CHECK LIST

OF NATIVE AND NATURALIZED

TREES

OF THE UNITED STATES

(INCLUDING ALASKA)

Agriculture Handbook No. 41

FOREST SERVICE

U. S. DEPARTMENT OF AGRICULTURE

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OF THE UNITED STATES
(INCLUDING ALASKA)

by

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Prepared under the direction of

The Forest Service Tree and Range Plant Name Committee

Agriculture Handbook No. 41

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(Supersedes Miscellaneous Circular 92, Check List of the Forest Trees of the United States, Their Names and Ranges)

Forest Service

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INTRODUCTION

This check list aims to compile the accepted scientific names and current synonyms, approved common names and others in use, and ranges of the native and naturalized trees of the United States of America (including Alaska). It is primarily a reference for foresters, botanists, students, and all others interested in trees. One of its important objects is to encourage uniform usage of names for trees. The third in a series, this is the official standard for tree names in the Forest Service.

There are four outstanding reasons for issuing a new check list. First, the former standard for tree names in the Forest Service, Check List of Forest Trees of the United States by George B. Sudworth (*44*)[1] issued in 1927, is out-of-print, antiquated, and moreover, chiefly under the obsolete "American Code" of nomenclature. Second, some changes in scientific names have been required to conform to the International Code of Botanical Nomenclature (*14a*), formerly the International Rules of Botanical Nomenclature (*1, 4, 30*) which incorporated certain desirable features of the "American Code" when the two were consolidated in 1930. These rules were officially adopted by the United States Department of Agriculture on April 30, 1940, and were revised slightly in 1950. Third, the common names have been revised by the Forest Service Tree and Range Plant Name Committee. Finally, much additional information about the trees of the United States, their taxonomy or dendrology, has become available through numerous investigations and researches by botanists and foresters during this 25-year interval.

Critical field, herbarium, and experimental studies have resulted in taxonomic revisions of various genera of trees and better understanding of the different kinds of trees and their relationships. Botanical exploration of the country including even the most remote regions has been advanced greatly by numerous plant collectors and field workers, aided by improved automobile transportation. A few new species of local range and additional varieties and natural hybrids have been named among the native trees. Likewise, many former varieties and some species have been found upon further study not to be distinct and have been reduced to synonymy. Range extensions northward of Mexican and tropical species along the southern boundary have been recorded, and with the passing of time more introduced trees have escaped from cultivation and have become naturalized. Tree individuals have been found among species previously known only as shrubs.

Many good State and local floras and publications on trees have contributed much valuable information on distribution, so that the ranges of individual tree species are now known more accurately and in much greater detail. However, as much of the

[1] Italic numbers in parentheses refer to Literature Cited, p. 24.

newer information is scattered in technical publications and not readily available to many, the need for compilation of a new check list is obvious.

PLAN OF THE CHECK LIST

The area covered is North America north of Mexico, the same as in Sargent's Silva of North America (*34*) and his Manual (*35, 36, 37*). Alaska has been included merely by the addition of 2 species (*Salix*) and a few varieties and hybrids. The trees of Alaska are described and illustrated in another Forest Service publication by Taylor and Little (*42*). To include the great area of Canada required only a few more additions (chiefly in *Crataegus* and *Salix*). The native trees of Canada have been described, illustrated, and mapped in an excellent publication by the Canada Dominion Forest Service (*5*).

Briefly, this check list contains native and naturalized trees, the same as forest trees of previous check lists, and omits other woody plants, the shrubs and vines. Genera, species, important varieties, and named hybrids of native trees are included, but minor and weak varieties, shrubby varieties, varieties distinguished in cultivation, forms, and hybrids without binomial names are excluded. Naturalized tree species, or introduced species thoroughly established as though wild, have been accepted, but their varieties and forms have not been distinguished. Cultivated trees and introduced species escaping from cultivation or persisting and spreading slightly after planting have been omitted.

The trees of the United States (genera, species, varieties, and hybrids) are listed in a single alphabetical order under accepted scientific names, instead of by families as in manuals and floras. The accepted scientific name and the approved common name are in boldface type. Capitals and small capitals designate naturalized trees. Each generic name is followed by family name in parentheses.

Immediately following the scientific name is the synonymy in chronological order; that is, the accepted scientific name and other scientific names, or synonyms, and the abbreviated citations. Transfers of the present name, such as a specific name originally in another genus or a species first distinguished as a variety, are included as necessary to show conformity of the name to priority and other rules of nomenclature. Synonyms in current use are cited and all accepted names of the 1927 Check List have been accounted for. The check list also cites new names of species, varieties, and hybrids of native trees of the United States published after 1920 to the end of 1951. It is the only publication aside from the Gray Herbarium Card-Index where these citations of trees have been assembled. Generic synonyms still in use are cross indexed, as are synonymous specific names in genera of four or more species. However, older generic names not currently used and synonymous varietal names have not been cross indexed.

Brief explanatory notes on nomenclature, particularly of recently changed scientific names or of confused or misapplied names, have been inserted as in the 1927 Check List. Derivations of scientific names are included; where possible these are given from original publication sources, though many names were unexplained there. Notes on added species, such as shrubby species known to reach tree size, or cultivated species recorded as naturalized, have been included, in many cases with citation of authority for the records.

Common names other than the accepted ones are English names also in use, often in certain regions rather than general, or names adopted in botanical manuals and tree publications. A common name in Standardized Plant Names (*14*), if different from the approved name, is listed first and designated by "(SPN)." Any Spanish common names of trees from the Mexican border region are mentioned last.

Range is given in outline form by States along the corners and irregular limits of distribution, generally from northeast to northwest, southwest, and southeast. However, distribution of species in some regions, such as the southeastern and southwestern, is more clearly cited in other directions.

Selected references have been added. Under genera the latest generic monographs, important taxonomic contributions, articles on nomenclature, and special publications, such as keys, are cited. References under species include notes on nomenclature, varieties, and range extensions and distribution records of rare or local species.

Hybrids with binomial names are listed in the regular alphabetical order with mention also under both parent species.

Following the alphabetical check list is the list of Commercial Names for Lumber (p. 440). The latter, like a similar one in the 1927 Check List, shows the commercial names for lumber and the common names and scientific names for the corresponding trees as accepted here.

The Botanical Index of Plant Families and Genera (p. 444) correlates the alphabetical order with the natural arrangement of families and genera according to Dalla Torre and Harms and numbers used in that reference. Like a table of contents it has page numbers of all accepted genera. An Alphabetical List of Plant Families has been inserted to aid in finding families in the Botanical Index of Plant Families.

Last is the Index of Common Names (p. 451), which includes approved common names, other common names, and common names of other trees mentioned in notes.

SYMBOLS

ASTERISK.—The asterisk (*) is used as in the 1927 Check List to designate important forest trees, the tree species commercially useful for lumber or other products or in a few cases noteworthy in forestry for other values.

DAGGER.—The dagger (†) indicates a name accepted in the 1927 Check List. For scientific names the daggers are placed in the synonymy, where the accepted name also appears. Daggers by two or more names in the synonymy mean that those names were accepted as distinct in the 1927 Check List but now have been united. Absence of this symbol before all scientific names is evidence that this genus, species, variety, or hybrid was not accepted in the 1927 Check List and is an addition or was merely mentioned there in a note. A dagger in front of an approved common name confirms that no change has been made in the common name adopted in the 1927 Check List, while the same symbol before one of the other common names shows which name was used there. Thus, this symbol correlates the nomenclature of this check list with the 1927 Check List.

STANDARDIZED PLANT NAMES.—(SPN), the abbreviation of Standardized Plant Names (*14*), is placed after a common name found in that reference which differs from the one approved by the Forest Service.

TIMES SIGN.—The times sign (×) designates a hybrid. In a hybrid with a binomial name the times sign now precedes the second word, or specific epithet, following a change in the rules of nomenclature in 1950, though formerly and in the 1927 Check List the symbol was placed before the generic name. When the two parent species of a cross are listed, the times sign is inserted between the two names.

TREES, NATIVE, NATURALIZED, AND CULTIVATED

There is no uniform definition of a tree, and the distinction between the woody plants known as trees and those called shrubs is a gradual one. Obviously, the number of tree species in a region or publication depends somewhat upon the definition used. Some references omit the species which are generally shrubby. In 1876 Vasey (*48*) placed a size limit in his title: A catalogue of the forest trees of the United States which usually attain a height of 16 feet or more.

Sargent (*34*, 1: viii. 1891) in his Silva of North America separated trees and shrubs on basis of habit and "considered as trees all woody plants which grow up from the ground with a single stem, excluding all such as habitually branch at the ground into a number of stems, whatever size or height they may attain."

Sudworth's Check List (*43, p. 7*) of 1898 had a similar interpretation, "the designation of 'tree' being applied to all woody plants which produce naturally in their native habitat one main, erect stem bearing a definite crown, no matter what size they attain." In the 1927 Check List (*44, p. 10*), he had the following statement: "The general rule applied by the author in defining a tree includes woody plants having one well-defined stem and a more or less definitely formed crown, and attaining a height of at least 8 feet and a diameter of not less than 2 inches."

He noted that most trees had a single trunk but some, such as willows produced several trunks from the same root but were classed as trees on account of their large size.

It has seemed desirable to raise the minimum limits slightly, as some foresters adopt a minimum height of 20 feet and as increasing numbers of shrubby species are found to meet occasionally the definition of the 1927 Check List. Trees are defined here as woody plants having one erect perennial stem or trunk at least 3 inches in diameter at breast height (4½ feet), a more or less definitely formed crown of foliage, and a height of at least 12 feet. However, large willows with several trunks from the same root and species generally shrubby but rarely or in certain localities becoming small trees have been included.

Naturalized trees have been included, as in previous check lists and most regional and State tree publications. Sargent's Manual, however, contains only native trees. Naturalized species are increasing in number and those not found in the 1927 Check List have been added mainly from regional manuals and floras. Small's Manual of the Southeastern Flora (*41*) has recorded several additions, particularly of tropical and subtropical tree species naturalized in southern Florida. Fernald's Manual (*10*) has contributed others from the northeastern States.

Cultivated trees not also native or naturalized have been omitted. Most of these are ornamentals or fruit trees, rather than forest trees, and their many improved varieties are treated in horticultural publications. Horticultural varieties of native tree species distinguished in cultivation were included in Sudworth's two check lists but have been omitted here.

PREVIOUS LISTS OF FOREST TREES OF THE UNITED STATES

The number of publications attempting to list or describe the forest trees of the entire United States is not large. The earlier ones, which had smaller boundaries or vaguely covered North America, were reviewed by Sargent (*34*, 1: v-ix. 1891). Noteworthy are the following: Marshall's Arbustrum Americanum (*18*) in 1785, Wangenheim's illustrated German work on North American woody species (*49*) in 1787, F. A. Michaux's North American Sylva (*21, 22*) in 1810-13, a 3-volume work with colored plates limited to the eastern part, Browne's compiled Sylva Americana (*3*) in 1832, and Nuttall's 3-volume, illustrated North American Sylva (*24*) of 1842-49, prepared as a supplement to Michaux's and reprinted with it in 1857 as a 5-volume North American Sylva (*23*).

Several lists of the trees of the country have been issued by agencies of the United States Government at various times up to the present one. About 1850 the Smithsonian Institution began an extensive work with text by Asa Gray and colored plates by Isaac Sprague. The project was abandoned, but the 22 plates prepared were published later (*11*). Early Government lists of

trees of the United States were by J. G. Cooper (*6*) in 1859, George Vasey (*48*) in 1876, and Charles Sprague Sargent (*32, 33*) in 1880 and 1883. The last, a detailed catalog of the forest trees of the United States prepared for the tenth census of 1880, included the work of several field agents in different regions and was an important work preliminary to its author's Silva of North America. Among the later lists may be mentioned Van Dersal's publication in 1938 on the native woody plants and their values in erosion control and for wildlife (*47*).

Most elaborate of the works on the forest trees of the United States was Charles Sprague Sargent's Silva of North America (*34*, 14 volumes, 1891-1902), which described and illustrated 585 native tree species. Condensed from this silva was his Manual of the Trees of North America (Exclusive of Mexico) (*35*) in 1905, which had smaller drawings and some additional species, mostly of *Crataegus*. The second edition of Sargent's Manual (*36*), which appeared in 1922 and which was reprinted with corrections in 1926 (*37*) and afterwards without further revision, remains the latest and most detailed descriptive and illustrated manual of the native trees of the entire United States.

Another one-volume, illustrated work covering the whole country was Britton and Shafer's North American Trees (*2*). The native trees also in cultivation, except in the warmer regions, have been included in Rehder's (*27, 28*) Manual of Cultivated Trees and Shrubs in 1927, revised in 1940, and in his Bibliography of Cultivated Trees and Shrubs (*29*) in 1949. Publications on tree identification, national, regional, State, and local, issued since 1900 have been listed in the bibliography by Dayton, United States Tree Books (*9*).

HISTORY OF FOREST SERVICE TREE NOMENCLATURE

The Forest Service, United States Department of Agriculture, and its predecessor before 1905, the Division of Forestry, has for many years exercised leadership in the nomenclature of the trees of the United States. One of the earliest objectives of the Bureau of Forestry was to arrive at uniform, stable scientific names and vernacular names of trees.

George B. Sudworth, who was dendrologist from 1886 until his death in 1927, issued in 1897 his Nomenclature of the Arborescent Flora of the United States (*42*). That reference contained the accepted scientific and common names as well as other common names in use and was especially important for its synonymy, a compilation of the scientific names applied to each species or variety and their citations. The next year it was followed by Sudworth's Check List of Forest Trees of the United States, Their Names and Ranges (*43*), a shorter, similar bulletin containing the same scientific and common names with very few changes, omitting the synonymy while adding ranges. In 1927 Sudworth (*44*) published a revision or second check list with the same title as the first.

Dendrological activities of the Forest Service lapsed between May 1927, when Sudworth died, and February 1942, when the Section of Range Forage Investigations of the Division of Range Research was reorganized as the Division of Dendrology and Range Forage Investigations, with William A. Dayton as chief and Elbert L. Little, Jr., as forester (dendrology).

In 1923 the first edition of Standardized Plant Names (*25*) appeared, prepared by a committee which included Frederick V. Coville, of the United States Department of Agriculture. That reference on names of trees and other plants was approved in 1928 by the Government Printing Office, by the Department of Agriculture, and by the Forest Service with ten exceptions. William A. Dayton, of the Forest Service, in 1939 was appointed representative of the Department of Agriculture on the editorial committee which prepared the second edition of Standardized Plant Names (*14*), issued in 1942.

The Forest Service Tree and Range Plant Name Committee worked to reduce the discrepancies between Sudworth's 1927 Check List and Standardized Plant Names to a minimum before the second edition of the latter was published. As a result, three extensive mimeographed lists were issued by the committee: (1) Memorandum of Proposed Changes in Sudworth's Check List (*38*) dated May 20, 1939, containing in its foreword a statement of the more important considerations involved in a satisfactory code of English plant nomenclature; (2) Summary of Comment on Tree Name Committee Memorandum of May 20, 1939, (*39*) dated September 23, 1939, containing criticism and comment; and (3) Approved Changes in Sudworth's Check List, (*40*), Jan. 23, 1940, with a little over 700 changes, mostly of common names.

Earlier, the following changes in the 1927 Check List had been approved: 36 changes for certain small trees on Sept. 26, 1930; adoption of the common name ponderosa pine on Jan. 5, 1932; and five others on March 30, 1936.

HOW THIS CHECK LIST WAS PREPARED

This check list has been prepared under the supervision of the Forest Service Tree and Range Plant Name Committee, which has selected the approved common names. Homer L. Shantz was chairman from 1937 until his retirement in 1944, and William A. Dayton has been chairman since that date. Membership of the committee, which has changed from time to time, has included representatives from different Forest Service divisions.

Compilation of this check list was started in December 1940 and continued during parts of the next 3 years. A preliminary, mimeographed edition, Check List of the Native and Naturalized Trees of the United States Including Alaska (*46*), was issued in April 1944. That edition was limited in number of copies by wartime paper restrictions and was intended primarily for official

use and circulation to foresters and botanists for review and corrections. The work was interrupted during the war and was not resumed until 1946, when additional copies were distributed for review. Since that time the revision has been brought to its present form.

This check list is largely a compilation of published researches on the nomenclature and ranges of the trees of the United States and was prepared mostly in the library, and only in small part in the field and herbarium. Thus, it is not a monograph of the trees of the United States, though a few groups have been studied critically. During the course of this work a limited amount of field work was done in Florida and other southeastern States and in the Southwest. Some specimens have been examined, chiefly at the herbarium of the United States National Museum and the Forest Service Herbarium, both in Washington, D. C. Preparation of other publications during the work, including Important Forest Trees of the United States (*17*) with distribution maps of 165 species, revision of Pocket Guide to Alaska Trees (*45*), and Southwestern Trees (*18*), has contributed helpful information for the check list.

A major task of this revision involved the checking of scientific names to determine their status under the present, changed rules of nomenclature and included examination of the original publication of each name and search for possible earlier synonyms and homonyms. Two previous detailed compilations of the nomenclature and synonymy of the trees of the United States have been made, one by Sudworth (*42*) and the other by Sargent (*34*), both more than 50 years ago. They are still very useful and were consulted to verify place of publication of scientific names.

The citations of specific names in the 1927 Check List were first checked in Index Kewensis (*13*), the classical work listing citations of species of seed plants from 1753 to 1885, and citations of new species of trees of the United States in the ten supplements covering the years 1886 to 1940 were copied on cards for further checking. Rehder's Bibliography of Cultivated Trees and Shrubs (*29*), which appeared after most of the checking was finished, has been consulted also.

Similarly, citations of new names of species, varieties, and hybrids of United States trees were copied from the Gray Herbarium Card-Index (*31*), a card catalog of the newly described and renamed plants of the New World. That index originated in the Library of the United States Department of Agriculture, where it was prepared from 1894 to 1903, but since that time has been published quarterly by the Gray Herbarium of Harvard University. Covering the period from 1886 to the present, as well as older varieties, it has been an invaluable aid, especially for locating names below the rank of species.

The botanical catalog of the Library of the United States Department of Agriculture, a unique card catalog of articles in serials as well as books, has been an important bibliographic

aid, especially in listing monographs and other important taxonomic contributions on the genera and for information on citations, editions, and dates of publication of botanical works.

The accepted names were further checked against homonyms of fossils in the card catalog of fossil plants of the United States Geological Survey located in the Division of Paleobotany, United States National Museum, Washington, D. C., as reported elsewhere (*15*).

Particular attention was given to compiling and including all new names published after Sudworth's 1927 Check List and the second edition of Sargent's Manual in 1922 (corrected in 1926), that is, from Jan. 1, 1921, to the end of 1951. Those references, though without citations and with very few synonyms, together with regional and State floras and monographs, accounted for new names appearing after the two earlier compilations of nomenclature by the same authors. Important earlier synonyms and other names in use have also been verified, and a few names of 1952 have been inserted.

The bibliographic work was done almost entirely at the Library of the United States Department of Agriculture, Washington, D. C., which includes the former separate library of the Forest Service. This excellent library, the best general collection on plant sciences in the United States, is one of the very few libraries of the country where a detailed check of the nomenclature of the trees of the United States could have been made. Because of its broader coverage of general scientific publications, it probably contains more of the volumes cited in this check list than do the few excellent specialized libraries at botanical institutions in this country.

The Library of Congress, also at Washington, D. C., has been consulted particularly for certain old scientific serials and rare books. A few rare books have been examined at other libraries in this city and at libraries of the New York Botanical Garden, Arnold Arboretum of Harvard University, and Gray Herbarium of Harvard University.

With a very few exceptions, most of which were not found in United States libraries, it has been possible to verify personally in the original publications the citations of all the accepted scientific names and synonyms of this check list, although a very few had to be consulted in photographic reproductions.

The more important nomenclatural changes made during this study and needed for this check list have been explained in a series of journal articles and notes on nomenclature, which have been cited as references under the respective genera and species. Among these were articles on *Carya, Fraxinus,* Pinaceae, and *Pseudotsuga,* and miscellaneous notes.

No new names or new combinations are published in this check list. In nearly all cases where changes were necessary, other published names were available. About 25 new combinations and new names have been published along with this work,

and one new species, one new variety, and one new hybrid have been discovered.

SCIENTIFIC NAMES

Botanical nomenclature, or the science of naming plants, aims to establish uniform and stable scientific names for the different kinds of plants of the world. Nomenclature is a foundation tool of plant sciences. It is not an end in itself but a means towards progress in all other fields of knowledge about plants, including cultivation of plants and commerce of plant products.

BINOMIAL NOMENCLATURE.—The binomial system of nomenclature now in use throughout the world dates from Carolus Linnaeus's Species Plantarum, published in 1753. Scientific names are in Latin, a dead, international language, and usually are taken from Latin or Greek but may be formed in an arbitrary manner. They are free from the limitations of common names, which change in different languages and areas and which may be applied to different kinds of plants in other localities or by other persons. Moreover, many kinds of wild plants have been given no individual common names to distinguish them from all other kinds.

The scientific name of a species, or kind of plant, consists of two words, the name of the genus (generic name) and the name of the species (specific epithet). In some technical publications the author (erroneously called authority), the botanist who named the plant, is added usually in abbreviated form. For example, all kinds of pines belong to the genus *Pinus*. Ponderosa pine is *Pinus ponderosa* or with the author Lawson added, *Pinus ponderosa* Laws.

If a variety of a species is distinguished, the varietal name preceded by the abbreviation var. (variety or Latin, *varietas*) is added as a third word. Thus, the variety Arizona pine is *Pinus ponderosa* var. *arizonica* (Engelm.) Shaw. The two authors, known as double citation of authors, mean that Engelmann first named the pine *arizonica* but in a different combination, as a species *Pinus arizonica* Engelm., and that Shaw reduced it to the variety as cited.

INTERNATIONAL CODE OF BOTANICAL NOMENCLATURE.—Scientific names of plants are based upon the International Code of Botanical Nomenclature (*14a*), formerly International Rules of Botanical Nomenclature (*1, 4, 30*), a detailed set of rules adopted by systematic botanists meeting together in international congresses. These rules were last revised at the Seventh International Botanical Congress at Stockholm in 1950 and as the democratic decisions of majorities are accepted around the world.

It is outside the scope of this check list to summarize the history of botanical nomenclature, a subject reviewed elsewhere by Weatherby (*51*). Formerly there were two rival codes of nomenclature. The Forest Service and Sudworth's Check Lists of 1898 and 1927 followed the so-called "American Code" which appeared under different names. Sudworth (*39, pp. 341–349*)

published early editions of both codes. In 1930 the best features of the "American Code" were incorporated into the International Rules, and the former ceased to exist. One of these rules from the "American Code" was the type method. That is, the name of a species (or variety) is based not merely upon a published description but upon a preserved specimen, the type.

One of the main differences between the two codes is the acceptance under International Code of *nomina conservanda,* generic names which either are not the oldest or which are later homonyms (that is, used before for different plants) but which are well established in usage. The only large genus of native trees affected is hickory, *Hicoria* Raf., which has become *Carya* Nutt. under the International Code. The other generic names affected are listed under the statistical summary.

TYPICAL VARIETIES.—An important change made in 1950 and adopted in this check list is the logical rule that a species is considered as the sum of its varieties. Whenever, a first variety in a species is named, another variety, the typical variety, is automatically created to contain the type and bears the specific epithet repeated without author or citation. For example, the typical variety of ponderosa pine, or ponderosa pine (typical), is *Pinus ponderosa* var. *ponderosa.* However, in forestry practice where there is no risk of confusion it will be simpler to retain present usage instead of typical varieties.

CONSERVATIVE NOMENCLATURE.—The scientific nomenclature of this check list follows conservative modern usage, with emphasis on names useful to foresters and other field workers, rather than on names based upon minute differences distinguished only by specialists in plant taxonomy.

FAMILIES.—As the genera are arranged alphabetically, grouping of genera into families under controversial systems is avoided. However, the conservative classification of Dalla Torre and Harms (*7*) has been followed in the Botanical Index of Plant Families and Genera (p. 444). For example, the familiar families Pinaceae and Leguminosae, which some authors have divided, have been preserved.

GENERA.—Similarly, an attempt has been made to retain the familiar, large conservative genera which have advantages of stability and convenience over the smaller ones formed by segregation. If the practice of splitting genera continues, the genus will come to have a much narrower meaning. Several generic names have been changed to conform to the rules and usage, as listed under the statistical summary.

SPECIES AND VARIETIES.—A conservative course has been followed in the recognition of species and varieties, especially those recently proposed and minor variations. The statistical summary reveals that the total number of species, varieties, and hybrids almost doubled from the 1898 Check List to the 1927 Check List. Part of the increase was in the genus *Crataegus,* but nearly three times as many varieties were accepted in 1927 as in 1898. In the interpretation of species and varieties the

1927 Check List largely followed Sargent's Manual (*36*) of 1922 though with some additions. However, Sargent described fully and illustrated only a few important varieties, mentioning many others briefly in the text, while Sudworth listed all varieties alike. It seems reasonable that nearly all the important variations of native trees of the United States have already been discovered and named, although systematic botanists may continue to name slighter and slighter variations of native trees.

Since this check list is intended primarily for foresters for whom a conservative nomenclature is desirable, it seems wise to remand to synonymy numerous twentieth century specific and varietal names of trees based on fine distinctions of pubescence, leaf shape and size, etc., and which, at best, represent hardly more than racial or ecological conditions. Therefore, only the more important varieties have been accepted here. Each recognizable variation does not require a separate scientific name. Minor variations, including all forms and variations regarded both as forms and varieties, have been placed in synonymy. Many of these are not separated geographically from the typical elements, and a few tested experimentally were not constant. However, these names are still available for use if needed.

Some of the older synonymy, including part of that compiled by Sargent and Sudworth more than half a century ago, has not been reviewed critically in recent years following important changes in the rules of nomenclature. Under the type method the scientific name of a species or variety is associated with a type specimen, even though the specimen may not agree closely with the original description. Further, any later combinations or transfers of the specific or varietal epithet must be associated with the original type and are nomenclaturally synonymous, even if the later authors applied the epithet to wholly different plants. Type specimens of the older names of United States trees are largely in European herbaria, if still preserved, and many have been examined and photographed by contemporaneous workers. Additional study of these types may result in slight revisions of the synonymy and in a few changes of names. In this check list the synonymy of more recent names of minor variations has been partly compiled from other publications and in part based on descriptions and study of herbarium specimens.

Variations below the rank of species are called varieties in this check list. Some modern workers have substituted the category subspecies for geographical variations commonly designated as varieties. However, introduction of this new category apparently has caused additional confusion in nomenclature. Besides, that usage is contrary to the International Code, under which a subspecies would be a group of varieties and used in genera with many varieties. Rehder (*26*) has reviewed the history of varieties; present usage of varieties and subspecies has been summarized by Weatherby (*50*).

HYBRIDS.—Natural tree hybrids having binomial names have been included, as in the 1927 Check List, being listed alpha-

betically with species and again under both parent species. Most of these are in the genus *Quercus,* and a few are in *Carya.* As explained under symbols, the times sign (×) denotes a hybrid. This sign now precedes the second word, or specific epithet of a binomial, following a change in the rules in 1950, though formerly placed before the generic name. One binomial is sufficient to cover all intermediate individuals between two parent species and their varieties except individuals closer to one parent. Varietal names of hybrids are unnecessary.

Hybrids without binomial names have not been mentioned. Artificial hybrids and those appearing rarely among cultivated trees are outside the scope of this check list. Additional, rare hybrids among the native species may be expected and doubtless will be discovered and named in time.

Use of binomials for hybrids is not to be encouraged except in special studies, such as tree breeding investigations. It is much simpler and clearer to designate supposed hybrids merely by the names of the two parent species joined by the times sign. Sometimes binomials are shifted from one cross to another after progeny tests from the type tree reveal one of the parents was incorrectly named in the beginning.

SPELLING OF SCIENTIFIC NAMES.—The original spelling of scientific names must be retained under the International Code, except in case of typographical errors or clearly unintentional orthographic errors. It is simpler and clearer to follow the original spelling than to attempt to correct it, as different persons may not agree upon the changes. Where the spelling has been changed, the original spelling has been quoted under the citation.

In several names the later spelling established in use has been replaced by the original spelling. Examples are *Albizia,* the original spelling, instead of *Albizzia,* and *Ziziphus* rather than *Zizyphus.* Original spelling of geographic names must be retained also, even though the name of the place may have changed and the spellings lack uniformity. For example, the forms *"pennsylvanicus"* and *"pensylvanicus"* both were used, and the original spelling is maintained, as in *Fraxinus pennsylvanica* and *Prunus pensylvanica.*

Specific and varietal names taken from persons usually have the Latin masculine genitive ending *"-i"* or *"-ii"* or the feminine equivalent *"-ae"* or *"-iae."* A recommendation adopted in 1950 permits uniform correction of the original spelling to the longer ending except that the shorter suffix is used after a vowel or after *"-er."*

CAPITALIZATION OF SCIENTIFIC NAMES.—Family names and generic names are always capitalized, but specific and varietal names are not capitalized in this check list. A recommendation that specific and varietal names begin with small letters was adopted in 1950. Decapitalization is also required in publications of the United States Government and was practiced in previous check lists.

LATIN TERMS.—A few citations are followed by Latin terms in

italics which explain the status of the scientific names under the International Code of Botanical Nomenclature. *Nomen nudum,* meaning bare name, is one published without description and thus not validly published at the reference cited. (Except in special cases, *nomina nuda* have been omitted from this check list.) An illegitimate name, *nomen illegitimum,* is one contrary to a rule and which must be rejected. *Nomen provisorium,* a name proposed provisionally in anticipation of later acceptance of the group or rank, is not validly published.

As previously mentioned, *nomen conservandum,* or a conserved name, is a generic name in general use which has been approved officially as an exception to the rules, such as one not the oldest or one used before for a different genus (later homonym). A generic name proposed for conservation and retained pending official action is designated *nomen conservandum propositum.* A generic name rejected because another is conserved is called *nomen rejiciendum.*

COMMON NAMES, OR ENGLISH PLANT NOMENCLATURE [2]

The importance of uniform common names of trees was early recognized by the Forest Service, as shown in its check lists and other publications. Sargent, however, in his valuable works did not attempt to adopt distinctive English names for the different kinds of trees. An early landmark in formulating sound principles for the standardization of English tree names was set up by B. F. Fernow, chief of the Division of Forestry, in his introductions to Sudworth's bulletins (*42, 43*) of 1897 and 1898 previously cited.

The more important considerations involved in a satisfactory code of English plant nomenclature have been discussed also in the prefaces to the 1923 and 1925 editions of Standardized Plant Names (*25, 14*), in the section on Forest Service policy in selecting standard names for trees and woods in Sudworth's 1927 Check List (*44, p. 237*), and in Dayton's Standardizing Range Plant Names for the Forest Service (*8*).

Sudworth (*44, pp. 3-7, 237-239*) in 1927 published also the "Forest Service policy in selecting standard names for trees and woods," listing seven principles. However, the 1927 Check List was inconsistent in adopting such homonymous and misleading names as "buckthorn" for species of *Bumelia,* "myrtle" for *Ceanothus,* "privet" for *Forestiera,* and the much overworked vernacular name "ironwood" for trees of six different native genera.

Adoption of standardized English plant names increases clarity and reduces confusion, conduces to uniformity of usage, and, if the names are carefully and properly selected, contributes to best usage. Some of the more important considerations in a suitable philosophy or "code" of English plant nomenclature are:

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[2] This material has been adapted from the Tree and Range Plant Name Committee's introduction to the 1944 mimeographed Check List (*46, pp. 3–5*).

1. The avoidance of a provincial outlook. For example, names like "gum" and "ironwood" may be well understood in a dozen different localities and yet each of these two names might apply to a dozen species in those localities. For this reason also, unless such terms are sanctioned by long usage, less ambiguous terms should be substituted for indefinite geographical terms such as "northern" and "southern." One should bear in mind the wide interest in plant names, covering practically all the world and numerous lines of work.

2. Adoption of the best-established usage, wherever possible and wherever such usage is not definitely in conflict with other essential considerations.

3. Avoidance of the use of homonyms, that is, the same name should not be used for more than one kind of plant or plant group. For example, only one genus should be called oak, and only one species of oak should be called willow oak.

4. Where, under well-defined usage, the terminal element of the allotted name of a genus is properly restricted to another genus, the name should be written solid or, if necessary for visual reasons, hyphened. For example, apple is *Malus,* so pineapple (for *Ananas comosus*) is written solid; willow is *Salix,* hence desertwillow for *Chilopsis* is written solid; hazel is *Corylus,* so witch-hazel for *Hamamelis* is hyphened.

5. Admittedly, some species (for example, avocado in the genus *Persea* and dahoon in *Ilex*), especially in the larger genera, have well-established names of their own. In general, however, it is desirable to have names on a generic or at least a subgeneric basis. Thus, all species of *Fraxinus* are various kinds of ash; all species of *Picea* are various kinds of spruce. In a large, polytypic genus such as *Prunus,* however, whose sections or subgenera are regarded by some botanists as distinct genera, well- and long-established usage compels us to recognize subgeneric common names, as cherry for the section or subgenus *Cerasus,* peach for the section or subgenus *Amygdalus,* plum for true *Prunus,* laurelcherry for *Laurocerasus,* and so on.

6. Generic names should be monomial or at least hyphened, as connoting a unit idea, and corresponding to the monomial Latin generic name. Thus, calabashtree or calabash-tree for *Enallagma,* and not calabash tree.

7. In general, and in the interest of brevity, nouns are preferable to participles in English specific names. Thus, lance-leaf (rather than lance-leaved) cottonwood; blueberry (rather than blue-berried) elder.

8. For the sake of brevity and for typographical and visual considerations it is desirable to eliminate the apostrophe from English plant names, following the leadership of Fernow in Sudworth's first lists of 1897 and 1898, the American Pomological Society, and the American Joint Committee on Horticultural Nomenclature. Thus, Engelmann spruce, not

Engelmann's spruce. A similar tendency, in fact, may be observed in geographic names. For example, Prince George's County (Maryland) has now officially become Prince Georges County.

9. Where there is danger of confusion between the name of a person and of an idea or thing, the personal name should be written in the possessive form and preferably without the apostrophe. Thus, Browns hickory, Bushes oak.

The Tree and Range Plant Name Committee has kept the above basic considerations in mind in connection with its handling of the English plant nomenclature of this book.

In cases where genera are monotypic so far as the United States is concerned, but of which other species occur in other parts of the world, the Committee feels that, in the interest of brevity, approval should be given to abbreviating the name of the United States species, when desired, where the context clearly shows that only the United States species is indicated. Cases of this sort include the genera *Fagus* and *Libocedrus,* and our only American chestnut (*Castanea dentata*). For example, in a publication on American beech (*Fagus grandifolia*) it might be desired to state at the outset that the word "beech" used in the discussion is understood to refer to American beech only.

Common names of families and genera have been inserted in this check list, though omitted in previous ones. A definite common name has been assigned to each tree species, with the exception of some of the numerous species of *Crataegus,* which are readily distinguished only by specialists. In this respect the nomenclature is more precise than in the 1927 Check List, which sometimes used the same common name for a group of related species and left a few species unnamed.

For hybrids and varieties some common names have been approved, particularly where already used or easily derived from the scientific names. However, some varieties do not have distinctive English names in use and may be grouped under the name of the species. As common names of species normally consist of two words and varieties of three, the longer trinomials may become objectionable. In forestry practice the specific common name is applicable also to any included varieties. Typical varieties have been designated merely by mention of the word "(typical)" after the specific common name, but this addition is unnecessary where there is no confusion with other varieties. Names of horticultural varieties of trees are adequately covered in Standardized Plant Names (*14*).

Common names of trees may be written either with only proper names capitalized, as in this check list, or with all words capitalized, as in the 1927 Check List. The former method is more useful in a reference and perhaps is more widely adopted, though some prefer capitals for approved common names clearly equivalent to scientific names, and to avoid ambiguity.

CITATIONS

Citations of place of publication of accepted names and synonyms have been included. They were omitted from the Check Lists of 1898 and 1927 but were given in full in Sudworth's (*42*) earlier compilation of nomenclature upon which the first Check List was based. These citations are for reference in summarizing the nomenclature and to show that the names conform to the rules. In several cases the place of publication has been corrected to an earlier or later one from that usually quoted. Some dates of publication have been revised from later sources.

Authors' names have been abbreviated unless short or uncommon. In most cases abbreviations stop before the second vowel. Explanations of authors' names, including dates and nationalities, can be found in botanical floras and manuals, such as Rehder (*28*).

Double citation of authors has been followed where the scientific name has been changed from one group to another, the first author being cited in parentheses. This standard practice is in accord with previous check lists and the International Code of Botanical Nomenclature. However, Sargent's Silva of North America and his Manual cited only a single author, the second where there were two.

Abbreviations of current periodicals and of single words from other titles follow Whitlock (*52*), the standard adopted in publications of the United States Department of Agriculture.

RANGES

The ranges, or distribution, of the trees are given in outline form, as in previous check lists. The States and Canadian provinces along the corners and irregular limits of distribution have been listed, generally from northeast to northwest, southwest, and southeast, as noted under the plan of the check list. However, ranges of species confined to the Coastal Plain of southeastern United States are cited from northeast to southeast and southwest. Also, distribution of southwestern trees of the Mexican border region is indicated from southeast to northeast, northwest, and southwest. In many cases oceans form natural boundaries on one side. Portions of States, especially large ones, along the corners and limits have been mentioned where the distribution within those States is not widespread.

Distribution is more or less continuous in a line connecting the States named. For example, a species listed from Indiana and Missouri occurs also in Illinois, or another cited from Washington to California is found also in Oregon. A species ranging from Texas to Florida is found in all the States between, and one recorded from Maine westward and back across to Florida is widely distributed northward back to Maine through the States along the Atlantic coast. Isolated stations have been omitted. Counties or other geographical divisions have been cited in a few instances, mostly trees of local or restricted distribution.

Entire ranges of species occurring also outside the area of this check list, mostly tropical and introduced, have not been given in detail. For the trees ranging southward in Mexico the Mexican States forming the outlines of distribution have been cited where known. Likewise, species native also in West Indies, Central America, and South America, have been so designated. For trees naturalized from the Old World the continent of origin is mentioned.

Ranges in this check list have been compiled from numerous published sources back to the 1927 Check List. The latter assembled data on ranges from Sargent's Manual (*36*) and other publications. Various current regional and State floras, manuals, floras, and tree publications have been consulted freely for further information on tree distribution. For those genera in which recent taxonomic monographs have been published, accurate summaries, including maps in many cases, have been available. Several States have excellent publications showing geographic distribution of trees by maps. Some local floras and local tree lists were examined for more detailed information on ranges, particularly in States not adequately covered otherwise.

Three publications with tree distribution maps of the United States, Alaska, and Canada, respectively, may be consulted for further information. The article, Important Forest Trees of the United States, by Little (*17*) in Trees, Yearbook of Agriculture, 1949, contains small distribution maps of 165 important tree species which summarize the ranges much more clearly and in greater detail than this check list. The ranges of trees in Alaska have been mapped by Hultén (*12*) in his Flora of Alaska and Yukon. Native Trees of Canada, by the Dominion Forest Service (*5*), contains maps of the trees of Canada also.

Accuracy of the compiled ranges is limited by that of the original published sources. Caution has been exercised in accepting broad range extensions from older references unless confirmed by more recent sources. Many helpful corrections of the ranges in the preliminary 1944 Check List have been received and incorporated into this published revision. Additional corrections and range extensions will be welcome for future use. As explained in a separate article (*19*), a publication containing maps of the native tree species is in preparation.

The distribution of certain kinds of trees in the United States is still imperfectly known. These are mostly the newly described varieties and hybrids. Ranges of many naturalized species have not been compiled accurately and may be expected to expand. Likewise, the local distribution of the native trees within some States is not available in published form.

Detailed, local distribution of trees is beyond the scope of this check list and can be recorded best by competent local observers, especially foresters, botanists, and field naturalists who are familiar from field experience with the exact limits, irregularities, and disjunct stations. Such observers should be urged to make their observations generally available by publication. More

State tree publications with maps and local ranges are needed, especially in some States where tree distribution records of many species are still meager.

STATISTICAL SUMMARY

Statistical data on the kinds of native and naturalized trees of the United States (including Alaska and Canada) accepted in this and the two previous check lists are summarized in table 1.

TABLE 1.—*Statistical summary of the Check Lists of 1953, 1927, and 1898, by botanical classification*

Year of check list	Families	Genera	Species	Varieties	Hybrids	Total species, varieties, and hybrids
1953.....	77	252	865	[1]61	101	[1]1,027
1927.....	78	227	862	228	87	1,117
1898.....	60	167	504	80	20	604

[1]Not including 45 typical varieties.

Naturalized trees in this 1953 Check List, also have been counted separately as follows: 6 families, 31 genera, and 78 species. The 45 typical varieties, bearing the specific epithet repeated, do not represent different kinds of trees from those previously listed and have not been included in the table.

The statistical summary confirms the conservative treatment of the present check list, which has accepted fewer kinds of trees than the 1927 Check List. Though 27 genera and a larger number of species have been added, mainly shrubby species now recorded as trees and naturalized trees, the number of accepted species has remained almost the same. Wild tree hybrids with binomial names have become more numerous, more having been detected and formally named in recent years.

Perhaps the greatest change revealed by the table is the reduction of varieties (excluding typical varieties) to slightly more than one-fourth the total accepted in the 1927 Check List and even fewer than in the 1898 Check List.

FAMILIES.—The 77 plant families of trees of the United States under the Dalla Torre and Harms (*7*) classification are cited in the alphabetical list of plant families (p. 444). The 6 introduced families, each with a single naturalized genus, are so designated. Two other families, Apocynaceae and Malvaceae, are represented by native herbs and shrubs, but only naturalized trees.

Three families are additions to the 1927 Check List, but 4 others have been united or omitted. Clethraceae, represented by *Clethra,* and Elaeagnaceae, by *Shepherdia,* each with a shrubby species becoming a small tree, have been inserted. Guttiferae has been included with a rare rediscovered species of *Clusia* from the Lower Florida Keys.

Under the Dalla Torre and Harms classification, Surianaceae has been united with Simaroubaceae and Nyssaceae with Cornaceae. Scrophulariaceae, with numerous native herbaceous species, has been left out because its single, naturalized, tree species in the United States, *Paulownia tomentosa* (Thunb.) Steud., is now placed by some authors in Bignoniaceae. Likewise, *Lagerstroemia indica* L., which escapes from cultivation but perhaps is not naturalized, has been omitted with its family of native herbs, Lythraceae.

GENERA.—The 27 genera added here, each with a single tree species in the United States except as indicated, are: *Andira, Artemisia, Callitris, Clethra, Clusia, Corylus, Crescentia, Daubentonia, Erythrina* (2), *Esenbeckia, Holacantha, Illicium* (2), *Ligustrum, Melaleuca, Nicotiana, Nolina, Phoenix, Pisonia, Poncirus, Psidium, Ricinus, Schinus, Serenoa, Shepherdia, Stewartia* (2), *Terminalia,* and *Ziziphus.* Ten of these genera and tree species of two more are naturalized, and most of the other additions are native shrubs recorded also as small trees. Three others are native trees in southern Florida, while another is a species described from southern Texas.

Two generic additions represent segregates, *Delonix* from *Poinciana* and *Toxicodendron* from *Rhus. Amygdalus,* of the 1927 Check List, has been united here with *Prunus,* and *Mimusops,* with *Achras.* As noted above, *Lagerstroemia* has been omitted. *Pouteria* (*Lucuma*) and *Talisia,* introduced genera of southern Florida, are omitted as probably not sufficiently established to be classed as naturalized.

Changes in generic names of the 1927 Check List have been kept at a minimum of only 18 despite differences in rules of nomenclature followed. Of these accepted names, 6 are *nomina conservanda,* or conserved names under the International Code of Botanical Nomenclature, 2 are older names, 1 replaces a rejected provisional name, and the others represent combinations and segregations of genera according to modern, conservative usage. Fortunately, only 29 species are involved. The only large genus changed is *Hicoria* to *Carya,* with 12 species. Generic names affected, with names formerly used, number of tree species in the United States, and reasons for change are summarized in table 2.

About 25 generic names of this check list are *nomina conservanda,* or conserved names. They have been retained under the International Code of Botanical Nomenclature as exceptions to the rules of priority or homonyms because of established usage and are designated in the citations by the abbreviation *nom. conserv.* Fifteen of these had already been accepted in the 1927 Check List.

TABLE 2.—*Generic names in 1953 Check List changed from those in 1927 Check List*

Accepted name in 1953 Check List	Name in 1927 Check List	Number of tree species	Reason for change
Ardisia Sw.	*Icacorea* Aubl.	1	Conserved name (*nomen conservandum*).
Broussonetia L'Her.	*Papyrius* Lam.	1	Conserved name.
Carya Nutt.	*Hicoria* Raf.	12	Conserved name.
Cereus Mill.	*Carnegiea* Britton & Rose.	1	*Carnegiea* united with older genus.
Crossopetalum P. Br.	*Rhacoma* L.	1	*Crossopetalum* is older mane. Proposal to conserve *Rhacoma* was rejected.
Delonix Raf.	*Poinciana* L.	1	*Delonix* segregated from older genus.
Firmiana Marsili.	*Sterculia* L.	1	*Firmiana* segregated from older genus.
Licaria Aubl.	*Misanteca* Cham. & Schlecht.	1	Older name now accepted.
Maclura Nutt.	*Toxylon* Raf.	1	Conserved Name.
Nectandra Roland.	*Ocotea* Aubl.	1	*Nectandra* generally accepted as segregate.
Paurotis O. F. Cook	*Acoelorraphe* H. Wendl.	1	*Acoelorraphe* rejected as a provisional name inadequately described.
Photinia Lindl.	*Heteromeles* Roem.	1	*Heteromeles* united with older genus.
Phyllanthus L.	*Cicca* L.	1	*Cicca* united with older genus.
Piscidia L.	*Ichthyomethia* P. Br.	1	Conserved name.
Prunus L.	*Prunus* L. *Amygdalus* L.	1	*Amygdalus* united with *Prunus*.
Torreya Arn.	*Tumion* Raf.	2	Conserved name.
Toxicodendron Mill. *Rhus* L.	*Rhus* L.	1	*Toxicodendron* segregated from *Rhus*.

When the names of the 1927 Check List were verified and checked against the different rules of nomenclature, 6 additional generic names were observed to need conservation. Proposals to conserve these names were approved by a jury of American plant taxonomists and, with that of another name added later, were submitted formally to the Seventh International Botanical Congress at Stockholm in 1950 (*16*). Pending final action by an international committee, these 7 names (*nomina conservanda proposita*) have been retained here: *Bucida* L., *Cephalocereus* Pfeiff., *Coccoloba* P. Br., *Condalia* Cav., *Dipholis* A. DC., *Fremontia* Torr. (1853), and *Halesia* Ellis.

The five genera with greatest numbers of tree species in this check list are: *Crataegus,* 149 species (including 1 naturalized); *Quercus,* 59 (including 1 naturalized); *Salix,* 42 (including 4 naturalized); *Pinus,* 36 (including 1 naturalized); and *Prunus,* 25 (including 7 naturalized). Other genera with 10 or more tree species in the United States are: *Fraxinus,* 16 species; *Acer,* 13; *Carya, Ilex,* and *Juniperus,* 12 each; *Yucca,* 11; and *Populus,* 10. These 12 genera together have 397 species, nearly half the total number for the country.

ALASKA TREES.—Though about one-fifth as large as the United States, Alaska has a relatively small number of tree species because of its far northern location. A count based upon Pocket Guide to Alaska Trees by Taylor and Little (*45*) reveals the following low totals: 6 families, 16 genera, 31 species (including 1 naturalized), 2 important varieties, and 4 named hybrids.

CANADA TREES.—From the Checklist of the Native Trees of Canada, published in Native Trees of Canada (*5, pp. xiii-xvii*), the following summary, which omits naturalized trees, has been compiled: 24 families, 48 genera, 153 species, and 18 varieties.

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Other persons in the Forest Service have assisted in various ways. The work of compiling names and citations from botanical indexes was done chiefly by Lola M. Ratterree.

Acknowledgment is due Ralph R. Shaw, librarian, and to various staff members of the Library of the United States Department of Agriculture for their helpful cooperation and assistance.

Ernest J. Palmer of the Arnold Arboretum, Harvard University, has examined the preliminary manuscript of the very large and difficult genus *Crataegus,* of which he is the outstanding authority, and has made various important suggestions, particularly on synonymy and ranges. Similarly, the manuscript of *Salix* has been reviewed by the recognized authority on the genus, Carleton R. Ball, of the Department of Agriculture, who has prepared the revised ranges in *Salix.*

Leslie N. Goodding, Richard J. Preston, Jr., Joseph L. Stearns, and others have suggested the inclusion of several additional shrubby species which become arborescent. E. Shirley Bliss, formerly of the Forest Service, has contributed Spanish common names in use for trees of the Mexican border region of southwestern United States. Information on the naturalized trees of southern Florida was furnished by Roy Woodbury.

Many persons, including Forest Service personnel and other foresters and botanists, have responded to the request for constructive criticism and corrections of the preliminary, mimeographed 1944 Check List. The interest and cooperation of all these persons in making this check list more accurate is deeply appreciated.

As the check list is a compilation, grateful acknowledgment is due the authors of numerous publications on trees of the United States for the information assembled here. Some of these publications are mentioned under references and citations.

REQUEST FOR ADDITIONAL INFORMATION

Suggestions, corrections, and additional information about the subjects covered in this check list may be sent to the Forest Service at any time and will be useful in preparation of the next revision. More accurate information on tree ranges will be especially welcome. Data on trees that should be added, on validity of species, and varieties worthy of recognition will be appreciated.

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MANUAL OF CULTIVATED TREES AND SHRUBS HARDY IN NORTH AMERICA EXCLUSIVE OF THE SUBTROPICAL AND WARMER TEMPERATE REGIONS. Ed. 2, 996 pp., illus. (Map.) New York. 1940.

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A CATALOGUE OF THE FOREST TREES OF NORTH AMERICA. U. S. Census, 10th, Forestry, 93 pp. Washington, D. C. 1880.

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REPORT ON THE FORESTS OF NORTH AMERICA (EXCLUSIVE OF MEXICO). U. S. Census, 10th, 1880, v. 9, 612 pp., illus. (Also folio v. of maps.) Washington, D. C. 1884.

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THE SILVA OF NORTH AMERICA; A DESCRIPTION OF THE TREES WHICH GROW NATURALLY IN NORTH AMERICA EXCLUSIVE OF MEXICO. 14 v., illus. Boston and New York. 1891–1902.

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MANUAL OF THE TREES OF NORTH AMERICA (EXCLUSIVE OF MEXICO). 826 pp., illus. Boston and New York. 1905.

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MANUAL OF THE TREES OF NORTH AMERICA (EXCLUSIVE OF MEXICO). Ed. 2, 910 pp., illus. Boston and New York. 1922.

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PROPOSED CHANGES IN SUDWORTH'S CHECK LIST. 104 pp. U. S. Forest Serv. [Washington, D. C.] 1939 (May 20). [Processed.]

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SUMMARY OF COMMENT ON TREE NAME COMMITTEE MEMORANDUM OF MAY 20, 1939. 89 pp. U. S. Forest Serv. [Washington, D. C.] 1939 (Sept. 23). [Processed.]

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MANUAL OF THE SOUTHEASTERN FLORA. 1554 pp., illus. New York. 1933.

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NOMENCLATURE OF THE ARBORESCENT FLORA OF THE UNITED STATES. U. S. Dept. Agr., Div. Forestry Bul. 14, 419 pp. 1897.

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CHECK LIST OF THE FOREST TREES OF THE UNITED STATES, THEIR NAMES AND RANGES. U. S. Dept. Agr., Div. Forestry Bul. 17, 144 pp. 1898.

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CHECK LIST OF THE FOREST TREES OF THE UNITED STATES, THEIR NAMES AND RANGES. U. S. Dept. Agr. Misc. Cir. 92, 295 pp. 1927.

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CHECK LIST OF THE NATIVE AND NATURALIZED TREES OF THE UNITED STATES, INCLUDING ALASKA. 325 pp. U. S. Forest Serv. Washington, D. C., 1944. [Processed.]

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NATIVE WOODY PLANTS OF THE UNITED STATES; THEIR EROSION-CONTROL WILDLIFE VALUES. U. S. Dept. Agr. Misc. Pub. 303, 362 pp. [Maps.] 1938.

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FOREST-TREES OF THE UNITED STATES. U. S. [Dept. Agr.] Commr. Agr. Rpt. 1875: 151–186. 1876. (Reprinted as: A CATALOGUE OF THE FOREST TREES OF THE UNITED STATES WHICH USUALLY ATTAIN A HEIGHT OF SIXTEEN FEET OR MORE. [U. S. Dept. Agr. Rpt. 11] 38 pp. Washington. 1876.)

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BEYTRAG ZUR TEUTSCHEN HOLZGERECHTEN FORSTWISSENSCHAFT, DIE ANPFLANZUNG NORDAMERICANISCHER HOLZARTEN, MIT ANWENDUNG AUF TEUTSCHE FORSTE. 124 pp., illus. Göttingen. 1787.

(50) WEATHERBY, C. A.
SUBSPECIES. Rhodora 44: 157–167. 1942.

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BOTANICAL NOMENCLATURE SINCE 1867. Amer. Jour. Bot. 36: 5–7. 1949.

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ABBREVIATIONS USED IN THE DEPARTMENT OF AGRICULTURE FOR TITLES OF PUBLICATIONS. U. S. Dept. Agr. Misc. Pub. 337, 278 pp. 1939.

CHECK LIST OF NATIVE AND NATURALIZED TREES OF THE UNITED STATES (INCLUDING ALASKA)

Abies Mill. (Family Pinaceae) **fir**

†*Abies* Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754.

DERIVATION.—The classic Latin name of the silver fir, *Abies alba* Mill., of Europe.

REFERENCES.—Franco, João do Amaral. Abetos. Inst. Super. Agron. (Lisboa) v. 17, 260 pp., illus. 1950.

Fulling, Edmund H. Identification, by leaf structure, of the species of *Abies* cultivated in the United States. Torrey Bot. Club. Bul. 61: 497-524, illus. 1934.

Lamb, William H. A conspectus of North American firs (exclusive of Mexico). Soc. Amer. Foresters Proc. 9: 528-538, illus. 1914.

Viguié, Marié-Thérèse, and Gaussen, Henri. Révision du genre *Abies*. Soc. d'Hist. Nat. Toulouse Bul. 57: 369-434, illus. 1929; 58: 245-564, illus. 1929. Reprinted as Lab. Forest. Toulouse Trav. tome 2, v. 2, art. 1, 386 pp., illus. 1928-29.

Wyman, Donald. A simple foliage key to the firs. Arnoldia 3: 65-71, illus. 1943.

***Abies amabilis** (Dougl.) Forbes **Pacific silver fir**

Pinus amabilis Dougl., Comp. Bot. Mag. 2: 93. 1836; *nomen nudum*.

Picea amabilis Dougl. ex Loud., Arb. Frut. Brit. 4: 2342, figs. 2247-2248. 1838; in part.

†*Abies amabilis* (Dougl.) Forbes, Pinet. Woburn. 125, pl. 44. 1839.

DERIVATION.—Lovely.

OTHER COMMON NAMES.—Cascades fir (SPN), amabilis fir, lovely fir, red fir, †silver fir (lumber), white fir (lumber).

RANGE.—Pacific coast region from southern part of southeastern Alaska south through western British Columbia to western Washington and western Oregon. Local in northwestern California (Salmon Mountains, Siskiyou County).

***Abies balsamea** (L.) Mill. **†balsam fir**

Abies balsamea var. **balsamea** **balsam fir (typical)**

Pinus balsamea L., Sp. Pl. 1002. 1753.

†*Abies balsamea* (L.) Mill., Gard. Dict. Ed. 8, *Abies* No. 3. 1768.

†*Abies balsamea* var. *macrocarpa* Kent, Veitch Man. Conif. New ed. 492. 1900.

DERIVATION.—Ancient word for balsam tree, referring to the resinous pockets or blisters in the bark.

OTHER COMMON NAMES.—balsam, Canada balsam, eastern fir (lumber).

RANGE.—Newfoundland and Labrador, west to northeastern Alberta, and south to Minnesota, Wisconsin, Michigan, southern Ontario, northern Pennsylvania, New York, and New England. Also local in northeastern Iowa.

Abies balsamea var. phanerolepis Fern. **bracted balsam fir**

Abies balsamea var. *phanerolepis* Fern., Rhodora 11: 203. 1909.

Abies intermedia Fulling, [Castanea] South. Appal. Bot. Club Jour. 1: 93, fig. 1. 1936. Not *A. intermedia* Saporta, [Paris] Acad. des Sci. Compt. Rend. 94: 1021. 1882; fossil, Pliocene, France.

DERIVATION.—With visible scales, referring to the exposed bracts of the cones.

RANGE.—Newfoundland and Labrador to Ontario and Maine and high mountains of New Hampshire, Vermont, and New York. Also local on high mountains of northern Virginia (Blue Ridge in Page and Madison Counties) and West Virginia (Grant, Tucker, Randolph, and Pocahontas Counties).

The trees of Virginia and West Virginia may be intermediate between *Abies balsamea* and *A. fraseri*.

REFERENCES.—Core, Earl L. Torreya 40: 6. 1940.
Fosberg, F. R. Va. Jour. Sci. 2: 106. 1941.
Little, Elbert L., Jr. Wash. Acad. Sci. Jour. 33: 132. 1943.

Abies bracteata D. Don **†bristlecone fir**

Pinus bracteata D. Don, Linn. Soc. London Trans. 17: 442. 1836 (before July).

Pinus venusta Dougl., Comp. Bot. Mag. 2: 152. 1836 (Dec. 1).

Abies bracteata D. Don ex Poit., Rev. Hort., Ser. 2, 4: 7. 1845 (April).

Abies bracteata (D. Don) Nutt., No. Amer. Sylva 3: 137, pl. 118. 1849.

†*Abies venusta* (Dougl.) K. Koch, Dendrol. 2(2): 210. 1873.

This species, which generally has been known as *Abies venusta*, must now bear the slightly older name, *Abies bracteata*, as shown by Dayton.

DERIVATION.—With bracts, referring to the very long bristle-like tips of the cone bracts.

OTHER COMMON NAMES.—Santa Lucia fir, silver fir.

RANGE.—Santa Lucia Mountains, Monterey County, Calif.

REFERENCES.—Dayton, William A. Rhodora 54: 74-76. 1952.
Keck, David D. Bibliographic notes on Abies bracteata and Pinus coulteri. Madroño 8: 177-179. 1946.
Little, Elbert L., Jr. Amer. Jour. Bot. 31: 592. 1944.
Little, Elbert L., Jr. Lambert's "Description of the Genus Pinus," 1832 edition. Madroño 10: 33-47. 1949.

***Abies concolor** (Gord. & Glend.) Lindl. **†white fir**

Abies concolor Lindl. & Gord., Hort. Soc. London Jour. 5: 210. 1850; *nomen nudum*.

Picea concolor Gord. & Glend., Pinetum 155. 1858.
†*Abies concolor* (Gord. & Glend.) Lindl. ex Hildebr., Verbr. Conif. 261. 1861.
Picea lowiana Gord., Pinetum Sup. 53. 1862.
Abies lowiana (Gord.) A. Murr., Roy. Hort. Soc. Proc. 3: 317. 1863.
Abies grandis var. *lowiana* (Gord.) Hoopes, Book Evergreens 212. 1868.
†*Abies concolor* var. *lowiana* (Gord.) Lemm., Handb. W.-Amer. Cone-Bearers. Ed. 3, 64. 1895.

DERIVATION.—Of uniform color, referring to the needles, which are pale blue green on both sides.

OTHER COMMON NAMES.—white balsam, balsam fir, silver fir, pino real blanco.

RANGE.—Mountains from western Wyoming and southern Idaho to southern Oregon, and south to southern California, southern Arizona, and southern New Mexico. Also in northern Lower California, Mexico.

REFERENCES.—Franco, João do Amaral. Soc. Broter. (Coimbra) Bol., Sér. 2, 23: 160. 1949.
Little, Elbert L., Jr. Amer. Jour. Bot. 31: 590. 1944.
Rehder, Alfred. Arnold Arboretum Jour. 20: 287. 1939.

Abies excelsior Franco, see **A. grandis** (Dougl.) Lindl.

***Abies fraseri** (Pursh) Poir. **Fraser fir**

Pinus fraseri Pursh, Fl. Amer. Sept. 2: 639. 1814.
†*Abies fraseri* (Pursh) Poir. in Lam., Encycl. Méth. Bot. Sup. 5: 35. 1817.

DERIVATION.—Named for its discoverer, John Fraser (1750-1811), a Scotchman who traveled extensively in North America and introduced it and many other plants to Europe.

OTHER COMMON NAMES.—Fraser balsam fir (SPN), balsam fir (lumber), eastern fir (lumber), southern fir, †southern balsam fir, she-balsam.

RANGE.—Appalachian Mountains at high elevations in southwestern Virginia, western North Carolina, and eastern Tennessee.

***Abies grandis** (Dougl.) Lindl. **grand fir**

?*Abies aromatica* Raf., Med. Fl. 2:182. 1830; *nomen nudum.*
?*Pinus grandis* Dougl. ex D. Don in Lamb., Descr. Genus Pinus. Ed. 3 (8°), v. 2, unnumbered extra p. between p. 144 and p. 145. 1832.
?*Abies aromatica* Raf., Atlant. Jour. 1: 119. 1832.
†?*Abies grandis* (Dougl.) Lindl., Penny Cycl. 1: 30. 1833.
Abies excelsior Franco, Soc. Broter. (Coimbra) Bol., Sér. 2, 23: 162. 1949.

There is some uncertainty about the identity of the names *Abies grandis* and *A. amabilis*, which may be reversed from Douglas' original application. Franco has taken up *A. grandis* for the species universally known as *A.*

amabilis and has published the new name *A. excelsior* for the species known as *A. grandis*. However, specimens regarded as types support present usage, according to photographs examined. Some of the original material may have become mixed and part was reported as lost. It seems best to retain the established usage in the absence of more definite original evidence to the contrary.

DERIVATION.—Large.

OTHER COMMON NAMES.—balsam fir, lowland fir, †lowland white fir, silver fir, white fir (lumber), yellow fir.

RANGE.—Western Montana west of Continental Divide, northern and western Idaho, northeastern Oregon, and eastern Washington, north to southern British Columbia, and south in Pacific coast region to western Washington, western Oregon, and northwestern California (to Sonoma County).

REFERENCES.—Franco, João do Amaral. Soc. Broter. (Coimbra) Bol., Sér. 2, 23: 159-162. 1949.

Little, Elbert L., Jr. Amer. Jour. Bot. 31: 591-592. 1944.

Abies intermedia Fulling, see **A. balsamea** var. **phanerolepis** Fern.

***Abies lasiocarpa** (Hook.) Nutt. **subalpine fir**

Abies lasiocarpa var. **lasiocarpa** **subalpine fir (typical)**

Pinus lasiocarpa Hook., Fl. Bor. Amer. 2: 163. 1839.

Abies lasiocarpa (Hook.) Hook. ex Endl., Synops. Conif. 325. 1847; in index; as synonym.

†*Abies lasiocarpa* (Hook.) Nutt., No. Amer. Sylva 3: 138. 1849.

DERIVATION.—Hairy-fruited.

OTHER COMMON NAMES.—balsam, white balsam, †alpine fir, balsam fir, white fir (lumber), pino real blanco de las sierras.

RANGE.—Western Northwest Territories, Yukon, and southeastern Alaska (Copper River Valley and southeastward locally), south in British Columbia and southeastern Alberta and in mountains of western United States from western Washington and western Oregon east to Idaho, western Montana, and western Wyoming, south to central Colorado, western New Mexico, and southeastern Arizona. Also local in northeastern Nevada.

Abies lasiocarpa var. **arizonica** (Merriam) Lemm. **†corkbark fir**

†*Abies arizonica* Merriam, Biol. Soc. Wash. Proc. 10: 116, figs. 24-25. 1896.

Abies lasiocarpa var. *arizonica* (Merriam) Lemm., Sierra Club Bul. 2: 167. 1898; Lemm. ex Masters, Gard. Chron., Ser. 3, 29: 86, 134, figs. 52-53. 1901.

DERIVATION.—Of Arizona, where it was discovered.

OTHER COMMON NAME.—álamo de la sierra.

RANGE.—Central Colorado to southwestern New Mexico and eastern and northern Arizona.

Abies lowiana (Gord.) A. Murr., see **A. concolor** (Gord. & Glend.) Lindl.

***Abies magnifica** A. Murr. **†California red fir**

Abies magnifica var. **magnifica** **California red fir (typical)**

†*Abies magnifica* A. Murr., Roy. Hort. Soc. Proc. 3: 318, figs. 25-33. 1863.

DERIVATION.—Magnificent, referring to the cone.

OTHER COMMON NAMES.—red fir (SPN), golden fir (lumber), white fir (lumber).

RANGE.—Southwestern Oregon (Cascade Mountains) south to north Coast Ranges of California and through Sierra Nevada to central California and western Nevada.

Abies magnifica var. **shastensis** Lemm. **†Shasta red fir**

†*Abies magnifica* var. *shastensis* Lemm., Calif. State Bd. Forestry Bien. Rpt. 3: 145. 1890.

DERIVATION.—Of Shasta.

OTHER COMMON NAME.—Shasta fir.

RANGE.—Same as typical variety.

Abies nobilis (Dougl.) Lindl., see **A. procera** Rehd.

***Abies procera** Rehd. **†noble fir**

Pinus nobilis Dougl. ex D. Don in Lamb., Descr. Genus Pinus. Ed. 3 (8°), v. 2, unnumbered extra p. between p. 144 and p. 145, illus. 1832.

†*Abies nobilis* (Dougl.) Lindl., Penny Cycl. 1: 30. 1833. Not *A. nobilis* A. Dietr., Fl. Berlin 793. 1824.

Abies procera Rehd., Rhodora 42: 522. 1940.

This species was universally known as *Abies nobilis* until 1940, when Rehder showed that the name was a later homonym and untenable under the changed rules of nomenclature.

DERIVATION.—Tall.

OTHER COMMON NAMES.—red fir, white fir (lumber).

RANGE.—Western Washington from Cascade Mountains and high peaks of Coast Range southward to southwestern Oregon.

REFERENCE.—Rehder, Alfred. Abies procera, a new name for A. nobilis Lindl. Rhodora 42: 522-524. 1940.

Abies venusta (Dougl.) K. Koch, see **A. bracteata** (D. Don) Nutt.

Acacia Mill. (Family Leguminosae) **acacia**

†*Acacia* Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754.

Acacia Trew, Pl. Select. pl. 36. 1754.

Vachellia Wight & Arn., Prodr. Fl. Ind. Orient. 272. 1834.

Poponax Raf., Sylva Tellur. 118. 1838.

Senegalia Raf., Sylva Tellur. 119. 1838.

Acaciopsis Britton & Rose, No. Amer. Fl. 23: 93. 1928.

DERIVATION.—The classical Greek name of a thorny tree of Egypt, supposed to be of this genus.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Acacieae. No. Amer. Fl. 23: 84-120. 1928.

Two additional southwestern species of *Acacia* are recorded as becoming small trees to 16 feet high but apparently reach tree size only in Mexico and are known only as shrubs in the United States. These shrubby species are mentioned here to call attention to the possibility of discovering individuals of tree size in this country. *Acacia amentacea* DC. (*Acaciopsis rigidula* (Benth.) Britton & Rose), blackbrush acacia, is distributed in southern to central and Trans-Pecos Texas and northeastern Mexico. *Acacia millefolia* S. Wats. (*Senegalia millefolia* (S. Wats.) Britton & Rose), milfoil acacia, is found in southeastern Arizona and northern Mexico.

Acacia emoryana Benth. **Emory acacia**

†*Acacia emoryana* Benth., Linn. Soc. London Trans. 30: 522. 1875.

Senegalia emoryana (Benth.) Britton & Rose, No. Amer. Fl. 23: 109. 1928.

DERIVATION.—Named for Lt. Col. William Hemsley Emory (1811-87), leader of two military and scientific expeditions in the Southwest and a major general in the Civil War.

OTHER COMMON NAME.—†catclaw.

RANGE.—Southwestern Texas.

Acacia farnesiana (L.) Willd. **sweet acacia**

Mimosa farnesiana L., Sp. Pl. 521. 1753.

†*Acacia farnesiana* (L.) Willd., Sp. Pl., Ed. 4, 4: 1083. 1806.

Vachellia farnesiana (L.) Wight & Arn., Prodr. Fl. Ind. Orient. 1: 272. 1834.

DERIVATION.—Named in honor of Cardinal Odoardo Farnese (1573-1626), of Rome. This species was first introduced to Europe in his gardens (Hortus Farnesianus) in 1611.

OTHER COMMON NAMES.—cassie, †huisache.

RANGE.—Southern Texas and rare and local in southern Arizona and southern California (San Diego County). Also in Mexico, Central America, and South America to Chile. Widely cultivated and naturalized from Florida to Louisiana, in central and western Texas, and in southern California. Naturalized in the tropics generally.

Acacia greggii A. Gray **catclaw acacia**

†*Acacia greggii* A. Gray, Pl. Wright. 1: 65. 1852.

Senegalia greggii (A. Gray) Britton & Rose, No. Amer. Fl. 23: 110. 1928.

DERIVATION.—Named for Josiah Gregg (1806-50), early American explorer, who collected plants in the Southwest and northern Mexico.

OTHER COMMON NAMES.—†catclaw, devilsclaw, paradise-flower, uña de gato, uñas del gato.

RANGE.—Southern, central, and Trans-Pecos Texas, west to central New Mexico, northwestern Arizona, southwestern Utah, southeastern Nevada, and southeastern California, south to northern Mexico (Lower California, Sonora, Chihuahua, and Coahuila).

Acacia subtortuosa Shafer, see **A. tortuosa** (L.) Willd.

Acacia tortuosa (L.) Willd. **twisted acacia**

Mimosa tortuosa L., Syst. Nat. Ed. 10, 1312. 1759.
†*Acacia tortuosa* (L.) Willd., Sp. Pl. 4: 1083. [1806.]
Poponax tortuosa (L.) Raf., Sylva Tellur. 118. 1838.
Pithecellobium schaffneri S. Wats., Amer. Acad. Arts and Sci. Proc. 17: 352. 1882; as "*Pithecolobium.*"
Acacia subtortuosa Shafer in Britton & Shafer, No. Amer. Trees 524, fig. 485. 1908.
Poponax schaffneri (S. Wats.) Britton & Rose, No. Amer. Fl. 23: 89. 1928.

DERIVATION.—Twisted, referring to the branches.

OTHER COMMON NAMES.—Rio Grande acacia, †catclaw, huisachillo.

RANGE.—Southwestern Texas, south to southern Mexico. Also widely distributed in West Indies and in Venezuela and Galapagos Islands.

Acacia wrightii Benth. **Wright acacia**

†*Acacia wrightii* Benth. in A. Gray, Pl. Wright. 1: 64. 1852.
Senegalia wrightii (Benth.) Britton & Rose, No. Amer. Fl. 23: 110. 1928.

DERIVATION.—Named for Charles Wright (1811–86), American botanical collector, who collected it in western Texas.

OTHER COMMON NAMES.—†catclaw, Texas catclaw, tree catclaw.

RANGE.—Central to southern and Trans-Pecos Texas and northern Mexico (Tamaulipas to Sonora and Lower California).

Acer L. (Family Aceraceae) **maple**

†*Acer* L., Sp. Pl. 1054. 1753; Gen. Pl. Ed. 5, 474. 1754.
Negundo Ludw. & Boehm., Def. Gen. Pl. 508. 1760.
Rulac Adans., Fam. Pl. 2: 383. 1763.
Acer subg. *Sacharodendron* Raf., New Fl. No. Amer. 1: 47. 1836.
Saccharodendron (Raf.) Nieuwl., Amer. Midland Nat. 3: 182. 1914.
Argentacer Small, Man. Southeast. Fl. 825, 1505. 1933.
Rufacer Small, Man. Southeast. Fl. 825, 1505. 1933.

DERIVATION.—The classic Latin name of maple.

Additional cultivated species of *Acer* have been recorded as escaping and becoming established locally in eastern United States. In time they may become naturalized. These include *Acer platanoides* L., Norway maple, native of Europe, and *A. pseudoplatanus* L., planetree maple, of Europe and western Asia.

Acer barbatum Michx. **Florida maple**

Acer saccharinum Wangenh. var. *floridanum* Chapm., Fl. South. U. S. 81. 1860.
†*Acer floridanum* (Chapm.) Pax, Bot. Jahrb. 7: 243. 1886.
Acer barbatum Michx. var. *floridanum* (Chapm.) Sarg.,

Gard. & Forest 4: 148. 1891; Silva No. Amer. 2: 100, pl. 91, fig. 4. 1891.

Acer saccharum var. *floridanum* (Chapm.) Small & Heller, Torr. Bot. Club Mem. 3: 24. 1892.

Saccharodendron barbatum (Michx.) Nieuwl., Amer. Midland Nat. 3: 182. 1913; as to name but not description.

Saccharodendron floridanum (Chapm.) Nieuwl., Amer. Midland Nat. 3: 182. 1913.

†*Acer floridanum* var. *villipes* Rehd. in Sarg., Trees and Shrubs 2: 255. 1913.

Acer floridanum var. *longii* Fern., Rhodora 44: 426, pl. 726. 1942.

Acer barbatum var. *longii* (Fern.) Fern., Rhodora 47: 160. 1945.

Acer barbatum Michx., Fl. Bor.-Amer. 2: 252. 1803; in part, flowers but excluding leaves and fruit.

Long known as *Acer floridanum*. *A. barbatum* was applied also to the sugar maple by a few authors (Sarg., Silva No. Amer. 2: 97, pl. 90. 1891). A few others have rejected the name as based upon a mixture.

DERIVATION.—Of Florida.

OTHER COMMON NAMES.—†southern sugar maple, sugar maple.

RANGE.—Coastal Plain from southeastern Virginia to central Florida, west to eastern Texas and north in Mississippi Valley to southeastern Missouri.

REFERENCE.—Fernald, M. L. The identity of Michaux's Acer barbatum. Rhodora 47: 156–160. 1945.

Acer brachypterum Woot. & Standl., see **A. grandidentatum** Nutt.

Acer californicum (Torr. & Gray) D. Dietr., see **A. negundo** L.

Acer carolinianum Walt., see **A. rubrum** L.

Acer circinatum Pursh †**vine maple**

†*Acer circinatum* Pursh, Fl. Amer. Sept. 1: 267. 1814.

DERIVATION.—Rounded or circular, from the general shape of the leaves.

RANGE.—Pacific coast region from southwestern British Columbia to western Washington, western Oregon, and northern California. Also in Wallowa Mountains of northeastern Oregon.

Acer diffusum Greene, see **A. glabrum** Torr.

Acer douglasii Hook., see **A. glabrum** var. **douglasii** (Hook.) Dipp.

Acer drummondii Hook., see **A. rubrum** var. **drummondii** (Hook. & Arn.) Sarg.

Acer floridanum (Chapm.) Pax, see **Acer barbatum** Michx.

Acer fraxinifolium Nutt., see **A. negundo** L.

Acer glabrum Torr. **Rocky Mountain maple**

Acer glabrum var. **glabrum** **Rocky Mountain maple (typical)**

†*Acer glabrum* Torr., N. Y. Lyc. Nat. Hist. Ann. 2: 172. 1828.

Acer tripartitum Nutt. ex Torr. & Gray, Fl. No. Amer. 1: 247. 1840.

Acer glabrum var. *tripartitum* (Nutt.) Pax, Bot. Jahrb. 7: 218. 1886.

Acer diffusum Greene, Pittonia 5: 2. 1902.

Acer neo-mexicanum Greene, Pittonia 5: 3. 1902.

Acer torreyi Greene, Pittonia 5: 2. 1902.

Acer glabrum var. *diffusum* (Greene) Smiley, Calif. Univ. Pubs. Bot. 9: 261. 1921.

Acer glabrum var. *torreyi* (Greene) Smiley, Calif. Univ. Pubs. Bot. 9: 261. 1921.

Acer glabrum var. *neomexicanum* (Greene) Kearney & Peebles, Wash. Acad. Sci. Jour. 29: 486. 1939.

DERIVATION.—Glabrous, or hairless, referring to the foliage.

OTHER COMMON NAMES.—†dwarf maple, mountain maple, Sierra maple.

RANGE.—Black Hills of South Dakota and northwestern Nebraska west to Wyoming, southeastern Idaho, Utah, Nevada, and southwestern Oregon, and south to southern California, southeastern Arizona, and southern New Mexico.

REFERENCE.—Keller, Allan C. *Acer glabrum* and its varieties. Amer. Midland Nat. 27: 491–500, illus. 1942.

Acer glabrum var. **douglasii** (Hook.) Dipp. **Douglas maple**

Acer douglasii Hook., London Jour. Bot. 6: 77, pl. 6. 1847.

Acer glabrum subsp. *douglasii* (Hook.) Wesmael, Soc. Roy. de Bot. de Belg. Bul. 29:46. 1890.

†*Acer glabrum* b *douglasii* (Hook.) Dipp., Handb. Laubholzk. 2: 438. 1892.

DERIVATION.—Named for its discoverer, David Douglas (1798–1834), Scotch botanical explorer.

OTHER COMMON NAMES.—Douglas Rocky Mountain maple (SPN), †dwarf maple, mountain maple.

RANGE.—Southeastern Alaska, southeast to western and southern British Columbia, southern Alberta, western Montana, and northwestern Wyoming, and west to Idaho, Washington, and Oregon.

Acer grandidentatum Nutt. **†bigtooth maple**

Acer grandidentatum var. **grandidentatum**
bigtooth maple (typical)

†*Acer grandidentatum* Nutt. in Torr. & Gray, Fl. No. Amer. 1: 247. 1838.

Acer barbatum Michx. var. *grandidentatum* (Nutt.) Sarg., Silva No. Amer. 2: 100, pl. 92. 1891.

Acer brachypterum Woot. & Standl., U. S. Natl. Mus.

Contrib. U. S. Natl. Herbarium 16: 146. 1913.
Acer grandidentatum var. *brachypterum* (Woot. & Standl.) Palmer, Arnold Arboretum Jour. 10: 40. 1929.

DERIVATION.—Large-toothed, referring to the leaves.

OTHER COMMON NAME.—sugar maple.

RANGE.—Western Wyoming and southeastern Idaho, south to Utah, southwestern Colorado, southeastern Arizona, southern New Mexico, and Trans-Pecos Texas. Local in southwestern Oklahoma (Wichita Mountains, Comanche County). Also in northern Mexico (Sonora and Chihuahua).

Acer grandidentatum var. **sinuosum** (Rehd.) Little **Uvalde bigtooth maple**

Acer sinuosum Rehd. in Sarg., Trees and Shrubs 2: 255, pl. 195. 1913.
†*Acer saccharum* var. *sinuosum* (Rehd.) Sarg., Bot. Gaz. 67: 234. 1919.
Acer barbatum sinuosum (Rehd.) Ashe, Rhodora 24: 78. 1922.
Acer subglaucum sinuosum (Rehd.) Bush, Amer. Midland Nat. 12: 503. 1931.
Acer saccharophorum var. *sinuosum* (Rehd.) Rousseau, Nat. Canad. 67: 221. 1940.
Acer grandidentatum var. *sinuosum* (Rehd.) Little, Rhodora 46: 449. 1944.

DERIVATION.—With a sinus, referring to the curve at the base of the leaf blades.

OTHER COMMON NAME.—†sugar maple.

RANGE.—Central Texas including Edwards Plateau.

Acer interius Britton, see **A. negundo** L.

Acer kingii Britton, see **A. negundo** L.

Acer leucoderme Small **chalk maple**

Acer floridanum var. *acuminatum* Trel., Sugar Maples 12, pl. 11. 1894. Mo. Bot. Gard. Ann. Rpt. 5: 99, pl. 11. 1894.
†*Acer leucoderme* Small, Torrey Bot. Club Bul. 22: 367. 1895.
Acer saccharum var. *leucoderme* (Small) Sarg., Silva No. Amer. 13: 7, pl. 624. 1902.
Saccharodendron leucoderme (Small) Nieuwl., Amer. Midland Nat. 3: 182. 1913.

DERIVATION.—White-skinned, referring to the whitish bark.

RANGE.—Rare and local from North Carolina to southeastern Tennessee, southern Arkansas, and southeastern Oklahoma, south to Louisiana, northwestern Florida, and Georgia.

***Acer macrophyllum** Pursh **†bigleaf maple**

†*Acer macrophyllum* Pursh, Fl. Amer. Sept. 1: 267. 1814.
Acer macrophyllum var. *kimballi* Sudw. ex Harlow & Harrar,

Textb. Dendrol. 449. 1937; without Latin diagnosis.
Acer macrophyllum var. *kimballiae* Harrar, Jour. Forestry 38: 728, fig. 1. 1940; as "*kimballi.*"

DERIVATION.—Large-leaved (literally long-leaved).

OTHER COMMON NAMES.—broadleaf maple, Oregon maple.

RANGE.—Pacific coast region of western British Columbia, western Washington, and western Oregon, south in Sierra Nevada and Coast Ranges to southern California. Reported from southern end of southeastern Alaska, apparently in error.

***Acer negundo L.** **†boxelder**

†*Acer negundo* L., Sp. Pl. 1056. 1753.
Negundo aceroides Moench, Meth. Pl. 334. 1794.
Acer fraxinifolium Nutt., Gen. No. Amer. Pl. 1: 253. 1818.
Negundo californicum Torr. & Gray, Fl. No. Amer. 1: 250. 1838.
Acer californicum (Torr. & Gray) D. Dietr., Synops. Pl. 2: 1283. 1840.
Negundo aceroides var. *violaceum* Kirchn. in Petzold & Kirchn., Arboretum Muscav. 190. 1864.
Negundo negundo (L.) Karst., Deut. Fl. Pharm.-Med. Bot. 596. 1880–83.
Acer negundo var. *texanum* Pax, Bot. Jahrb. 7: 212. 1886.
Negundo aceroides var. *californicum* (Torr. & Gray) Sarg., Gard. and Forest 2: 364. 1889.
Acer negundo var. *violaceum* Jaeg. & Beissn., Ziergehölze Gärt. Park. Ed. 3, 6. 1889.
Acer negundo subsp. *californicum* (Torr. & Gray) Wesmael, Soc. Roy. de Bot. de Belg. Bul. 29: 43. 1890.
Acer negundo var. *californicum* (Torr. & Gray) Sarg., Gard. and Forest 4: 148. 1891; Silva No. Amer. 2: 112, pl. 97. 1891.
Acer negundo var. *violaceum* (Kirchn.) Schwer., Gartenfl. 42: 204, 711. 1893.
Rulac negundo (L.) Hitchc., Key Spring Fl. Manhattan 25. 1894.
Rulac texana (Pax) Small, Fl. Southeast. U. S. 743, 1334. 1903.
Acer interius Britton in Britton & Shafer, No. Amer. Trees 655, fig. 608. 1908; as "*interior.*"
Acer kingii Britton in Britton & Shafer, No. Amer. Trees 656, fig. 609. 1908.
Rulac nuttallii Nieuwl., Amer. Midland Nat. 2: 137. 1911.
Negundo interius (Britton) Rydb., Torrey Bot. Club Bul. 40: 56. 1913.
Negundo kingii (Britton) Rydb., Torrey Bot. Club Bul. 40: 56. 1913.
Negundo nuttallii (Nieuwl.) Rydb., Torrey Bot. Club Bul. 40: 55. 1913.
Negundo texanum (Pax) Rydb., Torrey Bot. Club Bul. 40: 56. 1913.

Acer negundo var. *arizonicum* Sarg., Bot. Gaz. 67: 240. 1919.

Acer negundo var. *interius* (Britton) Sarg., Bot. Gaz. 67: 239. 1919; as "*interior*."

Negundo fraxinifolium (Nutt.) Farwell, Amer. Midland Nat. 10: 37. 1926.

Acer nuttallii (Nieuwl.) Lyon, Amer. Midland Nat. 12: 39. 1930.

This very widespread species includes several intergrading races which differ chiefly in hairiness and shape and thickness of leaflets and which are not distinguished here.

DERIVATION.—From the Malayan common name of *Vitex negundo* L., negundo chastetree, later applied to this species.

OTHER COMMON NAMES.—†California boxelder, ashleaf maple, boxelder maple, Manitoba maple.

RANGE.—Throughout most of the United States. New Jersey, Pennsylvania, extreme southern and western Ontario, Michigan, Wisconsin, and Minnesota, north to central Manitoba, central Saskatchewan, and southern Alberta, and south to central Montana, Wyoming, Utah, and California, and east to southern Texas and central Florida. Also local in Vermont, Massachusetts, Connecticut, New York, Idaho, and Nevada. Naturalized northeastward to Maine, southern Quebec, New Brunswick, Nova Scotia, and Prince Edward Island, and in southeastern Washington and eastern Oregon.

Acer neo-mexicanum Greene, see **A. glabrum** Torr.

***Acer nigrum** Michx. f. **†black maple**

†*Acer nigrum* Michx. f., Hist. Arbr. For. Amér. Sept. 2: 238, pl. 16. 1812.

Acer saccharinum β nigrum (Michx. f.) Torr. & Gray, Fl. No. Amer. 1: 248. 1838.

Acer saccharum var. *nigrum* (Michx. f.) Britton, N. Y. Acad. Sci. Trans. 9: 10. 1889.

Acer barbatum Michx. var. *nigrum* (Michx. f.) Sarg., Gard. and Forest 4: 148, fig. 27. 1891; Silva No. Amer. 2: 99, pl. 91, figs. 1–3, 1891.

Acer nigrum var. *palmeri* Sarg., Arnold Arboretum Jour. 2: 166. 1921.

Saccharodendron nigrum (Michx. f.) Small, Man. Southeast. Fl. 824, 1505. 1933.

Acer saccharophorum var. *nigrum* (Michx. f.) Rousseau, Nat. Canad. 67: 221. 1940; *nom. illegit.*

DERIVATION.—Black, from the common name black sugar maple, probably referring to the dark green foliage and dark bark of mature trees.

OTHER COMMON NAMES.—black sugar maple, hard maple (lumber), rock maple, sugar maple.

RANGE.—Vermont, extreme southern Quebec, New York and southern Ontario to southern Michigan, Wisconsin, and south-

eastern Minnesota, south to Iowa, northeastern Kansas, and Missouri, and east to Kentucky, eastern Tennessee, western North Carolina, western Virginia, Maryland, and New Jersey. Also local in New Hampshire and northeastern South Dakota.

Acer nuttallii (Nieuwl.) Lyon, see **A. negundo** L.

Acer pensylvanicum L. **†striped maple**

†*Acer pensylvanicum* L., Sp. Pl. 1055. 1753.
Acer striatum Du Roi, Harbk. Baumz. 1: 8, pl. 1. 1771.

The original spelling was "*pensylvanicum*," based upon an early spelling of the colony, though "*pennsylvanicum*" has been used in some references, including the 1927 Check List.

DERIVATION.—Of Pennsylvania.

OTHER COMMON NAME.—moosewood.

RANGE.—Nova Scotia and Gaspé Peninsula of Quebec to Ontario and central Michigan, south to Ohio, Pennsylvania, and New England, and in mountains to northern Georgia.

REFERENCE.—Fernald, M. L. Pensylvanicus or pennsylvanicus? Rhodora 42: 94-95. 1940.

***Acer rubrum** L. **†red maple**

Acer rubrum var. rubrum **red maple (typical)**

†*Acer rubrum* L., Sp. Pl. 1055. 1753.
Acer carolinianum Walt., Fl. Carol. 251. 1788.
Acer rubrum δ trilobum Torr. & Gray ex K. Koch, Hort. Dendrol. 80. 1853; *nomen illegit.*
†*Acer rubrum β tridens* Wood, Class-book Bot., "1860" Ed., 286. 1861.
†*Acer rubrum tomentosum* Desf. ex Kirchn. in Petzold & Kirchn., Arboretum Muscav. 186. 1864.
Acer stenocarpum Britton in Britton & Shafer, No. Amer. Trees 647, fig. 598. 1908. Not *Acer stenocarpum* Ettinghausen, K. Bayer. Akad. der Wiss. München Denkschr. 50: 20, pl. 31, figs. 10-12. 1885 (fossil, Miocene, Carniola).
Rufacer carolinianum (Walt.) Small, Man. Southeast. Fl. 826, 1505. 1933.
Rufacer rubrum (L.) Small, Man. Southeast. Fl. 826, 1505. 1933.

DERIVATION.—Red, appropriate as the color of the flowers, petioles, and autumnal foliage.

OTHER COMMON NAMES.—Carolina red maple, scarlet maple, soft maple (lumber), swamp maple, water maple, white maple.

RANGE.—Newfoundland and Quebec to Ontario, southeastern Manitoba, and Minnesota, south to Wisconsin, Illinois, Missouri, eastern Oklahoma, and eastern Texas, east to southern Florida.

Acer rubrum var. drummondii (Hook. & Arn.) Sarg.
Drummond red maple

Acer drummondii Hook., Jour. Bot. 1: 200. 1834; *nomen provisorium.*

Acer drummondii Hook. & Arn. ex Nutt., No. Amer. Sylva 2: 83, pl. 70. 1846.

†*Acer rubrum* var. *drummondii* (Hook. & Arn.) Sarg., U. S. Census 10th, v. 9 (Rpt. Forests No. Amer.): 50. 1884.

Rufacer drummondii (Hook. & Arn.) Small, Man. Southeast. Fl. 826. 1933.

DERIVATION.—Named for its discoverer, Thomas Drummond (1780–1835), Scotch nurseryman and botanical explorer, who collected extensively in Canada and in southern United States.

OTHER COMMON NAMES.—Drummond maple, †red maple.

RANGE.—Coastal Plain from New Jersey to Florida and eastern Texas, north in Mississippi Valley to southeastern Missouri, southern Illinois, and southwestern Indiana.

Acer rugelii Pax, see **A. saccharum** Marsh.

***Acer saccharinum** L. **†silver maple**

†*Acer saccharinum* L., Sp. Pl. 1055. 1753.

Acer sacchatum Mill., Gard. Dict. Abridged. Ed. 6, *Acer* No. 6. 1771; in part.

Acer dasycarpum Ehrh., Beitr. Naturk. 4: 24. 1789.

Argentacer saccharinum (L.) Small, Man. Southeast. Fl. 825, 1505. 1933.

DERIVATION.—Sweet, or sugary, referring to the sap.

OTHER COMMON NAMES.—river maple, silverleaf maple, soft maple (lumber), swamp maple, water maple, white maple.

RANGE.—New Brunswick, Maine, southern Quebec, and southern Ontario to Michigan and Minnesota, south to southeastern South Dakota, eastern Nebraska, and eastern Oklahoma, and east to Mississippi and Georgia. Also local in Louisiana and northwestern Florida.

Acer saccharophorum K. Koch, see **A. saccharum** Marsh.

***Acer saccharum** Marsh. **†sugar maple**

†*Acer saccharum* Marsh., Arbustr. Amer. 4. 1785; perhaps misspelling or orthographical error of *A. saccharinum.*

Acer saccharinum Wangenh., Beytr. Teutsch. Holzger, Forstwiss. Anpflanz. Nordamer. Holz. 26, pl. 11, fig. 26. 1787. Not *A. saccharinum* L., Sp. Pl. 1055. 1753.

Acer saccharinum var. *glaucum* Schmidt, Anleit. Erzieh. Vermehr. Ahornart. 1812 (not seen).

Acer saccharophorum K. Koch, Hort. Dendrol. 80. 1853.

Acer rugelii Pax, Bot. Jahrb. 7: 243. 1886.

Acer saccharinum var. *glaucum* Pax, Bot. Jahrb. 7: 242. 1886.

Acer saccharinum var. *pseudo-platanoides* Pax, Bot. Jahrb. 7: 242. 1886.

†*Acer saccharum* var. *schneckii* Rehd. in Sarg., Trees and Shrubs 2: 256. 1913.

†*Acer saccharum* var. *rugelii* (Pax) Rehd. in Bailey, Stand. Cyclop. Hort. 1: 203. 1914.

†*Acer saccharum* var. *glaucum* (Pax) Sarg., Bot. Gaz. 77: 233. 1919.

Acer barbatum glaucum (Pax) Bush, Amer. Midland Nat. 11: 116. 1928.

Acer barbatum rugelii (Pax) Bush, Amer. Midland Nat. 11: 116. 1928.

Acer barbatum schneckii (Rehd.) Bush, Amer. Midland Nat. 11: 116. 1928.

Acer subglaucum Bush, Amer. Midland Nat. 12: 502. 1931.

Acer subglaucum rugelii (Pax) Bush, Amer. Midland Nat. 12: 503. 1931.

Acer subglaucum schneckii (Rehd.) Bush, Amer. Midland Nat. 12: 503. 1931.

Acer treleaseanum Bush, Amer. Midland Nat. 12: 502. 1931.

Saccharodendron saccharum (Marsh.) Moldenke, Rev. Sudamer. de Bot. 5: 2. 1937.

Acer saccharophorum var. *rugelii* (Pax) Rousseau, Nat. Canad. 67: 220. 1940.

Acer saccharophorum var. *schneckii* (Rehd.) Rousseau, Nat. Canad. 67: 220. 1940.

Acer nigrum var. *pseudoplatanoides* (Pax) Fosberg, Amer. Midland Nat. 26: 695. 1941; as "f. var." Fosberg in Fosberg & Walker, Castanea 6: 117. 1941.

Acer saccharophorum K. Koch var. *subvestitum* Marie-Victorin & Rolland, Montréal Univ. Inst. Bot. Contrib. 42: 17, figs. 5-8. 1942.

Acer barbatum, *A. leucoderme*, and *A. nigrum* all are closely related to *A. saccharum* and possibly should be regarded as varieties of the latter.

DERIVATION.—Sugar, referring to the sweetish sap, from which maple sugar is made.

OTHER COMMON NAMES.—hard maple (lumber), rock maple.

RANGE.—Newfoundland, Nova Scotia, and Quebec, west to Ontario, southwestern Manitoba, and Minnesota, south to Iowa, eastern Kansas, eastern Oklahoma, and northeastern Texas, east to Louisiana and northern Georgia, and north to Virginia and New Jersey. Also local in southeastern North Dakota (formerly?), northeastern South Dakota, and central Oklahoma.

REFERENCES.—Anderson, Edgar, and Hubricht, Leslie. The American sugar maples. I. Phylogenetic relationships, as deduced from a study of leaf variation. Bot. Gaz. 100: 312-323, illus. 1938.

Dansereau, Pierre, and Desmarais, Yves. Introgression in sugar maples—II. Amer. Midland Nat. 37: 146-161, illus. 1947.

Gleason, H. A. The preservation of well known binomials. Phytologia 2: 201-212. 1947.

Little, Elbert L., Jr. Phytologia 2: 460-463. 1948.
Mackenzie, Kenneth K. Technical name of sugar maple. Rhodora 28: 233-234. 1926.
Marie-Victorin, Frère, and Rousseau, Jacques. Univ. Montréal Inst. Bot. Contrib. 36: 36-37. 1940.
Rousseau, Jacques. L'histoire de la nomenclature de l'Acer saccharophorum Koch (A. saccharum Marsh.) depuis 1753. Nat. Canad. 67: 161-200, 201-224, illus. 1940.
Sprague, T. A. The botanical name of the sugar maple. Kew Roy. Bot. Gard. Bul. Misc. Inform. 1929: 81-82. 1929.

Acer saccharum var. *sinuosum* (Rehd.) Sarg., see **A. grandidentatum** var. **sinuosum** (Rehd.) Little

Acer sacchatum Mill., see **A. saccharinum** L.

Acer sinuosum Rehd., see **A. grandidentatum** var. **sinuosum** Rehd.) Little

Acer spicatum Lam. **†mountain maple**

†*Acer spicatum* Lam., Encyl. Méth. Bot. 2: 381. 1788.

DERIVATION.—Spiked, referring to the elongated spikelike inflorescence.

RANGE.—Newfoundland and Quebec to central Ontario, central Manitoba, and eastern Saskatchewan, south to Minnesota, northeastern Iowa, central Michigan, Ohio, Pennsylvania, and New Jersey. Also south in mountains to northern Georgia.

Acer stenocarpum Britton, see **A. rubrum** L.

Acer subglaucum Bush, see **A. saccharum** Marsh.

Acer torreyi Greene, see **A. glabrum** Torr.

Acer treleaseanum Bush, see **A. saccharum** Marsh.

Acer tripartitum Nutt., see **A. glabrum** Torr.

Achras L. (Family Sapotaceae) **achras**

†*Achras* L., Sp. Pl. 1190. 1753; Gen. Pl. Ed. 5, 497. 1754; in part.
†*Mimusops* L., Sp. Pl. 349. 1753; Gen. Pl. Ed. 5, 165. 1754.
Sapota Mill., Gard. Dict. Abridged. Ed. 4, v. 3. 1754; in part.
Achras L. emend. Loefl. ex L., Syst. Nat. Ed. 10, 988, 1381. 1759. *Nom. conserv. propos.*, Little, Brittonia 7: 48-49. 1949.
Manilkara Adans., Fam. Pl. 2: 116. 1763. Emend. Gilly, Yale Univ., School Forestry Trop. Woods 73: 8. 1943.

DERIVATION.—Ancient Greek name for the wild ancestor of the common pear (*Pyrus communis* L.) in accord with a fre-

quent usage of Linnaeus in transferring classical plant names to other genera.

REFERENCES.—Cronquist, Arthur. Studies in the Sapotaceae —IV. The North American species of Manilkara. Torrey Bot. Club Bul. 72: 550–562. 1945.

Gilly, Charles L. Studies in the Sapotaceae, II. The Sapodilla—Níspero complex. Yale Univ., School Forestry Trop. Woods 73: 1-22. 1943.

Monachino, Joseph V. The South American Species of Manilkara. Phytologia 4: 94–118. 1952.

Achras emarginata (L.) Little **†wild-dilly**

Sloanea emarginata L., Sp. Pl. 512. 1753.

Achras zapotilla β parvifolia Nutt., No. Amer. Sylva 3: 28. 1849.

Mimusops jaimiqui Wright in Griseb., Cat. Pl. Cub. 64. 1866.

Achras bahamensis Baker in Hook., Icon. Pl. 18: pl. 1795. 1888.

†*Mimusops parvifolia* (Nutt.) Radlk. ex Pierre, Not. Bot. Sapot. 37. 1891. Not *Mimusops parvifolia* R. Br., Prodr. Fl. Nov. Holl. 1: 531. 1810. Not *Mimusops parvifolia* Kurz, Forest Fl. Brit. Burma 2: 124. 1877.

Mimusops emarginata (L.) Britton, Torreya 11: 129. 1911.

Manilkara jaimiqui (Wright) Dubard, Col. Inst. Mars. Ann., Ser. 3, 3: 16. 1915.

Manilkara emarginata (L.) Britton & Wils., Sci. Surv. Puerto Rico 6: 366. 1926. Not *Manilkara emarginata* H. J. Lam, Buitenzorg Jard. Bot. Bul., Sér. 3, 7: 241. 1925.

Manilkara bahamensis (Baker) Lam & Meeuse, Blumea 4: 351, 354. 1941.

Manilkara jaimiqui subsp. *emarginata* (L.) Cronquist, Torrey Bot. Club Bul. 73: 467. 1946.

Achras emarginata (L.) Little, Rhodora 49: 292. 1947.

DERIVATION.—Emarginate, the leaves with a small notch at the apex.

OTHER COMMON NAME.—wild sapodilla.

RANGE.—Cape Sable at southern end of Florida and Florida Keys. Also Bahama Islands, Cuba, and Hispaniola. Reported from Puerto Rico.

At one time referred to *Mimusops seiberi* A. DC., of the West Indies.

REFERENCES.—Britton, N. L. The botanical name of the wild sapodilla. Torreya 11: 128-129. 1911.

Little, Elbert L., Jr. The name of the wild dilly of Florida. Rhodora 49: 289-293. 1947.

ACHRAS ZAPOTA L. †SAPODILLA

†*Achras zapota* L., Sp. Pl. 1190. 1753; in part. Emend. L., Syst. Nat. Ed. 10, 988. 1759.

Achras zapota β zapotilla Jacq., Stirp. Amer. 57, pl. 41. 1763.

Sapota achras Mill., Gard. Dict. Ed. 8, *Sapota* No. 1. 1768.
Achras zapotilla P. Br., Civ. Nat. Hist. Jamaica Ed. 2, Index. 1789.
Achras zapotilla Nutt., No. Amer. Sylva 3: 28, pl. 90. 1849.
Manilkara zapotilla (Jacq.) Gilly, Yale Univ., School Forestry Trop. Woods 73: 20. 1943.

The scientific name for this species has been the subject of considerable controversy. In the article cited below, Gilly rejected *Achras* L. (1753, 1754) as a *nomen ambiguum et confusum* and took up *Manilkara* Adans. Under his interpretation the scientific name of the sapodilla becomes *Manilkara zapotilla* (Jacq.) Gilly. However, *Achras zapota* L. is the name now established in use.

DERIVATION.—From the Mexican Indian name, sapote.

OTHER COMMON NAME.—nispero.

RANGE.—Escaped from cultivation and sparingly naturalized in southern Florida, including Florida Keys. Also introduced in West Indies, Mexico, Central America, northern South America, and tropical portions of the eastern hemisphere. Native in southern Mexico and Central America south to Costa Rica.

REFERENCES.—Cook, Orator F. Nomenclature of the sapote and the sapodilla. U. S. Natl. Museum, Contrib. U. S. Natl. Herbarium 16: 277-285, illus. 1913.

Gilly, Charles L. Studies in the Sapotaceae, II. The Sapodilla—Níspero complex. Yale Univ., School Forestry Trop. Woods 73: 1-22. 1943.

Lawrence, G. H. M. Gentes Herbarum 8: 59-61. 1949.

Pittier, Henry. Zapotes and zapotillas. U. S. Natl. Museum, Contrib. U. S. Natl. Herbarium 18: 76-86, illus. 1914.

Ponce de León, Antonio. La denominación científica de los zapotes. Soc. Cubana de Bot. Rev. 2: 116-122, illus. 1945.

Acoelorraphe H. Wendl., see **Paurotis** O. F. Cook

Acrodiclidium Nees, see **Licaria** Aubl.

Aesculus L. (Family Hippocastanaceae) **buckeye**

†*Aesculus* L., Sp. Pl. 344. 1753; Gen. Pl. Ed. 5, 161, 500. 1754.

DERIVATION.—Ancient Latin name of a European oak or other mast-bearing tree.

OTHER COMMON NAME.—horsechestnut (SPN).

HYBRIDS.—Five hybrids of *Aesculus* in the 1927 Check List are known only in cultivation and have not been included in this list. They are: †*A.* ×*arnoldiana* Sarg. (*A. glabra* × *hybrida* DC.); †*A.* ×*dupontii* Sarg. (*A. neglecta* × *pavia*); †*A.* × *mutabilis* (Spach) Schelle (*A. discolor* var. *mollis* × *neglecta* var. *georgiana*); †*A.* × *mutabilis* var. *induta* Sarg. (*A. discolor* var. *mollis* × *neglecta*); †*A.* ×*mutabilis* var. *penduliflora* Sarg. (*A. discolor* var. *mollis* × *neglecta*).

Aesculus arguta Buckl. **Texas buckeye**

Aesculus arguta Buckl., Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 443. 1860.

Aesculus glabra var. *arguta* (Buckl.) Robins. in A. Gray, Synopt. Fl. No. Amer. 1(1): 447. 1897; in part and as to name.

Aesculus glabra var. *buckleyi* Sarg., Silva No. Amer. 14: 99. 1902; in part and as to name.

Aesculus buckleyi (Sarg.) Bush, Amer. Midland Nat. 12: 24. 1930.

DERIVATION.—Shining, or bright, perhaps referring to the foliage.

RANGE.—Southern Oklahoma and eastern and central Texas to Edwards Plateau.

A tall shrub or small tree, according to Bush (Amer. Midland Nat. 12: 21. 1930; as *Aesculus buckleyi* (Sarg.) Bush).

Aesculus austrina Small, see **A. pavia** L.

Aesculus buckleyi (Sarg.) Bush, see **A. arguta** Buckl.

Aesculus ×bushii Schneid. ———

Aesculus glabra × pavia

Aesculus ×bushii Schneid., Illus. Handb. Laubholzk. 2: 251. 1909; as *A. glabra × austrina?*

Aesculus ×mississippiensis Sarg., Arnold Arboretum Jour. 2: 121. 1920; as *A. glabra × pavia.*

DERIVATION.—Named for its discoverer, Benjamin Franklin Bush (1858-1937), botanist of Missouri.

COMMON NAME.—Arkansas buckeye (SPN).

RANGE.—Mississippi and Arkansas.

Aesculus californica (Spach) Nutt. **†California buckeye**

Calothyrsus californica Spach, Ann. des Sci. Nat., Bot., Sér. 2, 2: 62. 1834.

†*Aesculus californica* (Spach) Nutt., in Torr. & Gray, Fl. No. Amer. 1: 251. 1838.

DERIVATION.—Of California.

RANGE.—Northern to southern California in Coast Ranges and Sierra Nevada foothills.

Aesculus discolor Pursh, see **A. pavia** L.

Aesculus georgiana Sarg., see **A. sylvatica** Bartr.

***Aesculus glabra** Willd. **†Ohio buckeye**

†*Aesculus glabra* Willd., Enum. Pl. Hort. Berol. 1: 405. 1809.

Aesculus pallida Willd., Enum. Pl. Hort. Berol. 1: 406. 1809.

†*Aesculus glabra pallida* (Willd.) Kirchn. in Petzold & Kirchner, Arboretum Muscav. 166. 1864.

Aesculus glabra var. *arguta* (Buckl.) Robins. in Gray, Synopt. Fl. No. Amer. 1(1): 447. 1897; in part.

†*Aesculus glabra* var. *buckleyi* Sarg., Silva No. Amer. 14: 99. 1902; in part.

†*Aesculus glabra* var. *leucodermis* Sarg., Trees and Shrubs 2: 262. 1913.

Aesculus glabra var. *sargentii* Rehd., Arnold Arboretum Jour. 7: 241. 1926.

DERIVATION.—Glabrous, or hairless, referring to the foliage.

OTHER COMMON NAME.—fetid buckeye.

RANGE.—Western Pennsylvania and Ohio to Illinois, Iowa, and southeastern Nebraska, south to central Oklahoma, and east to Arkansas, northern Mississippi, central Alabama, and north to eastern Tennessee and West Virginia.

HYBRID.—*Aesculus* ×*bushii* Schneid. (*A. glabra* × *pavia*).

Aesculus hippocastanum L., horsechestnut, which has been widely planted across the United States, has escaped from cultivation in various places in the Northeast but apparently is not naturalized. It is native in Balkan Peninsula of southeastern Europe. Mentioned in a note in the 1927 Check List.

Aesculus × *mississippiensis* Sarg., see **A.** ×**bushii** Schneid.

Aesculus neglecta Lindl., see **A. sylvatica** Bartr.

***Aesculus octandra** Marsh. **†yellow buckeye**

†*Aesculus octandra* Marsh., Arbustr. Amer. 4. 1785.

Aesculus octandra var. *virginica* Sarg., Arnold Arboretum Jour. 2: 119. 1920.

†*Aesculus octandra* var. *vestita* Sarg., Arnold Arboretum Jour. 5: 42. 1924.

DERIVATION.—With eight stamens.

OTHER COMMON NAME.—sweet buckeye.

RANGE.—Southwestern Pennsylvania, Ohio, southern Indiana, and southern Illinois, south to northern Alabama, northern Georgia, and western North Carolina, and north to West Virginia.

Aesculus pallida Willd., see **A. glabra** Willd.

Aesculus pavia L. **†red buckeye**

†*Aesculus pavia* L., Sp. Pl. 344. 1753.

†*Aesculus discolor* Pursh, Fl. Amer. Sept. 1: 255. 1814.

Pavia mollis Raf., Alsogr. Amer. 71. 1838.

Aesculus austrina Small, Torrey Bot. Club Bul. 28: 359. 1901.

†*Aesculus discolor* var. *mollis* (Raf.) Sarg., Trees and Shrubs 2: 267. 1913.

Aesculus discolor Pursh and *A. discolor* var. *mollis* (Raf.) Sarg. have been reduced to synonymy by Coker and Totten (Trees Southeast. States 286. 1934) and Brown (La. Trees Shrubs 175. 1945) and were not mentioned by Small (Man. Southeast. Fl. 822. 1933). However, Fernald (Gray's Man. Bot. Ed. 8, 989. 1950) recognized *A. discolor*.

DERIVATION.—Old generic name of buckeye honoring Peter Paaw (died 1617), of Leyden.

OTHER COMMON NAMES.—†scarlet buckeye, †woolly buckeye, firecracker-plant.

RANGE.—Coastal Plain from southeastern Virginia to northern Florida and eastern and central Texas west to Edwards Plateau, and north in Mississippi Valley to southeastern Oklahoma, southeastern Missouri, and southern Illinois.

HYBRID.—*Aesculus* ×*bushii* Schneid. (*A. glabra* × *pavia*).

Aesculus sylvatica Bartr. **painted buckeye**

Aesculus sylvatica Bartr., Trav. No. So. Car. Ga. Fla. 476. 1791.

†*Aesculus neglecta* Lindl., Edwards' Bot. Reg. 12: No. 1009, pl. 1009. 1826.

Aesculus georgiana Sarg., Trees and Shrubs 2: 259, pl. 197. 1913.

Aesculus georgiana var. *pubescens* Sarg., Trees and Shrubs 2: 259. 1913.

†*Aesculus neglecta* var. *pubescens* (Sarg.) Sarg., Arnold Arboretum Jour. 5: 45. 1924.

Aesculus georgiana var. *lanceolata* Sarg., Arnold Arboretum Jour. 2: 120. 1920.

†*Aesculus neglecta* var. *georgiana* (Sarg.) Sarg., Arnold Arboretum Jour. 5: 45. 1924.

Aesculus neglecta var. *lanceolata* (Sarg.) Sarg., Arnold Arboretum Jour. 5: 46. 1924.

†*Aesculus neglecta* var. *tomentosa* Sarg., Arnold Arboretum Jour. 5: 46. 1924.

DERIVATION.—Of the woods.

OTHER COMMON NAMES.—dwarf buckeye, †Georgia buckeye.

RANGE.—Coastal Plain and outer Piedmont from southeastern Virginia to Georgia, Alabama, and northwestern Florida.

REFERENCE.—Fernald, M. L. Rhodora 46: 47-48. 1944.

Agati Adans., see **Sesbania** Scop.

AILANTHUS Desf. (Family Simaroubaceae) AILANTHUS

Pongelion Adans., Fam. Pl. 2: 319. 1763; *nomen rejiciendum.*

†*Ailanthus* Desf., Acad. Sci. Paris Mém. Math. Phys. 1786: 265, pl. 8. 1788; *nomen conservandum.*

DERIVATION.—Said to be from a Moluccan name meaning tree-of-heaven, referring to the height of the tree.

AILANTHUS ALTISSIMA (Mill.) Swingle †AILANTHUS

Toxicodendron altissimum Mill., Gard. Dict. Ed. 8, *Toxicodendron* No. 10. 1768.

Ailanthus glandulosa Desf., Acad. Sci. Paris Mém. Math. Phys. 1786: 265, pl. 8. 1788.

†*Ailanthus altissima* (Mill.) Swingle, Wash. Acad. Sci. Jour. 6: 495. 1916.

Ailanthus peregrina (Buc'hoz) Barkley, Mo. Bot. Gard. Ann. 24: 264, pl. 9. 1937.

DERIVATION.—Very tall.

OTHER COMMON NAMES.—treeofheaven ailanthus (SPN), tree-of-Heaven, copal-tree.

RANGE.—Cultivated and widely naturalized as a "weed" tree from Massachusetts to southern Ontario, Iowa, and Kansas, south to southern Texas and Florida and established to a lesser extent in western United States from southern Rocky Mountains to Pacific States. Native of China but established elsewhere from cultivation.

ALBIZIA Durazz. (Family Leguminosae) ALBIZZIA

†*Albizia* Durazz., Mag. Tosc. 3(4): 10, 13, pl. 1772.

DERIVATION.—Dedicated to Cavalier Filippo degl' Albizzi, of an old and noble Italian family and who introduced this genus into Europe.

The original spelling *"Albizia"* should be restored for this genus, though *"Albizzia"* has been in general use and was in the 1927 Check List.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Albizzia. No. Amer. Fl. 23: 43-48. 1928.

ALBIZIA JULIBRISSIN Durazz. †SILKTREE

†*Albizia julibrissin* Durazz., Mag. Tosc. 3(4): 10, 11, 13, pl. 1772; as *"iulibrissin,"* except on pl.

DERIVATION.—From the native Persian name.

OTHER COMMON NAMES.—silktree albizzia (SPN), mimosa-tree.

RANGE.—Widely planted for ornament and escaped from cultivation, from Maryland to Kentucky and Indiana, south to Louisiana and Florida. Native from Persia to China.

ALBIZIA LEBBEK (L.) Benth. LEBBEK

Mimosa lebbek L., Sp. Pl. 516. 1753; as *"lebbeck."*

Acacia lebbek [L.] Willd., Sp. Pl. 4: 1066. 1806; as *"lebbeck."*

Albizia lebbek (L.) Benth., Hook. London Jour. Bot. 3: 87. 1844; as *"Albizzia."*

DERIVATION.—The Arabic common name.

OTHER COMMON NAME.—lebbek albizzia (SPN).

RANGE.—Escaped from cultivation in the Florida Keys, according to Small (Man. Southeast. Fl. 653. 1933), and mentioned in a note in the 1927 Check List. Native probably of tropical Asia but widely planted in the tropics as a shade tree. Introduced from Egypt into southern Florida about 1900.

Alnus B. Ehrh. (Family Betulaceae) **alder**

†*Alnus* B. Ehrh., Oecon. Pflanzenhist. 2: 211. 1753.

DERIVATION.—The classical Latin name of the alder.

Alnus acuminata H. B. K., see note under **A. oblongifolia** Torr.

Alnus alnus (L.) Britton, see A. GLUTINOSA (L.) Gaertn.

Alnus crispa (Ait.) Pursh, see note under **A. sinuata** (Reg.) Rydb.

Alnus ×*fallacina* Call., see **A. serrulata** (Ait.) Willd.

Alnus fruticosa Rupr., see note under **A. sinuata** (Reg.) Rydb.

ALNUS GLUTINOSA (L.) Gaertn. EUROPEAN ALDER

Betula alnus L., Sp. Pl. 983. 1753.
Betula alnus α *glutinosa* L., Sp. Pl. 983. 1753.
Betula glutinosa L., Syst. Nat. Ed. 10, 2: 1265. 1759.
Alnus rotundifolia Mill., Gard. Dict. Ed. 8, *Alnus* No. 1. 1768.
†*Alnus glutinosa* (L.) Gaertn., Fruct. Sem. Pl. 2: 54, pl. 90, fig. 2. 1791.
Alnus alnus (L.) Britton in Britton & Brown, Illus. Fl. North. States Can. Ed. 2, 1: 613, fig. 1509. 1913.

DERIVATION.—Gummy, or gluey, referring to the young twigs and young leaves.

OTHER COMMON NAMES.—black alder, †European black alder.

RANGE.—Naturalized locally from Newfoundland and southeastern Canada south to Illinois, Pennsylvania, and Delaware. Native of Europe, northern Africa, and Asia.

Alnus incana (L.) Moench, see note under **A. rugosa** (Du Roi) Spreng.

Alnus maritima (Marsh.) Muhl. **†seaside alder**

Betula-alnus maritima Marsh., Arbustr. Amer. 20. 1785.
†*Alnus maritima* (Marsh.) Muhl. ex Nutt., No. Amer. Sylva 1: 34, pl. 10 (bis). 1842.

DERIVATION.—Maritime, or seaside, because of its typical occurrence near the coast.

RANGE.—Delaware and eastern Maryland, and in southern Oklahoma (Johnston and Bryan Counties).

Alnus noveboracensis Britton, see **A. serrulata** (Ait.) Willd.

Alnus oblongifolia Torr. **Arizona alder**

†*Alnus oblongifolia* Torr., U. S. Mex. Bound. Surv. Bot. 204. 1859; as "*oblongifolius.*"

DERIVATION.—Oblong-leaved.

OTHER COMMON NAMES.—New Mexican alder (SPN), †Mexican alder.

At one time not distinguished from *A. acuminata* H. B. K., of Mexico and Central America.

RANGE.—Southwestern New Mexico to central Arizona, south to northern Mexico (Sonora).

Alnus oregona Nutt., see **A. rubra** Bong.

Alnus ×*purpusii* Call., see note under **A. tenuifolia** Nutt.

***Alnus rhombifolia** Nutt. **†white alder**

†*Alnus rhombifolia* Nutt., No. Amer. Sylva 1: 33. 1842.
Alnus rhombifolia var. *bernardina* Munz & Johnst., Torrey Bot. Club Bul. 52: 222. 1925.

DERIVATION.—Rhombic-leaved.

OTHER COMMON NAME.—Sierra alder (SPN).

RANGE.—Southern interior British Columbia, south in Idaho, Washington, Oregon, and Sierra Nevada and Coast Ranges of California to northern Lower California.

Alnus rotundifolia Mill., see A. GLUTINOSA (L.) Gaertn.

***Alnus rubra** Bong. **†red alder**

†*Alnus rubra* Bong., Acad. St. Pétersb. Mém., Sér. 6, Sci. Math. Phys. Nat. 2: 162. 1832. Not *Betula-Alnus rubra* Marsh., Arbustr. Amer. 20. 1785.
Alnus oregona Nutt., No. Amer. Sylva 1: 28, pl. 9. 1842.
Alnus rubra var. *pinnatisecta* Starker, Jour. Forestry 37: 415, fig. 1. 1939.

DERIVATION.—Red, the sapwood turning reddish when freshly cut.

OTHER COMMON NAMES.—Oregon alder, western alder.

RANGE.—Pacific coast region from southeastern Alaska southeast to western British Columbia and south through western Washington and western Oregon to southern California.

Alnus rugosa (Du Roi) Spreng. **speckled alder**

Betula alnus (*rugosa*) Du Roi, Obs. Bot. 32. 1771.
Betula rugosa (Du Roi) Ehrh., Beitr. Naturk. 3: 21. 1788.
Alnus rugosa (Du Roi) Spreng., Syst. Veget. 3: 848. 1826.
Alnus incana β americana Reg., Soc. Imp. Nat. Moscou Nouv. Mém. 13: 155. 1861. (Monog. Betul. 97.)
Alnus incana var. *tomophylla* Fern. ex Rehd., Man. Cult. Trees Shrubs 147. 1927.
Alnus rugosa var. *americana* (Reg.) Fern., Rhodora 47: 350, pls. 980-981. 1945.
Alnus incana (L.) Moench subsp. *rugosa* (Du Roi) R. T. Clausen, Cornell Univ. Agr. Expt. Sta. Mem. 291: 8. 1949.

This shrubby species sometimes becomes a small tree 15 to 26 feet high. Formerly it was included with the Eurasian species *Alnus incana* (L.) Moench and its variety *A. incana* var. *glauca* Ait. f., and by some authors not separated. Fernald in the reference cited below showed that the American alder is distinct. In the 1927 Check List *A. incana* was mentioned in a footnote as a shrub. The name *A. rugosa* formerly was applied to *A. serrulata* (Ait.) Willd.

DERIVATION.—Wrinkled.

RANGE.—Newfoundland and Labrador west to Hudson Bay and central Saskatchewan, south to eastern North Dakota, northeastern Iowa, northern Indiana, northeastern Illinois, northern Ohio, and Massachusetts, and in mountains to West Virginia and Maryland.

REFERENCE.—Fernald, M. L. Eastern North American representatives of *Alnus incana*. Rhodora 47: 333-361, illus. 1945.

Alnus serrulata (Ait.) Willd. **hazel alder**

?*Betula-Alnus rubra* Marsh., Arbustr. Amer. 20. 1785; *nomen subnudum*.

Betula serrulata Ait., Hort. Kew. 3: 338. 1789.

Alnus serrulata (Ait.) Willd., Sp. Pl. 4(1): 336. 1805.

Alnus rubra (Marsh.) Tuckerman, Amer. Jour. Sci. 45: 32. 1843. Not *Alnus rubra* Bong., Acad. St. Pétersb. Mém., Sér. 6, Sci. Math. Phys. Nat. 2: 162. 1832.

Alnus noveboracensis Britton, Torreya 4: 124. 1904.

?*Alnus* ×*fallacina* Call., Repert. Spec. Novarum Regni Veg. 10: 232. 1911; as *A. rugosa* × *serrulata*.

Alnus serrulata var. *subelliptica* Fern., Rhodora 47: 358, pl. 986. 1945.

DERIVATION.—Finely saw-toothed, referring to the leaves.

OTHER COMMON NAMES.—black alder, common alder, smooth alder.

RANGE.—Southwestern Nova Scotia and central Maine, west to New York, southern Michigan, Indiana, and Missouri, south to southeastern Oklahoma, Louisiana, and northern Florida.

REFERENCE.—See **Alnus rugosa** (Du Roi) Spreng.

This shrubby species sometimes becomes a small tree to 26 feet high, according to Fernald (Rhodora 47: 359. 1945), and reaches a height of 30 feet in Louisiana, according to Cocks (Arnold Arboretum Jour. 3: 174. 1922). In the 1927 Check List it was omitted except for a reference to *Alnus noveboracensis* Britton in a footnote. This species has generally been known as *A. rugosa*. However, Fernald showed that the name *A. rugosa* (Du Roi) Spreng. belongs instead to speckled alder, which had been included under the Eurasian species *A. incana* (L.) Moench. The name *A. serrulata* (Ait.) Willd. was adopted earlier by Britton and Shafer (No. Amer. Trees 261. 1908).

Alnus sinuata (Reg.) Rydb. **†Sitka alder**

Alnus viridis β sibirica lusus b *sitchensis* Reg., Soc. Nat. Moscou Nouv. Mém. 13(2): 138. 1861. (Monog. Betul. 80.)

Alnus viridis δ sinuata Reg., Soc. Imp. Nat. Moscou Bul. 38(2): 422. 1865.

†*Alnus sinuata* (Reg.) Rydb., Torrey Bot. Club Bul. 24: 190. 1897.

Alnus sitchensis (Reg.) Sarg., Silva No. Amer. 14: 61, pl. 727. 1902.

Alnus fruticosa Rupr. var. *sinuata* (Reg.) Reg. ex Hultén, Fl. Aleutian Is. 153. 1937.

Alnus crispa (Ait.) Pursh subsp. *sinuata* (Reg.) Hultén, Fl. Alaska Yukon, Lunds Univ. Årssk. N. F. Avd. 2, 40(1): 587. 1944.

Alnus crispa subsp. *sinuata* var. *laciniata* Hultén, Fl. Alaska Yukon, Lunds Univ. Årssk. N. F. Avd. 2, 40(1): 589. 1944.

DERIVATION.—Sinuate, referring to the wavy-margined leaves.

OTHER COMMON NAMES.—mountain alder, wavyleaf alder.

RANGE.—Yukon to southern and western Alaska, southeast to British Columbia and southwestern Alberta, and in the United States from Washington to western Montana, south to northeastern and western Oregon and northern California. Also in eastern Asia.

According to Raup (Arnold Arboretum Contrib. 6: 152. 1934) and others, this species should be included in the shrubby species *Alnus crispa* (Ait.) Pursh, American green alder, with which it intergrades in the far North. *A. sinuata* also has been united with *A. fruticosa* Rupr., a shrub of eastern Asia.

Alnus sitchensis (Reg.) Sarg., see **A. sinuata** (Reg.) Rydb.

Alnus tenuifolia Nutt. **thinleaf alder**

†*Alnus tenuifolia* Nutt., No. Amer. Sylva 1: 32, pl. 10. 1842.

DERIVATION.—Thin-leaved.

OTHER COMMON NAMES.—†mountain alder, river alder, baraña.

RANGE.—Yukon to central and southern Alaska, southeast to British Columbia and southwestern Saskatchewan, and in United States from western Montana to Washington, south to Oregon and in Sierra Nevada to central California and western Nevada, and east to eastern Arizona and northern New Mexico.

By Raup (Arnold Arboretum Contrib. 6: 153. 1934) and others *Alnus tenuifolia* has been regarded as a synonym of *A. incana* (L.) Moench. However according to Fernald (Rhodora 47: 333. 1945) the latter is a Eurasian species.

A reported natural hybrid of *Alnus tenuifolia* with an unidentified species is *A.* ×*purpusii* Call. (ex. Schneid., Illus. Handb. Laubholzk. 1: 132. 1904; as "*purpusi*"; as *A. rugosa* × *tenuifolia*). It was discovered in British Columbia by Carl Albert Purpus (1853-1941) and afterwards recorded from Montana and Washington, outside the range of the other suspected parental species.

Alvaradoa Liebm. (Family Simaroubaceae) **alvaradoa**

†*Alvaradoa* Liebm., Naturhist. For. Kjöbenhavn Vidensk. Meddel. 1853: 100. 1854.

DERIVATION.—In commemoration of Pedro de Alvarado, an explorer with Hernando Cortez' expedition in the conquest of Mexico.

REFERENCE.—Cronquist, Arthur. Studies in the Simaroubaceae—IV. Resume of the American genera. Brittonia 5: 128-147. 1944.

Alvaradoa amorphoides Liebm. **Mexican alvaradoa**

†*Alvaradoa amorphoides* Liebm., Naturhist. For. Kjöbenhavn Vidensk. Meddel. 1853: 101. 1854.

Alvaradoa psilophylla Urban, Repert. Spec. Novarum Regni Veg. 20: 304. 1924.

Alvaradoa amorphoides subsp. *psilophylla* (Urban) Cronquist, Brittonia 5: 135. 1944.

DERIVATION.—Like *Amorpha*, from the resemblance of the leaves.

RANGE.—Southern Florida, local in a few hammocks. Also in Bahama Islands, Cuba, Mexico from Chihuahua and Sonora southward, and Central America.

Amarolea Small, see **Osmanthus** Lour.

Amelanchier Med. (Family Rosaceae) **†serviceberry**

†*Amelanchier* Med., Phil. Bot. 1: 135, 155. 1789.

DERIVATION.—The common name of a European species.

OTHER COMMON NAMES.—juneberry, sarviceberry, shadblow, shadbush.

In addition to the one named hybrid included here, various other unnamed hybrids are common in this genus.

REFERENCES.—Jones, George Neville. American species of Amelanchier. Ill. Biol. Monog. 20(2), 126 pp., illus. 1946.

Nielsen, Etlar L. A taxonomic study of the genus Amelanchier in Minnesota. Amer. Midland Nat. 22: 160-206, illus. 1939.

Amelanchier alabamensis Britton, see **A. arborea** (Michx. f.) Fern.

Amelanchier alnifolia (Nutt.) Nutt. **saskatoon serviceberry**

Aronia alnifolia Nutt., Gen. No. Amer. Pl. 1: 306. 1818.

Amelanchier alnifolia (Nutt.) Nutt., Acad. Nat. Sci. Phila. Jour. 7: 22. 1834; *nomen nudum.*

Amelanchier alnifolia (Nutt.) Nutt. ex M. J. Roem., Fam. Nat. Reg. Veg. Syn. Mon. 3: 147. 1847.

Amelanchier carrii Rydb., Brittonia 1: 98. 1931.

Amelanchier alnifolia var. *dakotensis* Nielson, Amer. Midland Nat. 22: 168, pl. 2a. 1939.

DERIVATION.—With leaves like *Alnus*, or alder-leaved.

OTHER COMMON NAMES.—juneberry, saskatoon, western shadbush.

RANGE.—Western Ontario, western Minnesota, eastern North Dakota, and southern Manitoba northwest to Yukon, south to southern Oregon, northern Utah, Colorado, central Nebraska, and northwestern Iowa.

A shrub or small tree to 13 feet tall, according to G. N. Jones (Ill. Biol. Monog. 20(2): 68. 1946). In the 1927 Check List regarded as a shrub.

Amelanchier amabilis Wieg., see **A. sanguinea** (Pursh) DC.

Amelanchier arborea (Michx. f.) Fern. **downy serviceberry**

Mespilus arborea Michx. f., Hist. Arbr. For. Amér. Sept. 3: 68, pl. 11. 1813.

Amelanchier alabamensis Britton in Britton & Shafer, No. Amer. Trees 439, fig. 386. 1908.

Amelanchier arborea (Michx. f.) Fern., Rhodora 43: 563, pl. 672, fig. 2. 1941.

Amelanchier arborea var. *alabamensis* (Britton) G. N. Jones, Ill. Biol. Monog. 20(2): 41. 1946.

Fernald (Rhodora 43: 559–567, illus. 1941) has shown that the name *Amelanchier canadensis* (L.) Med., by which this species has long been known, should be applied to the shrubby species formerly known as *A. oblongifolia* (Torr. & Gray) M. J. Roem.

DERIVATION.—Tree-like.

OTHER COMMON NAMES.—shadblow serviceberry (SPN), †serviceberry.

RANGE.—New Brunswick, Maine, and southern Quebec, west to southern Ontario, northern Michigan, and eastern Minnesota, south to southeastern Nebraska, eastern Oklahoma, eastern Texas, Louisiana, and northern Florida.

HYBRID.—*Amelanchier* ×*grandiflora* Rehd. (*A. arborea* × *laevis*).

Amelanchier australis Standl., see **A. utahensis** Koehne

Amelanchier bakeri Greene, see **A. utahensis** Koehne

Amelanchier bartramiana (Tausch) M. J. Roem. (Fam. Nat. Reg. Veg. Syn. 3: 145. 1847), Bartram serviceberry, is a several-stemmed shrub less than 10 feet high in the United States but becomes a small tree in Nova Scotia, according to A. E. Roland. Its range is from Labrador and Newfoundland to Quebec, Ontario, northern Michigan, and northeastern Minnesota, and south in East to northeastern Pennsylvania, New York, and Maine.

Amelanchier canadensis (L.) Med., see note under **A. arborea** (Michx. f.) Fern.

Amelanchier carrii Rydb., see **A. alnifolia** (Nutt.) Nutt.

Amelanchier covillei Standl., see **A. utahensis** Koehne

Amelanchier crenata Greene, see **A. utahensis** Koehne

Amelanchier elliptica A. Nels., see **A. utahensis** Koehne

Amelanchier ephemerotricha Suksd., see **A. florida** Lindl.

Amelanchier florida Lindl. **Pacific serviceberry**

†*Amelanchier florida* Lindl., Edwards' Bot. Reg. 19: No. 1589, pl. 1589. 1833.
Amelanchier ephemerotricha Suksd., Werdenda 1: 20. 1927.
Amelanchier ephemerotricha var. *silvicola* Suksd., Werdenda 1: 21. 1927.
Amelanchier vestita Suksd., Werdenda 1: 22. 1927.
Amelanchier florida var. *humptulipensis* G. N. Jones, Wash. Univ. Pub. Biol. 5: 181. 1936.

DERIVATION.—Flowering, full of flowers.

OTHER COMMON NAME.—†western serviceberry.

RANGE.—Pacific coast region from Alaska Peninsula (Katmai region) of southern Alaska southeast to southwestern British Columbia, western Washington, and northwestern California (Mendocino County).

REFERENCES.—Nielsen, Etlar L. The identity of *Amelanchier florida* Lindley. Madroño 4: 17-21, illus. 1937.
Nielsen, Etlar. A note concerning the identity of *Amelanchier florida* Lindley and *A. alnifolia* Nuttall. Amer. Midland Nat. 22: 207-208. 1939.

Amelanchier goldmanii Woot & Standl., see **A. utahensis** Koehne

Amelanchier ×grandiflora Rehd. ———

Amelanchier arborea × laevis
Amelanchier ×grandiflora Rehd., Arnold Arboretum Jour. 2: 45. 1920 (Sept. 6); as *A. canadensis* [*arborea*] × *laevis*.
DERIVATION.—Large-flowered.
COMMON NAME.—apple serviceberry (SPN).
RANGE.—Recorded from New Hampshire to New York, southern Ontario, and Michigan, south to Missouri, Georgia, and North Carolina. Also in cultivation.

Amelanchier huronensis Wieg., see **A. sanguinea** (Pursh) DC.

Amelanchier interior Nielsen **inland serviceberry**

Amelanchier interior Nielsen, Amer. Midland Nat. 22: 185, pl. 13. 1939.
Amelanchier wiegandii Nielsen, Amer. Midland Nat. 22: 180, pl. 10. 1939.
DERIVATION.—Inland.
RANGE.—Northern Michigan, Wisconsin, Minnesota, and northeastern Iowa.
A straggling shrub or small tree sometimes 26 to 33 feet high, described in 1939.

Amelanchier jonesiana Schneid., see **A. utahensis** Koehne

Amelanchier laevis Wieg. **Allegheny serviceberry**

Amelanchier laevis Wieg., Rhodora 14: 123, 154, pl. 96, fig. 7. 1912.
DERIVATION.—Smooth, referring to the hairless foliage.
OTHER COMMON NAMES.—juneberry, †serviceberry, shadbush.
RANGE.—Newfoundland west to southern Quebec, Maine, Ontario, and Minnesota, south to eastern Kansas, Missouri, Indiana, Ohio, and Delaware and in mountains to Georgia and Alabama.
HYBRID.—*Amelanchier ×grandiflora* Rehd. (*A. arborea* × *laevis*).

Amelanchier mormonica Schneid., see **A. utahensis** Koehne

Amelanchier nitens Tidestrom, see **A. utahensis** Koehne

Amelanchier oreophila A. Nels., see **A. utahensis** Koehne

Amelanchier plurinervis Koehne, see **A. utahensis** Koehne

Amelanchier prunifolia Greene, see **A. utahensis** Koehne

Amelanchier purpusii Koehne, see **A. utahensis** Koehne

Amelanchier rubescens Greene, see **A. utahensis** Koehne

Amelanchier sanguinea (Pursh) DC. **roundleaf serviceberry**

Pyrus sanguinea Pursh, Fl. Amer. Sept. 1: 340. 1814.
Amelanchier sanguinea (Pursh) DC., Prodr. 2: 633. 1825.
Amelanchier grandiflora Wieg., Rhodora 22: 149. 1920 (Oct. 29). Not *Amelanchier* ×*grandiflora* Rehd., Arnold Arboretum Jour. 2: 45. 1920 (Sept. 6).
Amelanchier huronensis Wieg., Rhodora 22: 150. 1920.
Amelanchier amabilis Wieg., Rhodora 23: 48. 1921.

DERIVATION.—Bloody, from the red twigs.

OTHER COMMON NAMES.—roundleaf juneberry, shore shadbush, Huron serviceberry.

RANGE.—Maine and southern Quebec, west to New York, Ontario, and northern Minnesota, south to northern Iowa, southern Michigan, northern Ohio, and New Jersey. Also in mountains of western North Carolina.

A shrub or occasionally a small tree 10 to 23 feet high, according to Nielsen (Amer. Midland Nat. 22: 170. 1939) and G. N. Jones (Ill. Biol. Monog. 20(2): 60. 1946).

Amelanchier utahensis Koehne **Utah serviceberry**

Amelanchier utahensis Koehne, Wissensch. Progr. Falk-Realgymnasiums Berlin 95: 25, pl. 2, fig. 20e. 1890.
Amelanchier alnifolia var. *utahensis* (Koehne) M. E. Jones, Calif. Acad. Sci. Proc., Ser. 2, 5: 679. 1895.
Amelanchier prunifolia Greene, Pittonia 4: 21. 1899.
Amelanchier venulosa Greene, Pittonia 4: 21. 1899.
Amelanchier bakeri Greene, Pittonia 4: 128. 1900.
Amelanchier crenata Greene, Pittonia 4: 127. 1900.
Amelanchier rubescens Greene, Pittonia 4: 128. 1900.
Amelanchier elliptica A. Nels., Bot. Gaz. 40: 66. 1905.
Amelanchier oreophila A. Nels., Bot. Gaz. 40: 65. 1905.
Amelanchier mormonica Schneid., Illus. Handb. Laubholzk. 1: 740, fig. 414, n-o. 1906; Repert. Spec. Nov. Regni Veg. 3: 182. 1906.
Amelanchier jonesiana Schneid., Repert. Spec. Nov. Regni Veg. 3: 182. 1906.
Amelanchier goldmanii Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 16: 131. 1913.
Amelanchier australis Standl., Biol. Soc. Wash. Proc. 26: 116. 1913.
Amelanchier covillei Standl., Biol. Soc. Wash. Proc. 27: 198. 1914.
Amelanchier plurinervis Koehne, Bot. Jahrb. 52: 277. 1915.
Amelanchier purpusii Koehne, Bot. Jahrb. 52: 277. 1915.
Amelanchier nitens Tidestrom, Biol. Soc. Wash. Proc. 36: 182. 1923.

Amelanchier alnifolia var. *covillei* (Standl.) Jeps., Man. Fl. Pl. Calif. 510. 1925.
Amelanchier alnifolia var. *venulosa* (Greene) Jeps., Man. Fl. Pl. Calif. 510. 1925.
Amelanchier alnifolia var. *nitens* (Tidestrom) Munz, South. Calif. Acad. Sci. Bul. 31: 65. 1932.
Amelanchier utahensis subsp. *covillei* (Standl.) Clokey, Madroño 8: 57. 1945.
Amelanchier utahensis subsp. *oreophila* (A. Nels.) Clokey, Madroño 8: 58. 1945.
Amelanchier alnifolia var. *oreophila* (A. Nels.) R. J. Davis, Madroño 11: 144. 1951.

Most of the many specific names in the synonymy above were given to shrubby variations of this widespread species.

DERIVATION.—Of Utah, where it was first distinguished.

RANGE.—Southeastern Wyoming to southern Montana, Idaho, and southeastern Oregon, south to southern California, southern New Mexico, and Trans-Pecos Texas (Guadalupe Mountains). Also in northern Lower California, Mexico.

A shrub or small tree up to 16 feet high, according to G. N. Jones (Ill. Biol. Monog. 20(2): 88. 1946).

Amelanchier venulosa Greene, see **A. utahensis** Koehne

Amelanchier vestita Suksd., see **A. florida** Lindl.

Amelanchier wiegandii Nielsen, see **A. interior** Nielsen

Amygdalus L., see **Prunus** L.

Amyris P. Br. (Family Rutaceae) **amyris**

†*Amyris* P. Br., Civ. Nat. Hist. Jamaica 208. 1756.

DERIVATION.—Probably a Latinized version of Greek words meaning not myrrh, the author believing that the genus was related to Old World myrrh but was not true myrrh.

Amyris balsamifera L. **balsam amyris**

†*Amyris balsamifera* L., Syst. Nat. Ed. 10, 2: 1000. 1759; as "*balsamif.*" L., Sp. Pl. Ed. 2, 496. 1762; as "*balsamifera.*"

DERIVATION.—Balsam-bearing.

OTHER COMMON NAME.—†balsam torchwood.

RANGE.—Coastal hammocks of southern Florida, north to central Florida (Volusia County). Also in West Indies, Mexico (Sinaloa to Guerrero), and South America.

Amyris elemifera L. **sea amyris**

†*Amyris elemifera* L., Syst. Nat. Ed. 10, 2: 1000. 1759; as "*elemifer.*"
Amyris maritima Jacq., Enum. Pl. Carib. 23. 1760.

DERIVATION.—Bearing *elemi*, a fragrant resin or balsam.

OTHER COMMON NAMES.—†torchwood, candlewood, palo de tea.

RANGE.—Coastal hammocks of southern Florida, north to central Florida (Volusia County), and Florida Keys. Also in West Indies and Central America.

Anamomis Griseb., see **Eugenia** L.

Andira Lam. (Family Leguminosae) **angelin**

Vouacapoua Aubl., Hist. Pl. Guiane Franç., v. 2 (Sup.): 9, pl. 373. 1775; *nomen rejiciendum.*

Andira Lam., Encycl. Méth. Bot. 1: 171. 1783; *nomen conservandum.*

DERIVATION.—From the Brazilian name.

OTHER COMMON NAME.—angelintree (SPN).

Andira inermis (W. Wright) H. B. K. **cabbage angelin**

Geoffraea jamaicensis inermis W. Wright, Roy. Soc. London, Phil. Trans. 67: 512, pl. 10. 1777; rejected as not a binomial.

Geoffraea inermis W. Wright, Lond. Med. Jour. 8: 256. 1787.

Andira inermis (W. Wright) H. B. K., Nov. Gen. Sp. 6: 385. 1824.

Andira jamaicensis (W. Wright) Urban, Symb. Ant. Fund. Fl. Ind. Occ. 4: 298. 1905.

DERIVATION.—Unarmed; that is, without spines.

OTHER COMMON NAMES.—cabbage angelintree (SPN), moca.

RANGE.—Bahia Honda Key, southern Florida, according to Small (Man. Fl. Southeast. U. S. 712. 1933), apparently rare and local. This is the only known locality in the United States. Also in West Indies and from central Mexico (Michoacán) south through Central America to South America. Also recorded from western tropical Africa.

Annona L. (Family Annonaceae) **annona**

†*Annona* L., Sp. Pl. 536. 1753; Gen. Pl. Ed. 5, 241. 1754.

DERIVATION.—From the aboriginal Indian name.

This generic name has been spelled "*Anona*" by some authors, including the 1927 Check List.

Annona glabra L. **†pond-apple**

†*Annona glabra* L., Sp. Pl. 537. 1753.

Annona palustris L., Sp. Pl. Ed. 2, 757. 1762.

DERIVATION.—Glabrous, or hairless.

OTHER COMMON NAMES.—alligator-apple, custard-apple.

RANGE.—Southern Florida, including Florida Keys. Also widely distributed in tropical America, in West Indies and from southern Mexico south through Central America to South America. Also recorded from western Africa.

ANNONA SQUAMOSA L. SUGAR-APPLE

Annona squamosa L., Sp. Pl. 537. 1753.

DERIVATION.—Covered with scales.
OTHER COMMON NAME.—sweetsop.
RANGE.—Naturalized on Florida Keys, according to Small (Man. Southeast. Fl. 533. 1933), and mentioned in a note in the 1927 Check List. Native of tropical America and widely cultivated for its fruit and naturalized in tropical regions.

Apinus Neck., see **Pinus** L.

Aralia L. (Family Araliaceae) **aralia**

†*Aralia* L., Sp. Pl. 273. 1753; Gen. Pl. Ed. 5, 134. 1754.
DERIVATION.—From the French-Canadian name.

Aralia spinosa L. **†devils-walkingstick**

†*Aralia spinosa* L., Sp. Pl. 273. 1753.
DERIVATION.—Spiny.
OTHER COMMON NAMES.—angelica-tree, Hercules-club, prickly-ash.
RANGE.—New Jersey to Pennsylvania, western New York, Ohio, southern Indiana, and southeastern Missouri, south to southeastern Oklahoma and eastern Texas, and east to northern Florida. Also escaping from cultivation from southern New England to Michigan and naturalized locally in Connecticut and perhaps elsewhere.

Arbutus L. (Family Ericaceae) **madrone**

†*Arbutus* L., Sp. Pl. 395. 1753; Gen. Pl. Ed. 5, 187. 1754.
DERIVATION.—The classical Latin name of *Arbutus unedo* L., strawberry madrone, of southern Europe.
OTHER COMMON NAME.—madroño.

Arbutus arizonica (A. Gray) Sarg. **Arizona madrone**

Arbutus xalapensis H. B. K. var. *arizonica* A. Gray, Synopt. Fl. No. Amer. Ed. 2, Sup., 2(1): 396. 1886.
†*Arbutus arizonica* (A. Gray) Sarg., Gard. and Forest 4: 317, fig. 54. 1891.
DERIVATION.—Of Arizona, where it was discovered.
OTHER COMMON NAME.—†Arizona madroño.
RANGE.—Mountains of extreme southwestern New Mexico, southern Arizona, and northern Mexico (Sonora and Chihuahua to San Luis Potosí and Jalisco).

Arbutus menziesii Pursh **Pacific madrone**

†*Arbutus menziesii* Pursh, Fl. Bor. Amer. 1: 282. 1814.
DERIVATION.—Named for its discoverer, Archibald Menzies (1754-1842), Scotch physician and naturalist who accompanied Captain Vancouver on his voyage of discovery in the Northwest.
OTHER COMMON NAME.—madroño.
RANGE.—Pacific coast region from southwestern British Columbia south to western Washington, western Oregon, and Coast

Ranges and Sierra Nevada to central California and local in southern California.

Arbutus texana Buckl. **Texas madrone**

†*Arbutus texana* Buckl., Acad. Nat. Sci. Phila. Proc. 1861 [v. 13]: 460. 1862.

Arbutus xalapensis H. B. K. var. *texana* (Buckl.) A. Gray, Synopt. Fl. No. Amer. Ed. 2, Sup., 2(1): 397. 1886.

DERIVATION.—Of Texas, where it was first collected.

OTHER COMMON NAME.—†Texas madroño.

RANGE.—Central Texas (Edwards Plateau) to Trans-Pecos Texas, southeastern New Mexico (Guadalupe Mountains), and northeastern Mexico (Nuevo León).

At one time united with *Arbutus xalapensis* H. B. K., of Mexico.

Arctostaphylos Adans. (family Ericaceae), manzanita, a genus of shrubs, contains a few species in the Pacific Coast region that may have rare individuals becoming small trees. Sargent (Man. Trees No. Amer. Ed. 2, Corr. 910 pp., illus. 1926) omitted the genus. Sudworth (Forest Trees Pacif. Slope 418. 1908) in a footnote suggested that three or four species eventually should be included among the Pacific trees. However, in the 1927 Check List (p. 218, footnote), he excluded these treelike forms with some reluctance.

Certainly some individuals of *Arctostaphylos* reach larger size than do several generally shrubby species accepted here as small trees, as heights of 12 to 20 feet (or even 25 feet) have been recorded. Trunks up to 1 foot (rarely over 2 feet) in diameter have been reported. However, the trunks are short and branch usually within 3 feet from the ground and thus do not meet the definition of a tree, which should have a single trunk 3 inches in diameter at breast height (4½ feet above the ground). Further information is desired, particularly of any large individuals with single trunks. Photographs, as well as botanical specimens, would be helpful for confirmation.

It seems best at present to postpone acceptance of *Arctostaphylos* as trees until more evidence is available. These five species of the Pacific Coast region which become treelike and which are to be sought as small trees may be mentioned: *A. columbiana* Piper, hairy manzanita; *A. diversifolia* (Parry) Parry, toothed manzanita; *A. glauca* Lindl., bigberry manzanita; *A. manzanita* Parry, big manzanita; *A. viscida* Parry, whiteleaf manzanita.

Ardisia Sw. (Family Myrsinaceae) **ardisia**

Katoutheka Adans., Fam. Pl. 2: 159. 1763; *nomen rejiciendum.*

?*Vedela* Adans., Fam. Pl. 2: 502. 1763; *nomen rejiciendum.*

†*Icacorea* Aubl., Hist. Pl. Guiane Franç. v. 2, Sup.: 1, pl. 368. 1775; *nomen rejiciendum.*

Bladhia Thornstedt in Thunb. & Thornstedt, Nov. Gen. Pl. Part. Prim. 6, illus. 1781; *nomen rejiciendum.*

Ardisia Sw., Nov. Gen. Pl. Prodr. 3, 48. 1788; *nomen conservandum.*

DERIVATION.—From Greek *ardis* (arrow-point), referring to the sagittate anthers.

Ardisia escallonioides Schiede & Deppe **marbleberry**

Cyrilla paniculata Nutt., Amer. Jour. Sci. and Arts 5: 290. 1822.

Ardisia escallonioides Schiede & Deppe ex Schlecht. & Cham., Linnaea 6: 393. 1831.

Ardisia pickeringii Torr. & Gray ex A. DC., Prodr. 8: 124. 1844.

†*Icacorea paniculata* (Nutt.) Sudw., Gard. and Forest 6: 324. 1893.

Ardisia paniculata (Nutt.) Sarg., Man. Trees No. Amer. Ed. 2, 806. 1922. Not *Ardisia paniculata* Roxb., Fl. Indica 2: 270. 1824. Not *Ardisia paniculata* (Roxb.) A. DC., Prodr. 8: 139. 1844.

DERIVATION.—Like *Escallonia* Mutis, a genus of South American trees and shrubs with leathery leaves and showy flowers named for Escallon, a Spanish traveler.

OTHER COMMON NAMES.—marble ardisia (SPN), †marlberry.

RANGE.—Hammocks of southern Florida and Florida Keys. Also in West Indies and from northeastern Mexico (Tamaulipas and San Luis Potosí) southward to Guatemala.

REFERENCE.—Sargent, C. S. Arnold Arboretum Jour. 5: 48-49. 1924.

Argentacer Small, see **Acer** L.

Artemisia L. (Family Compositae) **sagebrush**

Artemisia L., Sp. Pl. 845. 1753; Gen. Pl. Ed. 5, 367. 1754.

DERIVATION.—From the classical Greek and Latin name of mugwort, an Old World species. The name of that species, in turn, derives (some say) from the Greek goddess Artemis (Roman, Diana) or, according to others, Artemisia, wife of Mausolus, King of Caria.

OTHER COMMON NAME.—wormwood (SPN).

Artemisia tridentata Nutt. **big sagebrush**

Artemisia tridentata Nutt., Amer. Phil. Soc. Trans., Ser. 2, 7: 398. 1841.

DERIVATION.—Three-toothed, referring to the apex of the leaf.

OTHER COMMON NAMES.—sage, black sage, blue sage, sagebrush, basin sagebrush, common sagebrush.

RANGE.—Southwestern North Dakota and Montana west to southern British Columbia and central Washington, south to central Oregon, eastern and southern California, northern Arizona, and northern New Mexico, and north to western Nebraska and western South Dakota. Also in northern Lower California.

This widespread species, probably the most abundant shrub in western United States, rarely becomes a small tree and therefore is included here. A few shrubby varieties have been named.

On favorable moist sites *Artemisia tridentata* has been recorded as a small tree as much as 12 to 20 feet high with a single trunk 4 to 14 inches d. b. h., though irregular in shape. Preston (Rocky Mt. Trees 280–281, pl. 1940) accepted this species as reported to reach tree size in southern Colorado and New Mexico. Billings (Nevada Trees. Nev. Univ. Agr. Ext. Serv. Bul. 94: 85. 1945) also cited this species as a small tree in Nevada. Joseph H. Robertson likewise has called attention to this species as a tree in Nevada, as has R. F. Daubenmire in Wyoming.

Asimina Adans. (Family Annonaceae) **pawpaw**

†*Asimina* Adans., Fam. Pl. 2: 365. 1763.

DERIVATION.—From the American Indian name.

Asimina triloba (L.) Dunal **pawpaw**

Annona triloba L., Sp. Pl. 537. 1753.

†*Asimina triloba* (L.) Dunal, Monog. Anon. 83. 1817.

DERIVATION.—Three-lobed, doubtless referring to the three-parted perianth with three sepals and two rows of three petals each.

OTHER COMMON NAME.—common pawpaw (SPN).

RANGE.—New Jersey and western New York west to extreme southern Ontario, southern Michigan, Illinois, southern Iowa, and southeastern Nebraska, south to eastern Kansas and eastern Texas, and east to northwestern Florida and Georgia.

Avicennia L. (Family Verbenaceae) **black-mangrove**

†*Avicennia* L., Sp. Pl. 110. 1753; Gen. Pl. Ed. 5, 49. 1754.

DERIVATION.—In honor of Abu Sina, Latinized as Avicenna (980-1036), of Bokhara, a distinguished oriental physician and philosopher.

OTHER COMMON NAME.—†blackwood.

REFERENCE.—Bakhuizen van den Brink, R. C. Revisio generis Avicenniae (cum annotationibus diversis). Buitenzorg Jard. Bot. Bul., Ser. 3, 3: 199-226, illus. 1921.

Avicennia nitida Jacq. **black-mangrove**

†*Avicennia nitida* Jacq., Enum. Pl. Carib. 25. 1760.

DERIVATION.—Shining, referring to the bright evergreen leaves.

RANGE.—Coasts of southern to northern Florida (north to St. Johns and Levy Counties) and coast from southern Louisiana to southeastern and southern Texas. Also widely distributed on coasts of West Indies, Mexico (Tamaulipas and Lower California southward), Central America, South America, and Africa.

Baccharis L. (Family Compositae) **baccharis**

†*Baccharis* L., Sp. Pl. 860. 1753; Gen. Pl. Ed. 5, 370. 1754.

DERIVATION.—Ancient Greek name of a plant with a fragrant root.

†*Baccharis glomeruliflora* Pers. (Synops. Pl. 2: 423. 1807), southern baccharis, distributed along the coast from North Carolina to southern Florida and in West Indies, was accepted in the 1927 Check List. Pending further evidence it is here considered as a shrub not meeting the raised minimum limits of a tree. Small (Fla. Trees 102. 1913) included this species as becoming 10 feet tall, but later he (Man. Southeast. Flora 1398. 1933) cited it as a shrub of the same height. Sudworth added

it to the 1927 Check List (p. 237) on authority of Small that it reached 4 inches in trunk diameter in Florida.

Baccharis halimifolia L. **eastern baccharis**

†*Baccharis halimifolia* L., Sp. Pl. 860. 1753.

DERIVATION.—With leaves of *Halimus,* an old synonym of saltbush, *Atriplex.*

OTHER COMMON NAMES.—†groundsel-tree, sea-myrtle.

RANGE.—Coastal Plain, generally near coast, from Massachusetts south to southern Florida and west to southern Texas.

Batodendron Nutt., see **Vaccinium** L.

Betula L. (Family Betulaceae) **birch**

†*Betula* L., Sp. Pl. 982. 1753; Gen. Pl. Ed. 5, 422. 1754.

DERIVATION.—The classical Latin name of birch.

REFERENCES.—Butler, Bertram T. The western American birches. Torrey Bot. Club Bul. 36: 421-440, illus. 1909.

Fernald, M. L. Some North American Corylaceae (Betulaceae). I. Notes on Betula in eastern North America. Rhodora 47: 303-329, illus. 1945.

†*Betula* ×*jackii* Schneid. (*B. lenta* × *pumila*), included in the 1927 Check List, is omitted here because it is a hybrid known only in cultivation.

Betula alaskana Sarg., see **B. papyrifera** var. **humilis** (Reg.) Fern. & Raup

***Betula alleghaniensis** Britton **†yellow birch**

†*Betula lutea* Michx. f., Hist. Arbr. For. Amér. Sept. 2: 152, pl. 5. 1812; as to description; *nom. illegit.*

Betula alleghaniensis Britton, Torrey Bot. Club Bul. 31: 166. 1904.

Betula lutea alleghaniensis (Britton) Ashe, Charleston Mus. Bul. 14: 11. 1918.

Betula lutea var. *macrolepis* Fern., Rhodora 24: 170. 1922.

Betula lutea var. *alleghaniensis* (Britt.) Rehd., Bibliog. Cult. Trees Shrubs 96. 1949.

The familiar name *Betula lutea* Michx. f. must be rejected because technically it was superfluous when published, being originally proposed as a new name for *B. excelsa* Ait., which had been misapplied by other authors to this species.

DERIVATION.—Of the Allegheny Mountains.

OTHER COMMON NAMES.—birch (lumber), gray birch, silver birch, swamp birch.

RANGE.—Newfoundland and southern Quebec to Maine, Ontario, northern Michigan, southeastern Manitoba, and Minnesota, south to northeastern Iowa, northern Illinois, northern Ohio, and Delaware, and in mountains to North Carolina, northern Georgia, and Tennessee.

HYBRID.—*Betula* ×*purpusii* Schneid. (*B. alleghaniensis* × *pumila* var. *glandulifera*).

Betula andrewsii A. Nels., see **B. papyrifera** Marsh.

Betula beeniana A. Nels., see **B. ×hornei** Butler

Betula borealis Spach (Ann. des Sci. Nat., Bot., Sér. 2, 15: 196. 1841; formerly referred to *Betula microphylla* Bunge of Asia), generally an upright to depressed shrub 1 to 6 feet high, has been recorded also as a shrubby small tree (size not stated) by Fernald (Gray's Man. Bot. Ed. 8, 536. 1950). Range from Newfoundland and Labrador to Ungava, south to northern Vermont, Maine (Mount Katahdin), and Cape Breton Island. Perhaps not reaching tree size in the United States.

Betula ×caerulea Blanchard ———

Betula caerulea-grandis × *populifolia*
†*Betula caerulea* Blanchard, Betula 1(1): [1]. 1904 (May 7).

Originally described as a species but reduced to a hybrid by Fernald (Rhodora 24: 172. 1922) and by Woodworth (Bot. Gaz. 87: 336. 1929).

DERIVATION.—Sky-blue.

COMMON NAMES.—blueleaf birch (SPN), blue birch.

RANGE.—Nova Scotia, Maine, Vermont, and elsewhere within range of both parent species.

Betula caerulea-grandis Blanchard **†blueleaf birch**

Betula caerulea-grandis Blanchard, Betula 1(1): [1] 1904 (May 7).
Betula caerulea var. *grandis* Blanchard, *Betula* 1(2): [3] 1904 (May 13).
†*Betula caerulea* var. *blanchardi* Sarg., Man. Trees No. Amer. 202, fig. 168A. 1905.

DERIVATION.—Literally blue-large; apparently a typographical error for a large variety of *Betula caerulea*.

OTHER COMMON NAME.—Blanchard birch (SPN).

RANGE.—Southern Quebec south to eastern New York, Maine, and Nova Scotia.

REFERENCE.—Fernald, M. L. Rhodora 24: 171-173. 1922.

HYBRID.—*Betula ×caerulea* Blanchard (*B. caerulea-grandis* × *populifolia*).

Betula ×commixta Sarg., see **B. ×eastwoodiae** Sarg.

Betula cordifolia Reg., see **B. papyrifera** var. **cordifolia** (Reg.) Fern.

Betula ×eastwoodiae Sarg. **Yukon birch**

Betula glandulosa × *papyrifera* var. *humilis*
†*Betula eastwoodae* Sarg., Bot. Gaz. 67: 216. 1919.
Betula ×commixta Sarg., Bot. Gaz. 67: 216. 1919; as *B. alaskana* × *glandulosa*?
Betula glandulosa × *resinifera* (*Betula eastwoodae* Sarg.); Hultén, Fl. Alaska Yukon, Lunds Univ. Årssk. N. F. Avd. 2, 40(1): 575. 1944.

One of the parental species, *Betula glandulosa* Michx., resin birch, is a shrub.

DERIVATION.—Named for Alice Eastwood, California botanist, who collected the type specimen in 1914.

OTHER COMMON NAME.—†Alaska red birch.

RANGE.—Alberta, Yukon, and Alaska.

Betula fontinalis Sarg., see **B. occidentalis** Hook.

Betula guthriei Sudw., see **B. occidentalis** Hook.

Betula ×hornei Butler — **Horne birch**

Betula nana × *papyrifera*
Betula hornei Butler, Torrey Bot. Club Bul. 36: 425. 1909.
Betula kenaica × *nana exilis* (*Betula hornei* Butler); Hultén, Fl. Alaska Yukon, Lunds Univ. Årssk. N. F. Avd. 2, 40 (1): 577. 1944.
Betula beeniana A. Nels., Amer. Jour. Bot. 32: 284. 1945.
Betula nana exilis × *resinifera* (*B. beeniana* A. Nels.); J. P. Anderson, Fl. Alaska, Iowa State Col. Jour. Sci. 20: 219. 1946.

DERIVATION.—Named for W. T. Horne, who discovered it in 1902.

RANGE.—Central and southern Alaska.

In Alaska, *Betula nana* L., dwarf arctic birch, a low shrub, hybridizes with both *B. papyrifera* var. *humilis* and *B. papyrifera* var. *kenaica* to produce intermediate birches varying in size from shrubs to small trees. These two crosses were originally described as tree species, *B. beeniana* and *B. hornei*, respectively. However, as one binomial is sufficient to include hybrids between the different varieties of two parental species, the older name *B.* ×*hornei* is adopted here.

Betula kenaica W. H. Evans, see **B. papyrifera** var. **kenaica** (W. H. Evans) Henry

***Betula lenta** L. — **†sweet birch**

Betula lenta var. **lenta** — **sweet birch (typical)**

†*Betula lenta* L., Sp. Pl. 983. 1753.

DERIVATION.—Flexible or tough, referring to the twigs.

OTHER COMMON NAMES.—birch (lumber), black birch, cherry birch.

RANGE.—Southern Maine to New York, extreme southern Quebec, and southern Ontario, south to eastern Ohio, Maryland, and Delaware and in mountains to northern Alabama and northern Georgia.

Betula lenta var. **uber** Ashe — ———

Betula lenta var. *uber* Ashe, Rhodora 20: 64. 1918.
Betula uber (Ashe) Fern., Rhodora 47: 325, pl. 974, figs. 1-5. 1945.

DERIVATION.—Fruitful.

RANGE.—Southwestern Virginia (Smyth County).

A poorly known local variety meriting additional study.

Betula lutea Michx., see **B. alleghaniensis** Britton

Betula microphylla Bunge, see note under **B. occidentalis** Hook.

Betula montanensis Butler, see **B. papyrifera** var. **commutata** (Reg.) Fern.

Betula neoalaskana Sarg., see **B. papyrifera** var. **humilis** (Reg.) Fern. & Raup

***Betula nigra** L. **†river birch**

†*Betula nigra* L., Sp. Pl. 982. 1753.

DERIVATION.—Black.

OTHER COMMON NAMES.—black birch, red birch, water birch.

RANGE.—Connecticut, southern New York, Pennsylvania, Ohio, Indiana, southwestern Wisconsin, and southeastern Minnesota, south to eastern Iowa, southeastern Kansas, and eastern Texas, and east to northern Florida. Also local in New England northeast to southeastern New Hampshire.

Betula occidentalis Hook. **water birch**

Betula occidentalis var. **occidentalis** **water birch (typical)**

Betula occidentalis Hook., Fl. Bor.-Amer. 2: 155. 1839.

†*Betula fontinalis* Sarg., Bot. Gaz. 31: 239. 1901.

Betula utahensis Britton, Torrey Bot. Club Bul. 31: 165. 1904.

Betula papyrifera var. *occidentalis* (Hook.) Sarg., Arnold Arboretum Jour. 1: 63. 1919.

Betula fontinalis var. *inopina* (Jeps.) Jeps., Man. Fl. Pl. Calif. 270. 1923.

?*Betula guthriei* Sudw., Amer. Forests and Forest Life 33: 286, fig. 1927.

Betula papyrifera subsp. *occidentalis* (Hook.) Hultén, Fl. Alaska Yukon, Lunds Univ. Årssk. N. F. Avd. 2, 40(1): 582. 1944.

Fernald (Rhodora 47: 312–317, illus. 1945) showed that *Betula occidentalis* Hook. is the correct name for the water birch, which has been known as *B. fontinalis* Sarg. It was necessary to reject *B. papyrifera* var. *occidentalis* (Hook.) Sarg. for the western paper birch and to take up for it the name *B. papyrifera* var. *commutata* (Reg.) Fern. Raup (Arnold Arboretum Contrib. 6: 152. 1934) and a few other authors listed *B. fontinalis* as a synonym of the Asiatic species, *B. microphylla* Bunge.

DERIVATION.—Western.

OTHER COMMON NAMES.—black birch, †red birch.

RANGE.—Southwestern Manitoba and southern Saskatchewan west to northeastern British Columbia, south to Washington, Oregon, and in Sierra Nevada to central California, east to southern Nevada (Charleston Mountains), northeastern Arizona, and northwestern New Mexico, and north to Black Hills and North Dakota.

Betula occidentalis var. **fecunda** Fern. ———

Betula piperi Britton, Torrey Bot. Club Bul. 31: 165. 1904; as to description but not type.

†*Betula fontinalis* var. *piperi* (Britton) Sarg., Arnold Arboretum Jour. 1: 65. 1919; in part.

Betula occidentalis var. *fecunda* Fern., Rhodora 47: 317, pl. 966. 1945.

DERIVATION.—Fertile, apparently because of the clustered, slender flower clusters.

COMMON NAME.—†red birch.

RANGE.—Western Montana to eastern Washington.

***Betula papyrifera** Marsh. **†paper birch**

OTHER COMMON NAMES.—canoe birch, silver birch, white birch.

RANGE.—Widely distributed from Newfoundland and Labrador across Canada to northwestern Alaska, south in northwestern United States to northern Washington, east to northwestern Montana, and south in northeastern United States from northern North Dakota to Minnesota, northeastern Iowa, northern Illinois, Michigan, Pennsylvania, and New England. Also local southward to northwestern Oregon, northern Colorado, and northern Nebraska, and in East in northwestern Indiana, West Virginia, and western North Carolina.

HYBRIDS.—*Betula* ×*eastwoodiae* Sarg. (*B. glandulosa* × *papyrifera* var. *humilis*); *B.* ×*hornei* Butler (*B. nana* × *papyrifera*); *B.* ×*sandbergii* Britton (*B. papyrifera* × *pumila* var. *glandulifera*).

Betula papyrifera var. **papyrifera** **paper birch (typical)**

†*Betula papyrifera* Marsh., Arbustr. Amer. 19. 1785.

Betula alba ε *papyrifera* (Marsh.) Spach, Ann. des Sci. Nat., Bot., Sér. 2, 15: 188. 1841.

Betula andrewsii A. Nels., Bot. Gaz. 43: 281, fig. 1907; *nomen provisorium.*

Betula andrewsii A. Nels. in Coult. & Nels., New Man. Bot. Central Rocky Mts. 140. 1909.

Betula papyrifera andrewsii (A. Nels.) Daniels, Fl. Boulder, Colo. 101. 1911.

Betula alba var. *elobata* Fern., Rhodora 15: 169. 1913.

†*Betula papyrifera* var. *elobata* (Fern.) Sarg., Arnold Arboretum Jour. 1: 63. 1919.

Betula papyrifera var. *pensilis* Fern., Rhodora 47: 318, pl. 967. 1945.

Betula papyrifera var. *macrostachya* Fern., Rhodora 47: 318, pl. 968, figs. 1-3. 1945.

DERIVATION.—Paper-bearing, referring to the whitish papery bark.

RANGE.—Newfoundland and Labrador west to Manitoba, south to northern North Dakota, Minnesota, and northeastern Iowa, and east to northern Illinois, Michigan, Pennsylvania, New York,

and New England. Local southward to Black Hills of South Dakota and northeastern Wyoming, northern Colorado (Boulder County), northern Nebraska, northwestern Indiana, and West Virginia.

Betula papyrifera var. **commutata** (Reg.) Fern.

†western paper birch

Betula occidentalis Hook., Fl. Bor.-Amer. 2: 155. 1839; in part.

Betula alba L. subsp. *occidentalis* (Hook.) Reg. *β commutata* Reg., Soc. Nat. Moscou Bul. 38(2): 401, pl. 7, figs. 6-10. 1865.

?*Betula montanensis* Butler, Torrey Bot. Club Bul. 36: 438, fig. 17. 1909.

†?*Betula papyrifera* var. *montanensis* (Butler) Sarg., Arnold Arboretum Jour. 1: 64. 1919.

†*Betula papyrifera* var. *occidentalis* (Hook.) Sarg., Arnold Arboretum Jour. 1: 63. 1919; in part.

Betula papyrifera subsp. *occidentalis* (Hook.) Hultén, Fl. Alaska Yukon, Lunds Univ. Årssk. N. F. Avd. 2, 40(1): 582. 1944; in part.

Betula papyrifera var. *commutata* (Reg.) Fern., Rhodora 47: 312, pl. 965. 1945.

DERIVATION.—Changeable.

RANGE.—In Northeast from Labrador to southwestern Quebec, south to northern New York, Massachusetts, and Nova Scotia. In Northwest from Saskatchewan to western Northwest Territories, southern Yukon, and southeastern Alaska (northern part from Junean to Skagway), south to Washington, northern Idaho, and Montana. Also in central Nevada (Toiyabe Mountains, Lander County), according to W. D. Billings (Nev. Univ. Agr. Ext. Serv. Bul. 94: 50. 1945; as *Betula papyrifera* var. *occidentalis*).

Betula papyrifera var. **cordifolia** (Reg.) Fern.

mountain paper birch

Betula cordifolia Reg., Soc. Imp. Nat. Moscou Nouv. Mém. 13: 86, pl. 12, figs. 29-36. 1861.

Betula alba subsp. *papyrifera β cordifolia* (Reg.) Reg., Soc. Imp. Nat. Moscou Bul. 38(2): 401. 1865.

†*Betula papyrifera* var. *cordifolia* (Reg.) Fern., Rhodora 3: 173. 1901; without basonym; validated by Gray Herbarium Card-Index. Fern. ex Sarg., Silva No. Amer. 14: 55, pl. 724. 1902.

Betula papyrifera var. *β cordifolia* (Reg.) Winkler, Pflanzenreich 19(IV. 61): 84. 1904.

DERIVATION.—Heart-leaved.

OTHER COMMON NAME.—†paper birch.

RANGE.—Newfoundland and Labrador, west to Quebec and central Ontario, south to northern Iowa, Wisconsin, Michigan, northern New York, and New England. Also in western North Carolina (Black Mountains and Mount Mitchell).

Betula papyrifera var. **humilis** (Reg.) Fern. & Raup
Alaska paper birch

Betula alba L. subsp. *papyrifera* var. γ *humilis* Reg. in DC., Prodr. 16(2): 166. 1868.

Betula alaskana Sarg., Bot. Gaz. 31: 236. 1901. Not *B. alaskana* Lesq., U. S. Natl. Mus. Proc. 5: 446, pl. 6, fig. 14. 1883 (fossil, Miocene, Alaska).

†*Betula neoalaskana* Sarg., Arnold Arboretum Jour. 3: 206. 1922.

Betula papyrifera var. *neoalaskana* (Sarg.) Raup, Arnold Arboretum Contrib. 6: 152. 1934.

Betula papyrifera var. *humilis* (Reg.) Fern. & Raup, Rhodora 47: 321, pls. 971-972. 1945.

DERIVATION.—Dwarf, or low-growing.

OTHER COMMON NAMES.—Alaska birch, †Alaska white birch, canoe birch.

RANGE.—Western Northwest Territories and Yukon, west to northwestern Alaska, and south to southern (but not southeast) Alaska, British Columbia, and Saskatchewan.

Another name misapplied to this variation is *Betula resinifera* (Reg.) Britton (N. Y. Bot. Gard. Bul. 2: 165. 1901), from *B. alba* subsp. *verrucosa* var. *resinifera* Reg. (Soc. Imp. Nat. Moscou Bul. 38(2): 398. 1865). However as the latter was based upon a specimen from eastern Siberia, the combination *B. resinifera* (Reg.) Britton must be retained for the Asiatic plants.

Betula papyrifera var. **kenaica** (W. H. Evans) Henry
†Kenai birch

†*Betula kenaica* W. H. Evans, Bot. Gaz. 27: 481. 1899.

Betula papyrifera var. *kenaica* (W. H. Evans) Henry in Elwes & Henry, Trees Great Brit. Ireland 4: 984. 1909.

DERIVATION.—From Kenai Peninsula in southern Alaska.

OTHER COMMON NAMES.—Kenai paper birch (SPN), black birch, red birch.

RANGE.—Central and southern Alaska, from Tanana and Yukon Rivers, south to Katmai, Kodiak Island, and Kenai Peninsula.

Betula papyrifera var. **subcordata** (Rydb.) Sarg.
northwestern paper birch

Betula subcordata Rydb. ex Butler, Torrey Bot. Club Bul. 36: 436, fig. 15. 1909.

†*Betula papyrifera* var. *subcordata* (Rydb.) Sarg., Arnold Arboretum Jour. 1: 63. 1919.

DERIVATION.—Slightly heart-shaped, referring to the leaves.

OTHER COMMON NAME.—†paper birch.

RANGE.—Alberta and British Columbia, and from eastern Washington and northeastern Oregon (Wallowa Mountains) east to northern Idaho and western Montana.

Betula piperi Britton, see **B. occidentalis** var. **fecunda** Fern.

***Betula populifolia** Marsh. **†gray birch**

†*Betula populifolia* Marsh., Arbustr. Amer. 19. 1785.

DERIVATION.—Poplar-leaved.

OTHER COMMON NAMES.—white birch, wire birch.

RANGE.—Prince Edward Island and Nova Scotia to southern Quebec and southern Ontario (west to Huron County), south to Pennsylvania and Delaware. Also local in northwestern Indiana, northern Ohio, and northern Virginia (Blue Ridge Mountains).

HYBRID.—*Betula* ×*caerulea* Blanchard (*B. caerulea-grandis* × *populifolia*).

Betula ×purpusii Schneid. **Purpus birch**

Betula alleghaniensis × *pumila* var. *glandulifera*

†*Betula* ×*purpusii* Schneid., Illus. Handb. Laubholzk. 1: 102. 1904; as *B. lutea* × *pumila*.

One of the supposed parental species, *Betula pumila* L. var. *glandulifera* Reg., low birch, is a shrub.

DERIVATION.—Named for Joseph Anton Purpus (1860-1933) of the Darmstadt Botanical Garden, Germany, who cultivated this hybrid from material found by his brother in Michigan.

OTHER COMMON NAME.—Minnesota birch (SPN).

RANGE.—Ontario, Michigan, Wisconsin, Minnesota, Illinois, and Indiana.

REFERENCE.—See **Betula ×sandbergii** Britton

Betula resinifera (Reg.) Britton, see note under **B. papyrifera** var. **humilis** (Reg.) Fern. & Raup

Betula ×sandbergii Britton **Sandberg birch**

Betula papyrifera × *pumila* var. *glandulifera*

†*Betula sandbergi* Britton, Torrey Bot. Club Bul. 31: 166. 1904.

DERIVATION.—Named for its discoverer, John Herman Sandberg (1848-1917).

RANGE.—Wisconsin to Minnesota, Saskatchewan, and Montana.

REFERENCES.—Rosendahl, C. O. Observations on Betula in Minnesota with special reference to some natural hybrids. Minn. Bot. Stud. 4: 443-450, illus. 1916.

Rosendahl, C. O. Evidence of the hybrid nature of Betula sandbergi. Rhodora 30: 125-129, illus. 1928.

This hybrid between a tree species and a shrub species is a shrub or small tree up to 33 feet high.

Betula subcordata Rydb. ex Butler, see **B. papyrifera** var. **subcordata** (Rydb.) Sarg.

Betula uber (Ashe) Fern., see **B. lenta** var. **uber** Ashe

Betula utahensis Britton, see **B. occidentalis** Hook.

Biota (D. Don) Endl., see **Thuja** L.

Bourreria P. Br. (Family Boraginaceae) **strongbark**

†*Bourreria* P. Br., Civ. Nat. Hist. Jamaica 168, pl. 15, fig. 2. 1756; *nomen conservandum.* Also spelled *"Beureria"* and *"Beurreria."* Not *Beureria* Ehret, Pl. Papil. Rar. pl. 13. 1755.

Morelosia La Llave & Lex., Nov. Veg. Descr. 1: 1. 1824; *nomen rejiciendum.*

DERIVATION.—Named in honor of J. A. Beurer, apothecary at Nuremberg, Germany.

Bourreria ovata Miers **Bahama strongbark**

†*Bourreria ovata* Miers, Ann. and Mag. Nat. Hist., Ser. 4, 3: 203. 1869.

Formerly referred to *B. havanensis* (Roem. & Schult.) Miers.

DERIVATION.—Ovate, perhaps referring to the oval leaves.

OTHER COMMON NAMES.—ovalleaf strongbark (SPN), †strongback.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies.

Bourreria revoluta H. B. K. **rough strongbark**

Bourreria revoluta H. B. K., Nov. Gen. Sp. 3: 67. 1818; as *"Beurreria."*

Formerly referred to *B. radula* (Poir.) G. Don.

DERIVATION.—Revolute or rolled back.

OTHER COMMON NAME.—rough strongback.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and Mexico.

Not in 1927 Check List, though added here as a small tree or shrub, according to Small (Man. Southeast. Fl. 1129. 1933), Buswell (Native Trees and Palms So. Fla. Miami Univ. Bul. 19(6): 44. 1945), and West and Arnold (Native Trees Fla. 189, fig. 1946).

Brasiliopuntia (K. Schum.) Berger, see **Opuntia** Mill.

BROUSSONETIA L'Hér. (Family Moraceae) PAPER-MULBERRY

†*Papyrius* Lam., Encycl. Méth. Bot. Rec. Pl. 4: pl. 762. 1798; plate without description; *nomen rejiciendum.*

Broussonetia L'Hér. ex Vent., Tabl. Regn. Veget. 3: 547. 1799; *nomen conservandum.* Not *Broussonetia* Ortega, Hort. Matr. Dec. 61, pl. 7. 1798.

DERIVATION.—Named for Auguste Broussonet (1761-1807), physician and naturalist of Montpellier, France.

BROUSSONETIA PAPYRIFERA (L.) Vent. †PAPER-MULBERRY

Morus papyrifera L., Sp. Pl. 986. 1753.

Broussonetia papyrifera (L.) Vent., Tabl. Regn. Veget. 3: 547. 1799.

†*Papyrus papyrifera* (L.) Kuntze, Rev. Gen. Pl. 629. 1891.

DERIVATION.—Paper-bearing, referring to the use of the inner bark in making paper.

OTHER COMMON NAME.—common paper-mulberry (SPN).

RANGE.—Naturalized in eastern United States from New York to Missouri and southeastern Kansas, south to eastern and southern Texas and Florida. Native of eastern Asia in Siam, Burma, and China, possibly Japan, and perhaps elsewhere.

Bucida L. (Family Combretaceae) **bucida**

Buceras P. Br., Civ. Nat. Hist. Jamaica 221, pl. 23, fig. 1. 1756.

†*Bucida* L., Syst. Nat. Ed. 10, 2: 1025. 1759. *Nom. conserv. propos.*, Little, Madroño 7: 250. 1944; Brittonia 7: 47-48. 1949.

DERIVATION.—From ox, referring to the resemblance to ox horns of the hornlike galls of the fruit caused by a mite.

Bucida buceras L. **oxhorn bucida**

†*Bucida buceras* L., Syst. Nat. Ed. 10, 2: 1025. 1759.

Buceras bucida Crantz, Inst. Rei Herbar. 1: 33. 1766; as "*Bvceras.*"

Terminalia buceras C. Wright in Sauv., Fl. Cub. 38. 1868.

DERIVATION.—Ox horn, suggested by the elongated fruit galls.

OTHER COMMON NAMES.—black-olive, †black olive-tree.

RANGE.—Upper Florida Keys. Also in West Indies, and from southern Mexico (Campeche) through Central America to Panama.

Bumelia Sw. (Family Sapotaceae) **bumelia**

?*Robertia* Scop., Introd. Hist. Nat. 154. 1777; *nomen rejiciendum.*

†*Bumelia* Sw., Nov. Gen. Sp. Pl. Prodr. 3, 49. 1788; *nomen conservandum.*

DERIVATION.—From an ancient Greek name for the European ash.

REFERENCES.—Clark, Robert Brown. A revision of the genus Bumelia in the United States. Mo. Bot. Gard. Ann. 29: 155-182, illus. 1942.

Cronquist, Arthur. Studies in the Sapotaceae, III. Dipholis and Bumelia. Arnold Arboretum Jour. 26: 435-471. 1945.

Four tree species of *Bumelia* are accepted here, largely in accordance with Cronquist's conservative monograph. A fifth native species is a low shrub, *B. reclinata* (Michx.) Vent., of Florida and southern Georgia.

Bumelia angustifolia Nutt., see **B. celastrina** H. B. K.

Bumelia anomala (Sarg.) Clark, see **B. tenax** (L.) Willd.

Bumelia cassinifolia Small, see **B. lycioides** (L.) Pers.

Bumelia celastrina H. B. K. **†saffron-plum**

Bumelia celastrina H. B. K., Nov. Gen. Sp. 7: 212. 1825.

Bumelia spiniflora DC. ex A. DC. in DC., Prodr. 8: 191. 1844.

†*Bumelia angustifolia* Nutt., No. Amer. Sylva 3: 38, pl. 93. 1849.

Bumelia schottii Britton in Britton & Shafer, No. Amer. Trees 777. 1908.

DERIVATION.—From the ancient Greek name of an evergreen tree.

OTHER COMMON NAMES.—saffronplum bumelia (SPN), antswood, tropical buckthorn, downward-plum, coma.

RANGE.—Coasts of central Florida south to Florida Keys and in southern Texas. Also in Bahama Islands and Cuba and from northeastern Mexico (Tamaulipas and Nuevo León) south through Central America to Colombia and Venezuela.

This species of southern Florida, long known as *Bumelia angustifolia* Nutt., has been united with two older Mexican species, *B. celastrina* H. B. K. by Cronquist (Arnold Arboretum Jour. 26: 467. 1945) and *B. spiniflora* A. DC. earlier by Standley (Trees Shrubs Mexico 1117. 1924).

Bumelia lacuum Small, see **B. tenax** (L.) Willd.

Bumelia lanuginosa (Michx.) Pers. **gum bumelia**

OTHER COMMON NAMES.—woollybucket bumelia (SPN), buckthorn, chittamwood, †gum elastic.

RANGE.—Southern Georgia and northern Florida, west to Louisiana, southern Illinois, central Missouri, eastern and southern Kansas, and southern Arizona, south through Texas to northern Mexico.

Bumelia lanuginosa var. lanuginosa **gum bumelia (typical)**

Sideroxylon lanuginosum Michx., Fl. Bor.-Amer. 1: 122. 1803.

†*Bumelia lanuginosa* (Michx.) Pers., Synops. Pl. 1: 237. 1805.

Bumelia rufa Raf., New Fl. No. Amer. 3: 29. 1836.

DERIVATION.—Woolly, referring to the young leaves.

RANGE.—Southern Georgia and northern Florida, west to southeastern Louisiana.

Bumelia lanuginosa var. albicans Sarg. ———

Bumelia oblongifolia Nutt., Gen. No. Amer. Pl. 1: 135. 1818.

†*Bumelia lanuginosa* var. *albicans* Sarg., Arnold Arboretum Jour. 2: 168. 1921.

Bumelia lanuginosa var. *oblongifolia* (Nutt.) Clark, Mo. Bot. Gard. Ann. 29: 165. 1942.

Bumelia lanuginosa subsp. *oblongifolia* (Nutt.) Cronquist, Arnold Arboretum Jour. 26: 453. 1945.

DERIVATION.—Becoming white, referring to the hairy leaves.

COMMON NAMES.—gum woollybucket bumelia (SPN), †gum elastic.

RANGE.—Southeastern Illinois, central Missouri, eastern and southern Kansas, south to central and southern Texas, and east to Louisiana. Also in northeastern Mexico (Nuevo León).

Bumelia lanuginosa var. **rigida** A. Gray

†*Bumelia monticola* Buckl., Torrey Bot. Club Bul. 10: 90. 1883.
Bumelia texana Buckl., Torrey Bot. Club Bul. 10: 91. 1883.
†*Bumelia lanuginosa* var. *rigida* A. Gray, Synopt. Fl. No. Amer. Ed. 2, 2(1): 68. 1886.
Bumelia rigida (A. Gray) Small, N. Y. Bot. Gard. Bul. 1: 444. 1900.
Bumelia riograndis Lundell, Mich. Univ. Herbarium Contrib. 8: 77. 1942.
Bumelia lanuginosa subsp. *rigida* (A. Gray) Cronquist, Arnold Arboretum Jour. 26: 453. 1945.
Bumelia lanuginosa subsp. *rigida* var. *texana* (Buckl.) Cronquist, Arnold Arboretum Jour. 26: 454. 1945.

DERIVATION.—Rigid, referring to the stiff spring branches.

COMMON NAMES.—†buckthorn, Brazos bumelia, Texas bumelia, †gum elastic.

RANGE.—Southern Oklahoma (Arbuckle Mountains, Murray County), central to southern and southwestern Texas, extreme southwestern New Mexico, and southeastern Arizona, south to northern Mexico (Sonora, Chihuahua, and Coahuila).

Bumelia lucida Small, see **B. lycioides** (L.) Pers.

Bumelia lycioides (L.) Pers. **buckthorn bumelia**

Sideroxylon lycioides L., Sp. Pl. Ed. 2, 279. 1762.
†*Bumelia lycioides* (L.) Pers., Synops. Pl. 1: 237. 1805.
Bumelia cassinifolia Small, N. Y. Bot. Gard. Bul. 1: 442. 1900.
Bumelia lucida Small, N. Y. Bot. Gard. 1: 443. 1900. Not *Bumelia lucida* Roem. & Schult., Syst. Veg. 4: 499. 1819.
Bumelia lycioides var. *virginiana* Fern., Rhodora 38: 439. 1936.
Bumelia lycioides var. *ellipsoidalis* Clark, Mo. Bot. Gard. Ann. 29: 172. 1942.
Bumelia smallii Clark, Mo. Bot. Gard. Ann. 29: 172. 1942.

DERIVATION.—Like *Lycium*, wolfberry, a genus of spiny shrubs of similar appearance.

OTHER COMMON NAMES.—†buckthorn, smooth bumelia, ironwood.

RANGE.—Coastal Plain from southeastern Virginia to northern Florida, west to southeastern Texas, and north to southeastern Missouri, southern Illinois, southern Indiana, and western Kentucky.

Bumelia megacocca Small, see **B. tenax** (L.) Willd.

Bumelia monticola Buckl., see **B. lanuginosa** var. **rigida** A. Gray

Bumelia oblongifolia Nutt., see **B. lanuginosa** var. **albicans** Sarg.

Bumelia rigida (A. Gray) Small, see **B. lanuginosa** var. **rigida** A. Gray

Bumelia riograndis Lundell, see **B. lanuginosa** var. **rigida** A. Gray

Bumelia rufa Raf., see **B. lanuginosa** (Michx.) Pers.

Bumelia schottii Britton, see **B. celastrina** H. B. K.

Bumelia smallii Clark, see **B. lycioides** (L.) Pers.

Bumelia spiniflora A. DC., see **B. celastrina** H. B. K.

Bumelia tenax (L.) Willd. **tough bumelia**

Sideroxylon tenax L., Mant. Pl. 48. 1767.
†*Bumelia tenax* (L.) Willd., Sp. Pl. 1: 1085. 1798.
Bumelia megacocca Small, N. Y. Bot. Gard. Bul. 1: 441. 1900.
Bumelia lanuginosa var. *anomala* Sarg., Arnold Arboretum Jour. 2: 168. 1921.
Bumelia lacuum Small, Man. Southeast. Fl. 1034, 1507. 1933.
Bumelia anomala (Sarg.) Clark, Mo. Bot. Gard. Ann. 29: 169. 1942.

DERIVATION.—Holding, or tough, referring to the flexible young branches which are not easily broken.

OTHER COMMON NAMES.—†tough buckthorn, ironwood.

RANGE.—Coastal Plain of southeastern South Carolina and eastern Georgia, south to southern Florida.

Bumelia texana Buckl., see **B. lanuginosa** var. **rigida** A. Gray

Bursera Jacq. (Family Burseraceae) **bursera**

Terebinthus P. Br., Civ. Nat. Hist. Jamaica 345. 1756. Not *Terebinthus* Mill., Gard. Dict. Abridged. Ed. 4, v. 3. 1754.
Elaphrium Jacq., Enum. Pl. Carib. 3. 1760; *nomen rejiciendum.*
†*Bursera* Jacq. ex L., Sp. Pl. Ed. 2, 471. 1762; Gen. Pl. Ed. 6, 174. 1764; *nomen conservandum.* Also *Bursera* Jacq., Select. Stirp. Amer. Hist. 94, pl. 65. 1763. Not *Burseria* Loefl., Iter Hispan. 194. 1758.

DERIVATION.—In honor of Joachim Burser (1593-1649), German botanist and physician.

Bursera fagaroides (H. B. K.) Engler **fragrant bursera**

Elaphrium fagaroides H. B. K., Nov. Gen. Sp. 7: 27, pl. 611. 1824.
Bursera fagaroides (H. B. K.) Engler in DC., Monog. Phaner. 4: 48. 1883.
Bursera odorata T. S. Brandegee, Calif. Acad. Sci. Proc., Ser. 2, 2: 138. 1889.
Elaphrium odoratum (T. S. Brandegee) Rose, No. Amer. Fl. 25: 250. 1911.

DERIVATION.—Like *Fagara,* here regarded as a synonym of *Zanthoxylum,* prickly-ash.

RANGE.—Known in the United States in one locality in Southern Arizona (Baboquivari Mountains, Pima County), which was first recorded by Kearney (Wash. Acad. Sci. Jour. 21: 72. 1931). Also in Mexico from Lower California and Sonora to Durango and Puebla. A shrub or small tree 7 to 15 feet high.

Bursera microphylla A. Gray **elephanttree**

†*Bursera microphylla* A. Gray, Amer. Acad. Arts and Sci. Proc. 5: 155. 1861.

Elaphrium microphyllum (A. Gray) Rose, No. Amer. Fl. 25: 250. 1911.

DERIVATION.—Small-leaved, referring to the minute leaves and leaflets.

OTHER COMMON NAMES.—elephant bursera (SPN), small-leaved elephanttree, copal, torote.

RANGE.—Desert mountains of southwestern Arizona and southeastern California (local west of Salton Sea Basin in Imperial County). Also in northwestern Mexico from Lower California and Sonora south to Zacatecas and Puebla.

Bursera simaruba (L.) Sarg. **†gumbo-limbo**

Pistacia simaruba L., Sp. Pl. 1026. 1753.

†*Bursera simaruba* (L.) Sarg., Gard. and Forest 3: 260. 1890.

Elaphrium simaruba (L.) Rose, No. Amer. Fl. 25: 246. 1911.

DERIVATION.—*Simarouba,* the Carib Indian name of another tree and also used as a generic name.

OTHER COMMON NAMES.—West Indian birch, gum-elemi.

RANGE.—Southern Florida, including Florida Keys, near coasts and north on east coast to Cape Canaveral. Also in West Indies and Mexico from Tamaulipas and Sinaloa southward to Central America and northern South America.

Byrsonima Rich. (Family Malpighiaceae) **byrsonima**

†*Byrsonima* Rich. ex Juss., Paris Mus. d' Hist. Nat. Ann. 18: 481. 1811.

DERIVATION.—From Greek hide and name, referring to the use of the bark in tanning. (Accordingly the gender is neuter instead of feminine.)

Byrsonima lucidum DC. **Long Key. byrsonima**

Malpighia lucida Mill., Gard. Dict. Ed. 8, *Malpighia* No. 9. 1768; excluding notes.

Malpighia lucida Sw., Nov. Gen. Sp. Pl. Prodr. 74. 1788.

†*Byrsonima lucida* DC., Prodr. 1: 580. 1824.

Malpighia cuneata Turcz., Soc. Imp. Nat. Moscou Bul. 31 (2): 390. 1858.

Byrsonima cuneata (Turcz.) P. Wils., N. Y. Bot. Gard. Bul. 8: 394. 1917.

DERIVATION.—Bright or shining, referring to the leathery leaves.

OTHER COMMON NAME.—locust-berry.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies. In Florida generally a shrub but rarely a small tree.

REFERENCE.—Sargent, C. S. Arnold Arboretum Jour. 2: 166. 1921.

CALLITRIS Vent. (Family Pinaceae) CYPRESS-PINE

Callitris Vent., Decad. 10. 1808.

DERIVATION.—From Greek beautiful and three, referring to the arrangement of leaves and cone scales in threes.

CALLITRIS GLAUCA R. Br. BLUE CYPRESS-PINE

Callitris glauca R. Br. ex Mirb., Paris Mus. d'Hist. Nat. Mém. 13: 74. 1825.

DERIVATION.—Glaucous, referring to the bluish leaves.

RANGE.—Naturalized locally in Brevard and Indian River Counties of middle east coast of Florida, according to Arthur S. Rhoads. Planted in Florida and California and native of Australia.

Commonly referred to *Callitris robusta* R. Br., a related species of Australia.

Calyptranthes Sw. (Family Myrtaceae) **lidflower**

Chytraculia P. Br., Civ. Nat. Hist. Jamaica 239, pl. 37, fig. 2. 1756; *nomen rejiciendum.*

Chytralia Adans., Fam. Pl. 2: 80. 1763; *nomen rejiciendum.*

†*Calyptranthes* Sw., Nov. Gen. Sp. Pl. Prodr. 5, 79. 1788; *nomen conservandum.*

DERIVATION.—Lid-flower, referring to the lidlike cover over the calyx in the bud.

Calyptranthes pallens Griseb. **pale lidflower**

Eugenia pallens Poir., Encycl. Méth. Bot. Sup. 3: 122. 1813.

Calyptranthes chytraculia δ *pauciflora* Berg, Linnaea 27: 27. 1856.

†*Calyptranthes pallens* Griseb., K. Gessell. der Wiss. Göttingen Abhandl. 7: 215. 1857.

DERIVATION.—Pale.

OTHER COMMON NAMES.—spicewood, †white spicewood.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies.

At one time referred to *Calyptranthes chytraculia* Sw.

Calyptranthes zuzygium (L.) Sw. **myrtle-of-the-river**

Myrtus zuzygium L., Syst. Nat. Ed. 10, 2: 1056. 1759; as "*zuzygiu.*"

†*Calyptranthes zuzygium* (L.) Sw., Nov. Gen. Sp. Pl. Prodr. 79. 1788.

DERIVATION.—*Zuzygium,* or now spelled *Syzygium,* the name of a related genus, from Greek, paired or yoked together, and referring to united petals.

OTHER COMMON NAMES.—myrtle-of-the-river lidflower (SPN), †spicewood.

RANGE.—Southern Florida, including Key Largo. Also in West Indies.

Canella P. Br. (Family Canellaceae) **canella**

†*Canella* P. Br., Civ. Nat. Hist. Jamaica 275, pl. 27, figs. 2, 3. 1756; *nomen conservandum.*

Winterana L., Syst. Nat. Ed. 10, 2: 1045. 1759; *nomen rejiciendum.*

DERIVATION.—From the Latin word meaning small cane or reed, first applied to the bark of an Old World tree which formed a roll upon drying.

Canella winterana (L.) Gaertn. **canella**

Laurus winterana L., Sp. Pl. 371. 1753.

Canella alba Murray in L., Syst. Veg. Ed. 14, 4: 443. 1784.

†*Canella winterana* (L.) Gaertn., Fruct. Sem. Pl. 1: 373, pl. 77, fig. 2. 1788.

DERIVATION.—From *Winterania* L., an old (and untenable) Linnaean name for *Canella; Winterania,* in turn, commemorated Capt. John Winter, who introduced the medicinal "Winter's bark" (*Drimys winteri*) from South America into England in 1579.

OTHER COMMON NAMES.—cinnamon canella (SPN), †cinnamon-bark, wild cinnamon.

RANGE.—Cape Sable region of extreme southern Florida and Florida Keys. Also in West Indies.

Canotia Torr. (Family Celastraceae) **canotia**

†*Canotia* Torr., U. S. Rpts. Expl. Surv. Miss. Pacif. 4(5): 68. 1857; as *"anotia"; "Canotia"* in index, p. 171.

DERIVATION.—The Mexican name.

Canotia holacantha Torr. **†canotia**

†*Canotia holacantha* Torr., U. S. Rpts. Expl. Surv. Miss. Pacif. 4(5): 68. 1857; as *"anotia"; "Canotia"* in index, p. 171.

DERIVATION.—From Greek wholly and thorn, referring to the spiny leafless branches.

OTHER COMMON NAME.—crucifixion-thorn.

RANGE.—Central to western and northwestern Arizona and southern Utah (Rainbow Bridge Canyon). Reported from southeastern California (Providence Mountains, but Munz (Man. South. Calif. Bot. 295. 1935) was unable to find any specimen from California. Also in northern Sonora, Mexico.

Capparis L. (Family Capparidaceae) **caper**

†*Capparis* L., Sp. Pl. 503. 1753; Gen. Pl. Ed. 5, 222. 1754.

DERIVATION.—The classical Greek name of *Capparis spinosa* L., common caper, of the Mediterranean region and Asia, the greenish flower buds of which are eaten pickled in vinegar.

Capparis cynophallophora L. **Jamaica caper**

Capparis cynophallophora L., Sp. Pl. 504. 1753. Not *Capparis cynophallophora* L., Syst. Nat. Ed. 10, 2: 1071. 1759.
†*Capparis jamaicensis* Jacq., Enum. Pl. Carib. 23. 1760.
DERIVATION.—Dog phallus, alluding to the shape of the fruit.
OTHER COMMON NAME.—†caper-tree.
RANGE.—Southern Florida north on east coast to Cape Canaveral and including Florida Keys. Also in West Indies, southern Mexico, Central America, and northern South America.
REFERENCE.—Fawcett, William. Notes on Jamaican Species of Capparis. Jour. Bot. 52: 142–144. 1914.

Linnaeus used the name *Capparis cynophallophora* L. at different times for both this and the following species, and the nomenclature has become reversed. *C. cynophallophora* L. should be associated with this species, which has long been known as *C. jamaicensis* Jacq. The following species, formerly bearing the name *C. cynophallophora* L. (1759), is now known as *C. flexuosa* L. The nomenclature used here was adopted by Small (Man. Southeast. Fl. 577. 1933).

Capparis flexuosa (L.) L. **limber caper**

†*Capparis cynophallophora* L., Syst. Nat. Ed. 10, 2: 1071. 1759. Not *C. cynophallophora* L., Sp. Pl. 504. 1753.
Morisonia flexuosa L. in L. & Elmgren, Pug. Jamaic. Pl. 1759; Amoen. Acad. 5: 398. 1760.
Capparis flexuosa (L.) L., Sp. Pl. Ed. 2, 722. 1763.
DERIVATION.—Limber.
OTHER COMMON NAMES.—dog caper (SPN), bay-leaved caper.
RANGE.—Southern Florida, including Florida Keys. Also in West Indies and from northern Mexico (Tamaulipas to Sinaloa southward) south to Central America and South America.

Generally a shrub, but included in the 1927 Check List; cited as a shrub or small tree by Small (Man. Southeast. Fl. 577. 1933).

CARICA L. (Family Caricaceae) PAPAYA

†*Carica* L., Sp. Pl. 1036. 1753; Gen. Pl. Ed. 5, 458. 1754.
DERIVATION.—From the Latin word for a dried fig (from Carya in Asia Minor, the reputed ancestral home of the cultivated fig), perhaps from the fancied resemblance of the fruit.

CARICA PAPAYA L. PAPAYA

†*Carica papaya* L., Sp. Pl. 1036. 1753.
DERIVATION.—Thought to be from the Carib Indian name "ababai."
OTHER COMMON NAME.—pawpaw.
RANGE.—Southern Florida, including Florida Keys, probably naturalized. Native in tropical America, the original home unknown. Widely cultivated and naturalized in West Indies, Mexico, Central America, and South America, and in the Old World tropics.

Carpinus L. (Family Betulaceae) **hornbeam**

†*Carpinus* L., Sp. Pl. 998. 1753; Gen. Pl. Ed. 5, 432. 1754.

DERIVATION.—The classical Latin name.

Carpinus caroliniana Walt. **American hornbeam**

Carpinus betulus virginiana Marsh., Arbustr. Amer. 25. 1785.

†*Carpinus caroliniana* Walt., Fl. Carol. 236. 1788.

Carpinus caroliniana var. *virginiana* (Marsh.) Fern., Rhodora 37: 425, pl. 395. 1935.

DERIVATION.—Of Carolina, where it was discovered.

OTHER COMMON NAMES.—†blue beech, water beech, ironwood.

RANGE.—Central Maine to southern Quebec, southern Ontario, northern Michigan, and eastern Minnesota, south to eastern Iowa, Missouri, eastern Oklahoma, and eastern Texas, and east to central Florida. Also in northeastern Mexico (Tamaulipas) and from southern Mexico to Guatemala and Honduras.

Carya Nutt. (Family Juglandaceae) **†hickory**

Scoria Raf., Med. Repos. 11 (Ser. 2, v. 5): 352. 1808; *nomen nudum; nomen rejiciendum.*

†*Hicoria* Raf., Fl. Ludov. 109. 1817; as *"Hicorius;" nomen rejiciendum.*

Carya Nutt., Gen. No. Amer. Pl. 2: 220. 1818; *nomen conservandum.*

Carya Nutt., *nomen conservandum* under International Code, has replaced *Hicoria* Raf., the name by which this genus has been known under the American Code. Therefore, the species of *Hicoria* have been transferred here, with slight changes, to *Carya.*

Carya is a difficult genus for identification, because it contains many minor intergrading variations in shape and size of fruits and in hairiness and other characters of foliage to which numerous names have been given, largely by C. S. Sargent and W. W. Ashe. It seems unnecessary to recognize most of these varietal names, which are listed here in synonymy along with a few specific segregates accepted by some authors.

DERIVATION.—From the Greek name used for nut.

REFERENCES.—Little, Elbert L., Jr. Notes on the nomenclature of Carya Nutt. Amer. Midland Nat. 29: 493-508. 1943.

Manning, Wayne E. A key to the hickories north of Virginia with notes on the two pignuts, Carya glabra and C. ovalis. Rhodora 52: 188-199. 1950.

Murrill, William A. Florida hickories. Fla. Acad. Sci. Jour. 9: 115-122, illus. 1947.

Sargent, C. S. Notes on North American Trees. II. Carya. Bot. Gaz. 66: 229-258. 1918.

Carya alba (Mill.) K. Koch, see **C. tomentosa** Nutt.

***Carya aquatica** (Michx. f.) Nutt. **†water hickory**

Juglans aquatica Michx. f., Hist. Arbr. For. Amér. Sept. 1: 182, pl. 5. 1810.

Carya aquatica Nutt., Gen. No. Amer. Pl. 2: 222. 1818; *nomen nudum.*

Carya aquatica (Michx. f.) Nutt. ex Ell., Sketch Bot. S.-Car. Ga. 2: 627. 1824.

Hicoria aquatica Raf., Alsogr. Amer. 66. 1838; *nomen* and perhaps irregular new combination.

†*Hicoria aquatica* (Michx. f.) Britton, Torrey Bot. Club Bul. 15: 284. 1888.

Carya aquatica var. *australis* Sarg., Bot. Gaz. 66: 232. 1918.

†*Hicoria aquatica australis* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 53. 1927.

DERIVATION.—Aquatic, from its habitat in river bottoms and swamps.

OTHER COMMON NAMES.—swamp hickory, pecan (lumber), bitter pecan, wild pecan.

RANGE.—Coastal Plain from southeastern Virginia and eastern North Carolina south to southern Florida and west to eastern Texas, north in Mississippi Valley to southeastern Oklahoma, southeastern Missouri, and extreme southern Illinois.

HYBRIDS.—*Carya* ×*lecontei* Little (*C. aquatica* × *illinoensis*); *C.* ×*ludoviciana* (Ashe) Little (*C. aquatica* × *texana*).

Carya arkansana Sarg., see **C. texana** Buckl.

Carya ashei (Sudw.) Kelsey & Dayton, see **C. glabra** var. **megacarpa** (Sarg.) Sarg.

Carya australis Ashe, see **C. ovata** (Mill.) K. Koch

Carya austrina (Small) Murrill, see **C. glabra** var. **megacarpa** (Sarg.) Sarg.

Carya ×brownii Sarg. **†Browns hickory**

Carya cordiformis × *illinoensis*

Carya ×*brownii* Sarg., Trees and Shrubs 2: 195, pl. 178. 1913; as *C. cordiformis* × *pecan.*

Carya ×*brownii* var. *varians* Sarg., Trees and Shrubs 2: 196. 1913.

†*Hicoria* ×*brownii* (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

†*Hicoria* ×*brownii varians* (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

DERIVATION.—Named for its discoverer, George M. Brown.

OTHER COMMON NAME.—Mayfield nut.

RANGE.—Mississippi, Arkansas, Oklahoma, and Kansas.

Carya buckleyi Durand, see **C. texana** Buckl.

Carya carolinae-septentrionalis (Ashe) Engl. & Graebn., see **C. ovata** (Mill.) K. Koch

***Carya cordiformis** (Wangenh.) K. Koch **†bitternut hickory**

Juglans alba minima Marsh., Arbustr. Amer. 68. 1785.

Juglans cordiformis Wangenh., Beytr. Teutsch. Holzger. Forstwiss. Nordamer. Holz. 25, pl. 10, fig. 25. 1787; as "*Iuglans.*"

Carya cordiformis (Wangenh.) K. Koch, Dendrol. 1: 597. 1869.

Hicoria minima (Marsh.) Britton, Torrey Bot. Club Bul. 15: 284. 1888.

†*Hicoria cordiformis* (Wangenh.) Britton in Britton & Shafer, No. Amer. Trees 228, fig. 186. 1908.

Carya cordiformis var. *latifolia* Sarg., Trees and Shrubs 2: 206. 1913.

Carya cordiformis var. *elongata* Ashe, Charleston Mus. Bul. 14: 12. 1918.

†*Hicoria cordiformis elongata* (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 136. 1918.

Hicoria cordiformis latifolia (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

DERIVATION.—Heart-shaped, perhaps referring to the fruit but not particularly appropriate.

OTHER COMMON NAMES.—bitternut, swamp hickory, pecan (lumber), pignut.

RANGE.—New Hampshire to New York, extreme southern Quebec, southern Ontario, Michigan, and Minnesota, south to southeastern Nebraska and eastern Texas, and east to northwestern Florida and Georgia.

HYBRIDS.—*Carya* ×*brownii* Sarg. (*C. cordiformis* × *illinoensis*); *C.* ×*demareei* Palmer (*C. cordiformis* × *glabra*); *C.* ×*laneyi* Sarg. (*C. cordiformis* × *ovata*).

Carya ×demareei Palmer **Demaree hickory**

Carya cordiformis × *glabra*

Carya ×*demareei* Palmer, Arnold Arboretum Jour. 18: 135. 1937; as *C. cordiformis* × *ovalis.*

DERIVATION.—Named for Delzie Demaree, botanist of Arkansas, who collected the type specimen.

RANGE.—Northeastern Arkansas.

This hybrid, published after the 1927 Check List, for the cross *Carya cordiformis* × *ovalis* also represents the cross *C. cordiformis* × *glabra* when *C. ovalis* is reduced to synonymy.

Carya ×dunbarii Sarg. **†Dunbar hickory**

Carya laciniosa × *ovata*

Carya ×*dunbarii* Sarg., Bot. Gaz. 66: 254. 1918; as *C. laciniosa* × *ovata.*

†*Hicoria* ×*dunbarii* (Sarg.) House, N. Y. State Mus. Bul. 233/234: 14. 1921.

DERIVATION.—Named for John Dunbar, Asst. Supt. of Parks, Rochester, N. Y., who discovered it.

RANGE.—Western New York.

Carya fernowiana Sudw., see **C. myristicaeformis** (Michx. f.) Nutt.

Carya floridana Sarg. **scrub hickory**

Carya floridana Sarg., Trees and Shrubs 2: 193, pl. 177. 1913.
Hicoria floridana (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 59. 1927.
DERIVATION.—Of Florida.
OTHER COMMON NAME.—**Florida hickory.**
RANGE.—Central to northwestern Florida.

***Carya glabra** (Mill.) Sweet **†pignut hickory**

HYBRID.—*Carya* ×*demareei Palmer* (*C. cordiformis* × *glabra*).

Carya glabra var. **glabra** **pignut hickory (typical)**

Juglans glabra Mill., Gard. Dict. Ed. 8, *Juglans* No. 5. 1768.
Juglans alba odorata Marsh., Arbustr. Amer. 68. 1785.
Juglans ovalis Wangenh., Beytr. Teutsch. Holzger. Forstwiss. Nordamer. Holz. 24, pl. 10, fig. 23. 1787; as *"Iuglans oualis."*
Juglans obcordata Muhl., Index Fl. Lancastr. 180. 1793; *nomen nudum.*
Juglans obcordata Muhl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 3: 392. 1801; Muhl. ex Willd., Sp. Pl. Ed. 4, 4: 458. 1805. Not *J. obcordata* Lam., Encycl. Méth. Bot. 4: 504. 1798(?).
Juglans porcina α *obcordata* Pursh, Fl. Amer. Sept. 2: 638. 1814.
Carya microcarpa Nutt., Gen. No. Amer. Pl. 2: 221. 1818.
Carya glabra [Mill.] Sweet, Hort. Brit. 97. 1827.
†*Hicoria glabra* (Mill.) Britton, Torrey Bot. Club Bul. 15: 284. 1888.
Hicoria microcarpa (Nutt.) Britton, Torrey Bot. Club Bul. 15: 283. 1888.
Hicoria glabra var. *odorata* (Marsh.) Sarg., Silva No. Amer. 7: 167, pl. 354. 1895.
Hicoria glabra var. *hirsuta* Ashe, Notes on Hickories 1. 1896.
Carya ovalis (Wangenh.) Sarg., Trees and Shrubs 2: 207. 1913.
Carya ovalis var. *obcordata* (Muhl. & Willd.) Sarg., Trees and Shrubs 2: 209. 1913.
Carya ovalis var. *obovalis* Sarg., Trees and Shrubs 2: 209. 1913.
Carya ovalis var. *odorata* (Marsh.) Sarg., Trees and Shrubs 2: 208. 1913.
†*Hicoria ovalis* (Wangenh.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 133. 1918.
†*Hicoria ovalis obcordata* Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 134. 1918.

†*Hicoria ovalis obovalis* (Sarg.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 134. 1918.

†*Hicoria ovalis odorata* Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 134. 1918.

Hicoria similis Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 135. 1918.

Carya ovalis var. *hirsuta* (Ashe) Sarg., Bot. Gaz. 66: 247. 1918.

Hicoria ovalis var. *acuta* (Sarg.) House, N. Y. State Mus. Bul. 233/234: 13. 1921.

Carya ovalis var. *mollis* Ashe, Rhodora 25: 180. 1923.

Hicoria glabra acuta (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

Hicoria glabra reniformis (Ashe) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

Hicoria glabra similis (Ashe) Ashe, Charleston Mus. Quart. 1(2): 28. 1925.

Hicoria ovalis vestita (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

†*Hicoria ovalis hirsuta* (Ashe) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 59. 1927.

†*Hicoria ovalis mollis* (Ashe) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 59. 1927.

DERIVATION.—Smooth, or hairless, referring to the foliage.

OTHER COMMON NAMES.—hickory (lumber), oval pignut hickory, red hickory, redheart hickory, small-fruited hickory, pignut, sweet pignut.

RANGE.—Southern New Hampshire and Massachusetts, west to New York, extreme southern Ontario, southern Michigan, Illinois, and northeastern Kansas, south to southeastern Oklahoma, and east to Arkansas, Mississippi, northwestern Florida, and Georgia.

The binomial *Carya ovalis* (Wangenh.) Sarg., red hickory, was established by Sargent in 1913 for a segregate of *C. glabra*. Since it is doubtful whether the two species can be maintained, and also whether many persons will wish to do so, *C. ovalis* is here reduced to synonymy. The principal difference ascribed is in the husk of the fruit, opening late and partly or remaining closed in *C. glabra* but promptly splitting to the base in *C. ovalis*, but many trees have intermediate fruits. The recorded ranges are almost the same. Wayne E. Manning (Rhodora 52: 188–199. 1950), while accepting both species, stated that the two could be distinguished with certainty only in November.

Carya glabra var. megacarpa (Sarg.) Sarg. coast pignut hickory

Carya megacarpa Sarg., Trees and Shrubs 2: 201, pl. 180. 1913.

Carya ovalis megacarpa (Sarg.) Ashe, Torreya 18: 74. 1918.

Hicoria ovalis megacarpa (Sarg.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 134. 1918.

Carya glabra var. *megacarpa* (Sarg.) Sarg., Bot. Gaz. 66: 244. 1918.

†*Hicoria ashei* Sudw., Amer. Forests and Forest Life 30: 334. 1924.

†*Hicoria glabra megacarpa* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 57. 1927.

Hicoria austrina Small, Man. Southeast. Fl. 406, 1504. 1933.

Carya ashei (Sudw.) Kelsey & Dayton, Stand. Pl. Names, Ed. 2, 92. 1942. Murrill, Fla. Acad. Sci. Jour. 9: 118. 1947.

Carya austrina (Small) Murrill, Fla. Acad. Sci. Jour. 9: 119. 1947.

?*Carya magnifloridana* Murrill, Fla. Acad. Sci. Jour. 9: 119, figs. 4, 7, 8, 10. 1947.

?*Hicoria magnifloridana* Murrill, Fla. Acad. Sci. Jour. 9: 119. 1947; *nom. altern.*

DERIVATION.—Large-fruited.

OTHER COMMON NAMES.—Ashes hickory, hammock hickory, southern pignut hickory.

RANGE.—Western New York to southern Ohio and southern Illinois, south to Louisiana and central Florida.

The three following variations proposed as distinct species in Florida are tentatively placed under *Carya glabra* var. *megacarpa* (Sarg.) Sarg. pending further field studies: *C. ashei* (Sudw.) Kelsey & Dayton, *C. austrina* (Small) Murrill, and *C. magnifloridana* Murrill.

***Carya illinoensis** (Wangenh.) K. Koch **pecan**

Juglans pecan Marsh., Arbustr. Amer. 69. 1785; *nomen subnudum.*

Juglans illinoinensis Wangenh., Beytr. Teutsch. Holzger. Forstwiss. Nordamer. Holz. 54, pl. 18, fig. 43. 1787; excluding fruit.

Juglans olivaeformis Michx., Fl. Bor.-Amer. 2: 192. 1803.

Carya olivaeformis [Michx.] Nutt., Gen. No. Amer. Pl. 2: 221. 1818.

Carya illinoënsis (Wangenh.) K. Koch, Dendrol. 1: 593. 1869.

Carya pecan (Marsh.) Engl. & Graebn. in Engl., Berlin K. Bot. Gart. u. Mus. Notizbl. App. 9: 19. 1902. Not *Carya pecan* (Walt.) Nutt., No. Amer. Sylva 1: 41. 1842.

Hicoria pecan (Marsh.) Britton, Torrey Bot. Club Bul. 15: 282. 1888.

DERIVATION.—Of Illinois.

RANGE.—Mississippi River Valley from Fountain County, Ind., Joe Daviess County, Ill., and Clinton County, Ia., south to eastern Kansas and central Texas including Edwards Plateau, and east to Mississippi and western Tennessee. Also local in southwestern Ohio, Kentucky, and Alabama. Sargent (Bot. Gaz. 66: 230–231. 1918) believed that the northern and more southeastern range was probably due to original plantings by Indians. Also native and spread by cultivation in northern Mexico (Nuevo León to Coahuila, south to Jalisco, Guanajuato, and Hidalgo, and in Oaxaca).

REFERENCES.—Fernald, M. L. The inadequate basis of the name Carya pecan. Rhodora 49: 194–196. 1947.

Rehder, Alfred. Arnold Arboretum Jour. 22: 571–572. 1941.

HYBRIDS.—*Carya* ×*brownii* Sarg. (*C. cordiformis* × *illinoensis*); *C.* ×*lecontei* Little (*C. aquatica* × *illinoensis*); *C.* ×*nussbaumeri* Sarg. (*C. illinoensis* × *laciniosa*); *C.* ×*schneckii* Sarg. (*C. illinoensis* × *tomentosa*).

***Carya laciniosa** (Michx. f.) Loud. **shellbark hickory**

Juglans laciniosa Michx. f., Hist. Arbr. For. Amér. Sept. 1: 199, pl. 8. 1810.

Carya laciniosa (Michx. f.) Loud., Hort. Brit. 384. 1830.

†*Hicoria laciniosa* (Michx. f.) Sarg., Torrey Bot. Club Mem. 5: 354. 1894.

DERIVATION.—Full of flaps or folds, referring to the plates of shaggy bark.

OTHER COMMON NAMES.—hickory (lumber), †bigleaf shagbark hickory, kingnut, big shellbark, bottom shellbark, thick shellbark, western shellbark.

RANGE.—Ohio and Mississippi Valleys, from western New York, Pennsylvania, and extreme southern Ontario to southern Iowa, south to eastern Kansas and northeastern Oklahoma, and east to Arkansas, northern Mississippi, northern Georgia, and western North Carolina, and West Virginia. Also local in Louisiana, Alabama, and Virginia.

HYBRIDS.—*Carya* ×*dunbarii* Sarg. (*C. laciniosa* × *ovata*); *C.* ×*nussbaumeri* Sarg. (*C. illinoensis* × *laciniosa*).

Carya ×**laneyi** Sarg. **†Laney hickory**

Carya cordiformis × *ovata*

Carya ×*laneyi* Sarg., Trees and Shrubs 2: 196. 1913; as *C. cordiformis* × *ovata*.

Carya ×*laneyi* var. *chateaugayensis* Sarg., Trees and Shrubs 2: 197. 1913.

†*Hicoria* ×*laneyi* (Sarg.) House, N. Y. State Mus. Bul. 233/234: 14. 1921.

†*Hicoria* ×*laneyi chateaugayensis* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 53. 1927.

DERIVATION.—Named for C. C. Laney, superintendent of parks at Rochester, N. Y., where it was discovered.

RANGE.—Recorded from southern Quebec, southern Ontario, Vermont, New York, and Pennsylvania.

REFERENCE.—Manning, Wayne E. A hybrid between shagbark and bitternut hickory in southeastern Vermont. Rhodora 50: 60–62. 1948.

Carya ×**lecontei** Little **†bitter pecan**

Carya aquatica × *illinoensis*

†*Hicoria texana* Le Conte, Acad. Nat. Sci. Phila. Proc. 6: 402, illus. 1853; as *"Hickorea."*

?*Carya texana* C. DC., Ann. des Sci. Nat., Bot., Sér. 4, 18: 33. 1862. Not *C. texana* Buckl., Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 444. 1860.

Carya ×*lecontei* Little, Amer. Midland Nat. 29: 503. 1943.

DERIVATION.—Named in honor of Major John Eaton Le Conte (1784–1860), American naturalist, who described a new species of hickory which may have been the same.

RANGE.—Missouri, Arkansas, eastern Texas, Louisiana, and Mississippi.

REFERENCES.—See also **Carya texana** Buckl.

Palmer, Ernest J. Arnold Arboretum Jour. 18: 133–135. 1937.

Palmer has submitted evidence to show that this is a hybrid between *Carya aquatica* and *C. illinoensis*. Unfortunately, when the names are transferred to *Carya*, the name *C. texana*, by which this hybrid has been known, must be used instead for the species *Hicoria buckleyi* (Durand) Ashe. Accordingly, the hybrid has been renamed *Carya* ×*lecontei* Little.

Carya leiodermis Sarg. **swamp hickory**

Carya leiodermis Sarg., Bot. Gaz. 66: 239. 1918.

Carya leiodermis var. *callicoma* Sarg., Bot. Gaz. 66: 240. 1918.

†*Hicoria mollissima* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 46. 1924.

†*Hicoria leiodermis* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 56. 1927.

†*Hicoria leiodermis callicoma* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 56. 1927.

Hicoria leiodermis var. *mollissima* (Ashe) Ashe, Torrey Bot. Club Bul. 55: 465. 1928.

DERIVATION.—Smooth-skinned, referring to smoothish bark.

OTHER COMMON NAMES.—buckeye hickory, †pignut hickory, smoothbark hickory.

RANGE.—Northern Florida (Levy County), western Alabama, Mississippi, southern Arkansas, Louisiana, and eastern Texas.

Carya ×**ludoviciana** (Ashe) Little **Louisiana hickory**

Carya aquatica × *texana*

Hicoria ×*ludoviciana* Ashe, Torrey Bot. Club Bul. 54: 582. 1927; as *H. aquatica* × *buckleyi* var. *arkansana*.

Carya ×*ludoviciana* (Ashe) Little, Amer. Midland Nat. 29: 504. 1943; as *C. aquatica* × *texana* var. *arkansana*.

DERIVATION.—Of Louisiana.

RANGE.—Northern and central Louisiana.

Additional field study of *Carya* ×*ludoviciana* is needed. According to Clair A. Brown (La. Trees Shrubs 51–52. 1945), it may not be distinct from *C. leiodermis*.

Carya magnifloridana Murrill, see **C. glabra** var. **megacarpa** (Sarg.) Sarg.

Carya megacarpa Sarg., see **C. glabra** var. **megacarpa** (Sarg.) Sarg.

Carya mexicana Engelm., see **C. ovata** (Mill.) K. Koch

Carya microcarpa Nutt., see **C. glabra** (Mill.) Sweet

***Carya myristicaeformis** (Michx. f.) Nutt. **†nutmeg hickory**

Juglans myristicaeformis Michx. f., Hist. Arbr. For. Amér. Sept. 1: 211, pl. 10. 1810.

Carya myristicaeformis Nutt., Gen. No. Amer. Pl. 2: 222. 1818; *nomen nudum.*

Carya myristicaeformis (Michx. f.) Nutt. ex Ell., Sketch Bot. S.-Car. Ga. 2: 628. 1824.

†*Hicoria myristicaeformis* (Michx. f.) Britton, Torrey Bot. Club Bul. 15: 284. 1888.

?*Hicoria fernowiana* Sudw. in Sudw. & Fernow, Trees Wash., D. C. [6]. 1891.

?*Carya fernowiana* Sudw. in Sudw. & Fernow, Trees Wash., D. C. [6]. 1891; *nom. altern.*

DERIVATION.—With the shape of *Myristica,* nutmeg, referring to the fruit.

OTHER COMMON NAMES.—bitter water hickory, swamp hickory, pecan (lumber).

RANGE.—Eastern South Carolina and in central Alabama, and from Mississippi to Arkansas and southeastern Oklahoma, south to eastern Texas and Louisiana. Also in northeastern Mexico (Nuevo León).

REFERENCE.—Dayton, W. A. Fernow hickory (*Hicoria fernowiana* Sudw.). Jour. Forestry 35: 859–864, illus. 1937.

Carya fernowiana Sudw. may be distinct but is known from a single cultivated tree "from the South" in Washington, D. C. However, Dayton, in the reference cited, suggested that *C. myristicaeformis* of late dendrological literature is in part *C. fernowiana.*

Carya ×nussbaumeri Sarg. **Nussbaumer hickory**

Carya illinoensis × *laciniosa*

Carya ×nussbaumerii Sarg., Bot. Gaz. 66: 254. 1918; as *C. laciniosa* × *pecan.*

†*Hicoria ×nussbaumerii* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 51. 1927.

DERIVATION.—Named for its discoverer, J. J. Nussbaumer, of Okawville, Ill.

RANGE.—Illinois, Iowa, and Missouri. Also in cultivation.

Carya olivaeformis (Michx.) Nutt., see **C. illinoensis** (Wangenh.) K. Koch

Carya ovalis (Wangenh.) Sarg., see **C. glabra** (Mill.) Sweet

***Carya ovata** (Mill.) K. Koch **†shagbark hickory**

Juglans alba L., Sp. Pl. 997. 1753; in part; *nomen ambiguum.*

Juglans ovata Mill., Gard. Dict. Ed. 8, *Juglans* No. 6. 1768.

Carya ovata (Mill.) K. Koch, Dendrol. 1: 598. 1869.

Carya mexicana Engelm. ex Hemsl., Biol. Cent. Amer. Bot. 3: 162. [1883.]

†*Hicoria ovata* (Mill.) Britton, Torrey Bot. Club Bul. 15: 283. 1888.

Hicoria borealis Ashe, Notes on Hickories 1. 1896.

†*Hicoria carolinae-septentrionalis* Ashe, Notes on Hickories 1. 1896.

Carya carolinae-septentrionalis (Ashe) Engl. & Graebn. in Engl., Berlin K. Bot. Gart. u. Mus. Notizbl., App. 9: 19. 1902.

Carya ovalis var. *borealis* (Ashe) Sarg., Trees and Shrubs 2: 209. 1913; *nomen provisorium.* Sarg., Bot. Gaz. 66: 246. 1918.

Carya ovata var. *fraxinifolia* Sarg., Trees and Shrubs 2: 207. 1913.

Carya ovata var. *nuttallii* Sarg., Trees and Shrubs 2: 207. 1913.

Carya australis Ashe, Charleston Mus. Bul. 14: 12. 1918.

†*Hicoria ovata fraxinifolia* (Sarg.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 133. 1918.

†*Hicoria ovata nuttallii* (Sarg.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 132. 1918.

Carya ovata var. *complanata* Sarg., Bot. Gaz. 66: 235. 1918.

Carya ovata var. *ellipsoidalis* Sarg., Bot. Gaz. 66: 235. 1918.

Carya ovata var. *pubescens* Sarg., Bot. Gaz. 66: 236. 1918.

†*Hicoria carolinae-septentrionalis* var. *australis* (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 46. 1924.

†*Hicoria ovalis borealis* (Ashe) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

†*Hicoria ovata complanata* (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

†*Hicoria ovata ellipsoidalis* (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

†*Hicoria ovata pubescens* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 54. 1927.

Carya alba subsp. *ovata* (Mill.) Schwerin, Deut. Dendrol. Gesell. Mitt. 44: 378. 1932.

Carya ovata var. *borealis* (Ashe) Manning, Rhodora 51: 89. 1949.

Carya ovata var. *mexicana* (Engelm.) Manning, Arnold Arboretum Jour. 30: 431. 1949.

Carya carolinae-septentrionalis (Ashe) Engl. & Graebn., Carolina hickory, was united with *C. ovata* by Robinson and Fernald (Gray's New Man. Bot. Ed. 7, 331. 1908) and apparently does not merit further recognition.

DERIVATION.—Ovate, or egg-shaped, referring to the fruit.

OTHER COMMON NAMES.—hickory (lumber), Carolina hickory, scalybark hickory, shellbark hickory, †southern shagbark hickory, upland hickory, shagbark.

RANGE.—Southwestern Maine to New York, extreme southern Quebec, southern Ontario, Michigan, Wisconsin, and southeastern Minnesota, south to southeastern Nebraska and eastern Texas, and east to northwestern Florida and Georgia. Also in northeastern Mexico (Tamaulipas, Nuevo León, San Luis Potosí, Querétaro, Hidalgo, and Puebla).

REFERENCE.—See **Carya tomentosa** Nutt.

HYBRIDS.—*Carya* ×*dunbarii* Sarg. (*C. laciniosa* × *ovata*); *C.* ×*laneyi* Sarg. (*C. cordiformis* × *ovata*).

Carya pallida (Ashe) Engl. & Graebn. **sand hickory**

†*Hicoria pallida* Ashe, Notes on Hickories 1. 1896.

Carya pallida (Ashe) Engl. & Graebn. in Engl., Berlin K. Bot. Gart. u. Mus. Notizbl., App. 9: 19. 1902.

DERIVATION.—Pale, referring to the leaflets.

OTHER COMMON NAMES.—pale hickory, pallid hickory, †pignut hickory.

RANGE.—Coastal Plain from southern New Jersey south to northwestern Florida and Louisiana, and north to Tennessee. Also recorded from Connecticut.

Carya pecan (Marsh.) Engl., see **C. illinoensis** (Wangenh.) K. Koch

Carya ×**schneckii** Sarg. **†Schneck hickory**

Carya illinoensis × *tomentosa*

Carya ×*schneckii* Sarg., Bot. Gaz. 66: 253. 1918; as *C. alba* × *pecan*.

†*Hicoria* ×*schneckii* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 56. 1927.

DERIVATION.—Named for its discoverer, Jacob Schneck (1843–1906), of Mount Carmel, Ill.

RANGE.—Illinois and Iowa.

Carya texana Buckl. **black hickory**

Carya texana Buckl., Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 444. 1860. Not *C. texana* C. DC., Ann. des Sci. Nat., Bot., Ser. 4, 18: 33. 1862. Not *Hickorea texana* Le Conte, Acad. Nat. Sci. Phila. Proc. 6: 402, illus. 1853.

Carya buckleyi Durand, Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 547. 1861.

Hicoria glabra var. *villosa* Sarg., Silva No. Amer. 7: 167, pl. 355. 1895.

†*Hicoria villosa* (Sarg.) Ashe, Torrey Bot. Club Bul. 24: 481. 1897.

Carya villosa [Sarg.] Schneid., Illus. Handb. Laubholzk. 1: 803. 1906.

Carya glabra var. *villosa* (Sarg.) Robinson, Rhodora 10: 32. 1908.

Carya arkansana Sarg., Trees and Shrubs 2: 203, pl. 181. 1913.

†*Hicoria buckleyi* (Durand) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 131. 1918.

Carya buckleyi var. *arkansana* (Sarg.) Sarg., Bot. Gaz. 66: 249. 1918.

Carya buckleyi var. *villosa* (Sarg.) Sarg., Bot. Gaz. 66: 251. 1918.

†*Hicoria buckleyi arkansana* (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

Hicoria buckleyi pachylemma (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

Hicoria buckleyi villosa (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

Carya texana var. *arkansana* (Sarg.) Little, Amer. Midland Nat. 29: 502. 1943.

Carya texana var. *villosa* (Sarg.) Little, Amer. Midland Nat. 29: 503. 1943.

DERIVATION.—Of Texas.

OTHER COMMON NAMES.—Buckley hickory, †pignut hickory.

RANGE.—Southern Indiana, southern Illinois, Missouri, and eastern Kansas, south to eastern Oklahoma, central Texas including Edwards Plateau to southern Texas, and Louisiana.

REFERENCE.—Little, Elbert L., Jr. Amer. Midland Nat. 29: 502–504. 1943.

HYBRID.—*Carya* ×*ludoviciana* (Ashe) Little (*C. aquatica* × *texana*).

When transferred to *Carya* under International Code, *Hicoria buckleyi* (Durand) Ashe is replaced by the older specific name *C. texana* Buckl., instead of the later name commonly used, *C. buckleyi* Durand. This species is not to be confused with the hybrid *C.* ×*lecontei* Little, which has been known as *C. texana* and under the American Code as *H.* ×*texana* Le Conte.

Carya texana C. DC., see C. ×**lecontei** Little

***Carya tomentosa** Nutt. **†mockernut hickory**

Juglans alba L., Sp. Pl. 997. 1753; in part; *nomen ambiguum.*

Juglans tomentosa Lam., Encycl. Méth. Bot. 4: 504. 1798.

Juglans tomentosa Michx. f., Hist. Arbr. For. Amér. Sept. 1: 184, pl. 6. 1810.

Carya tomentosa Nutt., Gen. No. Amer. Pl. 2: 221. 1818.

Carya alba (Mill.) K. Koch, Dendrol. 1: 596. 1869. Not *Carya alba* (L.) Nutt. ex Ell., Sketch Bot. S.-Car. Ga. 2: 624. 1824.

†*Hicoria alba* (L.) Britton, Torrey Bot. Club Bul. 15: 283. 1888.

Carya alba var. *ficoides* Sarg., Trees and Shrubs 2: 206. 1913.

Carya alba var. *subcoriacea* Sarg., Trees and Shrubs 2: 207. 1913.

Carya alba var. *anomala* Sarg., Bot. Gaz. 66: 238. 1918.

Carya alba var. *ovoidea* Sarg., Bot. Gaz. 66: 238. 1918.

Hicoria alba anomala (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925; as "*amomala.*"

Hicoria alba ovoidea (Sarg.) Ashe, Charleston Mus. Quart. 1(2): 29. 1925.

†*Hicoria alba ficoides* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 56. 1927.

†*Hicoria alba subcoriacea* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 56. 1927.

Carya alba subsp. *tomentosa* (Lam.) Schwerin, Deut. Dendrol. Gesell. Mitt. 44: 378. 1932.

Carya tomentosa var. *subcoriacea* (Sarg.) Palm. & Steyerm., Mo. Bot. Gard. Ann. 22: 515. 1935.

DERIVATION.—Tomentose, or densely hairy with short matted wool, referring to the leaflets.

OTHER COMMON NAMES.—bullnut, hickory (lumber), white hickory, whiteheart hickory, hognut, mockernut.

RANGE.—Southern New Hampshire and Massachusetts to New York, extreme southern Ontario, southern Michigan, and southeastern Iowa, south to Missouri, eastern Oklahoma, and eastern Texas, and east to northern Florida.

REFERENCE.—Rehder, Alfred. Carya alba proposed as nomen ambiguum. Arnold Arboretum Jour. 26: 482–483. 1945.

HYBRID.—*Carya* ×*schneckii* Sarg. (*C. illinoensis* × *tomentosa*).

This species formerly was known as *Carya alba*. However, Rehder, in the reference cited above has rejected the basonym *Juglans alba* L. as a *nomen ambiguum*. The latter included two species and when transferred as *C. alba* has been applied through the years by some authors for *C. tomentosa* and by others for *C. ovata* with obvious confusion.

Carya villosa Schneid., see **C. texana** Buckl.

Caryopitys Small, see **Pinus** L.

Casasia A. Rich., see **Genipa** L.

Cassia suffruticosa Koenig (ex Roth, Nov. Pl. Sp. Ind. Occ. 213. 1821; *Psilorhegma suffruticosa* (Koenig) Britton; family Leguminosae) is naturalized in and about Brickell Hammock, Miami, Florida, according to a note by Small (Man. Fl. Southeast. U. S. 662. 1933). This species was recorded as naturalized in Florida also by Britton and Rose (No. Amer. Fl. 23: 255. 1930). It is a shrub or small tree native of southern Asia and Australasia. In time it may become sufficiently established in other localities to merit acceptance as definitely naturalized.

Castanea Mill. (Family Fagaceae) **chestnut; chinkapin**

†*Castanea* Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754.

REFERENCE.—Camus, A. Les chataigniers. Monographie des genres Castanea et Castanopsis. 604 pp., illus. 1929. (*In* Encyclopédie Économique de Sylviculture, v. 3.)

DERIVATION.—The classical Greek and Latin name of chestnut.

The common name chinkapin is also spelled chinquapin.

Castanea ×alabamensis Ashe **Alabama chinkapin**

Castanea alnifolia? × *dentata*

†*Castanea alabamensis* Ashe, Charleston Mus. Quart. 1(2): 30. 1925.

DERIVATION.—Of Alabama.

RANGE.—Northern Alabama.

Camus (Chataigniers 239. 1929) regarded this as probably a hybrid, *Castanea dentata* × *floridana margaretta?*, but the latter supposed parent is here placed as a synonym of *C. alnifolia* var. *floridana* Sarg.

Castanea alnifolia var. **floridana** Sarg. **Florida chinkapin**

†*Castanea alnifolia* var. *floridana* Sarg., Bot. Gaz. 67: 242. 1919.

Castanea floridana (Sarg.) Ashe, Torrey Bot. Club Bul. 49: 266. 1919.

Castanea pumila var. *margaretta* Ashe, Torrey Bot. Club. Bul. 49: 265. 1922.

Castanea margaretta (Ashe) Ashe, Torrey Bot. Club Bul. 50: 359. 1923.

Castanea margaretta var. *angustifolia* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 46. 1924; as "*augustifolia.*"

Castanea margaretta var. *arcuata* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 46. 1924.

Castanea floridana angustifolia (Ashe) Ashe, Charleston Mus. Quart. 1(2): 31. 1925.

Castanea floridana arcuata (Ashe) Ashe, Charleston Mus. Quart. 1(2): 30. 1925.

†*Castanea floridana margaretta* (Ashe) Ashe, Charleston Mus. Quart. 1(2): 30. 1925.

DERIVATION.—With leaves like *Alnus,* or alder-leaved; the varietal name, of Florida.

OTHER COMMON NAMES.—running chinkapin, trailing chinkapin.

RANGE.—Coastal Plain from North Carolina to northern Florida and southeastern Louisiana.

Castanea alnifolia Nutt. (Gen. No. Amer. Pl. 2: 217. 1818), trailing chinkapin, in its typical variety, *Castanea alnifolia* var. *alnifolia,* is a low shrub which spreads by underground rootstocks. This shrubby variety has about the same range as the arborescent variety, var. *floridana* Sarg. Hybrid of *C. alnifolia* Nutt.: *C.* ×*alabamensis* Ashe (*C. alnifolia?* × *dentata*).

Castanea arkansana Ashe, see **C. ozarkensis** Ashe

Castanea ashei (Sudw.) Sudw., see **C. pumila** var. **ashei** Sudw.

***Castanea dentata** (Marsh.) Borkh. **American chestnut**

Fagus-Castanea dentata Marsh., Arbustr. Amer. 46. 1785.

†*Castanea dentata* (Marsh.) Borkh., Handb. Forst. Bot. 1: 741. 1800.

DERIVATION.—Toothed, referring to the leaf margins.

OTHER COMMON NAME.—†chestnut.

RANGE.—Central Maine to New York, extreme southern Ontario, and southeastern Michigan, south to Ohio, southern Indiana, western Kentucky, central Tennessee, northeastern Mississippi, Alabama, and Georgia. Formerly also in extreme southern Illinois (Pulaski County), where now extinct, and in northwestern Florida. Now almost exterminated by the chestnut blight, but stump sprouts persist.

HYBRIDS.—*Castanea* ×*alabamensis* Ashe (*C. alnifolia?* × *dentata*); *C.* ×*neglecta* Dode (*C. dentata* × *pumila*).

Castanea floridana (Sarg.) Ashe, see **C. alnifolia** var. **floridana** Sarg.

Castanea margaretta (Ashe) Ashe, see **C. alnifolia var. floridana** Sarg.

Castanea ×neglecta Dode **chinknut**

Castanea dentata × pumila

†*Castanea neglecta* Dode, Soc. Dendrol. de France Bul. 8: 155. 1908.

DERIVATION.—Neglected, or overlooked.

RANGE.—Recorded from Maryland, District of Columbia, Virginia, North Carolina, South Carolina, and Alabama.

Originally published as a possible hybrid and formally reduced to a hybrid by Ashe (Torrey Bot. Club Bul. 49: 266. 1922). However, Fernald (Gray's Man. Bot. Ed. 8, 541. 1950) suggested that *C. neglecta* may be merely a shade form of *C. pumila.*

Castanea ozarkensis Ashe **Ozark chinkapin**

†*Castanea ozarkensis* Ashe, Torrey Bot. Club Bul. 50: 360. 1923.

Castanea arkansana Ashe, Torrey Bot. Club Bul. 50: 361. 1923.

Castanea ozarkensis var. *arkansana* (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 45. 1924.

DERIVATION.—Of the Ozarks.

RANGE.—Southern Missouri, Arkansas, and eastern Oklahoma.

***Castanea pumila** Mill. **Allegheny chinkapin**

HYBRID.—*Castanea ×neglecta* Dode (*C. dentata × pumila*).

Castanea pumila var. pumila **Allegheny chinkapin (typical)**

Fagus pumila L., Sp. Pl. 998. 1753.

†*Castanea pumila* Mill., Gard. Dict. Ed. 8, *Castanea* No. 2. 1768.

DERIVATION.—Dwarf.

OTHER COMMON NAME.—†chinkapin.

RANGE.—New Jersey and eastern Pennsylvania southwest to Tennessee, Arkansas, and eastern Texas, and east to Florida. Also local in eastern Massachusetts.

Castanea pumila var. ashei Sudw. **Ashe chinkapin**

Castanea pumila ashei Sudw., Amer. Forestry 28: 301, fig. 1922.

†*Castanea ashei* (Sudw.) Sudw. ex Ashe, Torrey Bot. Club Bul. 49: 267. 1922.

DERIVATION.—Named for its discoverer, William Willard Ashe (1872–1932), pioneer forester of the United States Forest Service, who named several variations in *Castanea.*

RANGE.—Coastal Plain from southeastern Virginia to northern Florida and eastern Texas, north to Arkansas.

Castanopsis (D. Don) Spach (Family Fagaceae) **chinkapin**

Quercus [sect.?] *Castanopsis* D. Don, Prodr. Fl. Nepal. 56. 1825.

Balanoplis Raf., Alsogr. Amer. 29. 1838.
Castanopsis (D. Don) Spach, Hist. Vég. Phanér. 11: 185. 1842. *Nom. conserv. propos.*, Little, Phytologia 3: 81–82. 1949.
Chrysolepis Hjelmqvist, Bot. Not. Sup. 2(1): 117. 1948.
DERIVATION.—Resembling *Castanea*, chestnut, a related genus.
OTHER COMMON NAME.—evergreen-chinkapin (SPN).

***Castanopsis chrysophylla** (Dougl.) A. DC. **†golden chinkapin**

Castanea chrysophylla Dougl., Comp. Bot. Mag. 2: 126. 1836; *nomen subnudum.*
Castanea chrysophylla Dougl. ex Hook., Fl. Bor.-Amer. 2: 159. 1839.
Castanea chrysophylla var. *minor* Benth., Pl. Hartw. 337. 1857.
†*Castanopsis chrysophylla* (Dougl.) A. DC. in Hance, Jour. Bot. [London] 1: 182. 1863.
Castanopsis chrysophylla β minor (Benth.) A. DC., Prodr. 16(2): 110. 1864.
Chrysolepis chrysophylla (Hook.) Hjelmqvist, Bot. Not. Sup. 2(1): 117. 1948.
DERIVATION.—Golden leaf, referring to the golden yellow scales coating the under surface of young leaves.
OTHER COMMON NAMES.—giant evergreen-chinkapin (SPN), goldenleaf chestnut, chinkapin, giant chinkapin.
RANGE.—Pacific coast region in western Washington (Mason and Skamania Counties), western Oregon, and south in Coast Ranges to central California. Also local in Sierra Nevada, California (Plumas County to Eldorado County).

CASUARINA L. (Family Casuarinaceae) CASUARINA

†*Casuarina* L. in L. & Stickman, Herbar. Amboin. 1754; Amoen. Acad. 4: 143. 1759.
DERIVATION.—From the Malay word *kasuari*, cassowary, because of a fancied resemblance of the leafy twigs to the plumage of that bird of Australia and New Guinea.
OTHER COMMON NAMES.—beefwood (SPN), "Australian-pine."

CASUARINA EQUISETIFOLIA L. HORSETAIL CASUARINA

†*Casuarina equisetifolia* L. in L. & Stickman, Herbar. Amboin. 1754; Amoen. Acad. 4: 143. 1759; as "*equisefolia.*"
DERIVATION.—With leaves like *Equisetum*, horsetail.
OTHER COMMON NAMES.—horsetail beefwood (SPN), "Australian-pine," †beefwood.
RANGE.—Naturalized in southern Florida including Florida Keys and in various tropical regions. Native of tropical Asia and Australasia.
REFERENCE.—Merrill, E. D. Philipp. Bur. Sci. Pub. 9: 179–180. 1917.

Catalpa Scop. (Family Bignoniaceae) **catalpa**

†*Catalpa* Scop., Introd. Hist. Nat. 170. 1777.

DERIVATION.—The American Indian name.
OTHER COMMON NAMES.—catawba, Indian-bean.

Catalpa bignonioides Walt. **southern catalpa**

Bignonia catalpa L., Sp. Pl. 622. 1753.
†*Catalpa bignonioides* Walt., Fl. Carol. 64. 1788.
Catalpa catalpa (L.) Karst., Deut. Fl. Pharm.-Med. Bot. 927. [1882.]

DERIVATION.—Like *Bignonia,* a vine of the same family.
OTHER COMMON NAMES.—†common catalpa, Indian-bean.
RANGE.—Native probably from southwestern Georgia and western Florida to Louisiana. Naturalized from southern New England, New York, and Pennsylvania to Ohio and Michigan, and south to eastern Texas.

***Catalpa speciosa** Warder **northern catalpa**

†*Catalpa speciosa* Warder ex Engelm., Bot. Gaz. 5: 1. 1880.
DERIVATION.—Showy, from the clusters of large flowers.
OTHER COMMON NAMES.—†hardy catalpa, western catalpa, western catawba-tree, cigar-tree.
RANGE.—Native from southwestern Indiana and southern Illinois to Missouri, south to western Tennessee and northeastern Arkansas. Also escaped from cultivation or naturalized from Virginia to West Virginia, Ohio, and Kansas, and south to eastern Texas and Louisiana.

Ceanothus L. (Family Rhamnaceae) **ceanothus**

†*Ceanothus* L., Sp. Pl. 195. 1753; Gen. Pl. Ed. 5, 90. 1754.
DERIVATION.—The classical Greek name of a different spiny plant.
REFERENCES.—McMinn, Howard E. A geographic and taxonomic study of the California species of the genus Ceanothus. Stanford Univ., Dudley Herbarium Contrib. 1: 121–147, illus. 1930.
McMinn, Howard E. An illustrated manual of California shrubs. 689 pp., illus. 1939. *Ceanothus,* pp. 278-320, illus.
McMinn, Howard E. A systematic study of the genus Ceanothus. *In* Van Rensselaer, Maunsell, and McMinn, Howard E. Ceanothus, pp. 131–308, illus. 1942.

Ceanothus arboreus Greene **feltleaf ceanothus**

†*Ceanothus arboreus* Greene, Calif. Acad. Sci. Bul. 2: 144. 1886.
Ceanothus velutinus Dougl. var. *arboreus* (Greene) Sarg., Gard. and Forest. 2: 364. 1889.
Ceanothus arboreus var. *glaber* Jeps., Man. Fl. Pl. Calif. 619. 1925.

DERIVATION.—Treelike, a small tree with trunk and round crown; the species of the genus reaching largest size and unlike the others in shape.
OTHER COMMON NAMES.—Catalina ceanothus, †island-myrtle.

RANGE.—Santa Rosa, Santa Catalina, and Santa Cruz Islands off the coast of southern California.

Ceanothus spinosus Nutt. **spiny ceanothus**

†*Ceanothus spinosus* Nutt. in Torr. & Gray, Fl. No. Amer. 1: 267. 1838.

DERIVATION.—Spiny, the twigs ending in spines.

OTHER COMMON NAMES.—redheart ceanothus (SPN), California-lilac, greenbark ceanothus, redheart, †spiny-myrtle.

RANGE.—Coast ranges of southern California (San Luis Obispo County to San Diego County) and in northern Lower California, Mexico.

Ceanothus thyrsiflorus Eschsch. **blueblossom**

†*Ceanothus thyrsiflorus* Eschsch., Acad. Imp. Sci. St. Pétersb. Mém., Sér. 5, 10: 285. 1826; as "*thyrsiflora.*"

Ceanothus thyrsiflorus var. *chandleri* Jeps., Man. Fl. Pl. Calif. 619. 1925.

DERIVATION.—Thyrse-flowered, the flowers in a compact branched cluster.

OTHER COMMON NAMES.—blueblossom ceanothus (SPN), †blue-myrtle, blue-brush, California-lilac.

RANGE.—Outer Coast Range from southwestern Oregon south to southern California (Santa Barbara County).

Ceanothus velutinus Dougl., snowbrush, generally is a spreading shrub less than 5 feet high but includes a treelike variety. *Ceanothus velutinus* var. *laevigatus* (Hook.) Torr. & Gray has a maximum height of 20 feet but with several stems from the ground, according to Van Rensselaer and McMinn (Ceanothus 100, 171. 1942). This variety ranges from Vancouver Island, British Columbia, and western Washington south to northwestern California.

Celtis L. (Family Ulmaceae) **hackberry**

†*Celtis* L., Sp. Pl. 1043. 1753; Gen. Pl. Ed. 5, 467. 1754.

DERIVATION.—The classical Latin name of a species of lotus.

Celtis is a difficult genus with intergrading forms as well as ecological variations. Since the species are not well defined, it seems unnessary to distinguish minor variations as varieties. Considerable study of the genus, both in field and herbarium, is needed.

Celtis canina Raf., see **C. occidentalis** L.

Celtis crassifolia Lam., see **C. occidentalis** L.

Celtis douglasii Planch., see **C. reticulata** Torr.

Celtis georgiana Small, see **C. tenuifolia** Nutt.

Celtis helleri Small, see **C. lindheimeri** Engelm.

***Celtis laevigata** Willd. †**sugarberry**

†*Celtis laevigata* Willd., Berl. Baumz. Ed. 2, 81. 1811.

Celtus alba Raf., Fl. Ludovic. 25. 1817.
Celtis mississippiensis Bosc in Bosc & Baudrillard, Encycl. Méth. Agr. 7: 577. 1821; *nomen nudum.*
Celtis mississippiensis Spach, Ann. des Sci. Nat., Bot., Sér. 2, 16: 42. 1841.
Celtis texana Scheele, Linnaea 22: 146. 1849.
Celtis smallii Beadle in Small, Fl. Southeast. U. S. 365, 1329. 1903.
†*Celtis laevigata* var. *brachyphylla* Sarg., Bot. Gaz. 67: 225. 1919.
†*Celtis laevigata* var. *smallii* (Beadle) Sarg., Bot. Gaz. 67: 223. 1919.
†*Celtis laevigata* var. *texana* (Scheele) Sarg., Bot. Gaz. 67: 223. 1919.
†*Celtis laevigata* var. *apposita* Ashe, Torrey Bot. Club Bul. 50: 361. 1923.

DERIVATION.—Smooth, referring to the leaves.

OTHER COMMON NAMES.—sugar hackberry (SPN), hackberry, Texas sugarberry.

RANGE.—Southeastern Virginia south to southern Florida and west to southern and western Texas and southeastern New Mexico, and north in Mississippi Valley to western Oklahoma, southern Kansas, Missouri, southern Illinois, southern Indiana, and central Kentucky. Also in northeastern Mexico.

REFERENCE.—Sargent, C. S. Bot. Gaz. 67: 221–222. 1919.

Celtis lindheimeri Engelm. **Lindheimer hackberry**

†*Celtis lindheimeri* Engelm. ex K. Koch, Dendrol. 2(1): 434. 1872.
Celtis helleri Small, Torrey Bot. Club Bul. 24: 439. 1897.

DERIVATION.—Named for its discoverer, Ferdinand Lindheimer (1801–1879), German-born botanical collector and newspaper editor of New Braunfels, Texas.

OTHER COMMON NAME.—†paloblanco.

RANGE.—Central and southern Texas.

Celtis mississippiensis Bosc, see **C. laevigata** Willd.

***Celtis occidentalis** L. **†hackberry**

Celtis occidentalis L., Sp. Pl. 1044. 1753.
Celtis crassifolia Lam., Encycl. Méth. Bot. 4: 138. 1797.
Celtis canina Raf., Amer. Monthly Mag. and Crit. Rev. 2: 43. 1817.
Celtis pumila Pursh, Fl. Amer. Sept. 1: 200. 1814.
Celtis occidentalis var. *pumila* (Pursh) A. Gray, Man. Bot. North. U. S. Ed. 2, 397. 1856.
†*Celtis occidentalis* var. *crassifolia* (Lam.) A. Gray, Man. Bot. North. U. S. Ed. 2, 397. 1856.
†*Celtis occidentalis* var. *canina* (Raf.) Sarg., Bot. Gaz. 67: 217. 1919.
Celtis occidentalis var. *submembranacea* Fern., Rhodora 37: 425. 1935.

DERIVATION.—Western; that is, of the western hemisphere.

OTHER COMMON NAMES.—common hackberry (SPN), sugarberry.

RANGE.—Massachusetts and New Hampshire to New York, southern Quebec, southern Ontario, central Michigan, Minnesota, and central North Dakota, south to western Nebraska, northeastern Colorado, western Kansas, and western Oklahoma, east to Arkansas, Alabama and Georgia. Also local in southern Manitoba.

REFERENCE.—Fernald, M. L., and Schubert, Bernice G. The type of Celtis occidentalis L. Rhodora 50: 155–162, pls. 1097, 1098. 1948.

Celtis pumila Pursh, see **C. occidentalis** L. and note under **C. tenuifolia** Nutt.

Celtis reticulata Torr. **netleaf hackberry**

†*Celtis reticulata* Torr., Lyc. Nat. Hist. N. Y. Ann. 2: 247. 1828.

†*Celtis douglasii* Planch., Ann. des Sci. Nat., Bot., Sér. 3, 10: 293. 1848.

Celtis laevigata S. Wats., Amer. Acad. Arts and Sci. Proc. 14: 297. 1879.

Celtis occidentalis L. var. *reticulata* (Torr.) Sarg., Cat. Forest Trees No. Amer. 126. 1884.

Celtis mississippiensis var. *reticulata* (Torr.) Sarg., Silva No. Amer. 7: 72, pl. 319. 1895.

Celtis rugulosa Rydb., Fl. Rocky Mts. Plains 207, 1061. 1917.

†*Celtis laevigata* var. *brevipes* (S. Wats.) Sarg., Bot. Gaz. 67: 226. 1919.

Celtis reticulata var. *vestita* Sarg., Bot. Gaz. 67: 221. 1919.

Celtis villosula Rydb., Fl. Rocky Mts. Plains Ed. 2, 1116, 1923.

Celtis laevigata Willd. var. *reticulata* (Torr.) L. Benson, Amer. Jour. Bot. 30: 235. 1943.

DERIVATION.—Reticulate, or netted, referring to the prominent leaf veins.

OTHER COMMON NAMES.—†hackberry, western hackberry, †paloblanco.

RANGE.—Wyoming to Idaho and western Washington, south to Oregon, eastern and southern California, and east to Arizona, New Mexico, and Trans-Pecos and western Texas, and north to western Oklahoma and Colorado. Also in northern Mexico.

Celtis rugulosa Rydb., see **C. reticulata** Torr.

Celtis smallii Beadle, see **C. laevigata** Willd.

Celtis tenuifolia Nutt. **Georgia hackberry**

Celtis tenuifolia Nutt., Gen. No. Amer. Pl. 1: 202. 1818.

Celtis georgiana Small, Torrey Bot. Club Bul. 24: 439. 1897.

†*Celtis pumila* Pursh var. *georgiana* (Small) Sarg., Bot. Gaz. 67: 227. 1919.

Celtis tenuifolia var. *georgiana* (Small) Fern. & Schubert, Rhodora 50: 160. 1948.

DERIVATION.—Thin-leaved.

OTHER COMMON NAME.—†hackberry.

RANGE.—Pennsylvania to Indiana, Missouri, and eastern Kansas, south to eastern Oklahoma, Louisiana, and northern Florida.

REFERENCE.—See **Celtis occidentalis** L.

Fernald and Schubert (Rhodora 50: 160. 1948) have shown that the shrub or small tree of usually exposed habitats which has been known as *Celtis pumila* is *C. tenuifolia* Nutt. and that *C. pumila* Pursh is a variation of *C. occidentalis* L.

Celtis texana Scheele, see **C. laevigata** Willd.

Celtis villosula Rydb., see **C. reticulata** Torr.

Cephalanthus L. (Family Rubiaceae) **buttonbush**

Cephalanthus L., Sp. Pl. 95. 1753; Gen. Pl. Ed. 5, 42. 1754.

DERIVATION.—From Greek head and flower, in reference to the dense ball-like flower clusters.

Cephalanthus occidentalis L. **common buttonbush**

Cephalanthus occidentalis L., Sp. Pl. 95. 1753.

Cephalanthus occidentalis var. *pubescens* Raf., Med. Fl. 1: 101. 1828.

Cephalanthus occidentalis var.? *californicus* Benth., Pl. Hartw. 314. 1849.

DERIVATION.—Western, referring to the western hemisphere.

RANGE.—Western Nova Scotia, New Brunswick, and Maine, west to southern Quebec, southern Ontario, southern Michigan, and southeastern Minnesota, south to southeastern Nebraska, central Kansas, and Trans-Pecos and southern Texas, and east to southern Florida, and west from southern New Mexico to central Arizona and central California. Also south to southern Mexico (from Chihuahua to Guerrero and Veracruz) and in Cuba. Recorded from eastern Asia.

Cephalocereus Pfeiff. (Family Cactaceae) **cephalocereus**

Cephalophorus Lem., Cact. Aliq. Nov. Hort. Monvill. p. xii. 1838 (before May 5). Not *Cephalophora* Cav., Icon. Descr. Pl. Hisp. 6: 79, pl. 599. 1801.

†*Cephalocereus* Pfeiff., Allg. Gartenz. 6: 142. 1838 (May 5). *Nom. conserv. propos.*, Werdermann, Kakteenkunde 1937: 129–130, illus. 1937. Little, Madroño 7: 249–250. 1944; Brittonia 7: 47. 1949.

Pilocereus Lem., Cact. Gen. Nov. Sp. Hort. Monvill. 6. 1839.

DERIVATION.—From head and *Cereus*, a cactus genus, perhaps referring to the crown of long hair.

Cephalocereus deeringii Small **Deering cephalocereus**

†*Cephalocereus deeringii* Small, N. Y. Bot. Gard. Jour. 18: 201, pl. 206. 1917.

Pilocereus deeringii (Small) Knuth in Backeberg & Knuth, Kaktus-ABC 330. 1935.

DERIVATION.—Named for Charles Deering, whose deep interest in the botanical exploration of Florida and in the preservation of its hammocks and rare plants enabled Small to study this cactus.

OTHER COMMON NAMES.—Matecumbe pilocereus (SPN), tree-cactus.

RANGE.—Upper Florida Keys, from Big Pine Key to Upper Matecumbe Key.

Cephalocereus keyensis Britton & Rose **Key West cephalocereus**

Cephalocereus keyensis Britton & Rose, U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 12: 516. 1909.

Cereus keyensis (Britton & Rose) Vaupel, Monatsschr. f. Kakteenkunde 23: 23. 1913.

Pilocereus keyensis (Britton & Rose) Knuth in Backeberg & Knuth, Kaktus-ABC 331. 1935.

DERIVATION.—Of the key, referring to Key West, where it was discovered.

OTHER COMMON NAME.—tree-cactus.

RANGE.—Lower Florida Keys, from Key West to Big Pine Key. A shrub or small tree up to 20 feet high, according to Small (Man. Southeast. Fl. 917. 1933).

Cerasus Adans., see **Prunus** L.

Cercidium Tulasne (Family Leguminosae) **paloverde**

Parkinsonia L., Sp. Pl. 375. 1753; Gen. Pl. Ed. 5, 177. 1754; in part.

Cercidium Tulasne, Arch. Mus. Paris 4: 133. 1844.

Cercidiopsis Britton & Rose, No. Amer. Fl. 23: 306. 1930.

DERIVATION.—Latinized from Greek *kerkidion,* a weaver's comb, from a fancied resemblance to the pod.

REFERENCES.—Benson, Lyman, Taxonomic contributions. I. The native palo verdes of Arizona. Amer. Jour. Bot. 27: 186–187, illus. 1940.

Britton, Nathaniel Lord, and Rose, Joseph Nelson. Parkinsonia. Cercidiopsis. Cercidium. No. Amer. Fl. 23: 305–309. 1930.

Johnston, Ivan M. Taxonomic records concerning American spermatophytes. 1. Parkinsonia and Cercidium. Gray Herbarium, Harvard Univ., Contrib., New Ser. 70: 61–68. 1924.

Cercidium floridum Benth. **blue paloverde**

Cercidium floridum Benth. ex A. Gray, Pl. Wright. 1: 58. 1852.

Parkinsonia florida (Benth.) S. Wats., Amer. Acad. Arts and Sci. Proc. 11: 135. 1876.

Parkinsonia torreyana S. Wats., Amer. Acad. Arts and Sci. Proc. 11: 135. 1876.

†*Cercidium torreyanum* (S. Wats.) Sarg., Gard. and Forest 2: 388. 1889.

DERIVATION.—Full of flowers, appropriate because of the abundant showy yellow flowers.

OTHER COMMON NAMES.—†paloverde, paloverde azul.

RANGE.—Southern and central Arizona west to southeastern California. Also in northwestern Mexico (Lower California, Sonora, and Sinaloa).

Johnston (Gray Herbarium, Harvard Univ., Contrib., New Ser. 70: 61–92. 1924) and Benson (Amer. Jour. Bot. 27: 186–190, illus. 1940) have shown that the older name, *Cercidium floridum* Benth., belongs to this species, which has generally been known as *C. torreyanum* (S. Wats.) Sarg. To the species of Texas and northeastern Mexico formerly known as *C. floridum*, the name *C. macrum* Johnst. has been given.

Cercidium macrum Johnst. **border paloverde**

Cercidium macrum Johnst., Gray Herbarium, Harvard Univ., Contrib., New Ser. 70: 64. 1924.

DERIVATION.—Long.

OTHER COMMON NAME.—†Texas paloverde.

RANGE.—Southern Texas and northeastern Mexico (Tamaulipas, Nuevo León, and Coahuila).

Formerly referred to †*Cercidium floridum* Benth. (ex A. Gray, Pl. Wright. 1: 58. 1852) and included under that name in the 1927 Check List.

Cercidium microphyllum (Torr.) Rose & Johnst. **yellow paloverde**

Parkinsonia microphylla Torr., Rpt. Expl. Surv. Miss. Pacif. 4(5): 82. 1857; *nomen subnudum.*

†*Parkinsonia microphylla* Torr., U. S. Mex. Bound. Surv. Bot. 59. 1859.

Cercidium microphyllum (Torr.) Rose & Johnston in Johnston, Gray Herbarium, Harvard Univ., Contrib., New Ser. 70: 66. 1924.

Cercidiopsis microphylla (Torr.) Britton & Rose, No. Amer. Fl. 23: 306. 1930.

DERIVATION.—Little-leaf, describing the minute leaflets.

OTHER COMMON NAMES.—littleleaf paloverde (SPN), †littleleaf horsebean, paloverde, foothill paloverde.

RANGE.—Southern and central Arizona and local in southeastern California. Also in northwestern Mexico (Lower California and Sonora).

Cercis L. (Family Leguminosae) **redbud**

†*Cercis* L., Sp. Pl. 374. 1753; Gen. Pl. Ed. 5, 176. 1754.

DERIVATION.—The classical Greek name of *Cercis siliquastrum* L., Judas-tree, of southern Europe and western Asia.

REFERENCES.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Cercis. No. Amer. Fl. 23: 201–202. 1930.

Hopkins, Milton. Cercis in North America. Rhodora 44: 193–211, illus. 1942.

Cercis canadensis L. **eastern redbud**

Cercis canadensis var. **canadensis** **eastern redbud (typical)**

†*Cercis canadensis* L., Sp. Pl. 374. 1753.

DERIVATION.—Of Canada, erroneously thought to be the native home. However, now known from extreme southern Ontario.

OTHER COMMON NAMES.—Judas-tree †redbud.

RANGE.—Connecticut and southern New York west to extreme southern Ontario, southern Michigan, southern Wisconsin, Iowa, and eastern Nebraska, and south to southern Texas and northern Florida. Also in northeastern Mexico (Tamaulipas and Nuevo León).

Cercis canadensis var. **texensis** (S. Wats.) Hopkins **†Texas redbud**

Cercis reniformis Engelm. ex Scheele in Roemer, Texas 428. 1849; *nomen nudum.*

Cercis occidentalis Torr. var., A. Gray, Boston Jour. Nat. Hist. 6: 177. 1850.

Cercis occidentalis var. *texensis* S. Wats., Bibl. Index No. Amer. Bot. 209. 1878.

†*Cercis reniformis* Engelm. ex S. Wats., Amer. Acad. Arts and Sci. Proc. 17: 348. 1882.

Cercis texensis (S. Wats.) Sarg., Gard. and Forest 4: 448. 1891.

Cercis mexicana Rose in Britton & Rose, No. Amer. Fl. 23: 202. 1930.

Cercis canadensis var. *mexicana* (Rose) Hopkins, Rhodora 44: 208. 1942.

Cercis canadensis var. *texensis* (S. Wats.) Hopkins, Rhodora 44: 203. 1942.

DERIVATION.—Of Texas.

OTHER COMMON NAME.—Mexican redbud.

RANGE.—Southern Oklahoma (Arbuckle Mountains) and from eastern to western Texas, including Edwards Plateau and Trans-Pecos Texas, and south to northeastern Mexico (Coahuila to Tamaulipas and San Luis Potosí).

Cercis occidentalis Torr. **†California redbud**

†*Cercis occidentalis* Torr. ex A. Gray, Boston Jour. Nat. Hist. 6: 177. 1850.

Cercis arizonica Rose ex N. N. Dodge, Grand Canyon Nat. Hist. Assoc. Nat. Hist. Bul. 3: 56, fig. 1936; without Latin diagnosis.

Cercis occidentalis var. *orbiculata* (Greene) Tidestrom in Tidestrom & Kittell, Fl. Ariz. New Mex. 155. 1941.

DERIVATION.—Western.

OTHER COMMON NAMES.—Arizona redbud, western redbud.

RANGE.—Southeastern Utah west to southern Nevada and northern California, and south to southern California and southern Arizona.

Cercocarpus H. B. K. (Family Rosaceae) **cercocarpus**

†*Cercocarpus* H. B. K., Nov. Gen. Sp. 6: 232, pl. 559. 1823.

DERIVATION.—From tail and fruit, referring to the long-tailed hairy fruit.

OTHER COMMON NAME.—mountain-mahogany (SPN).

REFERENCES.—Dunkle. M. D. A revision of the Channel Islands forms of Cercocarpus. South. Calif. Acad. Sci. Bul. 39: 1–2. 1940.

Martin, Floyd L. A revision of Cercocarpus. Brittonia 7: 91–111, illus. 1950.

Rydberg, Per Axel. Cercocarpus. No. Amer. Fl. 22: 418–424. 1913.

Cercocarpus alnifolius Rydb., see **C. betuloides** var. **blancheae** (Schneid.) Little

Cercocarpus betuloides Nutt. **birchleaf cercocarpus**

RANGE.—Central Arizona and from western Oregon south through California to northern Lower California, Mexico.

OTHER COMMON NAMES.—†birchleaf mountain-mahogany (SPN), plume-tree.

Cercocarpus betuloides var. **betuloides**
birchleaf cercocarpus (typical)

†*Cercocarpus betuloides* Nutt. in Torr. & Gray, Fl. No. Amer. 1: 427. 1840 (June).

Cercocarpus parvifolius Nutt. var. *glaber* S. Wats., Bot. Calif. 1: 175. 1876.

Cercocarpus parvifolius var. *betuloides* (Nutt.) Sarg., Silva No. Amer. 4: 66. 1892.

Cercocarpus douglasii Rydb., No. Amer. Fl. 22: 421. 1913.

Cercocarpus betuloides var. *multiflorus* Jeps., Man. Fl. Pl. Calif. 503. 1925.

Cercocarpus montanus Raf. var. *glaber* (S. Wats.) F. L. Martin, Brittonia 7: 101. 1950.

DERIVATION.—Like *Betula*, birch, from the resemblance of the leaves to those of dwarf birches.

RANGE.—Same as species.

Cercocarpus betuloides var. **blancheae** (Schneid.) Little
alderleaf cercocarpus

Cercocarpus betulaefolius var. *blancheae* Schneid., Deut. Dendrol. Gesell. Mitt. 14: 127. 1905.

†*Cercocarpus alnifolius* Rydb., No. Amer. Fl. 22: 421. 1913.

Cercocarpus betuloides [var.] *alnifolius* (Rydb.) Dunkle, South. Calif. Acad. Sci. Bul. 39: 2. 1940.

Cercocarpus montanus Raf. var. *blancheae* (Schneid.) F. L. Martin, Brittonia 7: 103. 1950.

Cercocarpus betuloides var. *blancheae* (Schneid.) Little, Phytologia 4:308. 1953.

DERIVATION.—Named for Luella Blanche (Engle) Trask, who discovered it in 1896.

OTHER COMMON NAMES. — †alderleaf mountain-mahogany (SPN).

RANGE.—Santa Rosa, Santa Cruz, and Santa Catalina Islands off the coast of southern California.

Cercocarpus betuloides var. **macrourus** (Rydb.) Jeps. ———

Cercocarpus macrourus Rydb., No. Amer. Fl. 22: 420. 1913.

Cercocarpus betuloides var. *macrourus* (Rydb.) Jeps., Man. Fl. Pl. Calif. 503. 1925.

Cercocarpus montanus Raf. var. *macrourus* (Rydb.) F. L. Martin, Brittonia 7: 104. 1950.

DERIVATION.—Long-tailed, describing the fruit.

RANGE.—Southwestern Oregon and northern California.

Shrub or small tree to 16 feet tall.

Cercocarpus betuloides var. **traskiae** (Eastw.) Dunkle **Catalina cercocarpus**

†*Cercocarpus traskiae* Eastw., Calif. Acad. Sci. Proc. Bot., Ser. 3, 1: 136, pl. 11, fig. 7. 1898.

Cercocarpus betuloides [var.] *traskiae* (Eastw.) Dunkle, South. Calif. Acad. Sci. Bul. 39: 2. 1940.

Cercocarpus montanus Raf. var. *traskiae* (Eastw.) F. L. Martin, Brittonia 7: 103. 1950.

DERIVATION.—Named for Luella Blanche (Engle) Trask, who made plant collections on Santa Catalina Island, where she lived, discovering this variety in 1897.

OTHER COMMON NAMES.—Catalina mountain-mahogany (SPN), †bigleaf mountain-mahogany.

RANGE.—Santa Catalina Island off the coast of southern California. Very rare and very local.

Cercocarpus breviflorus A. Gray **hairy cercocarpus**

Cercocarpus breviflorus A. Gray, Smithsn. Contrib. Knowl. 5(6) (Pl. Wright. Pt. 2): 54. 1853.

Cercocarpus parvifolius var. *paucidentatus* S. Wats., Amer. Acad. Arts and Sci. Proc. 17: 353. 1882.

Cercocarpus parvifolius var. *breviflorus* (A. Gray) M. E. Jones, Zoë 2: 245. 1891.

Cercocarpus parvifolius var. *brevifolius* Sarg., Silva No. Amer. 4: 66. 1892.

†*Cercocarpus paucidentatus* (S. Wats.) Britton, N. Y. Acad. Sci. Trans. 14: 31. 1894.

Cercocarpus breviflorus var. ? *eximius* Schneid., Illus. Handb. Laubholzk. 1: 530. 1905.

Cercocarpus eximius (Schneid.) Rydb., No. Amer. Fl. 22: 422. 1913.

Cercocarpus montanus Raf. var. *paucidentatus* (S. Wats.) F. L. Martin, Brittonia 7: 104. 1950.

DERIVATION.—Short-flowered.

OTHER COMMON NAMES.—Wright mountain-mahogany (SPN), †hairy mountain-mahogany.

RANGE.—Trans-Pecos Texas to northern New Mexico and northern Arizona, south to northern Mexico (eastern Sonora to Nuevo León, south to San Luis Potosí and Hidalgo).

Cercocarpus douglasii Rydb., see **C. betuloides** Nutt.

Cercocarpus eximius (Schneid.) Rydb., see **C. breviflorus** A. Gray

Cercocarpus hypoleucus Rydb., see **C. ledifolius** Nutt.

Cercocarpus ledifolius Nutt. **curlleaf cercocarpus**

†*Cercocarpus ledifolius* Nutt. in Torr. & Gray, Fl. No. Amer. 1: 427. 1840.
Cercocarpus ledifolius var. *intercedens* Schneid., Deut. Dendrol. Gesell. Mitt. 14: 128. 1905.
Cercocarpus hypoleucus Rydb., No. Amer. Fl. 22: 424. 1913.
Cercocarpus ledifolius var. *hypoleucus* (Rydb.) M. E. Peck, Man. Pl. Ore. 407. 1941; Madroño 6: 134. 1941.

DERIVATION.—With leaves like *Ledum*, Labrador-tea, a shrub with similar shaped leathery leaves with margins rolled under the lower surface densely hairy.

OTHER COMMON NAME.—†curlleaf mountain-mahogany (SPN).

RANGE.—Northern Wyoming, western Montana, Idaho, southeastern Washington, and eastern Oregon, south to southeastern California, Nevada, Utah, northern Arizona, and western Colorado. Also in northern Lower California, Mexico.

Cercocarpus macrourus Rydb., see **C. betuloides** var. **macrourus** (Rydb.) Jeps.

Cercocarpus paucidentatus (S. Wats.) Britton, see **C. breviflorus** A. Gray

Cercocarpus traskiae Eastw., see **C. betuloides** var. **traskiae** (Eastw.) Dunkle

Cereus Mill. (Family Cactaceae) **cereus**

Cereus **Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754.**
Cereus Trew, Pl. Select., pl. 31. 1754.
Cereus subg. *Lophocereus* Berg., Mo. Bot. Gard. Ann. Rpt. 16: 62. 1905.
†*Carnegiea* Britton & Rose, N. Y. Bot. Gard. Jour. 9: 187, pls. 48–52, fig. 32. 1908.
Lemaireocereus Britton & Rose, U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 12: 424. 1909.
Lophocereus Britton & Rose, U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 12: 426. 1909.

The monotypic genus *Carnegiea* Britton & Rose, accepted in the 1927 Check List, is regarded by most conservative specialists as not distinct from *Cereus* Mill.

DERIVATION.—Perhaps from Latin, wax candle, from the resemblance of the stems of some species.

REFERENCES.—Benson, Lyman. The cacti of Arizona. Ed. 2, 134 pp., illus. 1950. *Cereus*, pp. 66–76, illus.

Vaupel, F. *Cereus*. *In* Engler, A., and Prantl, K. Natürl. Pflanzenfam. Ed. 2, 21: 633–642, illus. 1925.

Cereus giganteus Engelm. saguaro

Cereus giganteus Engelm. in Emory, Notes Mil. Reconn. Ft. Leav. Calif. 158, pl. 1848; as "*gigantens*" but spelled "*giganteus*" on plate opposite p. 72.

†*Carnegiea gigantea* (Engelm.) Britton & Rose, N. Y. Bot. Gard. Jour. 9: 188, pls. 48–52, fig. 32. 1908.

DERIVATION.—Giant.

OTHER COMMON NAMES.—†giant cactus, pitahaya.

RANGE.—Southern, central, and southwestern Arizona, and local in southeastern California. Also in Sonora, Mexico.

Two species of treelike cacti of southern Arizona and adjacent northern Mexico may be mentioned here though technically not trees because they lack a single trunk. Instead, from or near the ground they have many erect columnar branches 5 to 20 feet high and 4 to 8 inches in diameter and are unbranched above unless injured. They are: *Cereus schottii* Engelm. (*Lophocereus schottii* (Engelm.) Britton & Rose), senita; *Cereus thurberi* Engelm. (*Lemaireocereus thurberi* (Engelm.) Britton & Rose), organpipe cactus.

In southern Florida are other treelike cacti which have been placed also in the segregate genus *Harrisia* Britton, apple-cactus. These cacti, described as succulent shrubs by Small (Man. Southeast. Fl. 915–916, illus. 1933), have slender fluted cylindrical stems, simple or branched, and erect, reclining, or clambering, becoming as much as 16 to 20 feet high. More information is desired whether the larger individuals are definitely erect and otherwise meet the definition of trees. In addition to a smaller species, these two species, which have been transferred to *Cereus* by Little (Amer. Midland Nat. 33: 495–496. 1945), may be treelike: *Cereus aboriginum* (Small) Little (*Harrisia aboriginum* Small), shellmound apple-cactus; *Cereus fragrans* (Small) Little (*Harrisia fragrans* Small), fragrant apple-cactus.

Cerothamnus Tidestr., see **Myrica** L.

Chamaecyparis Spach (Family Pinaceae) white-cedar

†*Chamaecyparis* Spach, Hist. Nat. Vég. Phanér. 11: 329. 1842.

DERIVATION.—From the Greek name of lavender-cotton, or ground-cypress (*Santolina chamaecyparrisus* L.), a dwarf shrubby Old World composite, which resembles a dwarf cypress.

OTHER COMMON NAME.—false-cypress (SPN).

REFERENCE.—See under **Cupressus** L.

***Chamaecyparis lawsoniana** (A. Murr.) Parl. **†Port-Orford-cedar**

Cupressus lawsoniana A. Murr., Edinb. New Phil. Jour., New Ser. 1: 292, pl. 10. 1855.

Chamaecyparis lawsonii Parl., Fir. Mus. Fis. Stor. Nat. Ann., Nuov. Ser. 1: 161, 174, 181, pl. 3. 1865; *nomen nudum*.

†*Chamaecyparis lawsoniana* (A. Murr.) Parl. in A. DC., Prodr. 16(2): 464. 1868.

DERIVATION.—Named in honor of Peter Lawson and Sons, nurserymen of Edinburgh, who introduced this species into cultivation. The seeds were purchased from William Murray, who col-

lected them in California in 1854 and whose brother named the species. Charles Lawson (1794–1873), son of the founder, was a leader in Scottish agriculture.

OTHER COMMON NAMES.—Lawson false-cypress (SPN), Lawson cypress, Oregon-cedar, Port-Orford white-cedar.

RANGE.—Southwestern Oregon (Coos Bay) south to northwestern California (Klamath River).

***Chamaecyparis nootkatensis** (D. Don) Spach **†Alaska-cedar**

Cupressus nootkatensis D. Don in Lamb., Descr. Genus Pinus 2: [18]. 1824 (not seen; seen in Ed. 2, 2: 113. 1828).

†*Chamaecyparis nootkatensis* (D. Don) Spach, Hist. Nat. Vég. Phanér. 11: 333. 1842; as *"nutkatensis."*

DERIVATION.—Named for Nootka Sound, on Vancouver Island, British Columbia, where it was discovered.

OTHER COMMON NAMES.—Nootka false-cypress (SPN), Alaska cypress, Sitka cypress, yellow cypress, yellow-cedar, Alaska yellow-cedar.

RANGE.—Pacific coast region from southeastern Alaska southeast to western British Columbia and western Washington, and south in Cascade Mountains to western Oregon. Also local in Blue Mountains of northeastern Oregon and in northwestern California (Siskiyou County).

***Chamaecyparis thyoides** (L.) B. S. P. **Atlantic white-cedar**

Cupressus thyoides L., Sp. Pl. 1003. 1753.

†*Chamaecyparis thyoides* (L.) B. S. P., Prel. Cat. Anth. Pter. N. Y. 71. 1888.

DERIVATION.—Like *Thuya,* a related genus containing northern white-cedar.

OTHER COMMON NAMES.—white-cedar false-cypress (SPN), swamp-cedar, white-cedar, †southern white-cedar (lumber).

RANGE.—Coastal Plain from southern Maine to northern Florida, west to southern Mississippi.

Chilopsis D. Don (Family Bignoniaceae) **desertwillow**

†*Chilopsis* D. Don, Edinb. Phil. Jour. 9: 261. 1823.

DERIVATION.—With the appearance of a lip, the corolla having a distinct lip.

Chilopsis linearis (Cav.) Sweet **†desertwillow**

Bignonia linearis Cav., Icon. Descr. Pl. 3: 35, pl. 269. 1794.

Chilopsis saligna D. Don, Edinb. Phil. Jour. 9: 262. 1823.

†*Chilopsis linearis* (Cav.) Sweet, Hort. Brit. 283. 1827.

Chilopsis glutinosa Engelm. in Wisliz., Mem. Tour North. Mex. 94. 1848; *nom. provisor.*

Chilopsis linearis var. *arcuata* Fosberg, Madroño 3: 366. 1936.

Chilopsis linearis var. *glutinosa* (Engelm.) Fosberg, Madroño 3: 365. 1936.

DERIVATION.—Linear, referring to the very narrow leaves.

RANGE.—Central and southern Texas west to Trans-Pecos Texas, southern and central New Mexico, northwestern Arizona, southwestern Utah, southeastern Nevada, and southeastern California. Also south in northern Mexico to Lower California, Sonora, Zacatecas, and Tamaulipas.

REFERENCE.—Fosberg, F. Raymond. Varieties of the desert willow, Chilopsis linearis. Madroño 3: 363–366. 1936.

Chionanthus L. (Family Oleaceae) **fringetree**

†*Chionanthus* L., Sp. Pl. 8. 1753; Gen. Pl. Ed. 5, 9. 1754.

DERIVATION.—From Greek, snow and flower, in reference to the light and snow-white flower clusters.

Chionanthus virginicus L. **†fringetree**

†*Chionanthus virginicus* L., Sp. Pl. 8. 1753; as "*virginica.*"

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—white fringetree (SPN), old-man's-beard.

RANGE.—New Jersey and eastern Pennsylvania to West Virginia, southern Ohio, Kentucky, and southern Missouri, south to southeastern Oklahoma and eastern Texas, and east to central Florida.

Chrysobalanus L. (Family Rosaceae) **coco-plum**

†*Chrysobalanus* L., Sp. Pl. 513. 1753; Gen. Pl. Ed. 5, 229. 1754.

DERIVATION.—Literally golden acorn, apparently in allusion to the yellow fruit which the type species (*C. icaco*) sometimes exhibits.

Chrysobalanus icaco L. **icaco coco-plum**

Chrysobalanus icaco var. icaco **icaco coco-plum (typical)**

†*Chrysobalanus icaco* L., Sp. Pl. 513. 1753.

DERIVATION.—The native or Spanish name of the fruit.

OTHER COMMON NAME.—†coco-plum.

RANGE.—Southern Florida north on east coast to Cape Canaveral and on Florida Keys. Also in West Indies, Mexico, Central America, South America, and recorded from tropical western Africa.

Chrysobalanus icaco var. pellocarpus (G. F. W. Mey.) DC. **smallfruit coco-plum**

Chrysobalanus pellocarpus G. F. W. Mey., Prin. Fl. Esseq. 193. 1818.

†*Chrysobalanus icaco β pellocarpus* (G. F. W. Mey.) DC., Prodr. 2: 525. 1825.

Chrysobalanus interior Small, Man. Southeast. Fl. 645. 1933.

DERIVATION.—With dark-colored fruit.

RANGE.—Southern Florida, West Indies, and northern South America.

Chrysolepis Hjelmqvist, see **Castanopsis** (D. Don) Spach

Chrysophyllum L. (Family Sapotaceae) **goldenleaf**

†*Chrysophyllum* L., Sp. Pl. 192. 1753; Gen. Pl. Ed. 5, 88. 1754.

DERIVATION.—Golden leaf, from the color of the lower leaf surface.

OTHER COMMON NAME.—starapple (SPN).

REFERENCE.—Cronquist, Arthur. Studies in the Sapotaceae—I. The North American species of Chrysophyllum. Torrey Bot. Club Bul. 72: 192–205. 1945.

Chrysophyllum oliviforme L. **†satinleaf**

†*Chrysophyllum oliviforme* L., Syst. Nat. Ed. 10, 2: 937. 1759; as *"olivifor."*

DERIVATION.—Olive-formed, referring to the fruit.

OTHER COMMON NAME.—satinleaf starapple (SPN).

RANGE.—Southern Florida, including Florida Keys. Also in Bahama Islands and Greater Antilles (Cuba, Jamaica, Hispaniola, and Puerto Rico).

Cicca L., see **Phyllanthus** L.

CINNAMOMUM Trew (Family Lauraceae) CINNAMON

†*Cinnamomum* Trew, Herb. Blackw., Cent. 4, pl. 354. 1760. Blume, Bijdr. Fl. Ned Indië 568. 1825.

Camphora Trew, Herb. Blackw., Cent. 4, pl. 347. 1760. Nees in Wall., Pl. As. Rar. 2: 61. 1831.

DERIVATION.—The ancient name, coming into Latin through Hebrew and Greek.

CINNAMOMUM CAMPHORA (L.) Nees & Eberm. CAMPHOR-TREE

Laurus camphora L., Sp. Pl. 369. 1753.

†*Cinnamomum camphora* (L.) Nees & Eberm., Handb. Med.-Pharm. Bot. 2: 430. 1831.

Camphora camphora (L.) Karst., Deut. Fl. Pharm.-Med. Bot. 504. 1882.

DERIVATION.—Camphor, the ancient name.

RANGE.—Escaped from cultivation from Florida to Louisiana and recorded as naturalized in Florida. Native of tropical Asia and Malaya to China and Japan and planted in tropics throughout the world.

Citharexylum L. (Family Verbenaceae) **fiddlewood**

†*Citharexylum* L., Sp. Pl. 625. 1753; as *"Citharexylum"*; Gen. Pl. Ed. 5, 273. 1754; as *"Citharexylon."*

DERIVATION.—A translation of the English West Indian name fiddlewood, and the French equivalent, referring to the use of the very hard, heavy, strong wood for musical instruments.

The variant spelling *"Citharexylon"* was used in the 1927 Check List.

Citharexylum berlandieri Robinson, Berlandier fiddlewood, a shrub of extreme southern Texas (Willacy, Hidalgo, and Cameron Counties), becomes a small tree southward in northern Mexico.

Citharexylum fruticosum L. **Florida fiddlewood**

†*Citharexylum fruticosum* L., Syst. Nat. Ed. 10, 2: 115. 1759; as "*fruticos.*"

Citharexylum villosum Jacq., Coll. Bot. 1: 72. 1786; Icon. Pl. Rar. 1: pl. 118. 1786 (?).

Citharexylum fruticosum var. *β villosum* (Jacq.) O. E. Schulz in Urban, Symb. Ant. 6: 63. 1909.

Citharexylum fruticosum var. *subvillosum* Moldenke, Repert. Spec. Novarum Regni Veg. 37: 223. 1934.

DERIVATION.—Shrubby.

OTHER COMMON NAME.—†fiddlewood.

RANGE.—Central and southern Florida, including Florida Keys. Also in West Indies.

CITRUS L. (Family Rutaceae) CITRUS

Citrus L., Sp. Pl. 782. 1753; Gen. Pl. Ed. 5, 341. 1754.

DERIVATION.—From Greek, citron; Pliny the Elder, (23–79 A. D.) Roman naturalist, also used *citrus* for the citron tree (*Citrus medica* L.).

REFERENCE.—Swingle, Walter T. The botany of Citrus and its wild relatives of the orange subfamily (family Rutaceae, subfamily Aurantioideae). Pp. 129–474, illus. *In* Webber, Herbert John, and Batchelor, Leon Dexter, eds. The citrus industry. V. 1, 1028 pp., illus. 1943 [1944].

The five introduced species of *Citrus* in the 1927 Check List are retained here, though perhaps only one, *C. aurantium* L., is extensively naturalized. Small (Fl. Southeast. U. S. 678. 1903; Man. Southeast. Fl. 760–761. 1933) recorded all these species as spontaneous or naturalized in southern Florida and the Florida Keys. He noted that these early Spanish introductions, among the first fruit trees introduced in America, were sown in the more remote parts as well as in the coastal regions and had maintained a foothold in the hammocks and in the kitchenmiddens. More recent information on the status of these species as naturalized is needed. Two additional cultivated species not recorded as naturalized are *Citrus paradisi* Macf., grapefruit, and *Citrus reticulata* Blanco, mandarin orange or tangerine.

CITRUS AURANTIFOLIA (L.) Swingle LIME

Limonia aurantifolia [Christmann in] L., Pfanzensyst. nach 13 Lat. Ausg. Holl. Houttuyn. 1: 618. 1777.

Citrus lima Lunan, Hort. Jamaic. 1: 451. 1814.

Citrus aurantifolia (Christmann) Swingle, Wash. Acad. Sci. Jour. 3: 365. 1913.

DERIVATION.—Orange-leaved.

OTHER COMMON NAME.—key lime.

RANGE.—Naturalized in Florida, including Florida Keys, according to Small (Man. Southeast. Fl. 761. 1933). Widely cultivated in tropical and subtropical regions. Native of East Indian Archipelago.

CITRUS AURANTIUM L. SOUR ORANGE

Citrus aurantium L., Sp. Pl. 782. 1753.
Citrus vulgaris Risso, Paris Mus. d'Hist. Nat. Ann. 20: 190. 1813.

DERIVATION.—Orange.

OTHER COMMON NAMES.—bittersweet orange, †Seville orange.

RANGE.—Naturalized in Florida and Georgia. Widely naturalized in tropical and subtropical regions. Native of southeastern Asia.

Citrus lima Lunan, see C. AURANTIFOLIA (L.) Swingle

CITRUS LIMON (L.) Burm. f. †LEMON

Citrus medica β limon L., Sp. Pl. 782. 1753.
Citrus limon (L.) Burm. f., Fl. Ind. 173. 1768.
Citrus limonum Risso, Paris Mus. d'Hist. Nat. Ann. 20: 201. 1813.

†*Citrus limonia* Osbeck, Canton lemon, to which the European lemon has been referred, is a Chinese hybrid and different.

DERIVATION.—Lemon.

RANGE.—Naturalized in Florida, including Florida Keys, according to Small (Man. Southeast. Fl. 761. 1933). Widely cultivated in tropical and subtropical regions. Origin uncertain and perhaps relatively recent, possibly from southeastern Asia.

REFERENCE.—Tanaka, Tyôzaburô. On the scientific name of lemon. [Japanese with English summary.] Kyushu Imp. Univ., Dept. Agr. Bul. Sci. 1: 59–69. 1925.

CITRUS MEDICA L. †CITRON

†*Citrus medica* L., Sp. Pl. 782. 1753.

DERIVATION.—Healing, or medicinal.

RANGE.—Naturalized in Florida, including Florida Keys, according to Small (Man. Southeast. Fl. 761. 1933). Widely cultivated in tropical and subtropical regions. Native home uncertain, possibly Arabia, India, or China.

CITRUS SINENSIS Osbeck SWEET ORANGE

Citrus aurantium β sinensis L., Sp. Pl. 783. 1753.
†*Citrus sinensis* Osbeck, Reise Ostind. China 250. 1765.

Formerly referred to *Citrus aurantium* L.

DERIVATION.—Of China.

OTHER COMMON NAME.—†orange.

RANGE.—Naturalized in Florida, including Florida Keys, according to Small (Man. Southeast. Fl. 761. 1933). Widely cultivated in tropical and subtropical regions. Probably originally native of China, Indo-China, or other southeastern Asiatic regions but no longer known as truly wild.

Citrus vulgaris Risso, see C. AURANTIUM L.

Cladrastis Raf. (Family Leguminosae) **yellowwood**

†*Cladrastis* Raf., Cincinnati Lit. Gaz. 1: 60. 1824.

DERIVATION.—From Greek, brittle and branch.

Cladrastis lutea (Michx. f.) K. Koch **†yellowwood**

Virgilia lutea Michx. f., Hist. Arbr. For. Amér. Sept. 3: 266, pl. 3. 1813.

†*Cladrastis lutea* (Michx. f.) K. Koch, Dendrol. 1: 6. 1869.

DERIVATION.—Yellow, referring to the color of the wood, which produces a yellow dye.

OTHER COMMON NAMES.—American yellowwood (SPN), virgilia.

RANGE.—Western North Carolina, Tennessee, Kentucky, southern Indiana (Brown County), and southern Illinois (Alexander County), south to northern Alabama and extreme northern Georgia. Also from southwestern Missouri to central Arkansas and northeastern Oklahoma. Rare and local.

Clethra L. (Family Clethraceae) **clethra**

Clethra L., Sp. Pl. 296. 1753; Gen. Pl. Ed. 5. 188. 1754.

DERIVATION.—From the classical Greek name of alder, later applied to this genus perhaps because of the resemblance of the foliage.

Clethra acuminata Michx. **cinnamon clethra**

Clethra acuminata Michx., Fl. Bor.-Amer. 1: 260. 1803.

DERIVATION.—Acuminate, or taper-pointed, referring to the leaves.

OTHER COMMON NAMES.—summer-sweet, white-alder.

RANGE.—Mountains of Virginia and West Virginia to eastern Kentucky, Tennessee, Alabama, and Georgia.

A shrub or sometimes a small tree to 20 feet high. This species, which was not in the 1927 Check List, is the only tree species of the single genus *Clethra* of the family Clethraceae found in the United States. This family is sometimes included in the Ericaceae.

Cliftonia Banks (Family Cyrillaceae) **buckwheat-tree**

†*Cliftonia* Banks ex Gaertn. f., Sup. Fruct. Sem. Pl. 3: 246, pl. 225, fig. 5. 1807.

DERIVATION.—Named in memory of Francis Clifton (died 1736), an English physician.

Cliftonia monophylla (Lam.) Britton **buckwheat-tree**

Ptelea monophylla Lam., Tabl. Encycl. Méth. Bot. 1: 336. 1791 (?).

Cliftonia nitida Gaertn. f., Sup. Fruct. Sem. Pl. 3: 247, pl. 225, fig. 5. 1807.

Cliftonia ligustrina (Willd.) Sims ex Spreng., Syst. Veg. 2: 316. 1825.

†*Cliftonia monophylla* (Lam.) Britton ex Sarg., Silva No. Amer. 2: 7, pl. 52. 1891.

RANGE.—Coastal Plain from southern South Carolina to Georgia and northwestern Florida, west to southeastern Louisiana.

DERIVATION.—One-leaf, or simple leaf; this species originally placed in *Ptelea* L., hoptree, a genus with trifoliolate leaves.

OTHER COMMON NAMES.—†titi, black titi, ironwood.

Clistoyucca (Engelm.) Trel., see Yucca L.

Clusia L. (Family Guttiferae) **clusia**

Clusia L., Sp. Pl. 509. 1753; Gen. Pl. Ed. 5, 226. 1754.

DERIVATION.—Named in honor of Carolus Clusius (Charles de l'Ecluse; 1526–1609) French physician, botanist, and zoologist; perhaps best known for his drawings of West Indian plants and animals.

Clusia L., the only native tree genus of the family Guttiferae (Clusiaceae), is added here with one very rare species in the lower Florida Keys which has been rediscovered there in recent years. A second species, *Clusia flava* Jacq. (Enum. Pl. Carib. 34. 1760), was recorded by Nuttall (No. Amer. Sylva 2: 111-113, pl. 77. 1846) from incomplete material collected at Key West by John Loomis Blodgett more than a century ago. That species, which has not been found there by other collectors, was mentioned also by Small (Man. Southeast. Fl. 865. 1933).

Clusia rosea Jacq. **copey clusia**

Clusia rosea Jacq., Enum. Pl. Carib. 34. 1760; as *"Glusia"* but corrected in index to *"Clusia."*

DERIVATION.—Rose, from the whitish to rose-colored petals.

RANGE.—Big Pine Key and Little Torch Key, near Key West, Fla., where it is very rare. Also in West Indies and from southern Mexico (Chiapas) to Central America and northern South America.

Collected at Big Pine Key more than a century ago by John Loomis Blodgett and then "lost," according to Small (Man. Southeast. Fl. 865. 1933). In 1938 rediscovered there by Walter M. Buswell (Native Trees Palms So. Fla. Miami Univ. Bul. 19(6): 33–34. 1945) and by Walter S. Phillips and Roy Woodbury. Included and illustrated by West and Arnold (Native Trees Fla. 143, fig. 1946).

Coccoloba P. Br. (Family Polygonaceae) **seagrape**

Guaiabara Mill., Gard. Dict. Abridged. Ed. 4, v. 2. 1754.

†*Coccolobis* P. Br., Civ. Nat. Hist. Jamaica 209, pl. 14, fig. 3. 1756.

Uvifera Kuntze, Rev. Gen. 561. 1891.

Coccoloba P. Br. ex L., Syst. Nat. Ed. 10, 2: 1007, 1367. 1759. *Nom. conserv. propos.*, Little, Madroño 7: 244–246. 1944; Brittonia 7: 44. 1949.

DERIVATION.—Lobed berry, referring to the calyx lobes of the grapelike fruits.

REFERENCE.—Howard, Richard A. The genus Coccoloba in Cuba. Arnold Arboretum Jour. 30: 388–424. 1949.

Coccoloba diversifolia Jacq. **doveplum**

Coccoloba diversifolia Jacq., Enum. Pl. Carib. 19. 1760; Select. Stirp. Amer. 114, pl. 76. 1763.

Coccoloba floridana Meisn. in DC., Prodr. 14: 165. 1856.
Coccoloba curtissii Lindau, Bot. Jahrb. 13: 159. 1890.

DERIVATION.—Variable-leaved.

OTHER COMMON NAMES.—pigeon seagrape (SPN), †pigeonplum.

RANGE.—Near coasts of southern Florida, north on east coast to Cape Canaveral and on Florida Keys. Also in West Indies, including Bahama Islands and Greater and Lesser Antilles.

REFERENCE.—Dayton, William A. Rhodora 54: 77–79. 1952.

In the 1927 Check List, and by most recent authors referred to †*Coccoloba laurifolia* Jacq., a species described from Venezuela.

Coccoloba uvifera (L.) L. **†seagrape**

Polygonum uvifera L., Sp. Pl. 365. 1753.
†*Coccoloba uvifera* (L.) L., Syst. Nat. Ed. 10, 2: 1007. 1759.
Guaiabara uvifera (L.) House, Amer. Midland Nat. 8: 64. 1922; as "*Guajabara.*"

DERIVATION.—Bearing grapes, from the resemblance of the fruit clusters to grapes.

OTHER COMMON NAME.—common seagrape (SPN).

RANGE.—Shores of central and southern Florida, including Florida Keys. Also widely distributed on coasts of Bermuda, West Indies, and from northern Mexico (Tamaulipas and Sinaloa southward) south to Central America and northern South America.

Coccothrinax Sarg. (Family Palmae) **silverpalm**

†*Coccothrinax* Sarg., Bot. Gaz. 27: 87. 1899.

DERIVATION.—From berry and *Thrinax,* thatchpalm, in reference to the berrylike fruit and relationship with that genus.

OTHER COMMON NAME.—seamberry palm.

REFERENCE.—Bailey, L. H. Coccothrinax of Florida. Gentes Herbarum 4: 220–225, illus. 1939.

Coccothrinax argentata (Jacq.) Bailey **Florida silverpalm**

Palma argentata Jacq., Fragm. Bot. 38, pl. 43, fig. 1. 1803.
†*Coccothrinax jucunda* Sarg., Bot. Gaz. 27: 89. 1899.
Coccothrinax argentata (Jacq.) Bailey, Gentes Herbarum 4: 223, figs. 140–143. 1939.

DERIVATION.—Silvery, from the silvery white lower leaf surfaces.

OTHER COMMON NAMES. — Biscayne-palm, brittle thatch, †thatchpalm.

RANGE.—Southern Florida, including Florida Keys to Marquesas Keys west of Key West.

Formerly referred also to *Coccothrinax argentea* (Lodd.) Sarg., which is confined to Hispaniola.

COCOS L. (Family Palmae) COCONUT

†*Cocos* L., Sp. Pl. 1188. 1753; Gen. Pl. Ed. 5, 495. 1754.

DERIVATION.—From *coco,* a name of unknown meaning (perhaps aboriginal) commonly used for coconut for centuries in European literature.

COCOS NUCIFERA L. †COCONUT

†*Cocos nucifera* L., Sp. Pl. 1188. 1753.

DERIVATION.—Nut-bearing.

RANGE.—Shores of southern Florida, including Florida Keys, growing naturally and in cultivation. Native land unknown but thought to be in Malayan or Indo-Pacific region or by some authors American. Now thoroughly naturalized on tropical shores of the world.

Small (Man. Southeast. Fl. 237. 1933) stated that the coconut may have been native on the Florida Keys. Buswell (Native Trees Palms So. Fla. Miami Univ. Bul. 19(6): 53. 1945) considered it as a native tree because it grows wild on the Keys and lower coastal region and certainly has been growing naturally in Florida a long time.

Colubrina L. C. Rich. (Family Rhamnaceae) **colubrina**

Marcorella Neck., Elem. Bot. 2: 122. 1790; *nomen rejiciendum.*

†*Colubrina* L. C. Rich. ex Brongn., Ann. des Sci. Nat. 10: 368, pl. 15, fig. 3. 1827; *nomen conservandum.*

DERIVATION.—From Latin *coluber,* serpent, probably because of the peculiar twisting of the deep furrows on the trunks of some species.

Colubrina arborescens (Mill.) Sarg. **coffee colubrina**

Rhamnus colubrinus Jacq., Enum. Pl. Carib. 16. 1760.

Ceanothus arborescens Mill., Gard. Dict. Ed. 8, *Ceanothus* No. 3. 1768.

Colubrina ferruginosa Brongn., Ann. des Sci. Nat. 10: 369, pl. 15, fig. 3. 1827.

Colubrina colubrina (Jacq.) Millsp., Field Columb. Mus. Pub., Bot. Ser. 1: 69. 1900.

†*Colubrina arborescens* (Mill.) Sarg., Trees and Shrubs 2: 167, pl. 168. 1911.

DERIVATION.—Becoming a tree; originally placed in a genus of shrubs.

OTHER COMMON NAMES.—wild-coffee colubrina (SPN), †nakedwood, wild-coffee.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies.

Colubrina cubensis (Jacq.) Brongn. **Cuba colubrina**

Rhamnus cubensis Jacq., Enum. Pl. Carib. 16. 1760.

†*Colubrina cubensis* (Jacq.) Brongn., Ann. des Sci. Nat. 10: 369. 1827.

DERIVATION.—Of Cuba.

OTHER COMMON NAME.—†nakedwood.

RANGE.—Southern Florida in hammocks of lower Dade County. Also in Bahama Islands, Cuba, and Hispaniola.

Colubrina reclinata (L'Hér.) Brongn. **†soldierwood**

Ceanothus reclinatus L'Hér., Sert. Angl. 6. 1788.

†*Colubrina reclinata* (L'Hér.) Brongn., Ann. des Sci. Nat. 10: 369. 1827.

DERIVATION.—Reclining, or leaning.

OTHER COMMON NAMES.—soldierwood colubrina (SPN), nakedwood.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and Venezuela.

Condalia Cav. (Family Rhamnaceae) **condalia**

†*Condalia* Cav., An. Hist. Nat. [Madrid] 1: 39, pl. 4. 1799. *Nom. conserv. propos.*, Little, Madroño 7: 246–247. 1944; Brittonia 7: 46. 1949. Not *Condalia* Ruiz & Pavon, Fl. Peruv. Chil. Prodr. 11, pl. 2. 1794.

DERIVATION.—To preserve the memory of Antonio Condal, Spanish physician who went on a scientific trip to the Orinoco in South America in 1754, under the direction of the Swedish botanist Peter Loefling.

Condalia globosa Johnst. **bitter condalia**

Condalia globosa Johnst., Calif. Acad. Sci. Proc., Ser. 4, 12: 1086. 1924.

Condalia globosa var. *pubescens* Johnst., Calif. Acad. Sci. Proc., Ser. 4, 12: 1087. 1924.

DERIVATION.—Globose, referring to the rounded fruits.

OTHER COMMON NAMES.—spiny abrojo, crucillo.

RANGE.—Desert mountains of southwestern Arizona and southern California. Also in northwestern Mexico (Sonora and Lower California).

Large shrub or small tree as much as 15 to 20 feet high and 1 foot or more in trunk diameter. Originally described in 1924 from Lower California, Mexico, and first added to the native tree species by Kearney and Peebles (Ferns Fl. Pl. Ariz. 555–556. 1942) and by Benson and Darrow (Man. Southwest. Desert Trees Shrubs 247. 1945).

Condalia obovata Hook. **†bluewood**

†*Condalia obovata* Hook., Icon. Pl. 3: pl. 287. 1840.

DERIVATION.—Obovate, referring to the leaves, which are broader toward the apex.

OTHER COMMON NAMES.—bluewood condalia (SPN), purple haw, logwood, brasil.

RANGE.—Southern Texas, and with a shrubby variety very local in Edwards County. Also in northeastern Mexico (Tamaulipas and Nuevo León).

Condalia obtusifolia (Hook.) Weberb. (in Engler & Prantl, Natürl. Pflanzenfam. 3(5): 404. 1895; *C. lycioides* (A. Gray) Weberb.), lotewood condalia, may rarely become a small tree in southern Arizona. It is generally a much-branched shrub 3 to 8 feet high but rarely is 10 feet high with a trunk 4 inches in diameter or larger, as reported by Little (Southwestern Trees 83. 1950). It is distributed from central Texas to southern New Mexico, northwestern Arizona, and southeastern California, south to northern Mexico.

Conocarpus L. (Family Combretaceae) **button-mangrove**

Conocarpus L., Sp. Pl. 176. 1753; Gen. Pl. Ed. 5, 81. 1754.

DERIVATION.—Cone fruit, in reference to the conelike fruits.

Under the International Code the gender of this name is masculine, not feminine, as in common usage.

Conocarpus erectus L. **button-mangrove**

†*Conocarpus erectus* L., Sp. Pl. 176. 1753; as "*erecta.*"
Conocarpus erectus var. *sericeus* DC., Prodr. 3: 16. 1828; as "*erecta.*"

DERIVATION.—Erect, or upright.

OTHER COMMON NAMES.—†buttonwood, silver buttonwood.

RANGE.—Shores of central and southern Florida, including Florida Keys. Also widespread on tropical shores in Bermuda, West Indies, from northern Mexico (Tamaulipas and Lower California southward) south to Central America and South America, and in western Africa.

Cordia L. (Family Boraginaceae) **cordia**

†*Cordia* L., Sp. Pl. 190. 1753; Gen. Pl. Ed. 5, 87. 1754.
Sebesten Adans., Fam. Pl. 2: 177. 1763.

DERIVATION.—In commemoration of Euricius Cordus and his son Valerius Cordus (1515–1544), German physicians and botanists.

Cordia boissieri A. DC. **†anacahuita**

†*Cordia boissieri* A. DC. in DC., Prodr. 9: 478. 1845.

DERIVATION.—In honor of Pierre-Edmond Boissier (1810–1875), Swiss botanist.

OTHER COMMON NAME.—wild-olive.

RANGE.—Southern Texas and northeastern Mexico (Tamaulipas to Coahuila, south to San Luis Potosí).

Cordia sebestena L. **†Geiger-tree**

†*Cordia sebestena* L., Sp. Pl. 190. 1753.
Sebesten sebestena (L.) Britton ex Small, Fl. Miami 158, 200. 1913.

DERIVATION.—From the Arabic name *sibistan* for the congeneric sebesten-plum, *Cordia myxa* L., of southern Asia, East Indies, and Australia. The common name honors the man who reportedly first planted this tree at Key West, Fla.

OTHER COMMON NAME.—Geiger-tree cordia (SPN).

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and from southern Mexico (Yucatán) south to northern South America.

Cornus L. (Family Cornaceae) **dogwood**

†*Cornus* L., Sp. Pl. 117. 1753; Gen. Pl. Ed. 5, 54. 1754.
Cornus sect. *Cynoxylon* Raf., Med. Fl. 1: 132. 1828.
Cynoxylon Raf., Alsogr. Amer. 59. 1838; as genus or subgenus (?).
Benthamidia Spach, Hist. Nat. Vég. Phanér. 8: 106. 1839.
Svida Opiz, Seznam Rostl. 94. 1852; *nomen illegitimum* without description.

Cynoxylon Raf. ex Small, Fl. Southeast. U. S. 854. 1903.
Svida Opiz ex Small, Fl. Southeast. U. S. 853. 1903.

DERIVATION.—Latin name of *Cornus mas* L., Cornelian-cherry dogwood of Europe, from the word for horn, referring to the hardness of the wood.

OTHER COMMON NAMES.—cornel, bunchberry.

REFERENCES.—Farwell, Oliver Atkins. Eukrania and Cynoxylon not genera of Rafinesque. Rhodora 34: 29–30. 1932.

Hara, Hiroshi. The nomenclature of the flowering dogwood and its allies. Arnold Arboretum Jour. 29: 111–115. 1948.

Moldenke, Harold N. Some new names in the Apocynaceae and Cornaceae and in various American groups. Rev. Sudamer. de Bot. 6: 176–178. 1940.

Rickett, H. W. The names of Cornus. Torreya 42: 11–14. 1942.

Rickett, Harold William. Cornaceae. No. Amer. Fl. 28B: 299–311. 1945.

In addition to the 8 species listed here, about 6 other shrubby species of *Cornus* are native in the United States. Another is herbaceous, and a second herbaceous species occurs in Alaska and Canada.

Cornus ×*acadiensis* Fern. (Rhodora 43: 411. 1941; *C. alternifolia* × *stolonifera*), is known only as a shrub from Cape Breton Island, Nova Scotia. This hybrid is to be expected in northeastern United States and as both parent species become small trees, possibly may be found later as a tree.

Cornus alternifolia L. f. **alternate-leaf dogwood**

†*Cornus alternifolia* L. f., Sup. Pl. 125. 1781.
Svida alternifolia (L. f.) Small, Fl. Southeast. U.S. 853, 1335. 1903.

DERIVATION.—Alternate-leaved, distinctive in a genus otherwise characterized by opposite leaves.

OTHER COMMON NAMES.—pagoda dogwood (SPN), †blue dogwood.

RANGE.—Newfoundland and eastern Quebec west to Maine, southern Ontario, northern Michigan, eastern Minnesota, and southeastern Manitoba, south to Missouri, northern Arkansas, Alabama, northwestern Florida, and Georgia.

HYBRID.—*Cornus* ×*acadiensis* Fern. (*C. alternifolia* × *stolonifera*).

Cornus asperifolia Michx., see note under **C. drummondii** C. A. Meyer

Cornus baileyi Coult. & Evans, see **C. stolonifera** Michx.

Cornus ×californica C. A. Meyer ———

Cornus occidentalis × *stolonifera*
Cornus californica C. A. Meyer, Acad. Imp. Sci. St. Pétersb. Bul., Phys.-Math. 3: 373. 1845. Acad. Sci. St. Pétersb. Mem., Sér. 6, Sci. Nat. Bot. 5: 220. 1846. (Preprinted as Ueber Einige Cornus-Arten 30. 1845; not seen.)
Cornus pubescens var. *californica* Coult. & Evans, Bot. Gaz. 15: 37. 1890.

Svida californica (C. A. Meyer) Abrams, N. Y. Bot. Gard. Bul. 6: 429. 1910.

Cornus californica var. *nevadensis* Jeps., Man. Fl. Pl. Calif. 733. 1925.

Cornus stolonifera var. *californica* (C. A. Meyer) McMinn, Illus. Man. Calif. Shrubs 377, fig. 437A-B. 1939.

DERIVATION.—Of California.

COMMON NAME.—western red dogwood.

RANGE.—Southern British Columbia east to northern Idaho and south to southern California (throughout the range of *Cornus occidentalis*).

Formerly thought to be a species but considered as a hybrid by Rickett (No. Amer. Fl. 28B: 305. 1945).

Cornus drummondii C. A. Meyer **†roughleaf dogwood**

Cornus drummondii C. A. Meyer, Acad. Imp. Sci. St. Pétersb. Bul., Phys.-Math. 3: 372. 1845. Acad. Sci. St. Pétersb. Mem., Sér. 6, Sci. Nat. Bot. 5: 210. 1846. (Preprinted as Ueber Einige Cornus-Arten 20. 1845; not seen.)

Cornus priceae Small, Torreya 1: 54. 1901.

Svida priceae (Small) Small, Fl. Southeast. U. S. 854, 1336. 1903.

DERIVATION.—Named for its discoverer, Thomas Drummond (1780–1835), Scotch botanical explorer.

RANGE.—Extreme southern Ontario, Ohio, and Kentucky, west to Nebraska, and south to Texas, Louisiana, and Mississippi.

Formerly, and in the 1927 Check List, known as †*Cornus asperifolia* (*Svida asperifolia*). H. W. Rickett (Cornus asperifolia and its relatives. Amer. Midland Nat. 27: 259–261. 1942) showed that the name *C. asperifolia* Michx. has been misapplied to this species and is the proper name for the shrubby species of the Coastal Plain from South Carolina to western Florida and Alabama (?) formerly called *C. microcarpa* Nash.

***Cornus florida L.** **flowering dogwood**

†*Cornus florida* L., Sp. Pl. 117. 1753.

Cornus florida [var.] *rubra* Weston, Univ. Bot. 1: 73. 1770.

Cynoxylon floridum Raf., Alsogr. Amer. 59. 1838.

Benthamidia florida (L.) Spach, Hist. Nat. Vég. Phanér. 8: 107. 1839.

Cornus florida [var.] *rubra* André, Rev. Hort. 66: 500, pl. 1894.

Cynoxylon floridum (L.) Raf. ex Small, Fl. Southeast. U. S. 854. 1903.

Cynoxylon floridum var. *rubrum* (André) Moldenke, Torrey Bot. Club Bul. 60: 56. 1933.

Benthamidia florida var. *rubra* (André) Moldenke, Torreya 34: 8. 1934.

DERIVATION.—Flowering, referring to the showy petallike bracts.

OTHER COMMON NAME.—†dogwood.

RANGE.—Southwestern Maine west to extreme southern Ontario, southern Michigan, Illinois, and eastern Kansas, south to

eastern Texas and Florida. Also a variety in mountains of northeastern Mexico (Nuevo León and Vera Cruz).

Cornus foemina Mill., see note under **C. stricta** Lam.

Cornus instoloneus A. Nels., see **C. stolonifera** Michx.

Cornus interior (Rydb.) N. Petersen, see **C. stolonifera** Michx.

***Cornus nuttallii** Audubon **†Pacific dogwood**

Cornus nuttalli Audubon, Birds Amer. v. 4, pl. 367. 1837; *nomen nudum.*

†*Cornus nuttalli* Audubon, Ornith. Biogr. 4: 482. 1838.

Cynoxylon nuttallii Shafer in Britton & Shafer, No. Amer. Trees 746, fig. 684. 1908.

Benthamidia nuttallii (Audubon) Moldenke, Phytologia 1: 167. 1935.

DERIVATION.—John James Audubon, who first illustrated this species in his famous work Birds of America ("elephant folio"), named it for Thomas Nuttall (1786–1859), English-American botanist and ornithologist, who collected it on the Columbia River.

OTHER COMMON NAMES.—flowering dogwood, western flowering dogwood, mountain dogwood.

RANGE.—Southwestern British Columbia, western Washington, western Oregon, and south in mountains to southern California. Also local in central western Idaho.

Cornus occidentalis (Torr. & Gray) Coville **western dogwood**

Cornus sericea β ? occidentalis Torr. & Gray, Fl. No. Amer. 1: 652. 1840.

Cornus pubescens Nutt., No. Amer. Sylva 3: 54. 1849. Not *C. pubescens* Willd. in Roem. & Schult., Syst. Mant. 3: 252. 1827.

Cornus occidentalis (Torr. & Gray) Coville, U. S. Dept. Agr. Contrib. U. S. Natl. Herbarium 4: 117. 1893.

Cornus sericea subsp. *occidentalis* (Torr. & Gray) Fosberg, Torrey Bot. Club Bul. 69: 589. 1942.

DERIVATION.—Western.

OTHER COMMON NAME.—western red dogwood.

RANGE.—Southern British Columbia and Washington southeast to northern Idaho and to southern California.

Usually a shrub and not in the 1927 Check List. Becomes a small tree 20 feet high, according to Dayton (Important West. Browse Plants. U. S. Dept. Agr. Misc. Pub. 101, 121. 1931) and Preston (Rocky Mt. Trees 255. 1940).

REFERENCE.—See **Cornus stolonifera** Michx.

HYBRID.—*Cornus* ×*californica* C. A. Meyer (*C. occidentalis* × *stolonifera*).

Cornus priceae Small, see **C. drummondii** C. A. Meyer

Cornus pubescens Nutt., see **C. occidentalis** (Torr. & Gray) Coville

Cornus sericea L., see **C. stolonifera** Michx.

Cornus sessilis Torr. **blackfruit dogwood**

Cornus sessilis Torr. ex Durand, Acad. Nat. Sci. Phila. Jour., Ser. 2, 3: 89. 1855.

DERIVATION.—Sessile, the flowers in stalkless clusters.

OTHER COMMON NAME.—miners dogwood.

RANGE.—Northern and central California (foothills of Sierra Nevada and Coast Range).

A shrub or small tree to 13 feet high, according to Jepson (Man. Fl. Pl. Calif. 734. 1925). A spreading shrub 5 to 10 (20) feet high, according to McMinn (Illus. Man. Calif. Shrubs 375. 1939).

Cornus stolonifera Michx. **red-osier dogwood**

Cornus sericea L., Mant. Pl. 1: 199. 1771; in part; *nomen ambiguum.*

Cornus stolonifera Michx., Fl. Bor.-Amer. 1: 92. 1803.

Cornus baileyi Coult. & Evans, Bot. Gaz. 15: 37. 1890.

Suida interior Rydb., Torrey Bot. Club Bul. 31: 572. 1904.

Suida stolonifera (Michx.) Rydb., Torrey Bot. Club Bul. 31: 572. 1904.

Cornus alba L. subsp. a *stolonifera* (Michx.) Wanger. in Engler, Pflanzenreich 41(IV. 229): 53. 1910.

Cornus alba L. subsp. b *baileyi* (Coult. & Evans) Wanger. in Engler, Pflanzenreich 41 (IV. 229): 55. 1910.

Cornus instoloneus A. Nels., Bot. Gaz. 53: 224. 1912.

Cornus interior (Rydb.) N. Petersen, Fl. Neb. 163. 1912.

Svida instolonea (A. Nels.) Rydb., Fl. Rocky Mts. Plains 635, 1065. 1917.

Svida baileyi (Coult. & Evans) Rydb., Brittonia 1: 94. 1931.

Cornus stolonifera var. *baileyi* (Coult. & Evans) Drescher, Wis. Acad. Sci. Arts Letters Trans. 28: 190. 1933.

Cornus stolonifera var. *interior* (Rydb.) St. John, Fl. Southeast. Wash. Idaho 303. 1937.

Cornus sericea subsp. *stolonifera* (Michx.) Fosberg, Torrey Bot. Club Bul. 69: 587. 1942.

DERIVATION.—Bearing stolons; that is, the branches often touching the ground and rooting at the tips.

OTHER COMMON NAMES.—American dogwood, kinnikinnik, squawbush.

RANGE.—Very widely distributed from Newfoundland to southern Labrador and across Canada to Yukon and central Alaska, south in western United States from Washington to California, Arizona, New Mexico, and Nebraska and in northeastern United States to Wisconsin, Indiana, and New York. Also in northern Mexico (Chihuahua and Durango to Nuevo León).

REFERENCES.—Fosberg. F. R. Cornus sericea L. (C. stolonifera Michx.) Torrey Bot. Club Bul. 69: 583–589. 1942.

Rickett, H. W. Cornus stolonifera and Cornus occidentalis. Brittonia 5: 149–159, illus. 1944.

HYBRIDS.—*Cornus* ×*acadiensis* Fern. (*C. alternifolia* × *stolonifera*); *C.* ×*californica* C. A. Meyer (*C. occidentalis* × *stolonifera*).

Generally shrubby but mentioned in a footnote in the 1927 Check List as reported to reach tree size in southern Arizona. Preston (Rocky Mt. Trees 255. 1940) cited it as sometimes a small tree. In Nevada, Billings (Nev. Trees 79, 81. 1945) recorded it as sometimes a tree 15 to 20 feet high.

The oldest name *Cornus sericea* L. applied in part to *C. amomum* Mill., a shrubby species, and has been used for the latter. Rickett (No. Amer. Fl. 28B: 304, 305. 1945) rejected *C. sericea* L. as *nomen ambiguum.*

Cornus stricta Lam. **stiffcornel dogwood**

Cornus stricta Lam., Encycl. Méth. Bot. 2: 116. 1786.

Svida stricta (Lam.) Small, Fl. Southeast. U. S. 853, 1335. 1903.

DERIVATION.—Drawn tight, upright, or stiff.

RANGE.—Chiefly in Coastal Plain from eastern Virginia to central Florida and Louisiana, north in Mississippi Valley to southeastern Missouri, Kentucky, and southern Indiana.

Usually a shrub but mentioned in a footnote in the 1927 Check List as having been recorded as a small tree by Small (Fl. Southeast. U. S. 853. 1903) and by Britton and Shafer (No. Amer. Trees 742. 1908). Among later authors recording this species as becoming a small tree are Coker and Totten (Trees Southeast. States 5. 1934), West and Arnold (Native Trees Fla. 161. 1946) as a tree 15 feet high with trunk 3 to 4 inches in diameter, and Fernald (Gray's Man. Ed. 8, 1107. 1950) as a small tree or erect shrub to 16 feet (as *C. foemina* Mill.). The name *C. foemina* Mill., which was rejected by Rickett (No. Amer. Fl. 28B: 311. 1945) as a doubtful species inadequately described, has been taken up by some authors for this species and by others for *C. racemosa* Lam., a shrubby species.

Corylus L. (Family Betulaceae) **hazel**

Corylus L., Sp. Pl. 998. 1753; Gen. Pl. Ed. 5, 433. 1754.

DERIVATION.—The classical Greek name, probably from the word for hood or helmet, suggested by the involucre.

OTHER COMMON NAMES.—filbert, hazelnut.

Corylus cornuta var. **californica** (A. DC.) Sharp **California hazel**

Corylus rostrata Ait. *β californica* A. DC., Prodr. 16(2): 133. 1864.

Corylus californica (A. DC.) Rose, Gard. and Forest 8: 263. 1895.

Corylus cornuta Marsh. var. *californica* (A. DC.) Sharp, Stanford Univ., Dudley Herbarium Contrib. 4: 59. 1951.

DERIVATION.—Horned, from the long, hornlike involucre around the fruit; varietal epithet, of California.

OTHER COMMON NAME.—California hazelnut.

RANGE.—Southern British Columbia south to western Washington, western Oregon, and in Coast Ranges and Sierra Nevada to central California.

Commonly a shrub, this variety sometimes is a small tree 20 to 25 feet high and was included as a tree by Eliot and McLean (Forest Trees Pacific Coast 384-386, figs. 172, 173. 1938).

The typical variety *Corylus cornuta* Marsh. var. *cornuta* (Arbustr. Amer. 37. 1785; *C. rostrata* Ait.), beaked hazel (beaked filbert, SPN), is a shrub ranging from Newfoundland and Nova Scotia west to Saskatchewan and south to Colorado, North Dakota, eastern Kansas, Missouri, Tennessee, and northern Georgia.

Cotinus Mill. (Family Anacardiaceae) **smoketree**

†*Cotinus* Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754.

DERIVATION.—From Greek *cotinos,* the oleaster (*Elaeagnus angustifolia* L.) or, as some say, the wild olive (*Olea europaea* L. var. *oleaster* DC.), plant names much confused in early literature.

REFERENCE.—See **Rhus** L.

Cotinus obovatus Raf. **†American smoketree**

Rhus cotinoides Nutt. in Torr. & Gray, Fl. No. Amer. 1: 217. 1838; as synonym.

Cotinus obovatus Raf., Autikon Botanikon 82. 1840.

†*Cotinus americanus* Nutt., No. Amer. Sylva 3: 1, pl. 81. 1849.

Rhus cotinoides Nutt. ex Chapm., Fl. South. U. S. 70. 1860.

DERIVATION.—Obovate, the shape of the leaves.

OTHER COMMON NAMES.—chittamwood, smoketree.

RANGE.—Rare and local in mountains of eastern to central Tennessee and northern Alabama and from southwestern Missouri to northwestern Arkansas and eastern Oklahoma, and common on Edwards Plateau of Texas. Also in Kentucky (Daviess County), perhaps introduced.

REFERENCE.—Little, Elbert L., Jr. American smoketree (Cotinus obovatus Raf.) one of Oklahoma's rarest tree species. Okla. Acad. Sci. Proc. 3: 21–23. 1943.

Cowania D. Don (Family Rosaceae) **cliffrose**

†*Cowania* D. Don, Linn. Soc. London Trans. 14: 574, pl. 22. 1825.

DERIVATION.—In honor of James Cowan (died 1823), an English merchant who introduced many Peruvian and Mexican plants into England.

Cowania mexicana D. Don **cliffrose**

†*Cowania mexicana* D. Don, Linn. Soc. London Trans. 14: 574, pl. 22. 1825.

Cowania stansburiana Torr. in Stansbury, Expl. Surv. Great Salt Lake Utah 386, pl. 3. 1852.

Cowania davidsonii Rydb., No. Amer. Fl. 22: 416. 1913.

Cowania mexicana var. *stansburiana* (Torr.) Jeps., Man. Fl. Pl. Calif. 498. 1925.

DERIVATION.—Mexican.

OTHER COMMON NAMES.—Stansbury cliffrose (SPN), †quinine-bush.

RANGE.—Southwestern Colorado, northern Utah, Nevada, and eastern California, south to southeastern Arizona, western New Mexico, and to central Mexico (Sonora and Chihuahua to Durango and Guanajuato).

Crataegus L. (Family Rosaceae) **hawthorn**

†*Crataegus* L., Sp. Pl. 475. 1753; Gen. Pl. Ed. 5, 213. 1754.

DERIVATION.—From the classical Greek name of hawthorn.
OTHER COMMON NAMES.—haw, red haw, thorn, thorn-apple.

Crataegus, with perhaps between 100 and 200 species of small trees and shrubs in the United States (nearly all in the eastern half), remains the largest and taxonomically most difficult genus of native trees. More than 1,100 specific names have been published for the native plants of this genus, nearly all in the quarter century beginning about 1899 by three investigators working independently, C. S. Sargent, W. W. Ashe, and C. D. Beadle. About 700 were proposed by Sargent alone.

Most of the specific names in *Crataegus*, though formally published with descriptions, are no longer accepted but have been reduced to synonyms, varieties, or probable hybrids. The last detailed descriptive monograph, with keys and illustrations, of the tree species of *Crataegus* in the United States was by Sargent (Man. Trees No. Amer. Ed. 2, 397–549, illus. 1922), who accepted 153 tree species for the United States and Canada. Though Sargent did not explain his selection of species nor account for the species omitted or reduced to synonymy (mostly his own), it may be inferred that minor variations as well as shrubs were excluded.

The 1927 Check List followed Sargent's Manual closely but contained additional tree species of *Crataegus* published up to 1925. Relatively few new species of *Crataegus* in the United States have been published in recent years. Sargent described some new species in 1922, 1923, and 1925, after his revised manual appeared. After 1920, W. W. Ashe published one new species (*C. sabineana*). Ernest J. Palmer has distinguished four (*C. danielsii*, *C. hannibalensis*, *C. leonensis*, and *C. ouachitensis*), published one new specific name (*C. permixta*), and further reduced numerous species to synonyms, varieties, and hybrids. Several new varieties and forms have been proposed also. *C. leucantha* Laughlin was named in 1952.

William A. Murrill (New Florida hawthorns. Castanea 7: 19–30. 1942) published 15 new tree species of *Crataegus* (also 5 new forms of other species) from northern Florida. However, the sections or groups in which these novelties belonged were not indicated, nor were they distinguished from related species. W. H. Camp (Castanea 7: 51–55. 1942; Ecology 23: 368–369. 1942) and Ernest J. Palmer (Chron. Bot. 7: 373–375. 1943) promptly protested the naming of additional minor local variations in this genus. These new species were not mentioned by West and Arnold (Native Trees of Florida. 212 pp., illus. 1946) and have not been accepted by other authors. Murrill's 15 binomials with page of publication are listed here for reference but have not been added to the Check List.

C. alachuana Murrill (p. 20).
C. alachuaniformis Murrill (p. 21).
C. globirimosa Murrill (p. 22).
C. limnophiloides Murrill (p. 22).
C. megapulchra Murrill (p. 23).
C. newelliana Murrill (p. 24).
C. praeformosa Murrill (p. 24).
C. pyripulchra Murrill (p. 25).
C. rimosiformis Murrill (p. 26).
C. subaudens Murrill (p. 27).
C. subflavida Murrill (p. 28).
C. subpaludosa Murrill (p. 28).
C. tisdalei Murrill (p. 29).
C. visendiformis Murrill (p. 29).
C. watsonii Murrill (p. 30).

Ernest J. Palmer, the leading authority on the genus, has contributed a valuable monographic treatment of *Crataegus* of northeastern United States and eastern Canada in the recent revision by Fernald of Gray's Manual of Botany (1950), after publishing nomenclatorial notes separately. For this region, which had the greatest number of published names in the genus, he accepted 103 numbered species (1 introduced), including both shrubs and trees. However, he admitted additional varieties (almost all originally proposed as species) as well as many unnumbered binomials not in the key, explaining: "The unnumbered binomials belong to trees or shrubs of very limited occurrence or of suspected hybrid origin."

The many taxonomic problems and difficulties in this genus of many recognizable variations have been summarized in the references listed below. *Crataegus* is regarded as an unstable genus characteristic of openings and exposed areas, which has expanded and evolved rapidly following the clearing of forests and the origin of vast new areas suitable for colonization. The variable, expanding populations probably produced numerous hybrids.

Progeny tests have showed that many variations are perpetuated, or true breeding. However, cytological evidence indicates that a large number, perhaps a majority, of the supposed species, are "asexual apomictic triploids;" that is, they are clonal populations of hybrid origin with one and one-half the normal number of chromosomes but form viable seeds vegetatively without benefit of pollination and thus perpetuate their characters the same as if they were propagated by grafting.

While the variations within the genus are great, the "species" in *Crataegus* has become a narrower unit than in related genera. The number of "species" described in the past, especially some of those locally distributed, was excessive. One result of the multiplication of names was that many persons have considered identification hopeless and have not attempted to name specimens or trees. The general trend at present has been to reduce the number of species by consolidation as synonyms or varieties.

This compiled, relatively conservative summary of the tree species of *Crataegus* contains 149 accepted species and 40 additional binomials mentioned in notes as local species or probable hybrids. This number of species is still too large and doubtless will be reduced further by future workers. Only those species definitely recorded as becoming trees have been included here. However, most species probably become arborescent under favorable circumstances and even where originally described from a few shrubby individuals afterwards have been found as trees. (In a few groups, such as Sections Intricatae and Uniflorae strictly shrubby or dwarf species occur.) The section (or "series") of each accepted species is given after the citation.

No varieties in this difficult genus are accepted here, because of the very large number of closely related species, some of which are intermediate variations or hybrids or perhaps meriting only varietal rank. However, varieties in current use as well as some older reductions are cited in the synonymy for reference.

The treatment here does not differ greatly from that of the 1927 Check List or Sargent's Manual. All the names accepted in those two publications have been accounted for. The changes are based mainly upon later accounts of the genus in regional and State floras and particularly upon the publications of Ernest J. Palmer, in which numerous names were relegated to synonymy. A few changes and corrections in nomenclature have been adopted, newly described tree species have been cited, and new varieties or new varietal combinations arbitrarily placed in synonymy. Citations of names not listed are to be found in Palmer's Synopsis of North American Crataegi (Arnold Arboretum Jour. 6: 5–128. 1925).

For northeastern United States this compilation follows closely the treatment by Palmer in Fernald's revision of Gray's Manual and includes the accepted numbered species recorded as trees. In spite of the reduction of many species to synonymy by Palmer, 17 tree species of northeastern United States not in the 1927 Check List are added here because Palmer included them as trees while Sargent's Manual omitted them. In addition, 34 of the "unnumbered binomials" cited by Palmer as of very limited occurrence or suspected hybrid origin have been mentioned under related species where it was desirable to account for the names in the 1927 Check List or otherwise in use.

Further acknowledgment is due Ernest J. Palmer, who very kindly has answered various questions about the nomenclature and synonymy and who has contributed helpful suggestions. He has called attention to 9 synonymous names from southeastern United States here reduced to synonymy.

Additional, mostly local, species from southeastern United States probably should be suppressed. Others perhaps represent hybrids, as only one suspected hybrid from that region is cited. Tidestrom in Small's Manual (1933) accepted only 33 species of *Crataegus* for southeastern United States. These three species described from southwestern Arkansas in the 1927 Check List but not in Sargent's Manual nor mentioned in recent lists are omitted here: †*Crataegus amicalis* Sarg. (Trees and Shrubs 2: 238. 1913), †*Crataegus enucleata* Sarg. (Trees and Shrubs 2: 239. 1913), and †*Crataegus palliata* Sarg. (Trees and Shrubs 2: 236. 1913).

The following names, according to Palmer, have not been identified and are omitted:

Crataegus cordifolia (Mill.) Farwell (Amer. Midland Nat. 12: 62. 1930), based upon *Mespilus cordifolia* Mill. (Gard. Dict. Ed. 8, last page and *Mespilus* No. 4. 1768). *Crataegus cordata* (Mill.) Ait. (Hort. Kew. 2: 168. 1789), based upon *Mespilus cordata* Mill. (Gard. Dict. Ed. 8, *Mespilus* No. 4. 1768; as "*cordato*") nomenclaturally is the same.

Crataegus cuneiformis (Marsh.) Eggl. (in Deam, Ind. State Bd. Forestry Ann. Rpt. 11 (1911): 253. 1912), based upon *Mespilus cuneiformis* Marsh. (Arbustr. Amer. 88. 1785). According to Palmer (in Deam, Fl. Ind. 540. 1940; Brittonia 5: 472. 1946), the latter may well have been only a form of *C. punctata* Jacq.

Crataegus michauxii Pers. (Synops. Pl. 2: 38. 1806).

REFERENCES ON THE PROBLEM.—Camp, W. H. The Crataegus problem. Castanea 7: 51–55. 1942.

Camp, W. H. Ecological problems and species concepts in Crataegus. Ecology 23: 368–369. 1942.

Harper, Roland M. Catalogue of the trees, shrubs and vines of Alabama. Ala. Geol. Surv. Monog. 9, 357 pp., illus. 1928. *Crataegus,* pp. 202–211.

Palmer, Ernest J. The Crataegus problem. Arnold Arboretum Jour. 13: 342–362. 1932.

Palmer, Ernest J. The species concept in Crataegus. Chron. Bot. 7: 353–375. 1943.

Palmer, Ernest J. Crataegus in the northeastern and central United States and adjacent Canada. Brittonia 5: 471–490. 1946.

Rickett, H. W. Forms of *Crataegus pruinosa.* Bot. Gas. 97: 780–793, illus. 1936.

Sax, Karl. The origin and relationships of the Pomoideae. Arnold Arboretum Jour. 12: 3–21, illus. 1931.

REFERENCES FOR IDENTIFICATION.—The best references on *Crataegus* are those in the latest descriptive regional and State floras of the areas concerned, such as those listed below.

Britton, Nathaniel Lord, and Brown, Addison. An illustrated flora of the northern United States, Canada, and the British possessions. Ed. 2, 3 v., illus. 1913. *Crataegus* by W. W. Eggleston, 2: 294–321, illus.

Coker, William C., and Totten, Henry R. Trees of the southeastern States. Ed. 3, 419 pp., illus. 1937. *Crataegus,* pp. 210–242, illus.

Deam, Charles C. Flora of Indiana. 1236 pp., illus. 1940. *Crataegus* by Ernest J. Palmer, pp. 533–555.

Fernald, Merritt Lyndon. Gray's manual of botany. Ed. 8, 1632 pp., illus. 1950. *Crataegus* by E. J. Palmer, pp. 767–801, illus.

Gleason, Henry A. New Britton & Brown Illus. Fl. Northeast. States Can. 3v., illus. 1952. *Crataegus* by Ernest J. Palmer, 2: 338–375, illus.

Palmer, Ernest J. Synopsis of North American Crataegi. Arnold Arboretum Jour. 6: 5–128. 1925.

Rehder, Alfred. Manual of cultivated trees and shrubs hardy in North America. Ed. 2, 996 pp., illus. 1940. *Crataegus,* pp. 359–372.

Rydberg, Per Axel. Flora of the prairies and plains of central

North America. 969 pp., illus. 1932. *Crataegus* adapted from W. W. Eggleston's publications, pp. 440–443.

Sargent, Charles Sprague. Manual of the trees of North America (exclusive of Mexico). Ed. 2, reprinted with corrections, 910 pp., illus. 1926. (Reprinted 1933.) *Crataegus*, pp. 397–549, illus.

Small, John K. Flora of southeastern United States. Ed. 2, 1394 pp. 1913. *Crataegus* by C. D. Beadle, pp. 532–569.

Small, John K. Manual of the southeastern flora. 1554 pp., illus. 1933. *Crataegus* by Ivar Tidestrom, pp. 637–646.

Crataegus abbreviata Sarg.

†*Crataegus abbreviata* Sarg., Arnold Arboretum Jour. 3: 187. 1922. (Section Virides).

DERIVATION.—Shortened, or abbreviated, referring to the small leaves.

RANGE.—Eastern Texas.

Crataegus acclivis Sarg., see **C. pedicellata** Sarg.

Crataegus acerifolia Lodd., see **C. mollis** Scheele

Crataegus acutifolia Sarg. **St. Louis hawthorn**

†*Crataegus acutifolia* Sarg., Bot. Gaz. 31: 217. 1901. (Section Crus-galli).

†*Crataegus erecta* Sarg., Bot. Gaz. 31: 218. 1901.

†*Crataegus mitis* Sarg., Man. Trees No. Amer. 407, fig. 326. 1905.

Crataegus acutifolia var. *insignis* (Sarg.) Palmer, Brittonia 5: 482. 1946.

DERIVATION.—With acute leaves.

RANGE.—Indiana, Illinois, and Missouri.

Crataegus aestivalis (Walt.) Torr. & Gray **May hawthorn**

Mespilus aestivalis Walt., Fl. Car. 148. 1788.

†*Crataegus aestivalis* (Walt.) Torr. & Gray, Fl. No. Amer. 1: 468. 1840. (Section Aestivales).

Crataegus luculenta Sarg., Trees and Shrubs 1: 11, pl. 6. 1902.

Crataegus maloides Sarg., Trees and Shrubs 1: 9, pl. 5. 1902.

†*Crataegus aestivalis* var. *maloides* (Sarg.) Sarg., Arnold Arboretum Jour. 1: 250. 1920.

†*Crataegus rufula* Sarg., Arnold Arboretum Jour. 1: 251. 1920.

Crataegus aestivalis luculenta (Sarg.) Sarg. ex West & Arnold, Native Trees Fla. 77. 1946.

DERIVATION.—Of summer.

OTHER COMMON NAMES.—apple haw, †May haw, shining hawthorn.

RANGE.—Coastal Plain from North Carolina to northern and northwestern Florida and southeastern Alabama.

Crataegus albicans Ashe, see **C. pedicellata** Sarg.

Crataegus algens Beadle, see **C. crus-galli** L.

Crataegus alnorum Sarg., see **C. basilica** Beadle

Crataegus amnicola Beadle

†*Crataegus amnicola* Beadle, Biltmore Bot. Studies 1: 55. 1902. (Section Punctatae).

DERIVATION.—River-loving, from its abundant representation on river banks.

RANGE.—Eastern Tennessee, northern Georgia, and northern Alabama.

Crataegus annosa Beadle

†*Crataegus annosa* Beadle, Biltmore Bot. Studies 1: 83. 1902. (Section Flavae).

DERIVATION.—Of great age, referring to the large size sometimes attained.

RANGE.—East central Alabama.

Crataegus anomala Sarg., see note under **C. pedicellata** Sarg.

Crataegus antiplasta Sarg.

†*Crataegus antiplasta* Sarg., Arnold Arboretum Jour. 3: 190. 1922. (Section Virides).

DERIVATION.—Antiplastic; unexplained but presumably referring to the relative lack of variability of leaf form, not being so conspicuously lobed in vigorous shoots as in related species.

RANGE.—Eastern Texas.

Crataegus apiifolia Michx., see **C. marshallii** Eggl.

Crataegus apiomorpha Sarg., see note under **C. flabellata** (Bosc) K. Koch

Crataegus aprica Beadle

†*Crataegus aprica* Beadle, Bot. Gaz. 30: 335. 1900. (Section Flavae).

DERIVATION.—Growing in an open, sunny place, from the habitat in the mountains.

COMMON NAME.—Beadle hawthorn (SPN).

RANGE.—Mountains of southwestern Virginia, western North Carolina, eastern Tennessee, northern Alabama, northern Georgia, and South Carolina.

Crataegus araioclada Sarg., see **C. uniqua** Sarg.

Crataegus arborea Beadle, see **C. pyracanthoides** Beadle

Crataegus arborescens Ell., see **C. viridis** L.

Crataegus arduennae Sarg., see **C. crus-galli** L.

Crataegus arkansana Sarg., see **C. mollis** Scheele

Crataegus arnoldiana Sarg. **Arnold hawthorn**

†*Crataegus arnoldiana* Sarg., Bot. Gaz. 31: 221. 1901. (Section Molles).

DERIVATION.—Discovered growing wild at the Arnold Arboretum, Jamaica Plain, Mass., and named in memory of James Arnold (1781-1868), through whose generosity this arboretum was established.

OTHER COMMON NAME.—Arnold thorn.

RANGE.—Eastern Massachusetts to Connecticut, and Long Island, New York.

Crataegus ashei Beadle **Ashe hawthorn**

†*Crataegus ashei* Beadle, Bot. Gaz. 30: 339. 1900. (Section Bracteatae).

DERIVATION.—Named for William Willard Ashe (1872–1932), pioneer forester of the United States Forest Service, who described many species of *Crataegus*.

RANGE.—Alabama and Mississippi.

Crataegus assurgens Sarg., see **C. pedicellata** Sarg.

Crataegus atrorubens Ashe, see **C. viridis** L.

Crataegus basilica Beadle ———

†*Crataegus basilica* Beadle, Biltmore Bot. Studies 1: 125. 1902. (Section Tenuifoliae).

Crataegus alnorum Sarg., Rhodora 5: 153. 1903.

Crataegus taetrica Sarg., Mich. Geol. Surv. Rpt. 1906: 541. 1907.

DERIVATION.—Royal.

COMMON NAME.—royal thorn.

RANGE.—Maine to New York, southern Ontario, and southeastern Michigan, south in mountains to western North Carolina.

Crataegus beata Sarg. ———

Crataegus beata Sarg., Rochester Acad. Sci. Proc. 4: 97. 1903. (Section Silvicolae).

Crataegus beata var. *opulens* (Sarg.) Palmer, Brittonia 5: 486. 1946.

DERIVATION.—Blessed, presumably in the sense of having relatively large and fleshy fruits.

COMMON NAME.—Dunbar thorn.

RANGE.—Southern Ontario and New York.

A shrub or tree 20 to 23 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 789. 1950).

Crataegus berberifolia Torr. & Gray **barberryleaf hawthorn**

†*Crataegus berberifolia* Torr. & Gray, Fl. No. Amer. 1: 469. 1840. (Section Crus-galli).

Crataegus crus-galli var. *berberifolia* (Torr. & Gray) Sarg., Gard. and Forest 2: 424. 1889.
DERIVATION.—Barberryleaf.
RANGE.—Arkansas and Louisiana.

Crataegus berlandieri Sarg., see **C. texana** Buckl.

Crataegus bicknellii (Eggl.) Eggl., see **C. chrysocarpa** Ashe

Crataegus biltmoreana Beadle **Biltmore hawthorn**

Crataegus biltmoreana Beadle, Bot. Gaz. 28: 406. 1899. (Section Intricatae).
DERIVATION.—Of Biltmore, North Carolina, the type locality.
OTHER COMMON NAME.—Biltmore haw.
RANGE.—Vermont to southern Missouri, south to Arkansas and North Carolina.

A shrub 3 to 6 feet high or rarely a tree to 16 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 773, fig. 1133. 1950).

Crataegus blanda Sarg. ———

†*Crataegus blanda* Sarg., Bot. Gaz. 33: 121. 1902. (Section Virides).
DERIVATION.—Bland, mild.
RANGE.—Alabama, Louisiana, southern Arkansas, and eastern Texas.

Crataegus boyntonii Beadle **Boynton hawthorn**

†*Crataegus boyntonii* Beadle, Bot. Gaz. 28: 409. 1899. (Section Intricatae).
†*Crataegus buckleyi* Beadle, Biltmore Bot. Studies 1: 131. 1902.
DERIVATION.—Named for its discoverer, Frank Ellis Boynton.
OTHER COMMON NAME.—Boynton thorn.
RANGE.—Southern Pennsylvania to southeastern Kentucky, south to northern Alabama and northern Georgia.

Crataegus brachyacantha Sarg. & Engelm. **blueberry hawthorn**

†*Crataegus brachyacantha* Sarg. & Engelm. in Engelm., Bot. Gaz. 7: 128. 1882. (Section Brevispinae).
DERIVATION.—Short-spined.
OTHER COMMON NAMES.—blue haw, pomette bleue.
RANGE.—Georgia and Louisiana to southwestern Arkansas and eastern Texas.

Crataegus brachyphylla Sarg. ———

†*Crataegus brachyphylla* Sarg., Arnold Arboretum Jour. 3: 8. 1922. (Section Molles).
DERIVATION.—Short-leaved.
RANGE.—Southwestern Arkansas and eastern Texas.

†*Crataegus* ×*notha* Sarg. (Arnold Arboretum Jour. 3: 9. 1922), of southwestern Arkansas (Hempstead County), is probably a hybrid between *C. brachyphylla* Sarg. and *C. marshallii* Eggl.

Crataegus brainerdii Sarg. **Brainerd hawthorn**

Crataegus brainerdi Sarg., Rhodora 3: 27. 1901. (Section Brainerdianae).

†*Crataegus scabrida* Sarg., Rhodora 3: 29. 1901.

†*Crataegus deweyana* Sarg., Rochester Acad. Sci. Proc. 4: 133. 1903.

Crataegus brainerdi Sarg. var. *scabrida* (Sarg.) Eggl., Rhodora 10: 82. 1908.

Crataegus brainerdi var. *asperifolia* (Sarg.) Eggl., Rhodora 10: 82. 1908.

Crataegus brainerdi var. *egglestoni* (Sarg.) Robins. ex Eggl., Rhodora 10: 82. 1908.

Crataegus brainerdi var. *cyclophylla* (Sarg.) Palmer in Dole, Fl. Vt. Ed. 3, 151. 1937.

Crataegus brainerdi var. *kennedyi* (Sarg.) Palmer in Dole, Fl. Vt. Ed. 3, 152. 1937.

DERIVATION.—Named for its discoverer, Ezra Brainerd (1844–1924), American botanist and president of Middlebury College.

OTHER COMMON NAME.—Brainerd thorn.

RANGE.—Nova Scotia, Maine, southern Quebec, and southern Ontario to Michigan, and east to Pennsylvania and Massachusetts. Also in mountains of North Carolina.

†*Crataegus kingstonensis* Sarg. (Arnold Arboretum Jour. 3: 205. 1923), of Kingston, Ontario, is perhaps a hybrid between a species of Section Brainerdianae and *C. dilatata*, according to Palmer (in Fern., Gray's Man. 785. 1950).

Crataegus dunbarii Sarg. (Rochester Acad. Sci. Proc. 4: 126. 1903; as "*dunbari*"), local from near Rochester, N. Y., was recorded as a stout shrub 13 to 16 feet high or becoming a small tree by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 785. 1950).

Crataegus brazoria Sarg. **Brazoria hawthorn**

†*Crataegus brazoria* Sarg., Bot. Gaz. 31: 233. 1901. (Section Punctatae).

DERIVATION.—Of Brazoria, Texas, on the Brazos River where it was discovered.

OTHER COMMON NAME.—Brazos hawthorn (SPN).

RANGE.—Eastern Texas.

Crataegus brevispina Dougl., see **C. douglasii** Lindl.

Crataegus brockwayae Sarg., see **C. douglasii** Lindl.

Crataegus brumalis Ashe ———

Crataegus brumalis Ashe, Carnegie Mus. Ann. 1: 393. 1902. (Section Silvicolae).

DERIVATION.—Of the winter; from the fruits long persistent ripening in October and falling long after the leaves.

RANGE.—Southern New England and New York west to Michigan, south to Kentucky and Pennsylvania.

An arborescent shrub or a small tree 20 to 26 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 788. 1950).

Crataegus buckleyi Beadle, see **C. boyntonii** Beadle

Crataegus bushii Sarg. ———

†*Crataegus bushii* Sarg., Bot. Gaz. 33: 109. 1902. (Section Crus-galli).

DERIVATION.—Named for its discoverer, Benjamin Franklin Bush (1858–1937), botanist of Missouri.

COMMON NAME.—Bushes hawthorn (SPN).

RANGE.—Southwestern Arkansas, southeastern Oklahoma, eastern Texas and western Louisiana.

Crataegus callicarpa Sarg., see **C. coccinioides** Ashe

Crataegus calpodendron (Ehrh.) Med. **pear hawthorn**

†?*Crataegus tomentosa* L., Sp. Pl. 476. 1753; in part?; *nomen ambiguum.*

Mespilus calpodendron Ehrh., Beitr. Naturk. 2: 67. 1788.

†*Crataegus calpodendron* (Ehrh.) Med., Gesch. Bot. 83. 1793. (Section Macracanthae).

†*Crataegus chapmani* [Beadle] Ashe, Bot. Gaz. 28: 271. 1899.

Crataegus globosa Sarg., Mo. Bot. Gard. Ann. Rpt. 19: 118. 1908.

Crataegus tomentosa var. *structilis* (Ashe) Farwell, Amer. Midland Nat. 11: 61. 1928.

Crataegus calpodendron var. *obesa* (Ashe) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 564. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.

Crataegus calpodendron var. *hispidula* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 564. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.

Crataegus calpodendron var. *globosa* (Sarg.) Palmer, Brittonia 5: 489. 1946.

Crataegus calpodendron var. *microcarpa* (Chapm.) Palmer, Brittonia 5: 489. 1946.

Crataegus calpodendron var. *mollicula* (Sarg.) Palmer, Brittonia 5: 490. 1946.

DERIVATION.—Urn-tree, referring to the shape of the fruit.

OTHER COMMON NAMES.—†pear haw, pear thorn.

RANGE.—Southern Ontario and New York west to southeastern Minnesota, south to eastern Nebraska, eastern Texas, Arkansas, Alabama, and Georgia.

As it seems impossible to identify the name *Crataegus tomentosa* L., Palmer (Arnold Arboretum Jour. 19: 287–289. 1938) has suggested that the name be abandoned as a *nomen ambiguum* and that the next available name, *C. calpodendron* (Ehrh.) Med., should be used instead.

***Crataegus simulata* Sarg. (Mo. Bot. Gard. Ann. Rpt. 22: 82. 1912), from southwestern Missouri (Jasper County), probably is a hybrid between *C. calpodendron* and *C. palmeri*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 801. 1950).**

***Crataegus vailiae* Britton (Torrey Bot. Club Bul. 24: 53. 1897), an arborescent shrub or small tree 13 to 16 feet high from southern Virginia and North Carolina west to southern Missouri, is probably a hybrid between *C. calpodendron* and *C. uniflora*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 801. 1950).**

Crataegus ×*whitakeri* Sarg. (Arnold Arboretum Jour. 6: 3. 1925), of southeastern Illinois (Richland County), was described as a possible hybrid, and the supposed parents were *C. calpodendron* and *C. mollis*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 800. 1950).

Crataegus canadensis Sarg. **Canada hawthorn**

†*Crataegus canadensis* Sarg., Rhodora 3: 73. 1901. (Section Molles).

DERIVATION.—Of Canada; known only from Canada.

OTHER COMMON NAME.—Canadian thorn.

RANGE.—Along St. Lawrence River near Montreal, southern Quebec.

Crataegus canbyi Sarg. **Canby hawthorn**

†*Crataegus canbyi* Sarg., Bot. Gaz. 31: 3. 1901. (Section Crus-galli).

DERIVATION.—Named for its discoverer, William Marriott Canby (1831-1904), American businessman and botanical collector.

OTHER COMMON NAME.—Canby thorn.

RANGE.—Eastern Pennsylvania, Maryland, and Delaware.

Crataegus celsa Sarg., see note under **C. punctata** Jacq.

Crataegus champlainensis Sarg., see **C. submollis** Sarg.

Crataegus cherokeensis Sarg., see **C. crus-galli** L.

Crataegus chrysocarpa Ashe **fireberry hawthorn**

†*Crataegus rotundifolia* Moench, Verz. Ausl. Bäume Staud. Weiss. 29, pl. 1. 1785. Not *C. rotundifolia* Lam., Encycl. Méth. Bot. 1: 84. 1783.

Crataegus chrysocarpa Ashe, N. C. Agr. Expt. Sta. Bul. 175: 110. 1900. (Section Rotundifoliae).

Crataegus coccinea L. var. *rotundifolia* [Moench] Sarg., Bot. Gaz. 31: 14. 1901.

Crataegus sheridana A. Nels., Bot. Gaz. 34: 370. 1902.

Crataegus doddsii Ramaley, Bot. Gaz. 46: 381, fig. 1. 1908.

Crataegus rotundifolia Moench var. *bicknellii* Eggl., Rhodora 10: 79. 1908.

†*Crataegus rotundifolia* var. *pubera* Sarg., Rhodora 11: 183. 1909.

Crataegus bicknellii (Eggl.) Eggl., Torrey Bot. Club Bul. 38: 244. 1911.

Crataegus rotundifolia var. *aboriginum* (Sarg.) Sarg., Arnold Arboretum Jour. 3: 196. 1922.

Crataegus chrysocarpa var. *dodgei* (Ashe) Palmer in Dole, Fl. Vt. Ed. 3, 152. 1937.

Crataegus chrysocarpa var. *phoenicea* Palmer in Dole, Fl. Vt. Ed. 3, 152. 1937.

Crataegus chrysocarpa var. *bicknellii* (Eggl.) Palmer, Brittonia 5: 484. 1946.

Crataegus chrysocarpa var. *caesariata* (Sarg.) Palmer, Brittonia 5: 484. 1946.

DERIVATION.—Golden-fruited, the fruit rarely yellow.

OTHER COMMON NAMES.—roundleaf hawthorn, roundleaf thorn.

RANGE.—Newfoundland, Quebec, and Maine, west to Saskatchewan, south in western United States to Wyoming, Colorado, and New Mexico, and in northeastern States south to Nebraska, North Dakota, Minnesota, Wisconsin, Michigan, Pennsylvania, and New York.

†*Crataegus mansfieldensis* Sarg. (Arnold Arboretum Jour. 4: 103. 1923), described as a shrub or tree to 13 feet tall from near Mansfield, Richmond County, Ohio, was not accepted by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 767–801, illus. 1950).

Crataegus choriophylla Sarg. ———

†*Crataegus choriophylla* Sarg., Arnold Arboretum Jour. 3: 201. 1922. (Section Parvifoliae).

DERIVATION.—With separated leaves, the leaves divided above the middle into short lobes.

RANGE.—Northern Florida.

Crataegus coccinea L., see **C. pedicellata** Sarg.

Crataegus coccinioides Ashe — **Kansas hawthorn**

†*Crataegus coccinioides* Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 74. 1900. (Section Dilatatae).

†*Crataegus callicarpa* Sarg., Mo. Bot. Gard. Ann. Rpt. 19: 96. 1908.

DERIVATION.—Resembling *Crataegus coccinea,* now known as *C. pedicellata,* scarlet hawthorn.

OTHER COMMON NAME.—Eggert thorn.

RANGE.—Southern Illinois, Missouri, eastern Kansas, eastern Oklahoma, and Arkansas.

Crataegus cocksii Sarg. — **Cocks hawthorn**

†*Crataegus cocksii* Sarg., Arnold Arboretum Jour. 1: 248. 1920. (Section Crus-galli).

DERIVATION.—Named for one of the discoverers, Reginald Wodehouse Somers Cocks (1863–1926), botanist of Louisiana.

OTHER COMMON NAME.—†Cocks thorn.

RANGE.—Louisiana (Winn Parish).

Crataegus coleae Sarg. ———

Crataegus coleae Sarg., Trees and Shrubs 1: 7, pl. 4. 1902. (Section Brainerdianae).

DERIVATION.—Named for its discoverer, Emma Jane Cole, botanist of Grand Rapids, Michigan.

RANGE.—Pennsylvania and Michigan.

An arborescent shrub or a small tree 26 to 32 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 785. 1950).

***Crataegus macauleyae* Sarg. (Rochester Acad. Sci. Proc. 4: 130. 1903), of western New York, was recorded as an unnumbered binomial of very**

limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 785. 1950).

Crataegus collina Chapm. **sandhill hawthorn**

†*Crataegus collina* Chapm., Fl. South. U. S. Ed. 2, Sup. 2, 684. 1892. (Section Punctatae).

†*Crataegus sordida* Sarg., Bot. Gaz. 33: 114. 1902.

Crataegus collina var. *sordida* (Sarg.) Eggl., Rhodora 10: 76. 1908.

Crataegus sordida var. *villosa* Sarg., Arnold Arboretum Jour. 6: 2. 1925.

Crataegus collina var. *secta* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 560. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus collina var. *succincta* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 560. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus collina var. *collicola* (Ashe) Palmer, Brittonia 5: 483. 1946.

DERIVATION.—Of the hills.

OTHER COMMON NAME.—Chapman hill thorn.

RANGE.—Southwestern Virginia west to southeastern Indiana, Missouri, and southeastern Kansas, south to Oklahoma, Mississippi, and Georgia.

†*Crataegus incaedua* Sarg. (Trees and Shrubs 2: 3, pl. 102. 1907; †*Crataegus swanensis* Sarg., Arnold Arboretum Jour. 3: 182. 1923), from Indiana to Missouri and Arkansas, is perhaps a hybrid between *C. collina* and *C. calpodendron*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 779–780. 1950).

†*Crataegus lettermanii* Sarg. (Bot. Gaz. 31: 220. 1901; as "*lettermani*") of Missouri, is perhaps a hybrid between a variety of *C. collina* and *C. mollis*, according to Palmer and Steyermark (Mo. Bot. Gard. Ann. 22: 560. 1935) and Palmer (in Fern., Gray's Man. Bot. Ed. 8, 779. 1950).

Crataegus hirtiflora Sarg. (Mo. Bot. Gard. Ann. Rpt. 19: 82. 1908; as "*hertiflora*"), a tree 20 to 23 feet high local in southern Missouri, was not accepted by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 767–801, illus. 1950).

Crataegus coloradensis A. Nels., see **C. succulenta** Schrad.

Crataegus colorado Ashe, see **C. succulenta** Schrad.

Crataegus coloradoides Ramaley, see **C. succulenta** Schrad.

Crataegus columbiana Howell **Columbia hawthorn**

Crataegus columbiana Howell, Fl. Northwest. Amer. 1: 163. 1898. (Section Rotundifoliae).

Crataegus piperi Britton, Torreya 1: 55. 1901.

Crataegus columbiana var. *piperi* (Britton) Eggl., Rhodora 10: 79. 1908.

DERIVATION.—From the Columbia River and tributaries east of the Cascades, where it was discovered.

COMMON NAMES.—Columbia thornapple, Piper thornapple.

RANGE.—Southeastern British Columbia and Washington, south to northeastern California, eastern Oregon, and Idaho.

This species is recorded as a much-branched shrub or small tree 6 to 16 feet high.

Crataegus compta Sarg. ———

Crataegus compta Sarg., Rochester Acad. Sci. Proc. 4: 102. 1903. (Section Silvicolae).

Crataegus beata Sarg. var. *compta* (Sarg.) Eggl., Rhodora 10: 81. 1908.

DERIVATION.—Adorned.

RANGE.—Southern Ontario and New York to Michigan and Pennsylvania.

A shrub or tree 20 to 23 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 789. 1950).

Crataegus consanguinea Beadle ———

†*Crataegus consanguinea* Beadle, Biltmore Bot. Studies 1: 34. 1901. (Section Flavae).

DERIVATION.—Related; that is, related to *C. sororia* Beadle.

RANGE.—Northwestern Florida.

Crataegus cordifolia (Mill.) Farwell, see **C. macrosperma** Ashe

Crataegus corusca Sarg., see note under **C. pedicellata** Sarg.

Crataegus crocina Beadle ———

†*Crataegus crocina* Beadle, Biltmore Bot. Studies 1: 132. 1902. (Section Crus-galli).

DERIVATION.—Yellow, the color of the fruit at maturity.

RANGE.—Louisiana.

Crataegus crus-galli L. **cockspur hawthorn**

†*Crataegus crus-galli* L., Sp. Pl. 476. 1753; as "*Crus galli.*" (Section Crus-galli).

†*Crataegus crus-galli β pyracanthifolia* Ait., Hort. Kew. 2: 170. 1789.

†*Crataegus algens* Beadle, Biltmore Bot. Studies 1: 135. 1902.

†*Crataegus arduennae* Sarg., Bot. Gaz. 35: 377. 1903.

†*Crataegus crus-galli* var. *capillata* Sarg., Bot. Gaz. 35: 100. 1903.

†*Crataegus crus-galli* var. *oblongata* Sarg., Bot. Gaz. 35: 99. 1903.

Crataegus crus-galli var. *exigua* (Sarg.) Eggl., Rhodora 10: 75. 1908.

Crataegus crus-galli var. *attenuata* (Ashe) Farwell, Mich. Acad. Sci. Rpt. 20(1918): 181. 1919.

†*Crataegus cherokeensis* Sarg., Arnold Arboretum Jour. 3: 1. 1922.

Crataegus crus-galli var. *barrettiana* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 558. 1935;

Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus crus-galli var. *bellica* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 558. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus crus-galli var. *leptophylla* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 558. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus crus-galli var. *macra* (Beadle) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 557. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus crus-galli var. *pachyphylla* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 558. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

DERIVATION.—Cock's spur; from the long spines.

OTHER COMMON NAMES.—hog-apple, †cockspur thorn, Newcastle thorn.

RANGE.—Southern Quebec, southern Ontario, and New York, west to southern Michigan, south to eastern Kansas, eastern Texas, northern Louisiana, Alabama, northwestern Georgia, and South Carolina. Introduced in New England east to Maine.

Crataegus tantula Sarg. (Mo. Bot. Gard. Ann. Rpt. 19: 49. 1908. †*Crataegus lawrencensis* Sarg., Arnold Arboretum Jour. 3: 3. 1922), of southwestern Missouri, was not accepted by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 767–801, illus. 1950).

Crataegus danielsii Palmer (Arnold Arboretum Jour. 16: 355, fig. 2. 1935. *Crataegus crus-galli* var. *danielsii* (Palmer) Rickett, Bot. Gaz. 98: 615. 1937), of Missouri (Boone County), was described as a possible hybrid between *C. crus-galli* and *C. verruculosa* Sarg.

Crataegus crux Ashe, see **C. succulenta** Schrad.

Crataegus cuneiformis (Marsh.) Eggl., see **C. disperma** Ashe

Crataegus dallasiana Sarg. **Dallas hawthorn**

†*Crataegus dallasiana* Sarg., Trees and Shrubs 1: 59, pl. 30. 1903. (Section Punctatae).

DERIVATION.—Of Dallas County, Texas, where it was discovered.

RANGE.—Eastern Oklahoma and eastern Texas.

Crataegus danielsii Palmer, see note under **C. crus-galli** L.

Crataegus delecta Sarg., see **C. pedicellata** Sarg.

Crataegus denaria Beadle, see **C. mohrii** Beadle

Crataegus deweyana Sarg., see **C. brainerdii** Sarg.

Crataegus diffusa Sarg., see **C. populnea** Ashe

Crataegus dilatata Sarg. ———

†*Crataegus dilatata* Sarg., Bot. Gaz. 31: 9. 1901. (Section Dilatatae).

†*Crataegus neo-londinensis* Sarg., Man. Trees No. Amer. 443, fig. 360. 1905.

Crataegus coccinioides Ashe var. *dilatata* (Sarg.) Eggl., Rhodora 10: 81. 1908.

DERIVATION.—Dilated, or spread out, referring to the broad leaves.

COMMON NAME.—ample-leaved thorn.

RANGE.—Southern Quebec and southern Ontario to New York, Vermont, Connecticut, Rhode Island, and eastern Massachusetts.

Crataegus discolor Sarg., see **C. reverchonii** Sarg.

Crataegus disjuncta Sarg. ———

†*Crataegus disjuncta* Sarg., Trees and Shrubs 1: 109, pl. 55. 1903. (Section Pruinosae).

Crataegus disjuncta var. *magnifolia* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 562. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.

DERIVATION.—Distinct, so named because it was well distinguished from other species of the same group by its large leaves and few flowers in compact clusters.

COMMON NAME.—Missouri thorn.

RANGE.—Western Kentucky, Missouri, and northern Arkansas.

Crataegus dispar Beadle ———

†*Crataegus dispar* Beadle, Biltmore Bot. Studies 1: 28. 1901. (Section Flavae).

DERIVATION.—Unlike, differing from types of the group.

RANGE.—Western South Carolina and eastern Georgia.

Crataegus disperma Ashe ———

Crataegus disperma Ashe, Elisha Mitchell Sci. Soc. Jour. 17(1): 14. 1900. (Section Punctatae).

?*Crataegus cuneiformis* (Marsh.) Eggl. in Deam, Ind. State Bd. Forestry Ann. Rpt. 11(1911): 253. 1912.

DERIVATION.—Two-seeded, from the usually 2 nutlets.

RANGE.—Pennsylvania to Indiana and Iowa, and east to Virginia.

Intermediate between *C. crus-galli* and *C. punctata* and may have originated as a hybrid between them, according to Palmer (in Fernald, Gray's Man. Bot. Ed. 8, 779. 1950). These intermediate plants were referred by Eggleston to *C. cuneiformis* (Marsh.) Eggl., which was based upon *Mespilus cuneiformis* Marsh. (Arbustr. Amer. 88. 1785), a briefly described name of uncertain application rejected by Palmer.

Crataegus dispessa Ashe, see note under **C. lanuginosa** Sarg.

Crataegus divida Sarg. ———

Crataegus divida Sarg., Bot. Gaz. 35: 401. 1903. (Section Macracanthae).

DERIVATION.—Divided; the leaves very slightly and irregularly divided above the middle into small acute lobes.

RANGE.—Southern Ontario, New York, and northern Illinois.

A tree 26 to 29 feet high or often a stout shrub, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 800. 1950).

Crataegus doddsii Ramaley, see **C. chrysocarpa** Ashe

Crataegus dodgei Ashe **Dodge hawthorne**

Crataegus dodgei Ashe, Elisha Mitchell Sci. Soc. Jour. 19: 26. 1903. (Section Rotundifoliae).

DERIVATION.—Named for its discoverer, Charles Keene Dodge (1844–1918), botanist of Michigan.

RANGE.—Southern Quebec and New England, west to Michigan and Wisconsin, and to Pennsylvania.

An arborescent shrub or rarely a tree 16 to 20 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 783. 1950).

Crataegus douglasii Lindl. **black hawthorn**

Crataegus punctata β brevispina Dougl. ex Hook., Fl. Bor. Amer. 1: 201. [1834.]

†*Crataegus douglasii* Lindl., Edwards's Bot. Reg. 21: No. 1810, pl. 1810. 1835. (Section Douglasianae).

Crataegus brevispina Dougl. ex Steud., Nom. Bot. Ed. 2, 1: 432. 1841.

Crataegus douglasii var. *suksdorfii* Sarg., Bot. Gaz. 44: 65. 1907.

Crataegus brockwayae Sarg., Trees and Shrubs 2: 245. 1913.

DERIVATION.—Named for its discoverer, David Douglas (1798–1834), Scotch botanical explorer, who collected in northwestern America.

OTHER COMMON NAMES.—Douglas hawthorn (SPN), Douglas thorn, Douglas thornapple, †western thornapple.

RANGE.—Southwestern Ontario and northern Michigan, and also from Montana to western British Columbia and southeastern end of Alaska (Hyder), south to central California, Nevada, and Wyoming.

Crataegus drymophila Sarg., see **C. iracunda** Beadle

Crataegus dumicola Sarg., see **C. succulenta** Schrad.

Crataegus dunbarii Sarg., see note under **C. brainerdii** Sarg.

Crataegus eamesi Sarg., see **C. pedicellata** Sarg.

Crataegus edita Sarg. ———

†*Crataegus edita* Sarg., Bot. Gaz. 33: 110. 1902. (Section Crus-galli).

DERIVATION.—Put forth, or published.

COMMON NAME.—Sabine hawthorn (SPN).

RANGE.—Northwestern Louisiana and eastern Texas.

Crataegus edura Beadle ———

†*Crataegus edura* Beadle, Biltmore Bot. Studies 1: 128. 1902. (Section Crus-galli).

DERIVATION.—Very hard; perhaps referring to the wood.

RANGE.—Louisiana.

Crataegus ellwangeriana Sarg., see **C. pedicellata** Sarg.

Crataegus engelmannii Sarg. **Engelmann hawthorn**

†*Crataegus engelmanni* Sarg., Bot. Gaz. 31: 2. 1901. (Section Crus-galli).

Crataegus engelmanni var. *sinistra* (Beadle) Palmer, Brittonia 5: 483. 1946.

DERIVATION.—Named for George Engelmann (1809–1884), a German-born American physician and botanist of St. Louis, Mo., who first collected it.

RANGE.—Kentucky and southern Illinois and west to southeastern Kansas, south to eastern Oklahoma, Arkansas, and Mississippi.

Crataegus erecta Sarg., see **C. acutifolia** Sarg.

Crataegus erythropoda Ashe **Cerro hawthorn**

Crataegus erythropoda Ashe, N. C. Agr. Expt. Sta. Bul. 175: 113. 1900. (Section Douglasianae).

Crataegus cerronis A. Nels., Bot. Gaz. 34: 370. 1902.

DERIVATION.—Red-stalked, perhaps referring to the purplish petioles.

OTHER COMMON NAME.—Manzana de puya larga.

RANGE.—Wyoming to Washington, south to Arizona and northern New Mexico.

This western species becomes a small tree up to 16 feet high.

Crataegus fastosa Sarg. ———

†*Crataegus fastosa* Sarg., Trees and Shrubs 1: 61, pl. 31. 1903. (Section Punctatae).

DERIVATION.—Unexplained; possibly *fastuosa* was intended, meaning proud, or stately, from the large size.

RANGE.—Southwestern Arkansas.

Crataegus fecunda Sarg. **St. Claire hawthorn**

†*Crataegus fecunda* Sarg., Bot. Gaz. 33: 111. 1902. (Section Crus-galli).

DERIVATION.—Fruitful.

OTHER COMMON NAMES.—Missouri hawthorn (SPN), fruitful thorn.

RANGE.—Illinois and Missouri.

Crataegus fera Beadle ———

†*Crataegus fera* Beadle, Biltmore Bot. Studies 1: 128. 1902. (Section Crus-galli).

DERIVATION.—Wild, or native.

RANGE.—Louisiana.

Crataegus fertilis Sarg., see **C. succulenta** Schrad.

Crataegus filipes Ashe ———

Crataegus filipes Ashe, Elisha Mitchell Sci. Soc. Jour. 19: 18. 1903. (Section Silvicolae).

DERIVATON.—With very slender pedicels.
RANGE.—Pennsylvania to Michigan and Wisconsin.

An arborescent shrub or a tree 20 to 23 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 789. 1950).

Crataegus flabellata (Bosc) K. Koch **fanleaf hawthorn**

Mespilus flabellata Bosc, Desf. Tab. de l'Ecole 2: 271. 1815.
Crataegus flabellata (Bosc) K. Koch, Gartenb. Preuss. Verh. Ver. Beförd, Ser. 2, 1: 240. 1853. (Section Tenuifoliae).
Crataegus crudelis Sarg., Rhodora 3: 143. 1903.
Crataegus grayana Eggl., Rhodora 10: 80. 1908.
Crataegus flabellata var. *grayana* (Eggl.) Palmer, Brittonia 5: 486. 1946.

DERIVATION.—Fanlike, referring to the leaves.
OTHER COMMON NAMES.—Asa Gray hawthorn, Asa Gray thorn, Bosc thorn.
RANGE.—Southern Quebec and Maine to Vermont and New York.

A large shrub or small tree to 20 feet high.
†*Crataegus apiomorpha* Sarg. (Bot. Gaz. 35: 386. 1903), of northern Illinois, was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 787. 1950).

Crataegus flava Ait. **yellow hawthorn**

†*Crataegus flava* Ait., Hort. Kew. 2: 169. 1789. (Section Flavae).

DERIVATION.—Yellow, from the yellow fruits.
OTHER COMMON NAMES.—summer haw, yellow haw.
RANGE.—Southeastern Virginia, south to Florida and Alabama.

Crataegus floridana Sarg. **Jacksonville hawthorn**

Crataegus flava var. *integra* Nash, Torrey Bot. Club Bul. 22: 150. 1895.
†*Crataegus floridana* Sarg., Bot. Gaz. 33: 124. 1902. (Section Flavae).
†*Crataegus integra* (Nash) Beadle, Biltmore Bot. Studies 1: 87. 1902.

DERIVATION.—Of Florida, the type collected at Jacksonville.
RANGE.—Georgia, south to central Florida.

Crataegus fontanesiana (Spach) Steud. ———

Mespilus fontanesiana Spach, Hist. Nat. Vég. Phanér. 2: 58. 1834.
Crataegus fontanesiana (Spach) Steud., Nom. Bot. Ed. 2, 1: 432. 1840. (Section Crus-galli).
Crataegus crus-galli var. *fontanesiana* (Spach) Wenzig ex Sarg., Silva No. Amer. 4: 66. 1892.
Crataegus tenax Ashe, Elisha Mitchell Sci. Soc. Jour. 18(1): 21. 1902.
Crataegus olivacea Sarg., Acad. Nat. Sci. Phila. Proc. 62: 153. 1910.

Crataegus punctata var. *tenax* (Ashe) Farwell, Amer. Midland Nat. 12: 67. 1930.

DERIVATION.—Named for Réné Louiche Desfontaines (1750–1833), French botanist.

RANGE.—Southern Ontario, New York, and Michigan, south to Ohio, Kentucky, and Pennsylvania.

This species, which has been known in cultivation in Europe since 1830, was shown by Sargent (Arnold Arboretum Jour. 6: 1. 1925) to be the **same as the native Pennsylvania species *Crataegus olivacea* Sarg., discovered in 1905. Five additional species were united with this species later by Palmer (Brittonia 5: 482. 1946).**

Crataegus fretalis Sarg., see note under **C. macrosperma** Ashe

Crataegus gattingeri Ashe **Gattinger hawthorn**

Crataegus gattingeri Ashe, Elisha Mitchell Sci. Soc. Jour. 17(1): 12. 1900. (Section Pruinosae).

Crataegus gattingeri var. *rigida* Palmer in Deam, Fl. Ind. 546. 1940.

DERIVATION.—Named for its discoverer, Augustin Gattinger (1825–1903), Tennessee botanist of German birth.

OTHER COMMON NAME.—Gattinger thorn.

RANGE.—Pennsylvania and West Virginia, west to southern Indiana and eastern Missouri, south to Arkansas and Tennessee.

An arborescent shrub or small tree 20 to 23 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 792. 1950).

Crataegus gaultii Sarg., see **C. succulenta** Schrad.

Crataegus gemmosa Sarg., see **C. succulenta** Schrad.

Crataegus georgiana Sarg. **Georgia hawthorn**

†*Crataegus georgiana* Sarg., Bot. Gaz. 33: 113. 1902. (Section Pruinosae).

DERIVATION.—Of Georgia, the type locality at Rome.

RANGE.—Northwestern Georgia.

Crataegus gilva Beadle, see **C. mendosa** Beadle

Crataegus glabriuscula Sarg. ———

†*Crataegus glabriuscula* Sarg., Bot. Gaz. 31: 235. 1901. (Section Virides).

DERIVATION.—Almost glabrous, referring to the foliage, which is almost hairless at maturity.

RANGE.—Eastern and central Texas.

Crataegus glandulosa Moench, see **C. succulenta** Schrad.

Crataegus globosa Sarg., see **C. calpodendron** (Ehrh.) Med.

Crataegus grandis Ashe, see **C. peoriensis** Sarg.

Crataegus gravida Beadle, see **C. mollis** Scheele

Crataegus gravis Ashe ———

Crataegus gravis Ashe, Elisha Mitchell Sci. Soc. Jour. 20: 49. 1904. (Section Silvicolae).

†*Crataegus luxuriosa* Sarg., Acad. Nat. Sci. Phila. Proc. 62: 198. 1910.

DERIVATION.—Heavily laden.

RANGE.—Southern Ontario, New York and Michigan to Indiana and Pennsylvania.

Crataegus grayana Eggl., see **C. flabellata** (Bosc) K. Koch

Crataegus greggiana Eggl. **Gregg hawthorn**

†*Crataegus greggiana* Eggl., Torrey Bot. Club Bul. 36: 511. 1909. (Section Molles).

DERIVATION.—Named for Josiah Gregg (1806–50), early American explorer in the West, who collected plant specimens in the Southwest and Mexico and who wrote Commerce of the Prairies, a history of the Santa Fe trail.

RANGE.—Central Texas south to Coahuila, northeastern Mexico.

In the 1927 Check List spelled "*greggii*."

Crataegus hannibalensis Palmer **Hannibal hawthorn**

Crataegus hannibalensis Palmer, Arnold Arboretum Jour. 16: 353, fig. 1. 1935. (Section Crus-galli).

DERIVATION.—Of Hannibal, Missouri.

RANGE.—Illinois, southeastern Iowa, and northern and eastern Missouri.

This species, described since publication of the 1927 Check List, is a tree 20 to 26 feet high or sometimes an arborescent shrub.

***Crataegus vallicola* Sarg. (Mo. Bot. Gard. Ann. Rpt. 19: 74. 1908; †*Crataegus phaenoneura* Sarg., Arnold Arboretum Jour. 3: 2. 1922) of Missouri to Ohio (?), was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 777. 1950).**

Crataegus harbisonii Beadle **Harbison hawthorn**

†*Crataegus harbisoni* Beadle, Bot. Gaz. 28: 413. 1899. (Section Bracteatae).

DERIVATION.—Named for Thomas Grant Harbison (1862–1936), botanist of North Carolina, who collected the type specimen.

RANGE.—Central Tennessee and Alabama.

Crataegus hillii Sarg., see note under **C. pedicellata** Sarg.

Crataegus hirtiflora Sarg., see note under **C. collina** Chapm.

Crataegus holmesiana Ashe **Holmes hawthorn**

†*Crataegus holmesiana* Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 78. 1900 (Feb.). (Section Coccineae).

Crataegus tenuifolia Britton, N. Y. Bot. Gard. Bul. 1: 448. 1900 (March). Not Guild.

†*Crataegus holmesiana villipes* Ashe, Elisha Mitchell Sci. Soc. Jour. 17(2): 11. 1901.
Crataegus villipes (Ashe) Ashe, Carnegie Mus. Ann. 1: 388. 1902.
Crataegus tardipes Sarg., Ontario Nat. Sci. Bul. 4: 51. 1908.
†*Crataegus holmesiana* var. *tardipes* (Sarg.) Sarg., Arnold Arboretum Jour. 1: 254. 1920.
Crataegus holmesiana var. *amicta* (Ashe) Palmer, Brittonia 5: 488. 1946.
Crataegus holmesiana var. *chippewaensis* (Sarg.) Palmer, Brittonia 5: 488. 1946.
Crataegus holmesiana var. *magniflora* (Sarg.) Palmer, Brittonia 5: 488. 1946.

DERIVATION.—Named for Joseph Austin Holmes (1859–1915), geologist of North Carolina.

OTHER COMMON NAMES.—Holmes thorn, thin-leaved thorn.

RANGE.—Southern Maine, southern Quebec, and southern Ontario, west to Michigan and Minnesota, and south in Northeast to Pennsylvania.

Crataegus horridula Sarg., see **C. pruinosa** (H. L. Wendl.) K. Koch

Crataegus incaedua Sarg., see note under **C. collina** Chapm.

Crataegus ignava Beadle ———

†*Crataegus ignava* Beadle, Biltmore Bot. Studies 1: 31. 1901. (Section Flavae).

DERIVATION.—Inactive, perhaps from its unfruitfulness during three seasons which delayed its study and description.

RANGE.—Northeastern Alabama.

Crataegus illinoiensis Ashe, see **C. succulenta** Schrad.

Crataegus induta Sarg. **turkey hawthorn**

†*Crataegus induta* Sarg., Trees and Shrubs 1: 115, pl. 58. 1903. (Section Molles).
†*Crataegus invisa* Sarg., Trees and Shrubs 2: 147, pl. 160. 1911.

DERIVATION.—Covered, referring to the hoary covering of hairs on young foliage and flowers.

OTHER COMMON NAMES.—turkey-apple hawthorn (SPN), †turkey-apple.

RANGE.—Southwestern Arkansas, southeastern Oklahoma, and eastern Texas.

Crataegus ingens Beadle ———

†*Crataegus ingens* Beadle, Biltmore Bot. Studies 1: 56. 1902. (Section Virides).

DERIVATION.—Enormous, from the large size; described as a spreading tree to 26 feet tall and 1 foot in trunk diameter.

RANGE.—Southeastern Tennessee and northwestern Georgia.

Crataegus integra (Nash) Beadle, see **C. floridana** Sarg.

Crataegus integriloba Sarg., see note under **C. succulenta** Schrad.

Crataegus intermixta Sarg., see **C. permixta** Palmer

Crataegus invisa Sarg., see **C. induta** Sarg.

Crataegus iracunda Beadle

Crataegus silvicola Beadle, Bot. Gaz. 28: 414. 1899. Not *Crataegus silvicola* Gandoger, Soc. Bot. France Bul. 18: 448. 1871.

Crataegus iracunda Beadle, Biltmore Bot. Studies 1: 124. 1902. (Section Silvicolae).

†*Crataegus drymophila* Sarg., Arnold Arboretum Jour. 1: 252. 1920; as "*drymopila.*"

Crataegus iracunda var. *silvicola* [Beadle] Palmer, Brittonia 5: 486. 1946.

DERIVATION.—Irascible; the significance obscure.

RANGE.—Pennsylvania, Ohio, and Kentucky, south to southeastern Louisiana, Alabama, and Georgia.

A large shrub or slender tree to 25 feet tall.

Crataegus irrasa Sarg.

Crataegus irrasa Sarg., Rhodora 5: 116. 1903. (Section Rotundifoliae).

Crataegus irrasa var. *blanchardi* (Sarg.) Eggl., Rhodora 10: 79. 1908.

DERIVATION.—Indented, perhaps referring to the leaves.

COMMON NAME.—Blanchard thorn.

RANGE.—Southern Quebec, New York and Vermont.

A shrub or sometimes a tree 13 to 16 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 782. 1950).

Crataegus oakesiana Eggl. (Torreya 7: 35. 1907), a shrub or small tree **to 20 feet high, of Vermont, was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 782. 1950).**

Crataegus jasperensis Sarg., see **C. reverchonii** Sarg.

Crataegus jesupii Sarg.

Crataegus jesupi Sarg., Rhodora 5: 61. 1903. (Section Pruinosae).

DERIVATION.—Named for Henry Griswold Jesup (1826–1903), botanist at Dartmouth College.

COMMON NAME.—Jesup thorn.

RANGE.—Vermont and Connecticut to Pennsylvania and Ohio.

An arborescent shrub or a small tree 10 to 20 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 793. 1950).

Crataegus jonesiae Sarg. Jones hawthorn

†*Crataegus jonesae* Sarg., Bot. Gaz. 31: 14. 1901. (Section Rotundifoliae).

DERIVATION.—Named for its discoverer, Beatrix Jones Farrand, the first professional American woman landscape architect, and who brought this hawthorn to Sargent's attention.
OTHER COMMON NAME.—Miss Jones thorn.
RANGE.—Prince Edward Island, Nova Scotia, New Brunswick, southern Quebec, and Maine.

Crataegus kellermanii Sarg., see note under **C. punctata** Jacq.

Crataegus kelloggii Sarg., see note under **C. mollis** Scheele

Crataegus kingstonensis Sarg., see note under **C. brainerdii** Sarg.

Crataegus lacera Sarg. ———

†*Crataegus lacera* Sarg., Bot. Gaz. 33: 123. 1902. (Section Tenuifoliae?).
DERIVATION.—Torn, or lacerated, referring to the incised leaf borders.
RANGE.—Southwestern Arkansas.

Crataegus lacrimata Small **Pensacola hawthorn**

†*Crataegus lacrimata* Small, Torreya 1: 97. 1901. (Section Flavae).
DERIVATION.—Of tears, referring to the drooping or "weeping" branches.
RANGE.—Northwestern Florida.

Crataegus laetifica Sarg., see note under **C. succulenta** Schrad.

Crataegus lanuginosa Sarg. ———

†*Crataegus lanuginosa* Sarg., Trees and Shrubs 1: 113, pl. 57. 1903. (Section Molles).
DERIVATION.—Soft-hairy, referring to twigs, leaves and pedicels.
COMMON NAME.—woolly thorn.
RANGE.—Southwestern Missouri and southeastern Kansas, to eastern Oklahoma and central Arkansas.

†*Crataegus dispessa* Ashe (Elisha Mitchell Sci. Soc. Jour. 19(1): 17. 1903 (March); as "*dispersa*" in 1927 Check List. †*Crataegus treleasei* Sarg., Trees and Shrubs 1: 63, pl. 32. 1903 (May 13). *Crataegus pyriformis* (Britton, not Jacques) of southern Missouri, was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 797. 1950).

Crataegus lawrencensis Sarg., see note under **C. crus-galli** L.

Crataegus laxiflora Sarg., see note under **C. succulenta** Schrad.

Crataegus leiophylla Sarg. ———

Crataegus leiophylla Sarg., Rochester Acad. Sci. Proc. 4: 99. 1903. (Section Pruinosae).
DERIVATION.—Smooth-leaved.
COMMON NAMES.—Maine thorn, smooth thorn.

RANGE.—Southern Ontario and New York.

An arborescent shrub or rarely a tree 16 to 20 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 792. 1950).

Crataegus leonensis Palmer — **Leon hawthorn**

Crataegus leonensis Palmer, Arnold Arboretum Jour. 13: 422, fig. 1. 1932. (Section Flavae).

DERIVATION.—From Leon County, Florida.

RANGE.—Central and northwestern Florida.

This species, described since publication of the 1927 Check List, becomes a tree 33 to 39 feet high.

Crataegus lettermanii Sarg., see note under **C. collina** Chapm.

Crataegus leucantha Laughlin, see **C. succulenta** Schrad.

Crataegus limaria Sarg. ———

†*Crataegus limaria* Sarg., Trees and Shrubs 2: 149, pl. 161. 1911. (Section Molles).

DERIVATION.—Polished, referring to the lustrous fruits.

RANGE.—Southwestern Arkansas, southeastern Oklahoma, and eastern and central Texas.

Crataegus limnophila Sarg., see **C. pyracanthoides** Beadle

Crataegus lobulata Sarg., see **C. pringlei** Sarg.

Crataegus locuples Sarg., see note under **C. mollis** Scheele

Crataegus lucorum Sarg., see note under **C. macrosperma** Ashe

Crataegus luculenta Sarg., see **C. aestivalis** (Walt.) Torr. & Gray

Crataegus luxuriosa Sarg., see **C. gravis** Ashe

Crataegus macauleyae Sarg., see note under **C. coleae** Sarg.

Crataegus mackenzii Sarg. — **Mackenzie hawthorn**

Crataegus mackenzii Sarg. in Mackenzie, Man. Fl. Jackson Co., Mo. 108. 1902. (Section Pruinosae).

Crataegus mackenzii var. *bracteata* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 562. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.

Crataegus mackenzii var. *aspera* (Sarg.) Palmer, Brittonia 5: 487. 1946.

DERIVATION.—Named for its discoverer, Kenneth Kent Mackenzie (1877-1934), American attorney and botanist.

RANGE.—Kentucky and Missouri to southeastern Iowa, southeastern Kansas, Oklahoma, and Arkansas.

An arborescent shrub or a small tree 16 to 20 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 791. 1950). Previously regarded as a shrub.

Crataegus platycarpa Sarg. (Mo. Bot. Gard. Ann. Rpt. 19: 92. 1908), a tree 20 to 23 feet high from southern Indiana, southern Illinois, Missouri, and northeastern Arkansas, was recorded as an unnumbered binomial by

Palmer (in Fern., Gray's Man. Bot. Ed. 8, 791. 1950). Earlier, Palmer (in Deam, Fl. Ind. 547, 551. 1940) suggested that it might be a hybrid between a species of section Pruinosae and *C. mollis*.

Crataegus macracantha Lodd., see **C. succulenta** Schrad.

Crataegus macrosperma Ashe **large-seed hawthorn**

Crataegus macrosperma Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 73. 1900 (June?). (Section Tenuifoliae).
Crataegus roanensis Ashe, N. C. Agr. Exp. Sta. Bul. 175: 114. 1900 (Aug.).
†*Crataegus pentandra* Sarg., Rhodora 3: 25. 1901.
Crataegus prona Ashe, Elisha Mitchell Sci. Soc. Jour. 19(1): 17. 1903.
†*Crataegus paucispina* Sarg., Bot. Gaz. 35: 391. 1903.
Crataegus streeterae Sarg., Rochester Acad. Sci. Proc. 4: 119. 1903.
Crataegus macrosperma var. *acutiloba* (Sarg.) Eggl., Rhodora 10: 80. 1908.
Crataegus macrosperma var. *demissa* (Sarg.) Eggl., Rhodora 10: 80. 1908.
Crataegus macrosperma var. *matura* (Sarg.) Eggl., Rhodora 10: 80. 1908.
Crataegus macrosperma var. *pentandra* (Sarg.) Eggl., Rhodora 10: 80. 1908.
?*Crataegus cordifolia* (Mill.) Farwell var. *borealis* (Ashe) Farwell, Amer. Midland Nat. 12: 63. 1930.
Crataegus cordifolia var. *macrosperma* (Ashe) Farwell, Amer. Midland Nat. 12: 63. 1930.
Crataegus cordifolia var. *matura* (Sarg.) Farwell, Amer. Midland Nat. 12: 63. 1930.
Crataegus cordifolia var. *pastorum* (Sarg.) Farwell, Amer. Midland Nat. 12: 63. 1930.
Crataegus basilica var. *viridimontana* (Sarg.) Palmer in Dole, Fl. Vt. Ed. 3, 151. 1937.
Crataegus macrosperma var. *roanensis* (Ashe) Palmer, Brittonia 5: 486. 1946.

DERIVATION.—Large-seeded (literally long-seeded), referring to the nutlets.

OTHER COMMON NAMES.—large-seeded haw, Roan Mountain thorn, variable thorn.

RANGE.—Newfoundland, southern Quebec, and Maine, west to Michigan, Wisconsin, and southeastern Minnesota, south to Illinois, Kentucky and in mountains to Tennessee, northern Alabama, northern Georgia, and North Carolina, north to New York.

Crataegus fretalis Sarg. (Rhodora 5: 112. 1903; *Crataegus neofaxonii* Sarg., Arnold Arboretum Jour. 6: 2. 1925), of Massachusetts and Connecticut, is possibly a hybrid between species of Sections Tenuifoliae and Coccineae, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 787. 1950).

†*Crataegus lucorum* Sarg. (Bot. Gaz. 31: 227. 1901), from Vermont, Connecticut, and New York, west to Michigan, Illinois, and Ohio, is perhaps a hybrid between species of Sections Tenuifoliae and Coccineae, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 787. 1950).

Crataegus maloides Sarg., see **C. aestivalis** (Walt.) Torr. & Gray

Crataegus mansfieldensis Sarg., see note under **C. chrysocarpa** Ashe

Crataegus margaretta Ashe — **Margaret hawthorn**

†*Crataegus margaretta* Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 72. 1900. (Section Rotundifoliae).

†*Crataegus margaretta* var. *brownii* (Britton) Sarg., Arnold Arboretum Jour. 3: 199. 1922.

Crataegus margaretta var. *angustifolia* Palmer in Deam, Fl. Ind. 543. 1940.

Crataegus margaretta var. *meiophylla* (Sarg.) Palmer, Brittonia 5: 485. 1946.

DERIVATION.—Named for Margaret Henry Wilcox, later Mrs. W. W. Ashe.

OTHER COMMON NAME.—Mrs. Ashe's thorn.

RANGE.—Southern Ontario and Michigan, west to Iowa, south to Missouri, Tennessee, and Virginia.

Crataegus sicca Sarg. (Mo. Bot. Gard. Ann. Rpt. 19: 101. 1908), local from southeastern Missouri, was recorded as a stout shrub or rarely a small tree 13 to 16 feet high by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 783. 1950).

Crataegus mariettensis Sarg., see **C. pruinosa** (H. L. Wendl.) K. Koch

Crataegus marshallii Eggl. — **parsley hawthorn**

Mespilus apiifolia Marsh., Arbustr. Amer. 89. 1785.

†*Crataegus apiifolia* Michx., Fl. Bor.-Amer. 1: 287. 1803. Not *C. apiifolia* Med., Gesch. Bot. 83. 1793.

Crataegus marshallii Eggl., Rhodora 10: 79. 1908. (Section Microcarpae).

DERIVATION.—Named for Humphry Marshall (1722-1801), American botanist who first described it.

OTHER COMMON NAMES.—†parsley haw, parsley-leaved thorn.

RANGE.—Coastal Plain mostly, from southeastern Virginia to central Florida and west to eastern Texas, north in Mississippi Valley to southeastern Oklahoma and southeastern Missouri.

Crataegus mendosa Beadle — ———

Crataegus mendosa Beadle, Biltmore Bot. Studies 1: 65. 1902. (Section Intricatae).

Crataegus gilva Beadle, Biltmore Bot. Studies 1: 60. 1902.

DERIVATION.—Literally, full of faults; possibly since fruiting specimens were not available for 2 years because of a fungus disease.

RANGE.—Northern Alabama.

A shrub or small tree 10 to 20 feet high.

Crataegus meridiana Beadle — ———

Crataegus meridiana Beadle, Biltmore Bot. Studies 1: 115. 1902. (Section Flavae).

DERIVATION.—Of noon, hence southern.
COMMON NAME.—southern haw.
RANGE.—North Carolina, South Carolina, Georgia, Alabama, and Florida.

A small tree or large shrub 10 to 23 feet high.

Crataegus **meridionalis** Sarg. ———

†*Crataegus meridionalis* Sarg., Arnold Arboretum Jour. 1: 252. 1920. (Section Molles).
DERIVATION.—Southern.
RANGE.—Western Alabama and eastern Mississippi.

Crataegus micracantha Sarg., see **C. succulenta** Schrad.

Crataegus mitis Sarg., see **C. acutifolia** Sarg.

Crataegus **mohrii** Beadle **Mohrs hawthorn**

†*Crataegus mohri* Beadle, Bot. Gaz. 28: 416. 1899. (Section Crus-galli).
†*Crataegus denaria* Beadle, Biltmore Bot. Studies 1: 131. 1902.
DERIVATION.—Named for Charles Theodore Mohr (1824-1901), German-born manufacturing druggist and botanist of Alabama. He was at one time employed by the Forestry Division of the United States Department of Agriculture to make a study of southern pines.
RANGE.—Kentucky and Tennessee, south to Georgia, Alabama, and Arkansas.

Crataegus **mollis** Scheele **downy hawthorn**

Crataegus coccinea ε ? *mollis* Torr. & Gray, Fl. No. Amer. 1: 465. 1840.
†*Crataegus mollis* Scheele, Linnaea 21: 569. 1848. (Section Molles).
†*Crataegus arkansana* Sarg., Bot. Gaz. 31: 223. 1901.
†*Crataegus gravida* Beadle, Biltmore Bot. Studies 1: 119. 1902.
†*Crataegus sera* Sarg., Bot. Gaz. 33: 115. 1902.
Crataegus redolens Ashe, Elisha Mitchell Sci. Soc. Jour. 19: 14. 1903.
Crataegus mollipes Sarg., Mich. Geol. Surv. Rpt. 1906; 545. 1907.
Crataegus mollis var. *sera* (Sarg.) Eggl., Rhodora 10: 82. 1908.
Crataegus acerifolia Lodd. var. *sera* (Sarg.) Farwell, Amer. Midland Nat. 12: 65. 1930.
DERIVATION.—Soft, referring to the hairy foliage.
OTHER COMMON NAMES.—†red haw, downy thorn.
RANGE.—Southern Ontario, west to Michigan, southern Minnesota, eastern North Dakota, and eastern South Dakota, south to eastern Oklahoma, Arkansas, Alabama, and central Tennessee.

†*Crataegus kelloggii* Sarg. (Trees and Shrubs 1: 117, pl. 59. 1903), from Indiana to Missouri, is probably a hybrid between *C. margaretta* and *C. mollis*, according to Palmer and Steyermark (Mo. Bot. Gard. Ann. 22: 563. 1935) and Palmer (in Fern., Gray's Man. Bot. Ed. 8, 797. 1950).

Crataegus locuples Sarg. (Mo. Bot. Gard. Ann. Rpt. 19: 97. 1908; *Crataegus declivitatis* Sarg., Mo. Bot. Gard. Ann. Rpt. 19: 103. 1908), from Ohio to Kentucky and Missouri, is probably a hybrid between a species of Section Pruinosae and *C. mollis*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 793. 1950).

Crataegus ridgwayi Sarg. (Arnold Arboretum Jour. 6: 2. 1925; Section Molles), described as a slender tree 13 to 16 feet high from Richland County, southeastern Illinois, was not accepted by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 767–801, illus. 1950).

CRATAEGUS MONOGYNA Jacq. ONE-SEED HAWTHORN

Crataegus monogyna Jacq., Fl. Austr. 3: 50, pl. 292, fig. 1. 1775. (Section Oxyacanthae).

DERIVATION.—Having one ovary; from the usually single nutlet.

OTHER COMMON NAMES.—single-seed hawthorn (SPN), English hawthorn, European hawthorn, May thorn, white thorn.

RANGE.—Long cultivated and escaped from cultivation from Nova Scotia, Quebec, Maine, and New York, west to Minnesota and Oregon, south to Nebraska and North Carolina. Naturalized locally. Native of Europe, northern Africa, and western Asia.

Records of †*Crataegus oxyacantha* L. (L., Sp. Pl. 477. 1753), †English hawthorn, as an escapee in northeastern United States probably refer, at least in part, to this species. *C. oxyacantha*, native of Europe and north Africa, is in cultivation but not naturalized.

Crataegus montivaga Sarg., see **C. tracyi** Ashe

Crataegus neofaxonii Sarg., see note under **C. macrosperma** Ashe

Crataegus neo-fluvialis Ashe, see **C. succulenta** Schrad.

Crataegus neo-londinensis Sarg., see **C. dilatata** Sarg.

Crataegus nitida (Engelm.) Sarg. **glossy hawthorn**

Crataegus viridis nitida Engelm. ex Britton & Brown, Illus. Fl. North. States Canada 2: 242. 1897.

†*Crataegus nitida* (Engelm.) Sarg., Bot. Gaz. 31: 231. 1901. (Section Virides).

DERIVATION.—Shining; referring to the leaves.

OTHER COMMON NAME.—shining thorn.

RANGE.—Ohio to Missouri and Arkansas.

Crataegus noelensis Sarg. **Noel hawthorn**

†*Crataegus noelensis* Sarg., Arnold Arboretum Jour. 1: 253. 1920. (Section Molles).

†*Crataegus transmississippiensis* Sarg., Arnold Arboretum Jour. 3: 7. 1922.

DERIVATION.—From Noel, Missouri, where it was discovered.

RANGE.—Southern Missouri and northern Arkansas.

Crataegus ×notha Sarg., see note under **C. brachyphylla** Sarg.

Crataegus nuda Sarg., see note under **C. succulenta** Schrad.

Crataegus oakesiana Eggl., see note under **C. irrasa** Sarg.

Crataegus occidentalis Britton, see **C. succulenta** Schrad.

Crataegus ohioensis Sarg., see note under **C. pyracanthoides** Beadle

Crataegus olivacea Sarg., see **C. fontanesiana** (Spach) Steud.

Crataegus **opaca** Hook. & Arn. **riverflat hawthorn**

†*Crataegus opaca* Hook. & Arn. in Hook., Comp. Bot. Mag. 1: 25. 1835. (Section Aestivales).

Crataegus aestivalis var. *dormonae* Ashe, Torrey Bot. Club Bul. 55: 464. 1928.

DERIVATION.—Opaque.

OTHER COMMON NAME.—May haw.

RANGE.—Alabama, Mississippi, Arkansas, Louisiana, and eastern Texas.

Crataegus **opima** Beadle ———

†*Crataegus opima* Beadle, Biltmore Bot. Studies 1: 40. 1901. (Section Pulcherrimae).

DERIVATION.—Fruitful, being frequently loaded with small bright red fruits.

RANGE.—Southern Alabama and northwestern Florida.

Crataegus **ouachitensis** Palmer **Ouachita hawthorn**

Crataegus ouachitensis Palmer, Arnold Arboretum Jour. 7: 124. 1926. (Section Intricatae).

Crataegus ouachitensis var. *minor* Palmer, Arnold Arboretum Jour. 7: 125. 1926.

DERIVATION.—Of Ouachita Mountains.

RANGE.—Arkansas.

A shrub or small tree 13 to 20 feet high.

Crataegus ovata Sarg., see **C. viridis** L.

Crataegus oxyacantha L., see note under C. MONOGYNA Jacq.

Crataegus **padifolia** Sarg. ———

Crataegus padifolia Sarg., Trees and Shrubs 2: 75, pl. 35. 1908. (Section Intricatae).

Crataegus padifolia var. *incarnata* Sarg., Arnold Arboretum Jour. 6: 4. 1925.

DERIVATION.—Cherry-leaf.

COMMON NAME.—Padus-leaved thorn.

RANGE.—Southern Missouri and northern Arkansas.

A stout shrub or tree 16 to 20 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 772. 1950).

Crataegus palmeri Sarg. **Palmer hawthorn**

†*Crataegus palmeri* Sarg., Trees and Shrubs 1: 57, pl. 29. 1903. (Section Crus-galli).

DERIVATION.—Named for its discoverer, Ernest Jesse Palmer, American botanist and authority on *Crataegus*.

RANGE.—Missouri, southeastern Kansas, Oklahoma, and Arkansas.

Crataegus panda Beadle ———

†*Crataegus panda* Beadle, Biltmore Bot. Studies 1: 89. 1902. (Section Flavae).

DERIVATION.—Bent or crooked, referring to the branches.

RANGE.—Northwestern Florida.

Crataegus paucispina Sarg., see **C. macrosperma** Ashe

Crataegus pausiaca Ashe, see **C. punctata** Jacq.

Crataegus pedicellata Sarg. **scarlet hawthorn**

?*Crataegus coccinea* L., Sp. Pl. 476. 1753; in part?; *nomen ambiguum.*

†*Crataegus pedicellata* Sarg., Bot. Gaz. 31: 226. 1901. (Section Coccineae).

Crataegus albicans Ashe, Elisha Mitchell Sci. Soc. Jour. 17(2): 20. 1901.

†*Crataegus ellwangeriana* Sarg., Bot. Gaz. 33: 118. 1902.

†*Crataegus acclivis* Sarg., Rochester Acad. Sci. Proc. 4: 115. 1903.

†*Crataegus sertata* Sarg., Bot. Gaz. 35: 381. 1903.

†*Crataegus assurgens* Sarg., Bot. Gaz. 35: 382. 1903.

†*Crataegus robesoniana* Sarg., Rhodora 5: 110. 1903.

†*Crataegus delecta* Sarg., Man. Trees No. Amer. 451, fig. 368. 1905.

†*Crataegus eamesi* Sarg., Man. Trees No. Amer. 454, fig. 370. 1905.

Crataegus pedicellata var. *ellwangeriana* (Sarg.) Eggl., Rhodora 10: 82. 1908.

†*Crataegus pedicellata* var. *gloriosa* (Sarg.) Sarg., Arnold Arboretum Jour. 1: 254. 1920.

Crataegus pedicellata var. *albicans* (Ashe) Palmer in Dole, Fl. Vt. Ed. 3, 154. 1937; as *"pedicillata."*

Crataegus pedicellata var. *robesoniana* (Sarg.) Palmer, Brittonia 5: 488. 1946.

DERIVATION.—Pedicelled, the flowers on long thin pedicels.

OTHER COMMON NAMES.—Ontario hawthorn (SPN), †scarlet haw, †Ellwanger thorn, glistening thorn, scarlet thorn.

RANGE.—Maine, southern Quebec, and southern Ontario to Michigan and Wisconsin, south to northern Illinois, northern Indiana, Pennsylvania, and New York.

†*Crataegus hillii* Sarg. (Bot. Gaz. 35: 384. 1903), from Ohio and northeastern Illinois, was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 794. 1950).

†*Crataegus anomala* Sarg. (Rhodora 3: 74. 1901), from southern Quebec and Maine to Vermont and New York, is possibly a hybrid between species of Sections Coccineae and Molles, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 795. 1950).

†*Crataegus corusca* Sarg. (Bot. Gaz. 33: 117. 1902), of Lake County, Illinois, is perhaps a hybrid between a species of Section Coccineae and *C. mollis*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 795. 1950).

Crataegus **penita** Beadle ———

†*Crataegus penita* Beadle, Biltmore Bot. Studies 1: 57. 1902. (Section Virides).

DERIVATION.—Furnished with a tail, perhaps referring to the elongated pedicels.

RANGE.—Southeastern Tennessee.

Crataegus **pennsylvanica** Ashe **Pennsylvania hawthorn**

†*Crataegus pennsylvanica* Ashe, Carnegie Mus. Ann. 1: 394. 1902. (Section Coccineae).

Crataegus tatnalliana Sarg., Bot. Gaz. 35: 106. 1903.

Crataegus albicans Ashe var. *tatnalliana* (Sarg.) Farwell, Amer. Midland Nat. 12: 67. 1930.

DERIVATION.—Of Pennsylvania, where first found.

RANGE.—Delaware, Pennsylvania, and West Virginia.

Crataegus pentandra Sarg., see **C. macrosperma** Ashe

Crataegus **peoriensis** Sarg. **prairie hawthorn**

†*Crataegus peoriensis* Sarg., Bot. Gaz. 31: 5. 1901. (Section Punctatae).

†*Crataegus pratensis* Sarg., Bot. Gaz. 31: 6. 1901.

Crataegus grandis Ashe, Elisha Mitchell Sci. Soc. Jour. 17(2): 9. 1901.

DERIVATION.—Of Peoria County, Illinois, the type locality.

OTHER COMMON NAMES.—Peoria hawthorn (SPN), †prairie thorn.

RANGE.—Northern and central Illinois.

Crataegus **permixta** Palmer ———

†*Crataegus intermixta* Sarg., Arnold Arboretum Jour. 3: 5. 1922. Not *C. intermixta* (Wenzig) Beck, Fl. Nieder-Österreich 706. 1892.

Crataegus permixta Palmer, Brittonia 5: 483. 1946. (Section Crus-galli).

DERIVATION.—Very mixed.

COMMON NAME.—Hannibal hawthorn (SPN).

RANGE.—Illinois and northeastern Missouri.

Crataegus schizophylla Eggl. (Torrey Bot. Club Bul. 38: 243. 1911), local on Martha's Vineyard, Massachusetts, is a shrub or rarely a small tree 13 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 777. 1950).

Crataegus pertomentosa Ashe, see **C. succulenta** Schrad.

Crataegus phaenoneura Sarg., see note under **C. hannibalensis** Palmer

Crataegus phaenopyrum (L. f.) Med. **Washington hawthorn**

Mespilus phaenopyrum L. f., Sup. Pl. Syst. Veg. 254. 1781.
Crataegus populifolia Walt., Fl. Carol. 147. 1788.
†*Crataegus phaenopyrum* (L. f.) Med., Gesch. Bot. 84. 1793. (Section Cordatae).

DERIVATION.—With the appearance of a pear.

OTHER COMMON NAME.—†Washington thorn.

RANGE.—Virginia to Kentucky, southern Illinois, and Missouri, south to Arkansas and Florida. Escaping from cultivation and naturalized in Pennsylvania, Delaware, and elsewhere in northeastern States.

At one time known as *Crataegus cordata* (Mill.) Ait., which was based upon an unidentified name, as listed above under the introduction to the genus.

Crataegus piperi Britton, see **C. columbiana** Howell

Crataegus platycarpa Sarg., see note under **C. mackenzii** Sarg.

Crataegus poliophylla Sarg. ———

†*Crataegus poliophylla* Sarg., Arnold Arboretum Jour. 3: 185. 1922. (Section Virides).

DERIVATION.—With rosemarylike leaves, or with gray or hoary leaves; the leaves being whitish woolly when young.

RANGE.—Eastern Texas.

Crataegus populifolia Walt., see **C. phaenopyrum** (L. f.) Med.

Crataegus populnea Ashe ———

Crataegus populnea Ashe, Carnegie Mus. Ann. 1: 395. 1902. (Section Silvicolae).
†*Crataegus diffusa* Sarg., Rochester Acad. Sci. Proc. 4: 103. 1903.

DERIVATION.—Like a poplar.

COMMON NAME.—Gruber thorn.

RANGE.—New York to Michigan, south to Ohio and Pennsylvania.

Crataegus porteri Britton **Porter hawthorn**

Crataegus porteri Britton, N. Y. Bot. Gard. Bul. 1: 448. 1900. (Section Pruinosae).
Crataegus porteri var. *caerulescens* (Sarg.) Palmer, Brittonia 5: 448. 1946.

DERIVATION.—Named for Thomas Conrad Porter (1822-1901), botanist of Lafayette College and one of the discoverers.

RANGE.—Eastern Massachusetts and in Pennsylvania and adjacent Ohio.

An arborescent shrub or a tree 10 to 13 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 792. 1950).

Crataegus pratensis Sarg., see **C. peoriensis** Sarg.

Crataegus pringlei Sarg. **Pringle hawthorn**

†*Crataegus pringlei* Sarg., Rhodora 3: 21. 1901. (Section Coccineae).

†*Crataegus lobulata* Sarg., Rhodora 3: 22. 1901.

Crataegus pringlei var. *exclusa* (Sarg.) Eggl., Rhodora 10: 82. 1908.

Crataegus pringlei var. *lobulata* (Sarg.) Eggl., Rhodora 10: 82. 1908.

DERIVATION.—Named for its discoverer, Cyrus Guernsey Pringle (1838-1911), American botanist and horticulturist.

OTHER COMMON NAME.—Pringle thorn.

RANGE.—New Hampshire, Vermont, and Massachusetts, west to New York, southern Ontario, and northern Illinois.

Crataegus pruinosa (H. L. Wendl.) K. Koch **frosted hawthorn**

Mespilus pruinosa H. L. Wendl., Flora 6: 701. 1823.

†*Crataegus pruinosa* (H. L. Wendl.) K. Koch, Hort. Dendrol., 168. 1853. (Section Pruinosae).

Crataegus horridula Sarg., Mich. Geol. Surv. Rpt. 1906; 526. 1907.

Crataegus pruinosa var. *latisepala* (Ashe) Eggl., Rhodora 10: 81. 1908.

†*Crataegus mariettensis* Sarg., Arnold Arboretum Jour. 3: 194. 1922.

Crataegus pruinosa var. *dissona* (Sarg.) Eggl. in House, N.Y. State Mus. Bul. 254: 414. 1924.

Crataegus pruinosa var. *brachypoda* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 562. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.

Crataegus pruinosa var. *delawarensis* (Sarg.) Palmer, Brittonia 5: 487. 1946.

DERIVATION.—With a frostlike bloom, referring to the fruit.

OTHER COMMON NAME.—waxy-fruited thorn.

RANGE.—Newfoundland and Quebec, west to Wisconsin, south to northern Arkansas and North Carolina.

Crataegus punctata Jacq. **dotted hawthorn**

†*Crataegus punctata* Jacq., Hort. Vindob. 1: 10, pl. 28. 1770. (Section Punctatae).

Crataegus punctata α *rubra* Ait., Hort. Kew. 2: 170. 1789.

Crataegus punctata β *aurea* Ait., Hort. Kew. 2: 170. 1789.

†*Crataegus punctata* var. *xanthocarpa* (Med.) Lav., Arb. Kew. 1: 53, pl. 16. 1880.

†*Crataegus punctata* var. *canescens* Britton, Torrey Bot. Club Bul. 21: 231. 1894.

†*Crataegus pausiaca* Ashe, Carnegie Mus. Ann. 1: 390. 1902.

†*Crataegus punctata* var. *microphylla* Sarg., Acad. Nat. Sci. Phila. Proc. 62: 159. 1910.

Crataegus punctata var. *nitidula* (Sarg.) Farwell, Amer. Midland Nat. 12: 66. 1930.

Crataegus punctata var. *pausiaca* (Ashe) Palmer, Brittonia 5: 483. 1946.

DERIVATION.—Dotted, referring to the fruits.

OTHER COMMON NAMES.—dotted haw, †dotted thorn, large-fruited thorn, white thorn.

RANGE.—Newfoundland, southern Quebec, and southern Ontario, west to southern Michigan and southeastern Minnesota, south to Iowa, Kentucky, North Carolina, and northern Georgia.

Crataegus kellermanii Sarg. (Trees and Shrubs 2: 239. 1913), of Ohio, is perhaps a hybrid between *C. punctata* and a species of Section Pruinosae, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 780. 1950).

†*Crataegus silvestris* Sarg. (Ont. Nat. Sci. Bul. 4: 15. 1908), similar to *C. kellermanii* and found near London, Ontario, was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 780. 1950).

Crataegus celsa Sarg. (N. Y. State Mus. Bul. 122: 31. 1908), of southern Ontario and New York, is perhaps a hybrid between *C. punctata* and *C. succulenta*, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 780. 1950).

Crataegus putnamiana Sarg. — Putnam hawthorn

Crataegus putnamiana Sarg., Arnold Arboretum Jour. 4: 102. 1923. (Section Coccineae).

DERIVATION.—Named in honor of Rufus Putnam (1738-1824), American general and pioneer settler of Ohio, who in 1788 laid out Marietta, the type locality.

RANGE.—Southern Ohio, southern Indiana, southern Illinois, and northern Kentucky.

A tree up to 26 to 32 feet high or sometimes an arborescent shrub, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 795. 1950).

Crataegus pyracanthoides Beadle — ———

Crataegus pyracanthoides Beadle, Biltmore Bot. Studies 1: 136. 1902. (Section Crus-galli).

†*Crataegus arborea* Beadle, Biltmore Bot. Studies 1: 137. 1902.

†*Crataegus limnophila* Sarg., Arnold Arboretum Jour. 3: 3. 1922.

Crataegus pyracanthoides var. *arborea* (Beadle) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 599. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

Crataegus pyracanthoides var. *limnophila* (Sarg.) Palmer, Arnold Arboretum Jour. 13: 420. 1932.

DERIVATION.—Resembling *Pyracantha*, firethorn.

COMMON NAMES.—Montgomery hawthorn, Wakulla hawthorn.

RANGE.—Coastal Plain from eastern Virginia to northern Florida, Alabama, and Louisiana, north in Mississippi Valley to Missouri and Indiana.

†*Crataegus ohioensis* Sarg. (Arnold Arboretum Jour. 3: 183. 1922), of Franklin County, Ohio, was recorded as an unnumbered binomial of very limited occurrence by Palmer (in Fern., Gray's Man. Bot. Ed. 8, 776. 1950).

Crataegus pyriformis Britton, see note under **C. lanuginosa** Sarg.

Crataegus quercina Ashe, see **C. texana** Buckl.

Crataegus ravenelii Sarg. **Ravenel hawthorn**

†*Crataegus ravenelii* Sarg., Bot. Gaz. 33: 122. 1902. (Section Flavae).

DERIVATION.—Named for Henry William Ravenel (1814-1887), botanist of South Carolina and authority on fungi and other lower plants, who first collected a specimen of it in 1880.

OTHER COMMON NAME.—big-fruited haw.

RANGE.—South Carolina, Georgia and northern Florida.

Crataegus recurva Beadle ———

†*Crataegus recurva* Beadle, Biltmore Bot. Studies 1: 106. 1902. (Section Flavae).

DERIVATION.—Recurved, perhaps referring to the pendulous branches.

RANGE.—Northern Florida.

Crataegus redolens Ashe, see **C. mollis** Scheele

Crataegus regalis Beadle **Piedmont hawthorn**

†*Crataegus regalis* Beadle, Biltmore Bot. Studies 1: 134. 1902. (Section Crus-galli).

Crataegus regalis var. *paradoxa* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 559. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

DERIVATION.—Royal.

RANGE.—North Carolina to southern Indiana, Missouri and southeastern Kansas, south to Arkansas, northern Alabama, and northwestern Georgia.

Crataegus reverchonii Sarg. **Reverchon hawthorn**

Crataegus reverchoni Sarg., Trees and Shrubs 1: 55, pl. 28. 1903. (Section Crus-galli).

Crataegus discolor Sarg., Mo. Bot. Gard. Ann. Rpt. 19: 44. 1908.

Crataegus jasperensis Sarg., Mo. Bot. Gard. Ann. Rpt. 19: 61. 1908.

?*Crataegus rotunda* Sarg., Mo. Bot. Gard. Ann. Rpt. 19: 59. 1908.

Crataegus stevensiana Sarg., Arnold Arboretum Jour. 4: 99. 1923.

Crataegus reverchoni var. *discolor* (Sarg.) Palmer, Brittonia 5: 482. 1946.

Crataegus reverchoni var. *stevensiana* (Sarg.) Palmer, Brittonia 5: 482. 1946.

DERIVATION.—Named for Julien Reverchon (1837-1905), Texan of French birth, who collected plants in Texas.

OTHER COMMON NAME.—Reverchon thorn.

RANGE.—Missouri and eastern Kansas, south to southwestern Oklahoma, Texas south to central part, and Arkansas.

A shrub or tree to 26 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 776. 1950).

Crataegus ridgwayi Sarg., see note under **C. mollis** Scheele

Crataegus rivularis Nutt. **river hawthorn**

†*Crataegus rivularis* Nutt. in Torr. & Gray, Fl. No. Amer. 1: 464. 1840. (Section Douglasianae).

DERIVATION.—Of rivulets, or small streams.

OTHER COMMON NAME.—black haw.

RANGE.—Western Wyoming, southeastern Idaho, and northeastern Nevada, south to northern Arizona and northern New Mexico.

Crataegus roanensis Ashe, see **C. macrosperma** Ashe

Crataegus robesoniana Sarg., see **C. pedicellata** Sarg.

Crataegus robur Beadle ———

†*Crataegus robur* Beadle, Biltmore Bot. Studies 1: 69. 1902. (Section Pulcherrimae).

DERIVATION.—Oak.

RANGE.—Northwestern Florida.

Crataegus rotunda Sarg., see **C. reverchonii** Sarg.

Crataegus rotundifolia Moench, see **C. chrysocarpa** Ashe

Crataegus rubella Beadle ———

Crataegus rubella Beadle, Bot. Gaz. 30: 344. 1900. (Section Intricatae).

DERIVATION.—Reddish.

RANGE.—Pennsylvania to southern Indiana, south to Kentucky, Alabama, and North Carolina.

An irregularly branched shrub 3 to 13 feet high or rarely a tree up to 16 feet high, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 772. 1950). Not in 1927 Check List and previously regarded as a shrub.

Crataegus rufula Sarg., see **C. aestivalis** (Walt.) Torr. & Gray

Crataegus rugosa Ashe ———

Crataegus rugosa Ashe, Elisha Mitchell Sci. Soc. Jour. 17 (1): 5. 1900. (Section Pruinosae).

DERIVATION.—Rugose, or wrinkled.

COMMON NAME.—Fretz thorn.

RANGE.—Vermont, New York, and Pennsylvania, west to Indiana and Iowa, south to northern Missouri and North Carolina.

An arborescent shrub or tree up to 20 to 26 feet high according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 792. 1908).

Crataegus sabineana Ashe **Sabine hawthorn**

Crataegus sabineana Ashe, Charleston Mus. Quart. 1(2): 29. 1925. (Section Crus-galli).

DERIVATION.—Of Sabine, from its distribution along Sabine River.

RANGE.—Western Louisiana and eastern Texas.

A tree 16 to 23 feet high.

Crataegus saligna Greene **willow hawthorn**

†*Crataegus saligna* Greene, Pittonia 3: 99. 1896. (Section Brevispinae).

DERIVATION.—Of willow, from the slender, drooping, willowy branches.

OTHER COMMON NAME.—†willow thorn.

RANGE.—Mountains of Colorado.

Crataegus sargentii Beadle **Sargent hawthorn**

†*Crataegus sargenti* Beadle, Bot. Gaz. 28: 407. 1899. (Section Intricatae).

DERIVATION.—Named for Charles Sprague Sargent (1841-1927), American dendrologist, founder and director of the Arnold Arboretum and authority on *Crataegus,* who first collected this species.

RANGE.—Southeastern Tennessee, northwestern Georgia, and northern Alabama.

Crataegus scabrida Sarg., see **C. brainerdii** Sarg.

Crataegus schizophylla Eggl., see note under **C. permixta** Palmer

Crataegus senta Beadle ———

†*Crataegus senta* Beadle, Bot. Gaz. 30: 341. 1900. (Section Flavae).

DERIVATION.—Thorny.

RANGE.—Western North Carolina.

Crataegus sera Sarg., see **C. mollis** Scheele

Crataegus sertata Sarg., see **C. pedicellata** Sarg.

Crataegus sheridana A. Nels., see **C. chrysocarpa** Ashe

Crataegus sicca Sarg., see note under **C. margaretta** Ashe

Crataegus signata Beadle **pineland hawthorn**

†*Crataegus signata* Beadle, Biltmore Bot. Studies 1: 42. 1901. (Section Crus-galli).

DERIVATION.—Marked, designated.

RANGE.—Southern Alabama and Mississippi.

Crataegus silvestris Sarg., see note under **C. punctata** Jacq.

Crataegus silvicola Beadle, see **C. iracunda** Beadle

Crataegus simulata Sarg., see note under **C. calpodendron (Ehrh.)** Med.

Crataegus sordida Sarg., see **C. collina** Chapm.

Crataegus spathulata Michx. **littlehip hawthorn**

†*Crataegus spathulata* Michx., Fl. Bor.-Amer. 1: 288. 1803. (Section Microcarpae).

DERIVATION.—Wedge-shaped, referring to the leaves.

OTHER COMMON NAMES.—Small-fruited thorn, spathulate thorn.

RANGE.—Virginia, west to southern Missouri and Oklahoma, south to eastern and central Texas and northern Florida.

Crataegus stenosepala Sarg. ———

†*Crataegus stenosepala* Sarg., Arnold Arboretum Jour. 3: 186. 1922. (Section Virides).

DERIVATION.—Narrow-sepaled.

RANGE.—Southeastern Texas.

Crataegus stevensiana Sarg., see **C. reverchonii** Sarg.

Crataegus streeterae Sarg., see **C. macrosperma** Ashe

Crataegus sublobulata Sarg. **San Augustine hawthorn**

†*Crataegus sublobulata* Sarg., Arnold Arboretum Jour. 3: 4. 1922. (Section Crus-galli).

DERIVATION.—Sublobulate, or slightly small-lobed, referring to the deeply toothed leaves.

OTHER COMMON NAME.—Augustine hawthorn (SPN).

RANGE.—Eastern Texas.

Crataegus submollis Sarg. **Quebec hawthorn**

†*Crataegus submollis* Sarg., Bot. Gaz. 31: 7. 1901 (Jan. 21). (Section Molles).

†*Crataegus champlainensis* Sarg., Rhodora 3: 20. 1901 (Feb. 1).

DERIVATION.—Somewhat soft-hairy.

OTHER COMMON NAME.—Emerson thorn.

RANGE.—Nova Scotia, Maine, southern Quebec, and southern Ontario to New York and Massachusetts.

Crataegus suborbiculata Sarg. ———

†*Crataegus suborbiculata* Sarg., Rhodora 3: 72. 1901. (Section Punctatae).

†*Crataegus hudsonica* Sarg., Man. Trees No. Amer. 457, fig. 373. 1905.

COMMON NAME.—Caughuawaga thorn.

RANGE.—Southern Quebec, southern Ontario, New York and Connecticut.

Crataegus subpilosa Sarg. **Eureka Springs hawthorn**

†*Crataegus subpilosa* Sarg., Arnold Arboretum Jour. 3: 6. 1922. (Section Crus-galli).

DERIVATION.—Slightly soft-hairy, referring to the inflorescence.

RANGE.—Northwestern Arkansas.

Crataegus succulenta Schrad. **fleshy hawthorn**

Mespilus succulenta Schrad. ex Sweet, Hort. Brit. Ed. 2, 176. 1830; *nomen subnudum.*

†*Crataegus succulenta* Schrad. ex Link, Grundr. Kraüt. Vorl. (Handb., Th. 2) 3: 78. 1831. (Section Macracanthae).

†*Crataegus macracantha* Lodd. ex Loud., Arb. Frut. Brit. 2: 819, fig. 572, pl. 105. 1838.

Crataegus coccinea L. var. *macracantha* (Lodd.) Dudley, Cornell Univ. Bul. 2: 33. 1886.

†*Crataegus illinoiensis* Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 76. 1900.

Crataegus neo-fluvialis Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 71. 1900.

Crataegus pertomentosa Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 70. 1900.

Crataegus colorado Ashe, N. C. Expt. Sta. Bul. 175: 110. 1900.

Crataegus occidentalis Britton, N. Y. Bot. Gard. Bul. 1: 448. 1900.

†*Crataegus gemmosa* Sarg., Bot. Gaz. 33: 119. 1902.

Crataegus crux Ashe, Elisha Mitchell Sci. Soc. Jour. 18: 17. 1902.

†*Crataegus vegeta* Sarg., Bot. Gaz. 35: 396. 1903.

†*Crataegus gaultii* Sarg., Bot. Gaz. 35: 397. 1903.

Crataegus dumicola Sarg., Rhodora 5: 183. 1903.

Crataegus fertilis Sarg., Rhodora 5: 182. 1903.

†*Crataegus micracantha* Sarg., Trees and Shrubs 1: 69, pl. 35. 1903. (In the 1927 Check List as "*micrantha,*" the name of a different species.)

Crataegus coloradensis A. Nels., Biol. Soc. Wash. Proc. 17: 175. 1904.

†*Crataegus virilis* Sarg., Ont. Nat. Sci. Bul. 4: 68. 1908.

Crataegus coloradoides Ramaley, Bot. Gaz. 46: 383, fig. 2. 1908.

†*Crataegus victorinii* Sarg., Arnold Arboretum Jour. 3: 203. 1922.

Crataegus succulenta var. *macracantha* (Lodd.) Eggl. in House, N. Y. State Mus. Bul. 243/244: 65. 1923; as "*macrantha.*" Eggl. in House, N. Y. State Mus. Bul. 254: 428. 1924; as "*macracantha.*"

Crataegus succulenta var. *rhombifolia* (Sarg.) Eggl. in House, N. Y. State Mus. Bul. 243/244: 65. 1923.

Crataegus glandulosa Moench var. *michiganensis* (Ashe) Farwell, Amer. Midland Nat. 12: 65. 1930.

Crataegus glandulosa var. *minor* (Loud.) Farwell, Amer. Midland Nat. 12: 66. 1930.

Crataegus glandulosa var. *neofluvialis* (Ashe) Farwell, Amer. Midland Nat. 12: 66. 1930.

Crataegus succulenta var. *membranacea* (Sarg.) Palmer in Dole, Fl. Vt. Ed. 3, 155. 1937.

Crataegus succulenta var. *neofluvialis* (Ashe) Palmer in Dole, Fl. Vt. Ed. 3, 155. 1937.

Crataegus succulenta var. *pertomentosa* (Ashe) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 565. 1935. Palmer in Steyerm., Rhodora 40: 133. 1938.

Crataegus succulenta var. *michiganensis* (Ashe) Palmer, Brittonia 5: 489. 1946.

Crataegus leucantha Laughlin, Chicago Acad. Sci., Nat. Hist. Misc. 110: 1. 1952.

DERIVATION.—Succulent, referring to the soft fruit.

OTHER COMMON NAME.—long-spined thorn.

RANGE.—Nova Scotia, Maine, southern Quebec and southern Ontario, west to Michigan, Minnesota, Manitoba, and Montana, south to Utah, Colorado, Kansas, Missouri, Tennessee and North Carolina.

Crataegus laxiflora Sarg. (Bot. Gaz. 35: 400. 1903), a tree 23 to 26 feet high of local range in northern Illinois, was accepted as a species related to *C. succulenta* by Palmer (in Fern., Gray's Man. Ed. 8, 799. 1950).

†*Crataegus integriloba* Sarg. (Rhodora 3: 78. 1901), of southern Quebec, is perhaps a hybrid between species of Sections Macracanthae and Punctatae, according to Palmer (in Fern., Gray's Man. Ed. 8, 799. 1950).

Crataegus laetifica Sarg. (Acad. Nat. Sci. Phila. Proc. 62: 250. 1910), an arborescent shrub or a small tree from Pennsylvania and Ohio, is probably a hybrid between species of Sections Macracanthae and Crus-galli, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 800–801. 1950).

†*Crataegus nuda* Sarg. (Arnold Arboretum Jour. 3: 10. 1922), from southern Missouri (Taney County), is perhaps a hybrid between a variety of *C. succulenta* and a species of Section Crus-galli, according to Palmer (in Fern., Gray's Man. Bot. Ed. 8, 801. 1950).

Crataegus sutherlandensis Sarg. **Sutherland hawthorn**

†*Crataegus sutherlandensis* Sarg., Arnold Arboretum Jour. 3: 192. 1922. (Section Virides).

†*Crataegus sutherlandensis* var. *spinescens* Sarg., Arnold Arboretum Jour. 3: 193. 1922.

DERIVATION.—Named for Sutherland Springs, Texas, where it was discovered.

RANGE.—South central Texas (Wilson County).

Crataegus taetrica Sarg., see **C. basilica** Beadle

Crataegus tantula Sarg., see note under **C. crus-galli** L.

Crataegus tardipes Sarg., see **C. holmesiana** Ashe

Crataegus tatnalliana Sarg., see **C. pennsylvanica** Ashe

Crataegus tenax Ashe, see **C. fontanesiana** (Spach) Steud.

Crataegus tenuifolia Britton, see **C. holmesiana** Ashe

Crataegus **tersa** Beadle **Opelousas hawthorn**

†*Crataegus tersa* Beadle, Biltmore Bot. Studies 1: 129. 1902. (Section Crus-galli).

DERIVATION.—Literally, "rubbed off," or neat, referring to the leaves which at first are hairy and later become smooth and shining on the upper surface.

RANGE.—Louisiana and Mississippi.

Crataegus **texana** Buckl. **Texas hawthorn**

†*Crataegus texana* Buckl., Acad. Nat. Sci. Phila. Proc. 1861 [v. 13]: 454. 1862. (Section Molles).

†*Crataegus berlandieri* Sarg., Bot. Gaz. 31: 230. 1901.

†*Crataegus quercina* Ashe, Elisha Mitchell Sci. Soc. Jour. 18(1): 27. 1902.

DERIVATION.—Of Texas, the range of the species.

RANGE.—Eastern, central, and southern Texas.

Crataegus tomentosa L., see **C. calpodendron** (Ehrh.) Med.

Crataegus **tortilis** Ashe ———

Crataegus tortilis Ashe, Elisha Mitchell Sci. Soc. Jour. 18(1): 19. 1902. (Section Tenuifoliae).

†*Crataegus depilis* Sarg., Man. Trees No. Amer. 419, fig. 338. 1905.

DERIVATION.—Twisted.

RANGE.—Wisconsin and northern Illinois.

Crataegus **torva** Beadle ———

Crataegus torva Beadle, Biltmore Bot. Studies 1: 130. 1902. (Section Crus-galli).

DERIVATION.—Of wild, fierce appearance, perhaps referring to the many large spines.

COMMON NAME.—he hog-apple.

RANGE.—North Carolina, Georgia, Alabama, and Louisiana.

A large shrub or small tree 10 to 13 feet high.

Crataegus **tracyi** Ashe **Tracy hawthorn**

Crataegus tracyi Ashe ex Eggl., Torrey Bot. Club Bul. 36: 639. 1909. (Section Molles).

†*Crataegus montivaga* Sarg., Arnold Arboretum Jour. 1: 247. 1920. (As "*montegava*" in the 1927 Check List.)

DERIVATION.—Named for Prof. C. Tracy, botanist who collected the type.

RANGE.—Trans-Pecos Texas.

Crataegus transmississippiensis Sarg., see **C. noelensis** Sarg.

Crataegus treleasei Sarg., see note **C. lanuginosa** Sarg.

Crataegus trianthophora Sarg., see **C. uniflora** Muenchh.

Crataegus triflora Chapm. **threeflower hawthorn**

Crataegus triflora Chapm., Fl. South. U. S. Ed. 2, Sup. 2, 684. 1892. (Section Triflorae).

DERIVATION.—Three-flowered.

RANGE.—Georgia, Alabama, and Mississippi.

A large shrub or small tree 7 to 23 feet tall.

Crataegus tripartita Sarg. ———

Crataegus tripartita Sarg., Arnold Arboretum Jour. 3: 188. 1922. (Section Virides).

DERIVATION.—Three-parted, referring to the deeply 3-lobed leaves on vigorous twigs.

RANGE.—Southeastern Texas.

A shrub with several stems or a round-topped tree 20 to 23 feet high.

Crataegus tristis Beadle ———

†*Crataegus tristis* Beadle, Biltmore Bot. Studies 1: 84. 1902. (Section Flavae).

DERIVATION.—Sad, doubtless referring to the drooping branches.

RANGE.—Northwestern Georgia.

Crataegus triumphalis Sarg. ———

†*Crataegus triumphalis* Sarg., Trees and Shrubs 2: 236. 1913. (Section Crus-galli).

DERIVATION.—Triumphal.

RANGE.—Southwestern Arkansas and eastern Texas.

Crataegus uniflora Muenchh. **one-flower hawthorn**

Crataegus uniflora Muenchh., Hausvater 5: 147. 1770. (Section Parvifoliae).

Crataegus trianthophora Sarg., Trees and Shrubs 2: 11, pl. 106. 1907.

DERIVATION.—One-flowered.

OTHER COMMON NAME.—dwarf thorn.

RANGE.—Southern New York and Pennsylvania, west to southern Missouri, south to eastern Oklahoma, eastern Texas, and northern Florida.

Generally a low shrub 2 to 5 feet high. In Florida it becomes "a good-sized tree," according to W. A. Murrill (Ecology 23: 123. 1942) and a tree 12 feet high and 6 inches in diameter, according to West and Arnold (Native Trees Fla. 80. 1946). Sargent (Silva No. Amer. 4: 117-118, pl. 191. 1892) accepted it as rarely a bushy tree 10 to 12 feet high but afterwards did not include it as a tree.

Crataegus uniqua Sarg. ———

†*Crataegus uniqua* Sarg., Trees and Shrubs 2: 237. 1913. (Section Crus-galli).

†*Crataegus araioclada* Sarg., Arnold Arboretum Jour. 3: 5. 1922.

DERIVATION.—Unique.

RANGE.—Southwestern Arkansas, eastern Texas, and northwestern Louisiana.

Crataegus vailiae Britton, see note under **C. calpodendron** (Ehrh.) Med.

Crataegus vallicola Sarg., see note under **C. hannibalensis** Palmer

Crataegus vegeta Sarg., see **C. succulenta** Schrad.

Crataegus velutina Sarg., see **C. viridis** L.

Crataegus venusta Beadle ———

†*Crataegus venusta* Beadle, Bot. Gaz. 30: 338. 1900. (Section Intricatae).
DERIVATION.—Charming.
RANGE.—Northern Alabama.

Crataegus verruculosa Sarg. ———

†*Crataegus verruculosa* Sarg., Man. Trees No. Amer. 394, fig. 313. 1905. (Section Punctatae).
DERIVATION.—Minutely warty.
RANGE.—Kentucky to Missouri and Arkansas.

Crataegus viburnifolia Sarg. **viburnum hawthorn**

†*Crataegus viburnifolia* Sarg., Trees and Shrubs 2: 145, pl. 159. 1911. (Section Molles).
DERIVATION.—Viburnum-leaved.
RANGE.—Eastern Texas.

Crataegus victorinii Sarg., see **C. succulenta** Schrad.

Crataegus villipes (Ashe) Ashe, see **C. holmesiana** Ashe

Crataegus viridis L. **green hawthorn**

†*Crataegus viridis* L., Sp. Pl. 476. 1753. (Section Virides).
†*Crataegus arborescens* Ell., Sketch Bot. S.-Car. Ga. 1: 550. 1821.
†*Crataegus atrorubens* Ashe, Elisha Mitchell Sci. Soc. Jour. 16: 78. 1900.
†*Crataegus ovata* Sarg., Man. Trees No. Amer. 402, fig. 321. 1905.
†*Crataegus velutina* Sarg., Trees and Shrubs 2: 238. 1913.
Crataegus viridis var. *atrorubens* (Ashe) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 561. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.
Crataegus viridis var. *lanceolata* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 561. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.
Crataegus viridis var. *lutensis* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 561. 1935; Palmer in Steyerm., Rhodora 40: 133. 1938.

Crataegus viridis var. *ovata* (Sarg.) Palmer in Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 561. 1935; Palmer in Steyerm., Rhodora 40: 132. 1938.

DERIVATION.—Green.

OTHER COMMON NAMES.—†green haw, green thorn, southern thorn.

RANGE.—Coastal Plain from southeastern Virginia to northern Florida and eastern Texas, north in Mississippi Valley to eastern Oklahoma, southeastern Kansas, Missouri, and southwestern Indiana.

Crataegus virilis Sarg., see **C. succulenta** Schrad.

Crataegus visenda Beadle ———

†*Crataegus visenda* Beadle, Biltmore Bot. Studies 1: 79. 1902. (Section Virides).

DERIVATION.—Worth-seeing.

RANGE.—Northwestern Florida.

Crataegus vulsa Beadle ———

†*Crataegus vulsa* Beadle, Biltmore Bot. Studies 1: 39. 1901. (Section Virides).

DERIVATION.—Beardless, apparently referring to the glabrescent leaves and twigs.

RANGE.—Northwestern Georgia and northeastern Alabama.

Crataegus warneri Sarg. **Warner hawthorn**

†*Crataegus warneri* Sarg., Arnold Arboretum Jour. 3: 184. 1922. (Section Crus-galli?).

DERIVATION.—Named for R. S. Warner, who collected it.

RANGE.—Eastern Texas.

Crataegus ×*whitakeri* Sarg., see note under **C. calpodendron** (Ehrh.) Med.

Crataegus williamsii Eggl. **Williams hawthorn**

Crataegus williamsii Eggl., Torrey Bot. Club Bul. 36: 641. 1909. (Section Rotundifoliae).

DERIVATION.—Named for its discoverer Robert Statham Williams (1859-1945), American botanist and authority on mosses.

RANGE.—Northwestern Montana.

A round-topped shrub or tree up to 16 feet high.

Crataegus youngii Sarg. **Youngs hawthorn**

†*Crataegus youngii* Sarg., Arnold Arboretum Jour. 4: 105. 1923. (Section Cordatae).

DERIVATION.—Named for its discoverer, Robert C. Young.

RANGE.—Southeastern Virginia, North Carolina, and northern South Carolina.

Crescentia L. (Family Bignoniaceae) **calabash-tree**

Crescentia L., Sp. Pl. 626. 1753; Gen. Pl. Ed. 5, 274. 1754.

DERIVATION.—In commemoration of Pietro de' Crescenzi (1233-1320), early Italian writer on agriculture, whose works were printed afterwards in 1471 and later.

Crescentia L., see also **Enallagma** (Miers) Baill.

Crescentia cujete L. **common calabash-tree**

Crescentia cujete L., Sp. Pl. 626. 1753.

DERIVATION.—From the native common name in Yucatán, Mexico.

RANGE.—Florida Keys. Also in West Indies and from southern Mexico through Central America to South America.

A tree up to about 36 feet high, according to Small (Man. Southeast. Fl. 1242. 1933). First collected at Key West, Fla., more than a century ago by John Loomis Blodgett and recorded by Nuttall (No. Amer. Sylva 3: 71–73, pl. 103. 1849). This genus and species were not in the 1927 Check List.

Crossopetalum P. Br. (Family Celastraceae) **crossopetalum**

Crossopetalum P. Br., Civ. Nat. Hist. Jamaica 145, pl. 16, fig. 1. 1756.

†*Rhacoma* L., Syst. Nat. Ed. 10, 2: 896, 1361. 1759. *Nom. conserv. propos.*, Little, Madroño 7: 246. 1944; Brittonia 7: 46. 1949.

DERIVATION.—Fringe-petaled.

OTHER COMMON NAME.—rhacoma (SPN).

Rhacoma L., the name in universal usage for this genus, has been proposed for conservation. However, because a jury of American taxonomists opposed the proposal, *Crossopetalum* P. Br. is adopted here pending action by the International Committee concerned.

Crossopetalum rhacoma Crantz **Florida crossopetalum**

†*Rhacoma crossopetalum* L., Syst. Nat. Ed. 10, 2: 896. 1759; as "*crossopet.*"

Crossopetalum rhacoma Crantz, Inst. Rei Herbar. 2: 321. 1766.

Crossopetalum austrinum Gardner in Small, Fl. Southeast. U. S. 736, 1334. 1903.

DERIVATION.—A Greek name meaning rags and used by Pliny for some Old World plant.

OTHER COMMON NAME.—maravedi rhacoma (SPN).

RANGE.—Southern Florida, including Florida Keys. Also in West Indies. Collected at Bermuda in 1875 but not afterwards.

Commonly a shrub but reported to become a small tree.

Cupania L. (Family Sapindaceae) **cupania**

†*Cupania* L., Sp. Pl. 200. 1753; Gen. Pl. Ed. 5, 93. 1754.

DERIVATION.—In commemoration of Francis Cupani (1657-1710), Sicilian physician and botanist.

Cupania glabra Sw. **Florida cupania**

†*Cupania glabra* Sw., Nov. Gen. Sp. Pl. Prodr. 61. 1788.

DERIVATION.—Glabrous, or hairless.

RANGE.—Big Pine Key, near Key West, Fla., where it is very rare. Discovered there more than a century ago and thought exterminated until rediscovered in 1921 by John Kunkel Small, according to the 1927 Check List (p. 197). Recorded from Big Pine Key also by Small (Man. Southeast. Fl. 829. 1933) and by Buswell (Native Trees and Palms So. Fla. Miami Univ. Bul. 19(6): 31. 1945). Spreading slightly and less rare there in 1952. Also in Cuba and Jamaica and from Mexico (Veracruz to Sinaloa southward) south in Central America to Costa Rica.

Cupressus L. (Family Pinaceae) **†cypress**

†*Cupressus* L., Sp. Pl. 1002. 1753; Gen. Pl. Ed. 5, 435. 1754.

DERIVATION.—Classical Greek and Latin name of Italian cypress, *Cupressus sempervirens* L.

REFERENCES.—Camus, A. Les cyprès (genre *Cupressus*). Monographie, systématique, anatomie, culture, principaux usages. 106 pp., illus. 1914. (*In* Encyclopédie Économique de Sylviculture, v. 2.)

Wolf, Carl B., and Wagener, Willis W. The New World cypresses. El Aliso v. 1, 444 pp., illus. 1948.

Cupressus L., see also **Chamaecyparis** Spach.

Cupressus abramsiana C. B. Wolf, see **C. goveniana** Gord.

***Cupressus arizonica** Greene **†Arizona cypress**

†*Cupressus arizonica* Greene, Torrey Bot. Club Bul. 9: 64. 1882.

Cupressus arizonica var. *bonita* Lemm., Handb. W.-Amer. Cone-Bearers. Ed. 3, 76. 1895.

†*Cupressus glabra* Sudw., Amer. Forestry 16: 88, fig. 1910.

Cupressus nevadensis Abrams, Torreya 19: 92. 1919.

Cupressus macnabiana nevadensis (Abrams) Abrams, Illus. Fl. Pacif. States 1: 73. 1923.

Cupressus stephensonii C. B. Wolf, El Aliso 1: 125, figs. 3 G-I, 9 B, 26. 1948.

DERIVATION.—Of Arizona, where it was first collected.

OTHER COMMON NAMES.—Arizona smooth cypress, Cuyamaca cypress, Piute cypress, rough-bark Arizona cypress, †smooth cypress, cedro.

RANGE.—Trans-Pecos Texas (Chisos Mountains, Brewster County), southwestern New Mexico, southeastern to central Arizona, and southern California (Kern and San Diego Counties). Also in northern Mexico (Sonora to Coahuila and Durango).

Cupressus bakeri Jeps. **Modoc cypress**

Cupressus bakerii Jeps., Fl. Calif. 1: 61. 1909.

Cupressus macnabiana var. *bakeri* (Jeps.) Jeps., Man. Fl. Pl. Calif. 58. 1923.

Cupressus bakeri subsp. *matthewsii* C. B. Wolf, El Aliso 1: 83, figs. 3 C, 7 B, 22. 1948.

DERIVATION.—Named for Milo S. Baker, California botanist, who discovered this species in 1898.

OTHER COMMON NAMES.—Baker cypress, Siskiyou cypress.

RANGE.—Southwestern Oregon (Josephine County) and northern California (Siskiyou and Shasta Counties).

In the 1927 Check List included as a synonym of *Cupressus macnabiana* A. Murr.

Cupressus forbesii Jeps., see **C. guadalupensis** S. Wats.

Cupressus glabra Sudw., see **C. arizonica** Greene

Cupressus goveniana Gord. **†Gowen cypress**

†*Cupressus goveniana* Gord., Hort. Soc. London Jour. 4: 295, fig. 1849.

Cupressus goveniana var. *pigmaea* Lemm., Handb. W.-Amer. Cone-bearers. Ed. 3, 77. 1895; as "*pigm a,*" corrected in ink to "*pigmaea.*"

Cupressus pygmaea (Lemm.) Sarg., Bot. Gaz. 31: 239. 1901.

†*Cupressus sargentii* Jeps., Fl. Calif. 1: 61. 1909.

Cupressus goveniana subsp. *pigmaea* (Lemm.) A. Camus, Cyprès 50. 1914.

Cupressus sargentii var. *duttonii* Jeps., Trees Calif. Ed. 2, 200. 1923 (Sept. 1).

Cupressus abramsiana C. B. Wolf, El Aliso 1: 215, figs. 4 C, A 15-17, 13 B, 36. 1948.

DERIVATION.—Named in compliment to James Robert Gowen, secretary of the Royal Horticultural Society of London and a noted developer of rhododrendron varieties.

OTHER COMMON NAMES.—Mendocino cypress, pygmy cypress, Santa Cruz cypress, †Sargent cypress.

RANGE.—Coast Ranges of California (Colusa and Mendocino Counties southeast to Santa Barbara County).

Cupressus guadalupensis S. Wats. **†Tecate cypress**

†*Cupressus guadalupensis* S. Wats., Amer. Acad Arts and Sci. Proc. 14: 300. 1879.

Cupressus macrocarpa var. *guadaloupensis* (S. Wats.) Masters, Gard. Chron., Ser. 3, 18: 62, fig. 9. 1895.

Cupressus forbesii Jeps., Madroño 1: 75. 1922.

DERIVATION.—From Guadalupe Island, where it was first discovered.

OTHER COMMON NAMES.—Guadalupe cypress (SPN), Forbes cypress.

RANGE.—Southern California (Orange and San Diego Counties). Also in northwestern Lower California, Mexico, and Guadalupe Island off Pacific coast of Lower California.

Cupressus macnabiana A. Murr. **†MacNab cypress**

†*Cupressus macnabiana* A. Murr., Edinb. New Phil. Jour., New Ser., 1: 293, pl. 11. 1855; as *"M'Nabiana."*

DERIVATION.—Named in honor of James MacNab (1810–1878), a founder and president of the Edinburgh Botanical Society and curator of the Edinburgh Botanic Garden, who made horticultural collections in the United States in 1834.

RANGE.—Northern California (Shasta County to Amador and Somona Counties).

Cupressus macrocarpa Hartw. **†Monterey cypress**

Cupressus macrocarpa Hartw., Hort. Soc. London Jour. 2: 187. 1847; *nomen subnudum.*

†*Cupressus macrocarpa* Hartw. ex Gord., Hort. Soc. London Jour. 4: 296, illus. 1849.

DERIVATION.—From the "very large fruit."

RANGE.—California (Monterey County).

Cupressus nevadensis Abrams, see **C. arizonica** Greene

Cupressus pygmaea (Lemm.) Sarg., see **C. goveniana** Gord.

Cupressus sargentii Jeps., see **C. goveniana** Gord.

Cupressus sempervirens L., see under **Cupressus** L.

Cupressus stephensonii C. B. Wolf, see **C. arizonica** Greene

Cylindropuntia (Engelm.) Knuth, see **Opuntia** Mill.

Cynoxylon Raf., see **Cornus** L.

Cyrilla Garden (Family Cyrillaceae) **cyrilla**

†*Cyrilla* Garden ex L., Mant. Pl. 1: 5. 1767.

DERIVATION.—In honor of Domenico Cirillo (1734-1799), Italian physician, botanist, and patriot.

Cyrilla arida Small **Florida cyrilla**

Cyrilla arida Small, Torrey Bot. Club Bul. 51: 383. 1924.

DERIVATION.—Arid, from the dry inland dunes of white sand, the peculiar habitat of this species.

RANGE.—South-central Florida.

A small tree and perhaps also a shrub, according to Small (Torrey Bot. Club Bul. 51: 383. 1924; Man. Southeast. Fl. 812. 1933).

Cyrilla paryifolia Raf. **littleleaf cyrilla**

Cyrilla parvifolia Raf., Autik. Bot. 8. 1840.

Cyrilla parvifolia Shuttl. ex Nash., Torrey Bot. Club Bul. 23: 101. 1896.

Cyrilla racemiflora var. *parvifolia* (Shuttl.) Sarg., Arnold Arboretum Jour. 2: 166. 1921.

DERIVATION.—Small-leaved.

RANGE.—Coast of northwestern Florida.

A shrub 3 to 16 feet tall, according to Small (Man. Southeast. Fl. 812. 1933) but also arborescent, according to Joseph L. Stearns.

Cyrilla racemiflora L. **swamp cyrilla**

†*Cyrilla racemiflora* L., Mant. Pl. 1: 50. 1767.
Cyrilla racemiflora var. *subglobosa* Fern., Rhodora 46: 46, pl. 813, figs. 1-2. 1944.

DERIVATION.—Raceme-flowered, referring to the slender clusters bearing numerous small flowers.

OTHER COMMON NAMES.—American cyrilla (SPN), he-huckleberry, ironwood, †swamp ironwood, leatherwood, southern leatherwood, red titi, white titi.

RANGE.—Coastal Plain from southeastern Virginia to northern Florida and west to eastern Texas. Also in West Indies, in Oaxaca, Mexico, and northern South America.

Dalea Juss. (Family Leguminosae) **dalea**

†*Dalea* Juss., Gen. Pl. 355. 1789; *nomen conservandum.* Not *Dalea* Mill., Gard. Dict. Abridged. Ed. 4, v.1. 1754. Not *Dalea* P. Br., Civ. Nat. Hist. Jamaica 239. 1756. Not *Dalea* P. Br., Civ. Nat. Hist. Jamaica 314, pl. 34, fig. 1. 1756. Not *Dalea* Gaertn., Fruct. Sem. Pl. 1: 235, pl. 51, fig. 2. 1788.
Parosela Cav., Descr. Pl. 185. 1802; *nomen rejiciendum.*
Psorodendron Rydb., No. Amer. Fl. 24: 41. 1919.

DERIVATION.—In honor of Samuel Dale (1659-1739), English botanist and physician.

Dalea spinosa A. Gray **smokethorn**

†*Dalea spinosa* A. Gray, Amer. Acad. Arts and Sci. Mem., New Ser., 5: 315. 1855.
Parosela spinosa (A. Gray) Heller, Cat. No. Amer. Pl. Ed. 2, 7. 1900.
Psorodendron spinosum (A. Gray) Rydb., No. Amer. Fl. 24: 45. 1919.

DERIVATION.—Spiny, the leafless twigs ending in sharp spines.

OTHER COMMON NAMES.—smokethorn dalea (SPN), †indigobush, smoketree.

RANGE.—Southwestern Arizona and southeastern California, south in Mexico to Lower California and northwestern Sonora.

Daubentonia DC. (Family Leguminosae) **rattlebox**

Daubentonia DC., Mém. Fam. Légum. 285. 1826.

DERIVATION.—In memory of Louis-Jean-Marie Daubenton (1716–1800), French naturalist.

This genus, which is represented by a native shrubby species in Texas, contains the following introduced tree species and is included here as a tree.

DAUBENTONIA PUNICEA (Cav.) DC. PURPLE RATTLEBOX

Piscidia punicea Cav., Icon. Descr. Pl. 4: 8, pl. 316. 1797.
Daubentonia punicea (Cav.) DC., Mém. Fam. Légum. 286. 1826.
Sesbania punicea (Cav.) Benth. in Mart., Fl. Brasil. 15(1): 43. 1859.

DERIVATION.—Purple, from the purple-red flowers.

RANGE.—Escaped from cultivation and introduced in waste places from Florida to Louisiana, according to Small (Man. Southeast. Fl. 704. 1933; as *Daubentonia punicea*). Native from Brazil to Argentina.

This species is recorded as a shrub or small tree.

DELONIX Raf. (Family Leguminosae) FLAMBOYANT-TREE

Delonix Raf., Fl. Tellur. 2: 92. 1837.

DERIVATION.—From Greek, conspicuous claws, referring to the long-clawed petals.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Delonix. No. Amer. Fl. 23: 305. 1930.

DELONIX REGIA (Bojer) Raf. FLAMBOYANT-TREE

Poinciana regia Bojer ex Hook., Curtis's Bot. Mag. 56: No. 2884, pl. 2884. 1829.
Delonix regia (Bojer) Raf., Fl. Tellur. 2: 92. 1837.

DERIVATION.—Royal.

OTHER COMMON NAMES.—royal poinciana, flame-tree.

RANGE.—Naturalized in southern Florida, including Florida Keys. Native of Madagascar but widely planted for ornament and naturalized in tropical and subtropical regions.

Diospyros L. (Family Ebenaceae) **persimmon**

†*Diospyros* L., Sp. Pl. 1057. 1753; Gen. Pl. Ed. 5, 478. 1754.
Brayodendron Small, Torrey Bot. Club Bul. 28: 356. 1801.

DERIVATION.—From Greek, Jove's grain, alluding to the edible fruit.

Diospyros texana Scheele **Texas persimmon**

†*Diospyros texana* Scheele, Linnaea 22: 145. 1849.
Brayodendron texanum (Scheele) Small, Torrey Bot. Club Bul. 28: 356. 1901.

DERIVATION.—Of Texas.

OTHER COMMON NAMES.—chapote, †black persimmon, Mexican persimmon.

RANGE.—Southeastern to central and Trans-Pecos Texas, south to northeastern Mexico (Coahuila, Nuevo León, and Tamaulipas).

***Diospyros virginiana L. common persimmon**

Diospyros virginiana var. **virginiana**
common persimmon (typical)

†*Diospyros virginiana* L., Sp. Pl. 1057. 1753.

?*Diospyros virginiana* β *pubescens* Nutt., Gen. No. Amer. Pl. 2: 240. 1818.
Diospyros pubescens Pursh, Fl. Amer. Sept. 1: 265. 1814. Not *Diospyros pubescens* Pers., Synops. Pl. 2: 625. 1807.
Diospyros virginiana α *pubescens* [Pursh] Dippel, Handb. Laubholzk. 1: 306. 1889.
†*Diospyros virginiana* var. *platycarpa* Sarg., Arnold Arboretum Jour. 2: 168. 1921.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—†persimmon, eastern persimmon.

RANGE.—Connecticut and southern New York west to Pennsylvania, Ohio, Illinois, Missouri, and central Kansas, south to eastern Texas and central Florida.

Diospyros virginiana var. **mosieri** (Small) Sarg. ———

Diospyros mosieri Small, N. Y. Bot. Gard. Jour. 22: 33. 1921.
†*Diospyros virginiana* var. *mosieri* (Small) Sarg., Arnold Arboretum Jour. 2: 170. 1921.

DERIVATION.—Named for Charles A. Mosier.

COMMON NAME.—†persimmon.

RANGE.—Southern Florida.

Dipholis A. DC. (Family Sapotaceae) **bustic**

Spondogona Raf., Sylva Tellur. 35. 1838.
†*Dipholis* A. DC. in DC., Prodr. 8: 188. 1844. *Nom. conserv. propos.*, Little, Phytologia 3: 84-85. 1949.

DERIVATION.—From Greek, two scales, referring to the appendages of the corolla.

REFERENCE.—Cronquist, Arthur. Studies in the Sapotaceae, III. Dipholis and Bumelia. Arnold Arboretum Jour. 26: 435-471. 1945.

Dipholis salicifolia (L.) A. DC. **willow bustic**

Achras salicifolia L., Sp. Pl. Ed. 2, 470. 1762.
†*Dipholis salicifolia* (L.) A. DC. in DC., Prodr. 8: 188. 1844.
Spondogona salicifolia (L.) House, Amer. Midland Nat. 7: 131. 1921.

DERIVATION.—willow-leaved.

OTHER COMMON NAMES.—†bustic, cassada.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies from Bahama Islands southward, and from southern Mexico (Yucatan to Veracruz, and Oaxaca southward) south to Guatemala and British Honduras.

Dodonaea Mill. (Family Sapindaceae) **hopbush**

†*Dodonaea* Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754.

DERIVATION.—In honor of Rembert Dodoens or Dodonaeus (1518-1585), Dutch herbalist and physician.

OTHER COMMON NAME.—hopseedbush (SPN).

Dodonaea microcarya Small **Florida hopbush**

†*Dodonaea microcarya* Small, Torreya 25: 39. 1925.

DERIVATION.—Small nut, in reference to the relative small fruits.

OTHER COMMON NAME.—Florida hopseedbush (SPN).

RANGE.—Lower Florida Keys, discovered on Big Pine Key. Not known elsewhere.

The specific name was spelled "*microcarpa*" in the 1927 Check List.

Drypetes Vahl (Family Euphorbiaceae) **drypetes**

†*Drypetes* Vahl, Eclog. Amer. 3: 49. 1807.

DERIVATION.—According to some authors, from the Greek word for drupe, describing the fruit, or perhaps from Greek, oak and leaf (hence petal or sepal).

Drypetes diversifolia Krug & Urban **milkbark**

†*Drypetes diversifolia* Krug & Urban in Urban, Bot. Jahrb. 15: 353. 1892.

Drypetes keyensis Krug & Urban in Urban, Bot. Jahrb. 15: 354. 1892.

DERIVATION.—Variable leaved; the leaves on young plants generally spiny but other leaves with entire margins.

OTHER COMMON NAMES.—milkbark drypetes (SPN), whitewood, †big Guianaplum.

RANGE.—Southern Florida, including Florida Keys; generally rare but recorded as abundant on Key Largo. Also in West Indies.

Drypetes lateriflora (Sw.) Krug & Urban **†Guianaplum**

Schaefferia lateriflora Sw., Nov. Gen. Sp. Prodr. 38. 1788.

†*Drypetes lateriflora* (Sw.) Krug & Urban in Urban, Bot. Jahrb. 15: 357. 1892.

DERIVATION.—With flowers lateral, or on the sides, referring to the axillary flowers.

OTHER COMMON NAME.—whitewood drypetes (SPN).

RANGE.—Southern Florida north near east coast to Brevard County and on Florida Keys. Also in Bahama Islands, Cuba, Jamaica, Hispaniola, and Puerto Rico.

Duranta repens L. (Sp. Pl. 637. 1753; family Verbenaceae), golddrop skyflower (creeping skyflower, SPN), was recorded as a shrub or small tree in southern Florida, including Florida Keys, by Small (Man. Southeast. Fl. 1142–1143, fig. 1933). According to West and Arnold (Native Trees of Florida 192, fig. 1946), it is usually seen as a shrub. More information on the size is desired, as it may be only a shrub in Florida except in cultivation. Widely distributed in tropical America from Bermuda, West Indies, and Mexico to South America and grown for ornament.

Ehretia P. Br. (Family Boraginaceae) **ehretia**

Ehretia P. Br., Civ. Nat. Hist. Jamaica 168, pl. 16, fig. 1. 1756.

DERIVATION.—In honor of George Dionysius Ehret (1708–1770), German and English botanical artist.

Ehretia anacua (Mier & Berland.) Johnst. **†anaqua**

Gaza anacua Mier & Berland., Mem. Comisión Limites 5. 1832.

†*Ehretia elliptica* DC., Prodr. 9: 503. 1845.

Ehretia anacua (Mier & Berland.) Johnst., Gray Herbarium, Harvard Univ., Contrib., New Ser., 70: 89. 1924.

DERIVATION.—The Mexican name.

OTHER COMMON NAMES.—anaqua ehretia (SPN), knackaway.

RANGE.—Southern Texas and Mexico from Tamaulipas to Coahuila, south to Veracruz and Guanajuato.

Elaeagnus angustifolia L. (Sp. Pl. 121. 1753), Russian-olive (oleaster; family Elaeagnaceae), a shrub or small tree planted as an ornamental, is recorded as having escaped occasionally from cultivation from New England to California and may have become naturalized locally. It is native from southern Europe to western and central Asia.

Elaeagnus utilis A. Nels., see **Shepherdia argentea** (Pursh) Nutt.

Elaphrium Jacq., see **Bursera** Jacq.

Elliottia Muhl. (Family Ericaceae) **elliottia**

Elliottia Muhl., Cat. Pl. Amer. Sept. 40. 1813; *nomen nudum.*

†*Elliottia* Muhl. ex Ell., Sketch Bot. S.-C. Ga. 1: 448. 1817.

DERIVATION.—Dedicated to Stephen Elliott (1771–1830), botanist of South Carolina and author of A Sketch of the Botany of South-Carolina and Georgia (2 v., illus. 1816–24).

OTHER COMMON NAME.—southernplume (SPN).

Elliottia racemosa Muhl. **elliottia**

Elliottia racemosa Muhl., Cat. Pl. Amer. Sept. 40. 1813; *nomen nudum.*

Elliottia racemosa Muhl. ex Ell., Sketch Bot. S.-C. Ga. 1: 448. 1817.

DERIVATION.—Racemose, the flowers in long, racemelike clusters.

OTHER COMMON NAME.—southernplume (SPN).

RANGE.—Eastern Georgia (Columbia, Burke, Bulloch, Candler, Telfair, and Coffee Counties). Formerly Richmond County and also South Carolina (Aiken County) but extinct at those and perhaps other localities. Very rare and local.

REFERENCE.—Trudell, Harry W. A new colony of Elliottia. Bartonia 10: 24–27. 1929.

Enallagma (Miers) Baill. (Family Bignoniaceae) **black-calabash**

Crescentia sect. *Enallagma* Miers, Linn. Soc. London Trans. 26: 165, 174. 1868.

†*Enallagma* (Miers) Baill., Hist. Pl. 10: 54. 1888.

DERIVATION.—From Greek *enallage*, an interchange, referring to its substitution for certain species theretofore placed in *Crescentia.*

Enallagma latifolia (Mill.) Small **black-calabash**

Crescentia latifolia Mill., Gard. Dict. Ed. 8, *Crescentia* No. 2. 1768.
?*Crescentia ovata* Burm. f., Fl. Ind. 132. 1768.
Crescentia cucurbitina L., Mant. Pl. 2: 250. 1771.
Enallagma cucurbitina (L.) Baill. ex K. Schum. in Engler & Prantl, Natürl. Pflanzenfam. 4(3b): 247, fig. 93 D. 1895.
†*Enallagma latifolia* (Mill.) Small, Fl. Miami 171, 200. 1913.

DERIVATION.—Broad-leaved.

OTHER COMMON NAME.—†black calabash-tree.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies, Central America, and northern South America.

Erythrina L. (Family Leguminosae) **coralbean**

Erythrina L., Sp. Pl. 706. 1753; Gen. Pl. Ed. 5, 316. 1754.
Micropteryx Walp. in Duchass. & Walp., Linnaea 23: 739. 1851.

DERIVATION.—Red, from the bright red flowers of some species.

REFERENCE.—Krukoff, B. A. The American species of Erythrina. Brittonia 3: 205–337. 1939.

Erythrina crista-galli L. (Mant. Pl. 1: 99. 1767; as "*crista galli*"; *Micropteryx crista-galli* (L.) Walp.), cockspur coralbean, was recorded by Small (Man. Southeast. Fl. 716. 1933) as a shrub or small tree in waste places and cultivated in the Coastal Plain of the Gulf States. It is native of southern South America.

Erythrina flabelliformis Kearney **southwestern coralbean**

Erythrina flabelliformis Kearney in Britton & Kearney, N. Y. Acad. Sci. Trans. 14: 32. 1894.

DERIVATION.—With the form of a small fan, the shape of the broad leaflets.

OTHER COMMON NAMES.—western coralbean (SPN), chilicote, coralbean, Indian-bean.

RANGE.—Southwestern New Mexico, southeastern Arizona, and western Mexico (Lower California and Sonora to Chihuahua and south to Michoacán).

This species becomes a small tree up to 15 feet high and 10 inches in trunk diameter at base, according to Kearney and Peebles (Ferns Fl. Pl. Ariz. 501. 1942), though usually it is a small shrub.

Erythrina herbacea L. **eastern coralbean**

Erythrina herbacea L., Sp. Pl. 706. 1753.
Erythrina rubicunda Jacq., Fragm. Bot. 75. 1809.
Erythrina herbacea var. *arborea* Chapm., Fl. South. U. S. Ed. 3, 117. 1897.
Erythrina arborea (Chapm.) Small, Fl. Southeast. U. S. 647, 1332. 1903.

DERIVATION.—Herbaceous; the plants being herbs north of the tropical part of the range.

OTHER COMMON NAMES.—Cherokee-bean, red-cardinal.

RANGE.—South Carolina to southern Florida and Texas, and

eastern Mexico (Tamaulipas, San Luis Potosí, and Veracruz). A tree in the United States only in southern Florida, including Florida Keys.

This species was mentioned in a note in the 1927 Check List under the name †*Erythrina herbacea* var. *arborea* Chapm. The plants are usually perennial herbs but in southern Florida become shrubs and trees up to 10 to 25 feet or more in height, as recorded by Sargent (Trees and Shrubs 2: 253. 1913; Manual Trees No. Amer. ed. 2, corr. 628. 1926), Small (Man. Southeast. Fl. 716. 1933), and others.

Erythrobalanus (Oerst.) O. Schwarz, see **Quercus** L.

Esenbeckia H. B. K. (Family Rutaceae) **esenbeckia**

Esenbeckia H. B. K., Nov. Gen. Sp. 7: 246, pl. 655. 1825.

DERIVATION.—Commemorates Christian Gottfried Nees von Esenbeck (1776–1858), German botanist.

Esenbeckia runyonii Morton **Runyon esenbeckia**

Esenbeckia runyonii Morton, Wash. Acad. Sci. Jour. 20: 136. 1930; as "*runyoni.*"

DERIVATION.—Named for Robert Runyon, photographer and botanist of Brownsville, Texas, who collected the type specimen.

RANGE.—Extreme southern Texas (near Los Fresnos, Cameron County).

A rare, small tree about 16 feet high, discovered in 1929. Only four trees were found. This genus previously was not known in the United States.

Eugenia L. (Family Myrtaceae) **eugenia**

Eugenia L., Sp. Pl. 470. 1753; Gen. Pl. Ed. 5, 211. 1754.
Anamomis Griseb., Fl. Brit. W. Indies 240. 1860.
Mosiera Small, Man. Southeast. Fl. 936, 1506. 1933.

DERIVATION.—In commemoration of Prince Eugene of Savoy (1663–1736), a patron of botany and horticulture who made a collection of rare plants in the gardens of Belvidere Palace near Vienna.

Eugenia anthera Small **Smalls eugenia**

Eugenia anthera Small, Man. Southeast. Fl. 935, 1506. 1933.

DERIVATION.—Flowery.

RANGE.—Southern Florida.

A species of shrubs or small trees described since publication of the 1927 Check List.

Eugenia axillaris (Sw.) Willd. **white-stopper eugenia**

Myrtus axillaris Sw., Nov. Gen. Sp. Pl. Prodr. 78. 1788.
†*Eugenia axillaris* (Sw.) Willd., Sp. Pl. Ed. 4, 2: 960. 1799. Not *Eugenia axillaris* Vellozo, Fl. Flumin. 209, pl. 41. 1799.

DERIVATION.—Axillary, the flowers clustered in axils of leaves.

OTHER COMMON NAMES.—stopper, †white stopper.

RANGE.—Central and southern Florida including Florida Keys. Also in Bermuda and West Indies.

Formerly included in *Eugenia monticola* (Sw.) DC., of the West Indies.

Eugenia bahamensis Kiaerskou **Bahama eugenia**

†*Eugenia bahamensis* Kiaerskou, Bot. Tidsskr. 17: 266, pl. 8A, fig. 4. 1890.

Anamomis bahamensis (Kiaerskou) Britton in Small, Fl. Fla. Keys 104, 155. 1913.

Mosiera bahamensis (Kiaerskou) Small, Man. Southeast. Fl. 937, 1506. 1933.

DERIVATION.—Of Bahama Islands, where it was discovered.

OTHER COMMON NAME.—†stopper.

RANGE.—Southern Florida, including Florida Keys. Also in Bahama Islands.

Eugenia buxifolia (Sw.) Willd., see **E. myrtoides** Poir.

Eugenia confusa DC. **redberry eugenia**

†*Eugenia confusa* DC., Prodr. 3: 279. 1828.

Eugenia garberi Sarg., Gard. and Forest 2: 28, fig. 87. 1889.

DERIVATION.—Confused.

OTHER COMMON NAMES.—ironwood, †red stopper.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies.

Eugenia dicrana Berg **twinberry eugenia**

†*Eugenia dicrana* Berg, Linnaea 27: 259. 1856.

Anamomis dicrana (Berg) Britton in Britton & Shafer, No. Amer. Trees 728, fig. 668. 1908.

DERIVATION.—From Greek, pitchfork, in reference to the forked flower cluster with usually three flowers.

OTHER COMMON NAMES.—nakedwood, †naked stopper.

RANGE.—Southern Florida north on east coast to Cape Canaveral, and at Key West. Also in West Indies.

At one time designated as *Anamomis dichotoma* (Poir.) Sarg.

Eugenia garberi Sarg., see **E. confusa** DC.

†*Eugenia longipes* Berg (Linnaea 27: 150. 1856; *Mosiera longipes* (Berg) Small),trailing eugenia (†stopper), of southern Florida, including Florida Keys, and in West Indies, was accepted in the 1927 Check List as usually a shrub but becoming arborescent, on authority of J. K. Small. However, Small (Man. Southeast. Fl. 937. 1933) afterwards described it as a shrub with many often decumbent branches, rather than arborescent. West and Arnold (Native Trees Fla. 157, fig. 1946) included it as a shrub, occasionally a tree. Further information would be desirable.

Eugenia myrtoides Poir. **boxleaf eugenia**

Myrtus buxifolia Sw., Nov. Gen. Sp. Pl. Prodr. 78. 1788.

†*Eugenia buxifolia* (Sw.) Willd., Sp. Pl. Ed. 4, 2: 960. 1799. Not *Eugenia buxifolia* Lam., Encycl. Méth. Bot. 3: 204. 1789.

Eugenia myrtoides Poir. in Lam., Encycl. Méth. Bot. Sup. 3: 125. 1813.

DERIVATION.—Like *Myrtus*, myrtle.

OTHER COMMON NAMES.—†gurgeon stopper, Spanish stopper.

RANGE.—Southern Florida, north on east coast to Cape Canaveral, and including Florida Keys. Also in West Indies.

Eugenia buxifolia (Sw.) Willd., under which this species was recorded in the 1927 Check List, must be discarded as a later homonym. In its place _E. myrtoides_ Poir., apparently the next available name, has been adopted here.

Eugenia rhombea (Berg) Krug & Urban **spiceberry eugenia**

Eugenia foetida Pers. γ *rhombea* Berg, Linnaea 27: 212. 1856.

†*Eugenia rhombea* (Berg) Krug & Urban in Urban, Bot. Jahrb. 19: 644. 1895.

DERIVATION.—Rhombic, referring to the leaves narrowed at both base and apex.

OTHER COMMON NAMES.—stopper, †red stopper.

RANGE.—Lower Florida Keys to Key West. Also in West Indies.

Earlier referred to *Eugenia procera* (Sw.) Poir., a West Indian species.

Eugenia simpsonii (Small) Sarg. **Simpson eugenia**

Anamomis simpsonii Small, Torreya 17: 222, fig. 1917.

†*Eugenia simpsonii* (Small) Sarg., Man. Trees No. Amer. Ed. 2, 775, fig. 697. 1922.

DERIVATION.—Named for Charles Torrey Simpson, Florida naturalist and one of the discoverers.

OTHER COMMON NAMES.—Florida myrtle, †stopper.

RANGE.—Southern Florida (Dade County). Rare and local.

Euonymus L. (Family Celastraceae) **euonymus**

†*Euonymus* L., Sp. Pl. 197. 1753; as "*Evonymus*." Gen. Pl. Ed. 5, 91. 1754; as "*Euonymus*."

DERIVATION.—Literally, of good name; an old name applied to the European spindletree (*Euonymus europaea* L.).

OTHER COMMON NAME.—spindletree.

REFERENCE.—Blakelock, R. A. A synopsis of the genus Euonymus L. Kew Bul. 1591: 210–290, illus. 1951.

Linnaeus spelled this genus in two ways, and the spelling "_Evonymus_" was used in the 1927 Check List. The more common spelling "_Euonymus_" is accepted here in accordance with the International Code.

Euonymus atropurpureus Jacq. **eastern wahoo**

†*Euonymus atropurpureus* Jacq., Hort. Bot. Vindob. 2: 55, pl. 120. 1772.

DERIVATION.—Dark purple, the color of the fruits.

OTHER COMMON NAMES.—burning-bush, †wahoo.

RANGE.—Western New York to southern Ontario, central Michigan, central Minnesota, and southeastern North Dakota, south to northwestern Nebraska, central Kansas, and eastern Texas, east to Arkansas, Tennessee, and northern Alabama. Local in Montana.

Euonymus occidentalis Nutt. **western wahoo**

Euonymus occidentalis Nutt. ex Torr. in U. S. Rpts. Expl. Miss. Pacif. 4(5): 74. 1857.

Euonymus occidentalis var. *parishii* (Trel.) Jeps., Man. Fl. Pl. Calif. 610. 1925.

DERIVATION.—Western.

OTHER COMMON NAME.—western burning-bush.

RANGE.—Washington, south to Oregon, northern California, and in Sierra Nevada to western Nevada. Also in mountains of southern California.

A shrub or sometimes a small tree up to 18 feet high, according to Jepson (Man. Fl. Pl. Calif. 609. 1925).

Exostema L. C. Rich, (Family Rubiaceae) **exostema**

†*Exostema* L. C. Rich. ex Humb. & Bonpl., Pl. Aequin. 1: 131, pl. 38. 1807.

DERIVATION.—Exserted stamens, the stamens long.

Exostema caribaeum (Jacq.) Roem. & Schult. **Caribbean princewood**

Cinchona caribaea Jacq. Enum. Pl. Carib. 16. 1760.

†*Exostema caribaeum* (Jacq.) Roem. & Schult., Syst. Veget. 5: 18. 1819; as "*Exostemma.*"

DERIVATION.—Caribbean.

OTHER COMMON NAME.—†princewood.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and in Mexico (San Luis Potosí to Colima southward) and Central America. Reported from northern South America.

Exothea Macfadyen (Family Sapindaceae) **butterbough**

Exothea Macfadyen, Fl. Jamaica 1: 232. 1837.

DERIVATION.—From Greek, to expel, the genus having been separated from *Melicocca* L., honeyberry.

Exothea paniculata (Juss.) Radlk. **butterbough**

Melicocca paniculata Juss., Paris Mus. d'Hist. Nat. Mém. 3: 187, pl. 5. 1817.

Exothea paniculata Durand, Index Gen. Phaner. 81. 1888; *nomen nudum.*

†*Exothea paniculata* (Juss.) Radlk., K. Bayer. Akad. Wiss. München, Math-Phys. Cl. Sitzber. 20: 276. 1891.

DERIVATION.—Panicled.

OTHER COMMON NAMES.—†inkwood, ironwood.

RANGE.—Southern Florida, north on east coast to Brevard County, and on Florida Keys. Also in West Indies and Guatemala.

Eysenhardtia H. B. K. (Family Leguminosae) **kidneywood**

Viborquia Ortega, Hort. Matr. Dec. 66, pl. 9. 1798, *nomen rejiciendum.* Not *Viborgia* Moench, Meth. Pl. 132. 1794. Not *Wiborgia* Thunb., Nov. Gen. Sp. 10: 137. 1800; *nomen conservandum.*

†*Eysenhardtia* H. B. K., Nov. Gen. Sp. 6: 489, pl. 592. 1824; *nomen conservandum.*

DERIVATION.—In honor of Karl Wilhelm Eysenhardt (1794–1825), professor of botany in the University of Königsberg.

REFERENCE.—Pennell, Francis Whittier. Eysenhardtia. *In* Rydberg, Per Axel. No. Amer. Fl. 24: 34–40. 1919.

Eysenhardtia angustifolia Pennell (No. Amer. Fl. 24: 38. 1919), Texas kidneywood, of Trans-Pecos Texas, was originally described as a much-branched small tree 10 to 13 feet high but perhaps is better classed as a shrub.

Eysenhardtia polystachya (Ortega) Sarg. **kidneywood**

Viborquia polystachya Ortega, Hort. Matr. Dec. 66, pl. 9. 1798.

Eysenhardtia amorphoides H. B. K. ? var. *orthocarpa* A. Gray, Pl. Wright. 2: 37. 1853.

†*Eysenhardtia orthocarpa* (A. Gray) S. Wats., Amer. Acad. Arts and Sci. Proc. 17: 339. 1882.

Eysenhardtia polystachya (Ortega) Sarg., Silva No. Amer. 3: 29. 1892.

Viborquia orthocarpa (A. Gray) Cockerell, Amer. Mus. Nat. Hist. Bul. 24: 97. 1908.

DERIVATION.—With many spikes, referring to the numerous flower clusters.

RANGE.—Extreme southwestern New Mexico, southeastern Arizona, and south to southern Mexico (Sonora and Chihuahua to Tamaulipas and Oaxaca).

Fagara L., see **Zanthoxylum** L.

Fagus L. (Family Fagaceae) **beech**

†*Fagus* L., Sp. Pl. 997. 1753; Gen. Pl. Ed. 5. 1754.

DERIVATION.—The classical Latin name, from the Greek word meaning to eat, in reference to the edible beechnuts.

***Fagus grandifolia** Ehrh. **American beech**

Fagus americana latifolia Muenchhausen, Hausvater 5: 162. 1770; illegitimate as not a binomial.

Fagus sylvatica atropunicea Marsh., Arbustr. Amer. 46. 1785. Not *Fagus sylvatica* [var.] *atro-punicea* Weston, Bot. Univ. 1: 107. 1770.

†*Fagus grandifolia* Ehrh., Beitr. Naturk. 3: 22. 1788.

Fagus ferruginea Ait., Hort. Kew. 3: 362. 1789.

Fagus americana Sweet, Hort. Brit. 370. 1826.

†*Fagus ferruginea* 2 *caroliniana* Loud., Arb. Frut. Brit. 3: 1980, fig. 1915. 1838.

Fagus ferruginea 3 *latifolia* Loud., Arb. Frut. Brit. 3: 1980, fig. 1916. 1838.

Fagus atropunicea (Marsh.) Sudw., Torrey Bot. Club Bul. 20: 42. 1893.

Fagus latifolia (Muenchh.) Loud. ex Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 148. 1897.

Fagus grandifolia var. *caroliniana* (Loud.) Fern. & Rehd. in Rehd., Rhodora 9: 114. 1907.

DERIVATION.—Large-leaved.

OTHER COMMON NAME.—†beech.

RANGE.—Cape Breton Island, Nova Scotia, to Maine, southern Quebec, southern Ontario, northern Michigan, and eastern Wisconsin, south to southern Illinois, southeastern Missouri, northwestern Arkansas, southeastern Oklahoma, and eastern Texas, and east to northern Florida.

Ficus L. (Family Moraceae) **fig**

†*Ficus* L., Sp. Pl. 1059. 1753; Gen. Pl. Ed. 5, 482. 1754.

DERIVATION.—The classical Latin name of fig.

Ficus aurea Nutt. **Florida strangler fig**

†*Ficus aurea* Nutt., No. Amer. Sylva 2: 4, pl. 43. 1846.

DERIVATION.—Golden, from the orange-yellow fruits, originally described as orange-yellow when ripe but actually red.

OTHER COMMON NAMES.—†golden fig, strangler fig, wild fig.

RANGE.—Southern Florida, including Florida Keys. Also in Bahama Islands.

Ficus brevifolia Nutt., see **F. laevigata** Vahl

FICUS CARICA L. †COMMON FIG

†*Ficus carica* L., Sp. Pl. 1059. 1753.

DERIVATION.—From Caria in Asia Minor.

RANGE.—Escaped from cultivation and growing naturally chiefly in Coastal Plain from Virginia to Florida and Texas, north to Arkansas and Tennessee, according to Small (Man. Southeast. Fl. 439. 1933). Perhaps naturalized only locally. Native of Asia.

A shrub or small tree to 16 feet tall.

Ficus elastica Nois., India-rubber fig (India rubber-plant), from tropical Asia, is planted in southern Florida (also northward as a house plant) and has been recorded from pinelands and roadsides there by Small (Man. Southeast. Fl. 439. 1933). However, it perhaps should not be included as a naturalized tree.

Ficus laevigata Vahl **shortleaf fig**

Ficus laevigata Vahl, Enum. Pl. 2: 183. 1805.

Ficus populnea Willd., Sp. Pl. 4: 1141. [1806.]

†*Ficus brevifolia* Nutt., No. Amer. Sylva 2: 3, pl. 42. 1846.

Ficus populnea var. a *brevifolia* (Nutt.) Warb. in Urban, Symb. Antill. 3: 473. 1903.

Ficus laevigata var. *brevifolia* (Nutt.) Warb. ex Rossberg, Berlin Bot. Gart. Mus. Notizblatt 12: 583. 1935.

DERIVATION.—Smooth, referring to the hairless evergreen leaves.

OTHER COMMON NAME.—†wild fig.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies from Bahamas to Cuba, Jamaica, and Barbados.

Ficus brevifolia Nutt., by which the Florida representatives have been known in the United States, has been united with _F. laevigata_ Vahl, of the West Indies, by Britton and Wilson (Sci. Surv. Porto Rico 5: 237–238. 1924) and others.

Ficus populnea Willd., see **F. laevigata** Vahl

FIRMIANA Marsili (Family Steruliaceae) FIRMIANA

Firmiana Marsili, Accad. Padova Saggi Sci. Lett. 1: 115, illus. 1786.

DERIVATION.—Named for Conte di Firmian, of Italy.

This genus was included in the older genus †_Sterculia_ L. (Sp. Pl. 1007. 1753; Gen. Pl. Ed. 5, 438. 1754) in the 1927 Check List but now is generally regarded as distinct.

FIRMIANA PLATANIFOLIA (L. f.) Schott & Endl.
†CHINESE PARASOLTREE

?Hibiscus simplex L., Sp. Pl. Ed. 2, 2: 977. 1763.
†*Sterculia platanifolia* L. f., Sup. Pl. Syst. Veget. 423. 1781.
Firmiana platanifolia (L. f.) Schott & Endl., Melet. Bot. 33: 1832.
?Firmiana simplex (L.) W. F. Wight, U. S. Dept. Agr. Bur. Pl. Indus. Bul. 142: 67. 1909.

DERIVATION.—With leaves like *Platanus* L., sycamore, the leaves being palmately 3- or 5-lobed.

OTHER COMMON NAMES.—bottletree, Phoenix-tree, Japanese varnish-tree.

RANGE.—Escaped from cultivation and naturalized in Coastal Plain from South Carolina to Florida and Texas, according to Small (Man. Southeast. Fl. 864. 1933) and Coker and Totten (Trees Southeast. U. S. 322. 1934). Native of China and Japan.

REFERENCE.—Ridley, H. N. Kew Roy. Bot. Gard. Bul. Misc. Inform. 1934: 215. 1934.

Forestiera Poir. (Family Oleaceae) **forestiera**

Adelia P. Br., Civ. Nat. Hist. Jamaica 361, pl. 36, fig. 3. 1756. Not *Adelia* L., Syst. Nat. Ed. 10, 2: 1298. 1759; *nomen conservandum.*
Borya Willd., Sp. Pl. Ed. 4, 4: 711. 1805. Not *Borya* Labill., Nov. Holl. Pl. 1: 81, pl. 107. 1804.
†*Forestiera* Poir. in Lam., Encycl. Méth. Bot. Sup. 1: 132. 1810; 2: 664. 1812.
Piptolepis Benth., Pl. Hartweg. 29. 1840; *nom. rejic.*

DERIVATION.—Dedicated to Charles Le Forestier (died about 1820), French physician and naturalist at Saint-Quentin and first botany teacher of Poiret.

Forestiera acuminata (Michx.) Poir. **†swamp-privet**

Adelia acuminata Michx., Fl. Bor.-Amer. 2: 225, pl. 48. 1803.
†*Forestiera acuminata* (Michx.) Poir. in Lam., Encycl. Méth. Bot. Sup. 2: 664. 1812.

†*Forestiera acuminata* var. *vestita* Palmer, Arnold Arboretum Jour. 4: 29. 1923.

DERIVATION.—Acuminate, or with tapering point, referring to the leaves.

OTHER COMMON NAMES.—Texas forestiera (SPN), common adelia, Texas adelia, whitewood.

RANGE.—Coastal Plain chiefly from South Carolina to northern Florida and west to eastern Texas, and north in Mississippi Valley to eastern Oklahoma, extreme southeastern Kansas, Missouri, central Illinois, and southwestern Indiana.

Forestiera phillyreoides (Benth.) Torr. **desert-olive forestiera**

Piptolepis phillyreoides Benth., Pl. Hartw. 29. 1840.
Forestiera phillyreoides (Benth.) Torr., U. S. Mex. Bound. Surv. Bot. 167. 1859.
Forestiera shrevei Standl., Field Mus. Nat. Hist. Bot. Ser. 17: 205. 1937.

DERIVATION.—Resembling *Phillyrea*, phillyrea, a related genus of evergreen shrubs and small trees of the Mediterranean region.

OTHER COMMON NAMES.—desert-olive, wild-olive.

RANGE.—Local on desert mountains of southern and southwestern Arizona. Also in northern and central Mexico from Sonora south to Jalisco and Puebla.

A shrub 3 to 12 feet high but sometimes a small tree as much as 20 to 25 feet high and 8 inches in trunk diameter, according to Leslie N. Goodding, as recorded by Little (Southwestern Trees 101. 1950).

Forestiera porulosa (Michx.) Poir., see **F. segregata** (Jacq.) Krug & Urban

Forestiera pubescens Nutt., downy forestiera, is a shrubby species which may rarely reach tree size, but additional records would be desirable. It was mentioned as rarely a small tree by Preston (Rocky Mt. Trees 269. 1940). Ranges from Oklahoma and eastern Texas to New Mexico and in Arizona merges into *Forestiera neomexicana* A. Gray, New Mexican forestiera, which may be only a variety. The latter, which is recorded from southern Colorado and southern Utah to California and western Texas, has been listed as a small tree by Abrams (Illus. Fl. Pacif. States 3: 349. 1951).

Forestiera segregata (Jacq.) Krug & Urban **Florida-privet**

Myrica segregata Jacq., Coll. Bot. 2: 273. 1788.
Adelia porulosa Michx., Fl. Bor.-Amer. 2: 224. 1803.
Forestiera porulosa (Michx.) Poir. in Lam., Encycl. Méth. Bot. Sup. 2: 664. 1812.
Adelia segregata (Jacq.) Kuntze, Rev. Gen. Pl. 410. 1891.
Forestiera segregata (Jacq.) Krug & Urban in Urban, Bot. Jahrb. 15: 339. 1893.

DERIVATION.—Separated.

OTHER COMMON NAME.—Florida forestiera.

RANGE.—Southern Florida. Also Bermuda and Cuba, Jamaica, Hispaniola, and Puerto Rico.

A shrub or small tree, formerly regarded as only a shrub in the United States. Becomes a tree 12 feet tall with trunk 3 inches in diameter, according to West and Arnold (Native Trees Fla. 183. 1946). More often a small tree but sometimes a large old tree, according to Buswell (Native Trees Palms South. Fla. Miami Univ. Bul. 16(6): 43. 1945). Recorded as a small tree or shrub to 10 feet tall by Small (Fla. Trees 91. 1913; Man. Southeast. Flora 1041. 1933).

Forestiera shrevei Standl., see **F. phillyreoides** (Benth.) Torr.

Forestiera texana Cory **Texas forestiera**

Forestiera texana Cory, Madroño 7: 252. 1944.
Forestiera texana var. *palmeri* Cory, Madroño 7: 253. 1944.
DERIVATION.—Of Texas.
RANGE.—Southern Texas.
A small tree to 13 feet tall, not distinguished until 1944.

Franklinia Bartr. (Family Theaceae) **franklinia**

Franklinia Bartr. ex Marsh., Arbustr. Amer. 48. 1785.
DERIVATION.—In honor of "that patron of sciences, and truly great and distinguished character, Dr. Benjamin Franklin" (1706-90).
This genus is placed in *Gordonia* Ellis by some authors.

Franklinia alatamaha Bartr. **†franklinia**

†*Franklinia alatamaha* Bartr. ex Marsh., Arbustr. Amer. 49. 1785.
Gordonia alatamaha (Bartr.) Sarg., Gard. and Forest 2: 616. 1889; as "*altamaha.*"
DERIVATION.—From the Altamaha River (then spelled Alatamaha) of Georgia, where it was discovered.
RANGE.—Known only in cultivation. Originally occurring at a single locality near Fort Barrington, McIntosh County, Ga., where it was discovered by John and William Bartram in 1765. It has not been found growing wild since 1790, the original colony probably having been exterminated by transplanting to cultivation.
REFERENCES.—Harper, Francis, and Leeds, Arthur N. A supplementary chapter on *Franklinia alatamaha.* Bartonia 19: 1-13 illus. 1937.
Jenkins, Charles F. The historical background of Franklin's tree. Pa. Mag. Hist. and Biog. 57: 193-208, illus. 1933.
Wherry, Edgar T. The history of the Franklin tree, *Franklinia alatamaha.* Wash. Acad. Sci. Jour. 18: 172-176. 1928.

Fraxinus L. (Family Oleaceae) **ash**

†*Fraxinus* L., Sp. Pl. 1057. 1753; Gen. Pl. Ed. 5, 477. 1754.
DERIVATION.—The classical Latin name of ash.
REFERENCES.—Lingelsheim, A. Oleaceae-Oleoideae-Fraxineae. Pflanzenreich 72 Heft (IV. 243, I & II): 1-65, illus. 1920.
Little, Elbert L., Jr. Notes on Fraxinus (ash) in the United States. Wash. Acad. Sci. Jour. 42: 369–380. 1952.

Rehder, Alfred. The genus Fraxinus in New Mexico and Arizona. Amer. Acad. Arts. and Sci. Proc. 53: 197-212. 1917.

Whelden, C. M. Studies in the Genus Fraxinus. I. A preliminary key to winter twigs for the sections Melioides and Bumelioides. Arnold Arboretum Jour. 15: 118-126, illus. 1934.

***Fraxinus americana L.** **†white ash**

†*Fraxinus americana* L., Sp. Pl. 1057. 1753.

Fraxinus juglandifolia Lam., Encycl. Méth. Bot. 2: 548. 1788.

Fraxinus americana juglandifolia [(Lam.)] Browne, Trees Amer. 398. 1846.

Fraxinus curtissi Vasey, Cat. Forest Trees U. S. 20. 1876; U. S. Dept. Agr. Rpt. 1875: 168. 1876; *nom provisor. et subnud.*

†*Fraxinus americana* var. *microcarpa* A. Gray, Synopt. Fl. No. Amer. 2(1): 75. 1878.

†*Fraxinus biltmoreana* Beadle, Bot. Gaz. 25: 358. 1898.

Fraxinus catawbiensis Ashe, Bot. Gaz. 33: 230. 1902.

Fraxinus americana var. *subcoriacea* Sarg., Bot. Gaz. 67: 241. 1919.

†*Fraxinus americana* var. *crassifolia* Sarg., Man. Trees No. Amer. Ed. 2, 841. 1922.

Fraxinus americana var. *ascidiata* A. M[eunissier], Gard. Chron., Ser. 3, 76: 335, fig. 122. 1924.

Fraxinus americana var. *biltmoreana* (Beadle) J. Wright ex Fern., Rhodora 49: 159. 1947.

DERIVATION.—American.

OTHER COMMON NAMES.—Biltmore ash, †Biltmore white ash, †smallseed white ash.

RANGE.—Cape Breton Island, Nova Scotia, to Maine, southern Quebec, southern Ontario, northern Michigan, and southeastern Minnesota, south to eastern Nebraska, eastern Texas, and east to northern Florida.

REFERENCES.—Fernald, M. L. Arnold Arboretum Jour. 27: 390-391, pl. 3. 1946.

Fernald, M. L., and Schubert, Bernice G. Rhodora 50: 168-169. 1948.

Wright, Jonathan W. Genotypic variation in white ash. Jour. Forestry 42: 489-495. 1944.

Fraxinus anomala Torr. **†singleleaf ash**

OTHER COMMON NAMES.—dwarf ash, fresno.

Fraxinus anomala var. anomala **singleleaf ash (typical)**

†*Fraxinus anomala* Torr. ex S. Wats. in King, Rpt. Geol. Expl. 40th Par. 5: 283. 1871.

Fraxinus anomala var. *triphylla* Jones, Calif. Acad. Sci. Proc., Ser. 2, 5: 707. 1895.

DERIVATION.—Anomalous, referring to the simple leaves in this genus characterized by compound leaves.

RANGE.—Western Colorado, southern Utah, and southern

Nevada, south to southeastern California, northern Arizona, and extreme northwestern New Mexico.

Fraxinus anomala var. **lowellii** (Sarg.) Little **Lowell ash**

†*Fraxinus lowellii* Sarg. in Rehd., Amer. Acad. Arts and Sci. Proc. 53: 211. 1917.

Fraxinus anomala var. *lowellii* (Sarg.) Little, Wash. Acad. Sci. Jour. 42: 370. 1952.

RANGE.—Northern and central Arizona.

DERIVATION.—Named for Percival Lowell (1855-1916), American astronomer who collected this ash in northern Arizona.

Fraxinus attenuata Jones, see **F. velutina** Torr.

Fraxinus berlandieri DC., see **F. berlandieriana** A. DC.

Fraxinus berlandieriana A. DC. **Berlandier ash**

†*Fraxinus berlandieriana* A. DC. in DC., Prodr. 8: 278. 1844; as "*Berlanderiana.*"

Fraxinus viridis var. *berlandieriana* Torr., U. S. Mex. Bound. Surv. Bot. 166. 1859.

Fraxinus berlandieri DC. ex Small, Fl. Southeast. U. S. 918. 1903.

DERIVATION.—Named for its discoverer, Jean Louis Berlandier (1805?-51), native of Belgium, who resided in Mexico and made large plant collections in northeastern Mexico and Texas.

OTHER COMMON NAME.—†Mexican ash.

RANGE.—Central Texas to Trans-Pecos Texas, south to northeastern Mexico (Coahuila to Durango and Veracruz).

Fraxinus biltmoreana Beadle, see **F. americana** L.

Fraxinus campestris Britton, see **F. pennsylvanica** Marsh.

Fraxinus caroliniana Mill. **Carolina ash**

†*Fraxinus caroliniana* Mill., Gard. Dict. Ed. 8, *Fraxinus* No. 6. 1768.

Fraxinus platicarpa Michx., Fl. Bor.-Amer. 2: 256. 1803.

†*Fraxinus pauciflora* Nutt., No. Amer. Sylva 3: 61, pl. 100. 1849.

Fraxinus platycarpa γ *oblanceolata* M. A. Curtis, Amer. Jour. Sci. and Arts, Ser. 2, 7: 408. 1849.

Fraxinus platycarpa β *pubescens* M. A. Curtis, Amer. Jour. Sci. and Arts, Ser. 2, 7: 408. 1849.

Fraxinus cubensis Griseb., Cat. Pl. Cub. 170. 1866.

Fraxinus platycarpa var. *floridana* Wenzig, Bot. Jahrb. 4: 185. 1883.

Fraxinus floridana (Wenzig) Sarg., Silva No. Amer. 14: 39, pl. 717. 1902.

Fraxinus caroliniana var. β *cubensis* (Griseb.) Lingelsh., Bot. Jahrb. 40: 221. 1907.

Fraxinus hybrida Lingelsh., Bot. Jahrb. 40: 220. 1907.

Fraxinus rehderiana Lingelsh., Pflanzenreich 72 (IV. 243, 1 & 2): 42. 1920.

†*Fraxinus caroliniana* var. *rehderiana* (Lingelsh.) Sarg., Arnold Arboretum Jour. 2: 173. 1921.

Fraxinus caroliniana var. *pubescens* (M. A. Curtis) Fern., Rhodora 39: 442. 1937.

Fraxinus caroliniana var. *oblanceolata* (M. A. Curtis) Fern. & Schubert, Rhodora 50: 188. 1948.

DERIVATION.—Of Carolina.

OTHER COMMON NAMES.—Florida ash, pop ash, swamp ash, †water ash.

RANGE.—Coastal Plain from southeastern Virginia to southern Florida, west to eastern Texas and Arkansas. Also in Cuba.

REFERENCE.—Fernald, M. L., and Schubert, Bernice G. Rhodora 50: 186-190. 1948.

Fraxinus catawbiensis Ashe, see **F. americana** L.

Fraxinus coriacea S. Wats., see **F. velutina** Torr.

Fraxinus cubensis Griseb., see **F. caroliniana** Mill.

Fraxinus curtissi Vasey, see **F. americana** L.

Fraxinus cuspidata Torr. **fragrant ash**

OTHER COMMON NAME.—†flowering ash.

Fraxinus cuspidata var. **cuspidata** **fragrant ash (typical)**

†*Fraxinus cuspidata* Torr., U. S. Mex. Bound. Surv. Bot. 166. 1859.

Fraxinus cuspidata var. *serrata* Rehd., Amer. Acad. Arts and Sci. Proc. 53: 202. 1917.

DERIVATION.—Cuspidate, referring to the sharp-pointed leaflets.

RANGE.—Trans-Pecos Texas, southern to northwestern New Mexico, and northern Mexico (Chihuahua and Coahuila).

Fraxinus cuspidata var. **macropetala** (Eastw.) Rehd. ———

Fraxinus macropetala Eastw., Torrey Bot. Club Bul. 30: 494. 1903.

Fraxinus cuspidata var. *macropetala* (Eastw.) Rehd., Amer. Acad. Arts and Sci. Proc. 53: 201. 1917.

DERIVATION.—With long petals, referring to the long corolla lobes.

RANGE.—Northern and central Arizona and southeastern Nevada (Clark County).

Fraxinus darlingtonii Britton, see **F. pennsylvanica** Marsh.

Fraxinus dipetala Hook. & Arn. **two-petal ash**

Fraxinus dipetala Hook. & Arn., Bot. Beechey Voy. 362, pl. 87. 1838.

DERIVATION.—Two-petaled.

OTHER COMMON NAMES.—California shrub ash, foothill ash, flowering ash, California flowering ash, fringe-flowered ash, mountain ash.

RANGE.—Central California south to northwestern Lower California, Mexico.

REFERENCE.—Epling, Carl, and Lewis, Harlan. Amer. Midland Nat. 24: 743-746, figs. 1, 2. 1940.

This species, formerly regarded as a shrub, sometimes becomes a small tree 15 to 25 feet tall and 2 to 6 inches d. b. h.

Two varieties are recognized, the typical variety, var. *dipetala*, in California, and the following variety in northwestern Lower California, Mexico: *Fraxinus dipetala* var. *trifoliolata* Torr. (*F. trifoliolata* (Torr.) Lewis & Epling).

Fraxinus floridana (Wenzig) Sarg., see **F. caroliniana** Mill.

Fraxinus glabra Thornber, see **F. velutina** Torr.

Fraxinus gooddingii Little — **Goodding ash**

Fraxinus gooddingii Little, Wash. Acad. Sci. Jour. 42: 373. 1952.

DERIVATION.—Named for Leslie N. Goodding, botanist of the United States Department of Agriculture, who discovered it in 1934.

RANGE.—Known only from southern border of Arizona (Santa Cruz County) and northeastern Sonora, Mexico.

This newly described species is a small tree to 20 feet in height and formerly was referred to *F. greggii* A. Gray.

Fraxinus greggii A. Gray — **Gregg ash**

Fraxinus schiedeana Schlecht. & Cham. var. *parvifolia* Torr., U. S. Mex. Bound. Surv. Bot. 166. 1859; as "*scheideana*."

†*Fraxinus greggii* A. Gray, Amer. Acad. Arts and Sci. Proc. 12: 63. 1876.

DERIVATION.—Named for its discoverer, Josiah Gregg (1806-50), early American explorer-trader in the West and northern Mexico and author of Commerce of the Prairies.

OTHER COMMON NAME.—†littleleaf ash.

RANGE.—Trans-Pecos Texas and northern Mexico (Coahuila to Zacatecas and Tamaulipas).

In addition to the typical variety the following variety is found in Coahuila, northern Mexico: *Fraxinus greggii* var. *nummularis* (Jones) Little. Some Texan plants, referred to the typical variety, are intermediate.

Fraxinus hybrida Lingelsh., see **F. caroliniana** Mill.

Fraxinus juglandifolia Lam., see **F. americana** L.

Fraxinus lanceolata Borkh., see **F. pennsylvanica** Marsh.

***Fraxinus latifolia** Benth. — **†Oregon ash**

Fraxinus latifolia Benth., Bot. Voy. Sulphur 33. 1844.

†*Faxinus oregona* Nutt., No. Amer. Sylva 3: 59, pl. 99. 1849.

DERIVATION.—Broad-leaved, referring to the leaflets.

RANGE.—Pacific coast region in western Washington, western Oregon, and northern and central California. Also reported from southwestern British Columbia.

REFERENCE.—Munz, Philip A., and Laudermilk, J. D. A neglected character in western ashes (Fraxinus). El Aliso 2: 49–62, illus. 1949.

This species, universally known as *Fraxinus oregona* Nutt., has an older name, *F. latifolia* Bentham, which recently has been adopted by Abrams (Illus. Fl. Pacif. States 3: 346, fig. 3778. 1951).

Fraxinus lowellii Sarg., see **F. anomala** var. **lowellii** (Sarg.) Little

Fraxinus macropetala Eastw., see **F. cuspidata** var. **macropetala** (Eastw.) Rehd.

Fraxinus michauxii Britton, see **F. profunda** (Bush) Bush

***Fraxinus nigra** Marsh. **†black ash**

†*Fraxinus nigra* Marsh., Arbustr. Amer. 51. 1785.
Fraxinus sambucifolia Lam., Encycl. Méth. Bot. 2: 549. 1786.

DERIVATION.—Black.

OTHER COMMON NAMES.—basket ash, brown ash, hoop ash, swamp ash, water ash.

RANGE.—Newfoundland, Quebec, and Maine to Ontario, southeastern Manitoba, and northeastern North Dakota (Pembina Co.), south to Iowa, Illinois, Indiana, West Virginia, Maryland, and Delaware. Also local in northern Virginia.

Fraxinus oregona Nutt., see **F. latifolia** Benth.

Fraxinus papillosa Lingelsh. **Chihuahua ash**

Fraxinus papillosa Lingelsh., Bot. Jahrb. 40: 219. 1907.

DERIVATION.—Papillose, referring to the microscopic projections on the under surface of the leaflets.

RANGE.—Mountains of southwestern New Mexico, southeastern Arizona, and northern Mexico (Sonora and Chihuahua).

A small tree to 22 feet high and 12 inches d. b. h.

Fraxinus pauciflora Nutt., see **F. caroliniana** Mill.

***Fraxinus pennsylvanica** Marsh. **green ash**

Fraxinus pennsylvanica Marsh., Arbustr. Amer. 51. 1785.
Fraxinus lanceolata Borkh., Theor.-Prakt. Handb. Forstbot. 1: 826. 1800.
Fraxinus juglandifolia β subintegerrima Vahl, Enum. Pl. 1: 50. 1804.
Fraxinus viridis Michx. f., Hist. Arb. Forest Amér. Sept. 3: 115, pl. 10. 1813. Not Bosc (1809).
†*Fraxinus pennsylvanica* var. *lanceolata* (Borkh.) Sarg., Silva No. Amer. 6: 50. 1894.
Fraxinus darlingtonii Britton, Man. Fl. North. States Canada 725. 1901.
Fraxinus campestris Britton in Britton & Shafer, No. Amer. Trees 799, fig. 726. 1908.

Fraxinus smallii Britton in Britton & Shafer, No. Amer. Trees 805, fig. 735. 1908.

Fraxinus pennsylvanica var. *austini* Fern., Rhodora 40: 452, pl. 529, figs. 1, 2. 1938.

Fraxinus pennsylvanica campestris (Britton) F. C. Gates, Kans. Acad. Sci. Trans. 41: 102. 1938; Kans. Acad. Sci. Trans. 42: 137. 1939 [1940].

Fraxinus pennsylvanica var. *subintegerrima* (Vahl) Fern., Rhodora 49: 159. 1947.

DERIVATION.—Of Pennsylvania.

OTHER COMMON NAMES.—Darlington ash, †red ash, white ash, swamp ash, water ash.

RANGE.—Cape Breton Island, Nova Scotia, to southern Quebec, Maine, southern Ontario, central Manitoba, central Saskatchewan, and southeastern Alberta, southward through central Montana, northeastern Wyoming, northeastern Colorado, and Kansas to central Texas, and east to northwestern Florida and Georgia.

REFERENCES.—Fernald, M. L. Rhodora 40: 450–454, illus. 1938.

Wright, Jonathan W. Ecotypic differentiation in red ash. Jour. Forestry 42: 591–597. 1944.

Fraxinus pistaciaefolia Torr., see **F. velutina** Torr.

Fraxinus platicarpa Michx., see **F. caroliniana** Mill.

***Fraxinus profunda** (Bush) Bush **†pumpkin ash**

Fraxinus americana profunda Bush, Mo. Bot. Gard. Ann. Rpt. 5: 147. 1894.

†*Fraxinus profunda* (Bush) Bush, Gard. and Forest 10: 515. 1897.

Fraxinus michauxii Britton, Man. Fl. North. States Canada. Ed. 2, 1075. 1905.

Fraxinus profunda var. *ashei* E. J. Palmer, Arnold Arboretum Jour. 13: 417. 1932.

DERIVATION.—Deep, referring to the swamps where it grows.

OTHER COMMON NAME.—red ash.

RANGE.—Swamps and river bottoms, chiefly in Coastal Plain from southern New York, Maryland, and Virginia to northwestern Florida, west to Louisiana, and north in Mississippi Valley to southern Illinois, Indiana, and Ohio.

M. L. Fernald (Rhodora 40: 450–452, illus. 1938) adopted for this species the name *Fraxinus tomentosa* Michx. f. (Hist. Arbr. Forest. Amér. Sept. 3: 112, pl. 9. 1813). However, that name must be rejected as nomenclaturally superfluous when published.

***Fraxinus quadrangulata** Michx. **†blue ash**

†*Fraxinus quadrangulata* Michx., Fl. Bor.-Amer. 2: 255. 1803.

DERIVATION.—Four-angled, referring to the twigs.

RANGE.—Extreme southern Ontario, southern Michigan, south-

ern Wisconsin, and southeastern Iowa, south to eastern Kansas, northeastern Oklahoma, Arkansas, Alabama, and West Virginia.

Fraxinus rehderiana Lingelsh., see **F. caroliniana** Mill.

Fraxinus smallii Britton, see **F. pennsylvanica** Marsh.

Fraxinus standleyi Rehd., see **F. velutina** Torr.

Fraxinus texana Sarg., see **F. texensis** (A. Gray) Sarg.

Fraxinus texensis (A. Gray) Sarg. **†Texas ash**

Fraxinus americana var. *texensis* A. Gray, Synopt. Fl. No. Amer. 2(1): 75. 1878.

†*Fraxinus texensis* (A. Gray) Sarg., Silva No. Amer. 6: 47, pl. 270. 1894.

Fraxinus texana Sarg. ex Britton & Shafer, No. Amer. Trees 807, fig. 738. 1908.

DERIVATION.—Of Texas.

OTHER COMMON NAME.—Mountain ash.

RANGE.—Oklahoma (Arbuckle Mountains and Cherokee County) and central Texas including Edwards Plateau.

Fraxinus tomentosa Michx. f., see note under **F. profunda** (Bush) Bush

Fraxinus toumeyi Britton, see **F. velutina** Torr.

Fraxinus trifoliolata (Torr.) Lewis & Epling, see **F. dipetala** Hook. & Arn.

Fraxinus velutina Torr. **†velvet ash**

Fraxinus velutina Torr. in Emory, Notes Mil. Reconn. Ft. Leav. Calif. 149. 1848.

Fraxinus pistaciaefolia Torr., U. S. Rpts. Explor. Surv. Miss. Pacif. 4(5): 128. 1857.

Fraxinus coriacea S. Wats., Amer. Nat. 7: 302. 1873.

†*Fraxinus pistaciaefolia* var. *coriacea* (Torr.) A. Gray, Synopt. Fl. No. Amer. 2(1): 74. 1878.

Fraxinus oregona var. *β glabra* Lingelsh., Bot. Jahrb. 40: 220. 1907; *nomen nudum*. Lingelsh., Pflanzenreich 72 Heft (IV. 243, I & II): 43. 1920.

Fraxinus attenuata Jones, Contrib. West. Bot. 12: 59. 1908 (March 26).

Fraxinus toumeyi Britton in Britton & Shafer, No. Amer. Trees 803, fig. 732. 1908 (April).

†*Fraxinus oregona* var. *glabra* Lingelsh. ex Rehd., Amer. Acad. Arts and Sci. Proc. 53: 207. 1917.

Fraxinus glabra Thornber ex Rehd., Amer. Acad. Arts and Sci. Proc. 53: 207. 1917; as synonym. Thornber ex Gray Herbarium Card-Index Issue 77. Thornber ex Tidestrom & Kittell, Fl. Ariz. N. Mex. 516. 1941.

†*Fraxinus standleyi* Rehd., Amer. Acad. Arts and Sci. Proc. 53: 208. 1917.

†*Fraxinus standleyi* var. *lasia* Rehd., Amer. Acad. Arts and Sci. Proc. 53: 210. 1917.

Fraxinus velutina var. *coriacea* (S. Wats.) Rehd., Amer. Acad. Arts and Sci. Proc. 53: 206. 1917.

†*Fraxinus velutina* var. *glabra* Rehd., Amer. Acad. Arts and Sci. Proc. 53: 207. 1917.

†*Fraxinus velutina* var. *toumeyi* (Britton) Rehd., Amer. Acad. Arts and Sci. Proc. 53: 204. 1917.

DERIVATION.—Velvety, referring to the hairy leaflets and twigs.

OTHER COMMON NAMES.—Arizona ash, †desert ash, leatherleaf ash, †smooth ash, †smooth Oregon ash, Toumey ash, fresno.

RANGE.—Trans-Pecos Texas, southern New Mexico, Arizona, southwestern Utah, southern Nevada, and southern California. Also in northern Mexico (Lower California, Sonora, and Chihuahua).

REFERENCE.—Munz, Philip A., and Laudermilk, J. D. A neglected character in western ashes (Fraxinus). El Aliso 2: 49–62, illus. 1949.

Fraxinus viridis Michx. f., see **F. pennsylvanica** Marsh.

Fremontia Torr. (Family Sterculiaceae) **fremontia**

Fremontia Torr., Amer. Assoc. Adv. Sci. Proc. 4: 191. 1851; *nomen subnudum.*

†*Fremontia* Torr., Smithsn. Inst. Contrib. Knowl. 5(1) [6(2)] (Pl. Frémont.): 5, pl. 2. 1853. *Nomen conserv. propos.*, Little, Madroño 7: 247–248. 1944; Brittonia 7: 47. 1949. Not *Fremontia* Torr. in Frém., Rpt. Explor. Mo. Rocky Mts. 91. 1843.

Fremontodendron Cov., U. S. Dept. Agr. Contrib. U. S. Natl. Herbarium 4: 74. 1893.

DERIVATION.—Dedicated to Gen. John Charles Frémont (1813–90), politician, soldier, and noted explorer of western United States, who collected plant specimens on his expeditions.

REFERENCE.—Harvey, Margaret. A revision of the genus Fremontia. Madroño 7: 100–110, illus. 1943.

***Fremontia* Torr., used for this genus by most authors, has been technically invalid since 1930 as a later homonym. The name is retained here, as a proposal that it be made a *nomen conservandum* is pending.**

Fremontia californica Torr. **California fremontia**

†*Fremontia californica* Torr., Smithsn. Inst. Contrib. Knowl. 5(1) [6(2)] (Pl. Frémont.): 6, pl. 2. 1853.

Fremontodendron californicum (Torr.) Cov., U. S. Dept. Agr. Contrib. U. S. Natl. Herbarium 4: 74. 1893.

?*Cheirostemon californicum* Martínez, Pl. Utiles Repúbl. Mexicana 45. 1928; *nomen nudum.* Also Gray Herbarium Card-Index, Issue 122.

Fremontia crassifolia Eastw., Leafl. West. Bot. 1: 139. 1934.

Fremontia californica var. *diegensis* Harvey, Madroño 7: 108, fig. 1 l-m. 1943.

Fremontia californica var. *integra* Harvey, Madroño 7: 108, fig. 1 j-k. 1943.

Fremontia californica var. *viridis* Harvey, Madroño 7: 108, fig. 1 h-i. 1943.

Fremontia californica subsp. *crassifolia* (Eastw.) Abrams, Illus. Fl. Pacif. States 3: 114. 1952.

DERIVATION.—Of California.

OTHER COMMON NAMES.—flannelbush, †mountain leatherwood, California slippery-elm.

RANGE.—Mountains of central Arizona and northern to southern California.

Fremontia mexicana (Davidson) Macbr. **Mexican fremontia**

Fremontodendron mexicanum Davidson, South. Calif. Acad. Sci. Bul. 16: 50. 1917.

Fremontia mexicana (Davidson) Macbr., Gray Herbarium, Harvard Univ., Contrib., New Ser., 53: 14. 1918.

Fremontia californica var. *mexicana* (Davidson) Jeps., Man. Fl. Pl. Calif. 637. 1925.

DERIVATION.—Of Mexico, where it was discovered.

OTHER COMMON NAME.—San Diego fremontia (SPN).

RANGE.—Southern California (San Diego County) and northern Lower California, Mexico. Very rare and local in the United States and possibly only a shrub where found wild, though becoming a small tree in cultivation and in Mexico.

REFERENCES.—Payne, Theodore. History of the introduction of three California natives. El Aliso 2: 109-114. 1950.

Wiggins, Ira L. The range of Fremontia mexicana (Davids.) Macbr., in southern and Lower California. Gard. Chron., Ser. 3, 97: 13. 1935.

Fremontodendron Cov., see **Fremontia** Torr.

Garrya Dougl. (Family Cornaceae) **silktassel**

†*Garrya* Dougl. ex Lindl., Edwards' Bot. Reg. 20: No. 1686, pl. 1686. 1834.

DERIVATION.—Named in compliment to Nicholas Garry, secretary of the Hudson Bay Company, for assistance to David Douglas during his travels in northwestern America.

This genus is placed in the separate family Garryaceae by some authors.

Garrya **elliptica** Dougl. **wavyleaf silktassel**

†*Garrya elliptica* Dougl. ex Lindl., Edwards' Bot. Reg. 20: No. 1686, pl. 1686. 1834.

DERIVATION.—Elliptical, describing the leaves.

OTHER COMMON NAMES.—tree silktassel (SPN), quinine-bush, coast silktassel, †tasseltree.

RANGE.—Coast Ranges from western Oregon south to central California.

***Garrya wrightii* Torr., Wright silktassel, a shrub usually less than 10 feet high, may rarely become a small tree in Arizona. More information is desired. It ranges from Trans-Pecos Texas to southern New Mexico, central Arizona, and northern Mexico.**

Genipa L. (Family Rubiaceae) **genip**

†*Genipa* L., Gen. Pl. Ed. 5, 87. 1754.
Casasia A. Rich. in Sagra, Hist. Fis. Pol. Nat. Cuba 11: 9. 1850.

DERIVATION.—The Brazilian name.

Genipa clusiaefolia (Jacq.) Griseb. **†seven-year-apple**

Gardenia clusiaefolia Jacq., Coll. Bot. Chem. Hist. Nat. Sup. 37, pl. 4, fig. 3. 1796.
†*Genipa clusiaefolia* (Jacq.) Griseb., Fl. Brit. West Ind. 317. 1861; as "*clusiifolia.*"
Casasia clusiaefolia (Jacq.) Urban, Symbol. Antill. 5: 505. 1908; as "*clusiifolia.*"

DERIVATION.—With leaves like *Clusia,* a genus of tropical trees with thick, leathery leaves.

OTHER COMMON NAME.—seven-year-apple genip (SPN).

RANGE.—Southern Florida, including Florida Keys. Also in Bermuda, Bahamas, and Cuba.

Known also as *Casasia clusiaefolia* (Jacq.) Urban, but *Casasia* A. Rich. is a segregate of doubtful generic rank.

Gleditsia L. (Family Leguminosae) **honeylocust**

†*Gleditsia* L., Sp. Pl. 1056. 1753; Gen. Pl. Ed. 5, 476. 1754.
Gleditschia L. corr. Scop., Introd. Hist. Nat. 295. 1777. *Nom. conserv. propos.*, Janchen, Repert. Spec. Novarum Regni Veg. 52: 154. 1943.
Asacara Raf., Neogenyton 2. 1825.

DERIVATION.—Latinized name honoring Johann Gottlieb Gleditsch (1714–86), director of the botanical garden at Berlin.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Gleditsia. Asacara. No. Amer. Fl. 23: 302–303. 1930.

Gleditsia aquatica Marsh. **†waterlocust**

†*Gleditsia aquatica* Marsh., Arbustr. Amer. 54. 1785.
Asacara aquatica (Marsh.) Raf., Sylva Tellur. 121. 1838.

DERIVATION.—Aquatic, from the habitat of river swamps.

RANGE.—Coastal Plain from eastern North Carolina to central Florida and eastern Texas, and north in Mississippi Valley to southeastern Missouri, southwestern Kentucky, southern Illinois, and southwestern Indiana.

HYBRID.—*Gleditsia* ×*texana* Sarg. (*G. aquatica* × *triacanthos*).

Gleditsia ×texana Sarg. **†Texas honeylocust**

Gleditsia aquatica × *triacanthos*
†*Gleditsia texana* Sarg., Bot. Gaz. 31: 1. 1901.

DERIVATION.—Of Texas.

OTHER COMMON NAME.—Texas locust.

RANGE.—Mississippi to eastern Texas, north in Mississippi Valley to Arkansas and southwestern Indiana.

Shown by Sargent (Arnold Arboretum Jour. 3: 206–207. 1922) to be a hybrid rather than a species.

***Gleditsia triacanthos** L. **†honeylocust**

†*Gleditsia triacanthos* L., Sp. Pl. 1056. 1753.
Gleditsia inermis L., Syst. Nat. Ed. 10, 1313. 1759.
Gleditsia triacanthos γ *inermis* (L.) Castiglioni, Viagg. Stat. Unit. 2: 249. 1790; as "*Gleditschia.*"

DERIVATION.—Three-thorned, referring to the large branched spines.

OTHER COMMON NAME.—common honeylocust (SPN).

RANGE.—Western Pennsylvania to extreme southern Michigan, extreme southeastern Minnesota, and southeastern South Dakota, south to central Nebraska, western Oklahoma, and northwestern and eastern Texas, east to Alabama and northwestern Florida, and north to eastern Tennessee, West Virginia, and western Pennsylvania. Widely planted, escaped from cultivation, and naturalized east of Appalachian Mountains from South Carolina to New York and New England and also west of natural range. Also in extreme southern Ontario, where it may have been introduced. The thornless form, *Gleditsia triacanthos* f. *inermis* (L.) Zabel, is occasionally found wild and is preferred in planting.

HYBRID.—*Gleditsia* ×*texana* Sarg. (*G. aquatica* × *triacanthos*).

Glycosmis parviflora (Sims) Little (Phytologia 2: 463. 1948; *G. citrifolia* Lindl.; family Rutaceae), Chinese glycosmis, is cultivated and naturalized at Key West, Fla., according to Small (Man. Southeast. Fl. 759. 1933) and Everett (Addisonia 21: 29. 1940). However, this species is too local for acceptance as a naturalized tree. It is a shrub or small tree native of southern China, French Indo-China, and Thailand.

Gordonia Ellis (Family Theaceae) **gordonia**

Lasianthus Adans., Fam. Pl. 2: 398. 1763; *nomen rejiciendum.*
†*Gordonia* Ellis, Roy. Soc. London Phil. Trans. 70: 520, pl. 11. 1771; *nomen conservandum.*

DERIVATION.—In honor of James Gordon (1728–91), English nurseryman.

Gordonia Ellis, see also **Franklinia** Bartr.

Gordonia lasianthus (L.) Ellis **†loblolly-bay**

Hypericum lasianthus L., Sp. Pl. 783. 1753.
†*Gordonia lasianthus* (L.) Ellis, Roy. Soc. London Phil. Trans. 70: 523, pl. 11. 1771.

DERIVATION.—*Lasianthus,* an older name for the genus, meaning hairy-flowered.

OTHER COMMON NAME.—loblollybay gordonia (SPN).

RANGE.—Coastal Plain from eastern North Carolina to central Florida and southern Mississippi. Reported from southeastern Virginia but not included by Fernald (Gray's Man. Bot. Ed. 8, 1007. 1950).

Gossypium L. (Family Malvaceae) **cotton**

†*Gossypium* L., Sp. Pl. 693. 1753; Gen. Pl. Ed. 5, 309. 1754.

DERIVATION.—From the classical Latin name, perhaps of Arabic origin.

REFERENCE.—Watt, George. Gossypium. Kew Roy. Bot. Gard. Bul. Misc. Inform. 1926: 193–210. 1926; 1927: 321–356. 1927.

Gossypium hirsutum L. **upland cotton**

Gossypium hirsutum L., Sp. Pl. Ed. 2, 2: 975. 1763.

DERIVATION.—Hairy.

OTHER COMMON NAME.—wild cotton.

RANGE.—Southern Florida, including Florida Keys. Native of New World and widely distributed and naturalized in tropical countries of the world through cultivation.

A shrub or small tree. In the 1927 Check List the name †*Gossypium punctatum* **Schum. & Thonn. was used for this species.**

Gossypium thurberi Todaro (*Thurberia thespesioides* A. Gray), Thurber cotton, or desert cotton, is a shrub commonly less than 6 feet high but may reach tree size, 18 to 20 feet in height, according to Preston (Rocky Mt. Trees 241. 1940). Its distribution is desert mountains of southeastern and central Arizona and northern Mexico.

GREVILLEA R. Br. (Family Proteaceae) GREVILLEA

†*Grevillea* R. Br., Linn. Soc. London Trans. 10: 167. 1810.

DERIVATION.—Dedicated to Charles Francis Greville of England, a vice president of the Royal Society and patron of botany.

GREVILLEA ROBUSTA A. Cunn. SILK-OAK

†*Grevillea robusta* A. Cunn. in R. Br., Sup. Prodr. Fl. Nov. Holl. 24. 1830.

DERIVATION.—Robust, or stout.

OTHER COMMON NAMES.—silk-oak grevillea (SPN), †silky-oak.

RANGE.—Naturalized in southern Florida. Native in Australia but widely planted in tropical and subtropical regions.

Guaiacum L. (Family Zygophyllaceae) **lignumvitae**

Guaiacum L., Sp. Pl. 381. 1753; as "*Guajacum*" L., Gen. Pl. Ed. 5, 179. 1754; as "*Guaiacum.*" (In the 1927 Check List as "*Guajacum.*")

DERIVATION.—From the Carib Indian name.

Guaiacum sanctum L. **holywood lignumvitae**

Guaiacum sanctum L., Sp. Pl. 382. 1753; as "Guajacum."

DERIVATION.—Holy.

OTHER COMMON NAME.—roughbark lignumvitae.

RANGE.—Florida Keys. Also in Bahama Islands, Cuba, Hispaniola, and Puerto Rico, and Yucatán and perhaps other States in southern Mexico.

Guettarda L. (Family Rubiaceae) **velvetseed**

†*Guettarda* L., Sp. Pl. 991. 1753; Gen. Pl. Ed. 5, 428. 1754.

DERIVATION.—In honor of Jean Étienne Guettard (1715-86), French botanist, mineralogist, and physician.

Guettarda elliptica Sw. **Everglades velvetseed**

†*Guettarda elliptica* Sw., Nov. Gen. Sp. Pl. Prodr. 59. 1788.

DERIVATION.—Elliptical, referring to the shape of the leaves.

OTHER COMMON NAME.—†velvetseed.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies, southern Mexico (Yucatán, Sinaloa, Nayarit, and Socorro Island), and Venezuela.

Guettarda scabra (L.) Vent. **†roughleaf velvetseed**

Matthiola scabra L., Sp. Pl. 1192. 1753.

†*Guettarda scabra* (L.) Vent., Choix Pl. Jard. Cels 1, pl. 1. 1803.

DERIVATION.—Rough, the leaves being very rough above.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies.

Gyminda (Griseb.) Sarg. (Family Celastraceae) **falsebox**

Myginda Sect. *Gyminda* Griseb., Cat. Pl. Cub. 55. 1866.

†*Gyminda* (Griseb.) Sarg., Gard. and Forest 4: 4. 1891.

DERIVATION.—Anagram of *Myginda* Jacq., the related genus from which it was segregated.

Gyminda latifolia (Sw.) Urban **West Indies falsebox**

Myginda latifolia Sw., Nov. Gen. Sp. Pl. Prodr. 39. 1788.

Myginda integrifolia f. *glaucifolia* Griseb., Cat. Pl. Cub. 55. 1866; *nomen nudum.*

Gyminda grisebachii Sarg., Gard. and Forest 4: 4. 1891.

Gyminda grisebachii var. *glaucescens* Sarg., Gard. and Forest 4: 4. 1891.

Rhacoma latifolia (Sw.) Loes. in Engler & Prantl, Naturl. Pflanzenfam. 3(5): 217. 1892.

†*Gyminda latifolia* (Sw.) Urban, Symb. Antill. 5: 80. 1904.

Gyminda latifolia glaucifolia Small, Fla. Trees 64. 1913.

Gyminda latifolia var. *glaucescens* Small ex Sarg., Man. Trees No. Amer. Ed. 2, 679. 1922.

DERIVATION.—Broad-leaved.

OTHER COMMON NAME.—†false-boxwood.

RANGE.—Florida Keys. Also in West Indies and northeastern Mexico (Tamaulipas and Veracruz).

Gymnanthes Sw. (Family Euphorbiaceae) **oysterwood**

?*Ateramnus* P. Br., Civ. Nat. Hist. Jamaica 339. 1756.

†*Gymnanthes* Sw., Nov. Gen. Sp. Prodr. 6, 95. 1788. *Nom conserv. propos.*, Janchen, 1944.

DERIVATION.—Naked flower, the flowers with perianth reduced to bractlike scales or absent.

Gymnanthes lucida Sw. **oysterwood**

†*Gymnanthes lucida* Sw., Nov. Gen. Sp. Prodr. 96. 1788.

DERIVATION.—Bright, or shining, referring to the shiny dark green evergreen leaves.

OTHER COMMON NAMES.—shiny oysterwood (SPN), †crabwood.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and Yucatán, Mexico.

Gymnocladus Lam. (Family Leguminosae) **coffeetree**

†*Gymnocladus* Lam., Encycl. Méth. Bot. 1: 733. 1785.

DERIVATION.—From Greek, naked branch, presumably referring to the stout naked branches with few twigs and sparse foliage.

Gymnocladus dioicus (L.) K. Koch **Kentucky coffeetree**

Guilandina dioica L., Sp. Pl. 381. 1753.

†*Gymnocladus dioicus* (L.) K. Koch, Dendrol. 1: 5. 1869.

DERIVATION.—Dioecious, the staminate and pistillate flowers generally on different trees. The common name refers to a former use of the seeds as a substitute for coffee.

OTHER COMMON NAME.—†coffeetree.

RANGE.—Central New York and extreme southern Ontario to southern Michigan, southeastern Minnesota, and southeastern South Dakota, south to central Nebraska and western Oklahoma, and east to Arkansas, Tennessee, and Kentucky. Also naturalized east to Virginia and Delaware.

Halesia Ellis (Family Styracaceae) **silverbell**

†*Halesia* Ellis ex L., Syst. Nat. Ed. 10, 2: 1044, 1369. 1759. *Nom. conserv. propos.*, Little, Madroño 7: 250–251. 1944; Brittonia 7: 50. 1949. Not *Halesia* P. Br., Civ. Nat. Hist. Jamaica 205, pl. 20, fig. 1. 1756. Not *Halesia* Loefl., Iter Hisp. 188. 1758; as synonym.

Hillia Boehm. in Ludw., Def. Gen. Pl. 71. 1760. Not *Hillia* Jacq., Enum. Pl. Carib. 3. 1760.

?*Halia* St. Lag., Soc. Bot. de Lyon Ann. 8: 175. 1881; *nomen nudum.*

Mohria Britton, Gard. and Forest 6: 434. 1893 (Oct. 18). Not *Mohria* Sw., Synops. Fil. 159. 1806.

Carlomohria Greene, Erythea 1: 236. 1893 (Nov. 3); 1: 246. 1893 (Dec. 1).

Mohrodendron Britton, Gard. and Forest 6: 403. 1893 (Nov. 8).

DERIVATION.—In honor of Stephen Hales (1677–1761), English clergyman and author of Vegetable Staticks.

***Halesia carolina** L. **Carolina silverbell**

Halesia carolina var. **carolina** **Carolina silverbell (typical)**

†*Halesia carolina* L., Syst. Nat. Ed. 10, 2: 1044. 1759.

Halesia tetraptera Ellis, [Roy. Soc. London] Phil. Trans. 51: 932, pl. 22A. 1761.

Mohrodendron carolinum (L.) Britton, Gard. and Forest 6: 463. 1893 (Nov. 8).

Halesia tetraptera β mollis Lange, Bot. Tidssk. 19: 258, fig. 2 a-g. 1895.

†*Halesia carolina* var. *mollis* (Lange) Perkins, Pflanzenreich 30 (IV. 241): 97. 1907.

DERIVATION.—Of Carolina.

OTHER COMMON NAMES.—opossum-wood, †silverbell, snowdrop-tree.

RANGE.—Virginia and southern West Virginia to southern Ohio, southeastern and western Kentucky, and southern Illinois, south to western Tennessee, Alabama, northwestern Florida, and Georgia, and northeast to North Carolina.

†*Halesia carolina* var. *meehanii* (Sarg.) Perkins, Meehan silverbell, a variety which originated in cultivation, is omitted here.

Halesia carolina var. **monticola** Rehd. **†mountain silverbell**

Halesia carolina var. *monticola* Rehd., Deut. Dendrol. Gesell. Mitt. 22: 260. 1913 [1914].

†*Halesia monticola* (Rehd.) Sarg., Arnold Arboretum Jour. 2: 171. 1921.

†*Halesia monticola* var. *vestita* Sarg., Arnold Arboretum Jour. 2: 171. 1921.

DERIVATION.—Native of mountains.

RANGE.—Mountains of North Carolina to Tennessee and Georgia, and in Arkansas and southeastern Oklahoma.

Halesia diptera Ellis **†two-wing silverbell**

†*Halesia diptera* Ellis, [Roy. Soc. London] Phil. Trans. 51: 932, pl. 22 B. 1761.

Mohrodendron dipterum (Ellis) Britton, Gard. and Forest 6: 463. 1893 (Nov. 8).

DERIVATION.—Two-winged, describing the fruit.

OTHER COMMON NAME.—snowdrop-tree.

RANGE.—Coastal Plain from Georgia to northwestern Florida and eastern Texas, north to southeastern Oklahoma and central Arkansas. Also reported from South Carolina.

Halesia parviflora Michx. **†little silverbell**

†*Halesia parviflora* Michx., Fl. Bor.-Amer. 2: 40. 1803.

Mohrodendron parviflorum (Michx.) Britton, Gard. and Forest 6: 463. 1893 (Nov. 8).

DERIVATION.—Small-flowered.

OTHER COMMON NAME.—Florida silverbell (SPN).

RANGE.—Coastal Plain from southern Georgia to northern Florida, Alabama, and eastern Mississippi.

Hamamelis L. (Family Hamamelidaceae) **witch-hazel**

†*Hamamelis* L., Sp. Pl. 124. 1753; Gen. Pl. Ed. 5, 59. 1754.

DERIVATION.—Classical Greek name of *Mespilus germanica* L.,

medlar, or perhaps *Sorbus domestica* L., servicetree; from words meaning together (in a time sense) and apple, suggesting that the tree blooms contemporaneously with the apple and inappropriate for these largely winter-blooming species.

Hamamelis virginiana L. **†witch-hazel**

†*Hamamelis virginiana* L., Sp. Pl. 124. 1753.
†*Hamamelis macrophylla* Pursh, Fl. Amer. Sept. 1: 116. 1814.
Hamamelis virginiana γ *parvifolia* Nutt., Gen. No. Amer. Pl. 1: 107. 1818.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—common witch-hazel (SPN), southern witch-hazel.

RANGE.—Nova Scotia to southern Quebec, Maine, southern Ontario, central Michigan, extreme southeastern Minnesota, south to southern Missouri, southeastern Oklahoma, and eastern Texas, and east to central Florida. Also in northeastern Mexico (Tamaulipas).

Hamamelis macrophylla Pursh, which was revived by Sargent (Arnold Arboretum Jour. 1: 246. 1920), was reduced to synonymy by Coker and Totten (Trees Southeast. States 187. 1934), by Cory and Parks (Cat. Fl. Tex. Tex. Agr. Expt. Sta. Bul. 550: 52. 1938), and by Brown (La. Trees Shrubs 123. 1945.) A second species, *Hamamelis vernalis* Sarg., vernal witch-hazel, is a shrub of the Ozark region of southern Missouri, Arkansas, and eastern Oklahoma.

Hamelia Jacq. (Family Rubiaceae) **hamelia**

†*Hamelia* Jacq., Enum. Pl. Carib. 2. 1760.

DERIVATION.—In honor of Henry Louis Duhamel du Monceau (1700–82), French botanist.

Hamelia patens Jacq. **scarletbush**

†*Hamelia patens* Jacq., Enum. Pl. Carib. 16. 1760; Select. Stirp. Amer. 72, pl. 50. 1763. Also L., Sp. Pl. Ed. 2, 246. 1762; as "*Hamellia.*"
Hamelia erecta Jacq., Enum. Pl. Carib. 16. 1760; Select. Stirp. Amer. 71. 1763.

DERIVATION.—Open or spreading, referring to the flower clusters.

OTHER COMMON NAMES.—scarlet hamelia (SPN), firebush.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and from Mexico (Tamaulipas, Veracruz, Oaxaca, and Yucatan southward), south to Central America and South America.

Commonly a shrub but recorded also as a small tree.

Harrisia Britton, see note under **Cereus** Mill.

Havardia Small, see **Pithecellobium** Mart.

Helietta Tulasne (Family Rutaceae) **helietta**

†*Helietta* Tulasne, Ann. des Sci. Nat., Bot., Sér. 3, 7: 280. 1847.

DERIVATION.—In honor of Lewis Théodore Hélie (1804–67), French physician.

Helietta parvifolia (A. Gray) Benth. **†baretta**

Ptelea parvifolia A. Gray ex Hemsl., Biol. Centr.-Amer. Bot. 1: 170. 1879; excluding fruit.

†*Helietta parvifolia* (A. Gray) Benth. in Hook., Icon. Pl., Ser. 3, 4: 66, pl. 1385. 1882.

DERIVATION.—Small-leaved.

RANGE.—Southern Texas and northeastern Mexico (Tamaulipas to Coahuila and Querétaro).

This species of thicket-forming shrubs in Starr County, Texas, on the Mexican border perhaps should not be included as a native tree. However, it becomes a tree 20 to 25 feet tall southward in northeastern Mexico and possibly for that reason was accepted as a tree by Sargent (Silva No. Amer. 1: 79–82, pl. 35. 1891; Man. Trees No. Amer. Ed. 2, corr. 637–639, fig. 581. 1926) and by Sudworth in his Check Lists.

Heteromeles Roem., see **Photinia** Lindl.

Hibiscus L. (Family Malvaceae) **hibiscus**

†*Hibiscus* L., Sp. Pl. 693. 1753; Gen. Pl. Ed. 5, 310. 1754.

Pariti Adans., Fam. Pl. 2: 401. 1763.

DERIVATION.—Ancient Greek and Latin name of the marshmallow.

The native species of *Hibiscus* are herbs, called rosemallows, but three naturalized species known as hibiscus are trees.

Hibiscus rosa-sinensis L., Chinese hibiscus (Chinese-rose), a shrub or small tree grown for ornament in Florida, has escaped from cultivation in fields, waste places, and roadsides there, according to Small (Fla. Trees 70. 1913; Man. Southeast. Fl. 857. 1933). However, it perhaps is not yet established as a naturalized tree. Native of China but widely cultivated in tropical regions.

HIBISCUS SYRIACUS L. **SHRUB-ALTHEA**

Hibiscus syriacus L., Sp. Pl. 695. 1753.

DERIVATION.—Of Syria.

OTHER COMMON NAME.—rose-of-Sharon.

RANGE.—Escaped from cultivation in eastern United States from Connecticut, New York, and Pennsylvania to Ohio and Missouri, south to eastern Texas and Florida. Perhaps naturalized in the southern part of the range. Native of China and India.

A shrub or small tree, according to Small (Fla. Trees 70. 1913; Man. Southeast. Fl. 857. 1933).

HIBISCUS TILIACEUS L. SEA HIBISCUS

†*Hibiscus tiliaceus* L., Sp. Pl. 694. 1753.

Paritium tiliaceum (L.) St.-Hil., Juss., & Camb., Fl. Brasil. Merid. 1: 256. 1827.

?*Pariti grande* Britton ex Small, Man. Southeast. Fl. 859. 1933.

DERIVATION.—Like *Tilia* L., basswood, perhaps because of the large, similar shaped leaves.

OTHER COMMON NAMES.—linden hibiscus (SPN), mahoe.

RANGE.—Naturalized in southern Florida, including Florida Keys. Widely distributed in tropical regions including West Indies, Mexico, Central America, and South America and in Old World. Probably of Old World origin.

Hicoria Raf., see **Carya** Nutt.

Hicoria alba (L.) Britton, see **Carya tomentosa** Nutt.

Hicoria ashei Sudw., see **Carya glabra** var. **megacarpa** (Sarg.) Sarg.

Hicoria austrina Small, see **Carya glabra** var. **megacarpa** (Sarg.) Sarg.

Hicoria borealis Ashe, see **Carya ovata** (Mill.) K. Koch

Hicoria buckleyi (Durand) Ashe, see **Carya texana** Buckl.

Hicoria fernowiana Sudw., see **Carya myristicaeformis** (Michx. f.) Nutt.

Hicoria magnifloridana Murrill, see **Carya glabra** var. **megacarpa** (Sarg.) Sarg.

Hicoria microcarpa (Nutt.) Britton, see **Carya glabra** (Mill.) Sweet

Hicoria minima (Marsh.) Britton, see **Carya cordiformis** (Wangenh.) K. Koch

Hicoria mollissima Ashe, see **Carya leiodermis** Sarg.

Hicoria ovalis (Wangenh.) Ashe, see **Carya glabra** (Mill.) Sweet

Hicoria pecan (Marsh.) Britton, see **Carya illinoensis** (Wangenh.) K. Koch

Hicoria similis Ashe, see **Carya glabra** (Mill.) Sweet

Hicoria texana Le Conte, see **Carya ×lecontei** Little

Hicoria villosa (Sarg.) Ashe, see **Carya texana** Buckl.

Hippomane L. (Family Euphorbiaceae) **manchineel**

†*Hippomane* L., Sp. Pl. 1191. 1753; Gen. Pl. Ed. 5, 499. 1754.

DERIVATION.—A classical name (*hippomanes* in the original) for an Arcadian plant, apparently of this same family, supposed to make horses mad.

Hippomane mancinella L. **†manchineel**

†*Hippomane mancinella* L., Sp. Pl. 1191. 1753.

DERIVATION.—Latinized from Spanish *manzanilla,* little apple, referring to the applelike fruits.

RANGE.—Southern Florida, Cape Sable region and Florida Keys. Also in West Indies, southern Mexico (Veracruz, Yucatan, and Oaxaca), Central America, and northern South America, chiefly along shores.

Holacantha A. Gray (Family Simaroubaceae) **holacantha**

Holacantha A. Gray, Amer. Acad. Arts and Sci. Mem., New Ser., 5: 310. 1855.

DERIVATION.—From Greek wholly and thorn, alluding to the spiny branches throughout.

OTHER COMMON NAME.—crucifixion-thorn (SPN).

Holacantha emoryi A. Gray **holacantha**

Holacantha emoryi A. Gray, Amer. Acad. Arts and Sci. Mem., New Ser., 5: 310. 1855.

DERIVATION.—Named for its discoverer, Lt. Col. William Hemsley Emory (1811–87), who was in charge of the United States and Mexican boundary survey after the Mexican War and afterwards was a Major General in the Civil War.

OTHER COMMON NAMES.—crucifixion-thorn (SPN), corona de Cristo, rosario.

RANGE.—Southern Arizona and southeastern California. Also in Sonora, Mexico.

Formerly regarded as a shrub but becoming a small tree up to 12 feet tall in Arizona, according to Muller (Madroño 6: 131. 1941), Benson and Darrow (Man. Southwest. Desert Trees Shrubs 214. 1945), and Leslie N. Goodding.

Hymenanthes Blume, see **Rhododendron** L.

Hypelate P. Br. (Family Sapindaceae) **inkwood**

†*Hypelate* P. Br., Civ. Nat. Hist. Jamaica 208. 1756.

DERIVATION.—A classical Greek plant name (Latin *ruscum*) thought to apply to the liliaceous butchers-broom genus *Ruscus* L.

Hypelate trifoliata Sw. **inkwood**

†*Hypelate trifoliata* Sw., Nov. Gen. Sp. Prodr. 61. 1788.

DERIVATION.—Three-leaved, from the compound leaves with three leaflets.

OTHER COMMON NAME.—†white-ironwood.

RANGE.—Rare in southern Florida, including Florida Keys. Also in West Indies.

Icacorea Aubl., see **Ardisia** Sw.

Ichthyomethia P. Br., see **Piscidia** L.

Ilex L. (Family Aquifoliaceae) **holly**

†*Ilex* L., Sp. Pl. 125. 1753; Gen. Pl. Ed. 5, 60. 1754.
Prinos L., Sp. Pl. 330. 1753; Gen. Pl. Ed. 5, 153. 1754.

DERIVATION.—The classical Latin name of *Quercus ilex* L., holly oak, of Europe, which has hollylike leaves.

REFERENCES.—Hume, H. Harold. Evergreen hollies native in the United States. Natl. Hort. Mag. 26: 143–179, illus. 1947.
Lundell, Cyrus Longworth. Aquifoliaceae. Fl. Tex. 3: 112–122. 1943.
Woods, Frank W. The genus Ilex in Tennessee. Rhodora 53: 229–240, illus. 1951.

Ilex ambigua (Michx.) Torr. **Carolina holly**

Cassine caroliniana Walt., Fl. Carol. 242. 1788. Not *Cassine caroliniana* Lam., Encycl. Méth. Bot. 1: 652. 1785.
Prinos ambiguus Michx., Fl. Bor.-Amer. 2: 236. 1803.
Ilex ambigua (Michx.) Torr., Fl. N. Y. 2: 2. 1843; as "*ambiguus*"; as to new combination but not description.
Ilex ambigua Chapm., Fl. South. U. S. 269. 1860.
Ilex caroliniana (Walt.) Trel., Acad. Sci. St. Louis Trans. 5: 347. 1889; *nomen provisorium*. Not *I. caroliniana* Mill., Gard. Dict. Ed. 8, *Ilex* No. 3. 1768.
?*Ilex buswellii* Small, Torrey Bot. Club Bul. 51: 382. 1924.
Ilex caroliniana var. *jejuna* McFarlin, Rhodora 34: 236, pl. 231. 1932.

DERIVATION.—Ambiguous or doubtful.

RANGE.—Coastal Plain, chiefly, from North Carolina to central Florida and eastern Texas, north to southeastern Oklahoma and Arkansas.

REFERENCES.—Fernald, M. L. Rhodora 41: 425–426. 1939.
Little, Elbert L., Jr., Amer. Midland Nat. 33: 497–498. 1945.
Rehder, Alfred. Arnold Arboretum Jour. 3: 214. 1922.

In the 1927 Check List included under †*Ilex montana* Torr. & Gray.

Ilex amelanchier M. A. Curt. (ex Chapm., Fl. South. U. S. 270. 1860; *I. dubia* (G. Don) B. S. P., not Weber), sarvis holly, is a shrub generally less than 6 feet high but was mentioned also as a small tree, size not stated, by Small (Man. Southeast. Fl. 1502. 1933). It is very rare in the Coastal Plain from South Carolina and Georgia to southeastern Louisiana and has been reported also from southeastern Virginia. More information about the size of tree individuals is desired.

Ilex arenicola Ashe, see **I. opaca** var. **arenicola** (Ashe) Ashe

Ilex ×attenuata Ashe **Topel holly**

Ilex cassine × *opaca*
†*Ilex* ×*attenuata* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 44. 1924; as *Ilex dahoon* × *opaca*.

DERIVATION.—Attenuate, describing the long, spiny-pointed leaves. The common name is from *Ilex topelii* Hort., a synonym.

RANGE.—South Carolina and northwestern Florida.

Ilex beadlei Ashe, see **I. montana** Torr. & Gray

Ilex bronxensis Britton, see **I. verticillata** (L.) A. Gray

Ilex buswellii Small, see **I. ambigua** (Michx.) Torr.

Ilex caroliniana (Walt.) Trel., see **I. ambigua** (Michx.) Torr.

Ilex cassine L. **dahoon**

†*Ilex cassine* L., Sp. Pl. 125. 1753.
Ilex dahoon Walt., Fl. Carol. 241. 1788.
†*Ilex cassine β angustifolia* Ait., Hort. Kew. 1: 170. 1789.
Ilex cassine var. *bryanii* Tarbox, Some Nat. Hollies Brookgreen Gard. 12, fig. 1944; without Latin diagnosis; as f. *bryanii* on p. 21. 1945.

DERIVATION.—Old name for *Ilex vomitoria* Ait., yaupon, misapplied to this species.

OTHER COMMON NAMES.—cassena, Alabama dahoon, dahoon holly.

HYBRID.—*Ilex* ×*attenuata* Ashe (*I. cassine* × *opaca*).

RANGE.—Coastal Plain, mostly near coast, from southeastern Virginia to southern Florida and west to southern Louisiana. Also reported from southeastern Texas.

Ilex cassine Walt., see **I. vomitoria** Ait.

Ilex collina Alexander, see **I. montana** Torr. & Gray

Ilex coriacea (Pursh) Chapm. **large gallberry**

Prinos coriaceus Pursh, Fl. Amer. Sept. 1: 221. 1814.
Ilex coriacea (Pursh) Chapm., Fl. South. U. S. 270. 1860.

DERIVATION.—Leathery, referring to the evergreen leaves.

OTHER COMMON NAME.—sweet gallberry.

RANGE.—Coastal Plain from southeastern Virginia to Florida and west to Louisiana and eastern Texas.

Usually a shrub less than 10 feet high, this species occassionally becomes a small tree up to 15 feet high and 2 or 3 inches in trunk diameter, according to Lundell (Fl. Tex. 3: 114. 1943) and Hume (Natl. Hort. Mag. 26: 144. 1947). Brown (Trees Shrubs La. 166. 1945) recorded it as a large shrub or small tree.

Ilex cumulicola Small, see **I. opaca** var. **arenicola** (Ashe) Ashe

Ilex curtissii (Fern.) Small, see **I. decidua** Walt.

Ilex cuthbertii Small, see **I. decidua** Walt.

Ilex dahoon Walt., see **I. cassine** L.

Ilex decidua Walt. **possumhaw**

†*Ilex decidua* Walt., Fl. Carol. 241. 1788.
†*Ilex decidua* var. *curtissii* Fern., Bot. Gaz. 33: 155. 1902.
Ilex curtissii (Fern.) Small, Man. Southeast. Fl. 815. 1933.
Ilex cuthbertii Small, Man. Southeast. Fl. 815. 1933.

DERIVATION.—Deciduous.

OTHER COMMON NAMES.—deciduous holly, swamp holly, Curtiss possumhaw, †winterberry.

RANGE.—Maryland and Virginia, south in Coastal Plain and Piedmont to northern Florida, west to southeastern and central Texas, and north in interior to eastern Oklahoma, southeastern Kansas, Missouri, southern Illinois, southwestern Indiana, western Kentucky, and Tennessee. Also in northeastern Mexico (Tamaulipas and Nuevo León).

Ilex dubia (G. Don) B. S. P., see *I. amelanchier* M. A. Curt.

Ilex fastigiata Bickn., see **I. verticillata** (L.) A. Gray

Ilex krugiana Loes. **tawnyberry holly**

†*Ilex krugiana* Loes. in Urban, Bot. Jahrb. 15: 317. 1893.

DERIVATION.—In honor of Leopold Krug (1833–98), botanist who studied the flora of the West Indies.

OTHER COMMON NAMES.—Krug holly, southern holly.

RANGE.—Local in southern Florida (Dade County). Also in Bahama Islands and Hispaniola.

Ilex laevigata (Pursh) A. Gray **smooth winterberry**

Prinos laevigatus Dum.-Cours., Bot. Cult. Ed. 2, 6: 255. 1811; *nomen nudum.*

Prinos laevigatus Pursh, Fl. Amer. Sept. 1: 220. 1814.

Ilex laevigata (Pursh) A. Gray, Man. North, U. S. Ed. 2, 264. 1856.

DERIVATION.—Smooth, the leaves being hairless or nearly so.

RANGE.—Southwestern Maine to New York and Pennsylvania, and south to northern Georgia, mostly in Coastal Plain.

A shrub or rarely a small tree up to 20 feet high, according to Small (Man. Southeast. Fl. 815. 1933). Mentioned as a shrub in the 1927 Check **List.**

Ilex longipes Chapm. **Georgia holly**

Ilex longipes Chapm. ex Trel., Acad. Sci. St. Louis Trans. 5: 346. 1889.

Ilex longipes var. *hirsuta* Lundell, Fl. Tex. 3: 118. 1943.

DERIVATION.—Long-stalked, referring to the fruits.

OTHER COMMON NAME.—largeleaf holly.

RANGE.—North Carolina and southern Tennessee, south to eastern Texas, Louisiana, and Florida.

Usually a shrub but also a tree up to 23 feet high, according to Small (Man. Southeast. Fl. 815. 1933).

Ilex mollis A. Gray, see **I. montana** Torr. & Gray

Ilex montana Torr. & Gray **mountain winterberry**

†*Ilex montana* Torr. & Gray in A. Gray, Man. Bot. North. U. S. 276. 1848. Not *Ilex montana* (Sw.) Griseb., Amer. Acad. Arts and Sci. Mem., New Ser. 8: 171. 1861.

Ilex monticola A. Gray, Man. Bot. North. U. S. Ed. 2, 264. 1856.
Ilex mollis A. Gray, Man. Bot. North. U. S. Ed. 5, 306. 1867.
Ilex montana var. *mollis* (A. Gray) Britton, Torrey Bot. Club Bul. 17: 313. 1890.
Ilex beadlei Ashe, Bot. Gaz. 26: 377. 1897; *nomen subnudum.*
Ilex beadlei Ashe ex Kearney, Torrey Bot. Club Bul. 24: 569. 1897.
Ilex montana var. *beadlei* (Ashe) Fern., Rhodora 41: 428. 1939.
?*Ilex collina* Alexander, Castanea 6: 30. 1941.

The West Indian species formerly known also as *Ilex montana* (Sw.) Griseb., a later homonym, was renamed *I. macfadyenii* (Walp.) Rehd. (Arnold Arboretum Jour. 3: 215. 1922).

DERIVATION.—Of mountains.

OTHER COMMON NAME.—†mountain holly.

RANGE.—Mountains, mostly from Massachusetts to western New York, south to eastern Kentucky, central Tennessee, and Louisiana, and east to northwestern Florida and Georgia. Also a variety in Japan.

REFERENCES.—Fernald, M. L. Rhodora 41: 424–429, pl. 559. 1939.

Little, Elbert L., Jr. Amer. Midland Nat. 33: 498. 1945.

Woods, Frank. The status of Ilex collina Alexander. Castanea 16: 126–127. 1951.

Ilex monticola A. Gray, see **I. montana** Torr. & Gray

Ilex myrtifolia Walt. **myrtle dahoon**

Ilex myrtifolia Walt., Fl. Carol. 241. 1788.
Ilex cassine var. *myrtifolia* (Walt.) Sarg., Gard. and Forest 2: 616. 1889.

DERIVATION.—Myrtle-leaved.

OTHER COMMON NAMES.—dahoon, myrtle-leaved holly.

RANGE.—Coastal Plain from North Carolina to central Florida and west to southeastern Louisiana. Also reported from eastern Texas.

Ilex nettletoniana R. H. Ferguson, see **I. opaca** Ait.

***Ilex opaca** Ait. **American holly**

Ilex opaca var. opaca **American holly (typical)**

†*Ilex opaca* Ait., Hort. Kew. 1: 169. 1789.
†*Ilex opaca* f. *subintegra* Weatherby, Rhodora 23: 119. 1921.
Ilex opaca var. *subintegra* Weatherby ex Rehd., Man. Cult. Trees Shrubs 543. 1927.
Ilex nettletoniana R. H. Ferguson, Jour. Forestry 35: 300, fig. 1. 1937; without Latin diagnosis.

HYBRID.—*Ilex* ×*attenuata* Ashe (*I. cassine* × *opaca*).

DERIVATION.—Opaque or dark, referring to the dull green leaves.

OTHER COMMON NAMES.—†holly, white holly.

RANGE.—Massachusetts to southeastern New York, eastern Pennsylvania, West Virginia, southern Ohio, Kentucky, southeastern Missouri, southeastern Oklahoma, and eastern and south-central Texas, and east to central Florida.

Ilex opaca var. arenicola (Ashe) Ashe **dune holly**

Ilex arenicola Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 44. 1924 (before Sept. 16, Aug. ?).

Ilex cumulicola Small, Torrey Bot. Club Bul. 51: 382. 1924 (Sept. 18).

†*Ilex opaca arenicola* (Ashe) Ashe, Charleston Mus. Quart. 1(2): 31. 1925.

Ilex pygmaea McFarlin, Rhodora 34: 17, pl. 229. 1932.

Ilex arenicola var. *obovata* McFarlin, Rhodora 34: 234, pl. 226. 1932.

Ilex arenicola var. *paucidens* McFarlin, Rhodora 34: 235, pl. 227. 1932.

Ilex arenicola var. *transiens* McFarlin, Rhodora 34: 235, pl. 228. 1932.

Ilex pygmaea var. *subedentata* McFarlin, Rhodora 34: 235, pl. 230. 1932.

DERIVATION.—Growing in sandy places.

OTHER COMMON NAMES.—hummock holly (SPN), scrub holly.

RANGE.—Northern and central Florida (Clay to Highlands Counties).

Ilex pygmaea McFarlin, see **I. opaca var. arenicola** (Ashe) Ashe

Ilex verticillata (L.) A. Gray **common winterberry**

Prinos verticillatus L., Sp. Pl. 330. 1753.

Prinos padifolius Willd., Enum. Pl. Hort. Berol. 394. 1809.

Prinos verticillatus β tenuifolius Torr., Fl. North. Mid. U. S. 338. 1824.

Ilex verticillata (L.) A. Gray, Man. Bot. North. U. S. Ed. 2, 264. 1856.

Ilex verticillata var. *padifolia* (Willd.) Torr. & Gray ex S. Wats., Bibl. Index No. Amer. Bot. 1: 160. 1878.

Ilex verticillata var. *tenuifolia* (Torr.) S. Wats., Bibl. Index No. Amer. Bot. 1: 160. 1878.

Ilex verticillata var. *cyclophylla* Robinson, Rhodora 2: 105. 1900.

Ilex bronxensis Britton, Man. Fl. North. U. S. 604. 1901.

Ilex fastigiata Bickn., Torrey Bot. Club Bul. 39: 426. 1912.

Ilex verticillata var. *fastigiata* (Bickn.) Fern., Rhodora 23: 274. 1922.

Ilex verticillata var. *aurantiaca* Moldenke, Rev. Sudamer. de Bot. 6: 29. 1939.

DERIVATION.—Whorled, referring to the clusters of axillary flowers.

OTHER COMMON NAMES.—black-alder, winterberry.

RANGE.—Newfoundland to Quebec, Maine, Ontario, Michigan, and northern Minnesota, south to southeastern Missouri, Tennessee, southeastern Louisiana, Georgia, and northern Florida.

A shrub or sometimes a small tree to 25 feet tall. Mentioned in the 1927 Check List as a shrub.

Ilex vomitoria Ait. **†yaupon**

Cassine paragua Mill., Gard. Dict. Ed. 8, *Cassine* No. 2. 1768. Not *Cassine peragua* L., Sp. Pl. 268. 1753.

Ilex cassine Walt., Fl. Carol. 241. 1788. Not *Ilex cassine* L., Sp. Pl. 125. 1753.

†*Ilex vomitoria* Ait., Hort. Kew. 1: 170. 1789.

Ilex vomitoria var. *yawkeyii* Tarbox, Some Nat. Hollies Brookgreen Gard. 19, fig. 1944; without Latin diagnosis; as f. *yawkeyii* on p. 21. 1945.

Ilex vomitoria var. *chiapensis* Sharp, Harvard Univ. Bot. Mus. Leafl. 14: 107. 1950.

DERIVATION.—Causing vomiting, in reference to the emetic properties of tea prepared from the leaves.

OTHER COMMON NAMES.—cassena, Christmas-berry, evergreen holly.

RANGE.—Coastal Plain from southeastern Virginia south to central Florida and west to eastern and south-central Texas, and north to southeastern Oklahoma and Arkansas. Also a pubescent form in southern Mexico (Chiapas).

REFERENCES.—Rehder, Alfred. Arnold Arboretum Jour. 3: 212–215. 1922.

Schultes, Richard Evans. The correct name of the yaupon. Harvard Univ. Bot. Mus. Leafl. 14: 97–105, illus. 1950.

Illicium L. (Family Magnoliaceae) **anise-tree**

Illicium L., Syst. Nat. Ed. 10, 2: 1050. 1759.

DERIVATION.—Allurement, in reference to the odor.

REFERENCE.—Smith, A. C. The families Illiciaceae and Schisandraceae. Sargentia 7, 224 pp., illus. 1947.

A. C. Smith has proposed the new, segregate family Illiciaceae for this genus of about forty species, which was not in the 1927 Check List.

Illicium floridanum Ellis **Florida anise-tree**

Illicium floridanum Ellis, [Roy. Soc. London] Phil. Trans. 60: 529, pl. 12. 1770.

DERIVATION.—Of Florida.

OTHER COMMON NAMES.—polecat-tree, purple anise-tree, star-anise, starbush, stinkbush.

RANGE.—Coastal Plain of northwestern Florida to central Alabama, southern Mississippi, and southeastern Louisiana. Also in northeastern Mexico (Tamaulipas).

A small tree 15 to 20 feet high with trunks 2 to 3 inches in diameter in northwestern Florida, according to West and Arnold (Native Trees Fla. 67, fig. 1946). However, generally it is a shrub and, according to A. C. Smith (Sargentia 7: 37. 1947), a shrub or small tree usually not exceeding 10 feet in height.

Illicium parviflorum Michx. **yellow anise-tree**

Illicium parviflorum Michx. ex Vent., Tabl. Regn. Vég. 3: 71. 1791.

DERIVATION.—Small-flowered.

OTHER COMMON NAME.—small-flowered anise-tree.

RANGE.—Local in eastern Florida (Volusia, Seminole, and Lake Counties).

A large spreading shrub up to 23 feet high and in cultivation often a small tree up to 40 feet high, according to A. C. Smith (Sargentia 7: 41. 1947).

Jaquinia L. (Family Theophrastaceae) **jacquinia**

†*Jaquinia* L. in L. & Sandmark, Fl. Jamaicensis 27. 1759; Amoen. Acad. 5: 388. 1760.

DERIVATION.—In honor of Nicholas Joseph von Jacquin (1727–1817), Austrian botany and chemistry professor, perhaps best known for his collections, descriptions, and paintings of West Indian plants.

Jaquinia keyensis Mez **†joewood**

†*Jaquinia keyensis* Mez, Symb. Antill. 2: 444. 1901; as "*Jacquinia.*"

DERIVATION.—Of the keys.

OTHER COMMON NAME.—joewood jacquinia (SPN).

RANGE.—Southern Florida, including Florida Keys. Also in Bahama Islands, Cuba, and Jamaica.

At one time referred to *Jaquinia armillaris* Jacq., a synonym of the West Indian species *J. barbasco* (Loefl.) Mez.

Juglans L. (Family Juglandaceae) **walnut**

†*Juglans* L., Sp. Pl. 997. 1753; Gen. Pl. Ed. 5, 431. 1754. *Wallia* Alef., Bonplandia 9: 335. 1861.

DERIVATION.—The classic Latin name of the walnut, meaning nut of Jupiter.

Three hybrids in *Juglans* which were included in the 1927 Check List have been omitted here because they are known only in cultivation. They are:

Juglans ×*bixbyi* Rehd. (*Juglans* ×*sargentii* Sudw.; *J. cinerea* L. × ***J. ailantifolia* Carr. (*J. sieboldiana* Maxim.)**)

Juglans ×*intermedia* Carr. (*J. nigra* L. × *J. regia* L.)

Juglans ×*quadrangulata* (Carr.) Rehd. (*J. cinerea* L. × *J. regia* L.)

Juglans californica S. Wats. **†California walnut**

†*Juglans californica* S. Wats., Amer. Acad. Arts and Sci. Proc. 10: 349. 1875.

DERIVATION.—Of California.

OTHER COMMON NAMES.—California black walnut (SPN), southern California black walnut.

RANGE.—Coastal southern California (Santa Barbara County to Orange County).

***Juglans cinerea** L. **†butternut**

†*Juglans cinerea* L., Syst. Nat. Ed. 10, 1272. 1759.

Wallia cinerea (L.) Alef., Bonplandia 9: 336. 1861.

DERIVATION.—Ash-colored, referring to the bark.

OTHER COMMON NAMES.—oilnut, white walnut.

RANGE.—Western New Brunswick and central Maine to southern Quebec, southern Ontario, Michigan, Wisconsin, and southeastern Minnesota, south to Missouri and northern Arkansas, and east to northern Mississippi, northern Georgia, and western South Carolina.

Juglans hindsii Jeps. **†Hinds walnut**

Juglans californica var. *hindsii* Jeps., So. Calif. Acad. Sci. Bul. 7: 24. 1908.

†*Juglans hindsi* Jeps. ex R. E. Smith, Calif. Agr. Expt. Sta. Bul. 203: 27, fig. 9A. 1909; as "*hindsii*" on fig. 9A.

DERIVATION.—Named for its discoverer, Richard Brinsley Hinds, English botanist on a voyage around the world in 1836–42 on the ship Sulphur.

OTHER COMMON NAME.—Hinds black walnut (SPN).

RANGE.—Central California.

Juglans major (Torr.) Heller **Arizona walnut**

†*Juglans rupestris* Engelm. β *major* Torr. in Sitgreaves, Rpt. Exped. Zuni Colo. Rivers 171, pl. 16. 1853.

Juglans major (Torr.) Heller, Muhlenbergia 1: 50. 1904.

DERIVATION.—Larger, the fruits being much larger than in *Juglans microcarpa* (*J. rupestris*).

OTHER COMMON NAMES.—Arizona black walnut (SPN), †nogal.

RANGE.—Central and southwestern Texas to southwestern New Mexico and central Arizona, south to northern Mexico (Sonora to Coahuila and Durango).

REFERENCE.—Sudworth, George B. (ed. and annotated by W. A. Dayton). Poplars, principal tree willows and walnuts of the Rocky Mountain region. U. S. Dept. Agr. Tech. Bul. 420, 112 pp., illus. 1934.

Juglans microcarpa Berlandier **†little walnut**

Juglans microcarpa Berlandier in Berlandier & Chovel, Diario Viage Comisión Límites Mier y Teran 276. 1850.

Juglans nana Engelm., Amer. Assoc. Adv. Sci. Proc. 5: 226. 1851.

†*Juglans rupestris* Engelm. ex Torr. in Sitgreaves, Rpt. Exped. Zuni Colo. Rivers 171, pl. 15. 1853.

DERIVATION.—Small-fruited, from the nuts, originally described as about the size of a large hazelnut.

OTHER COMMON NAMES.—Texas black walnut (SPN), nogal, walnut, river walnut, Texas walnut.

RANGE.—Western Oklahoma, western and southern Texas including Edwards Plateau and Trans-Pecos Texas, and southeastern New Mexico, south to northeastern Mexico (Chihuahua and Coahuila).

REFERENCE.—Johnston, Ivan M. Arnold Arboretum Jour. 25: 436. 1944.

Juglans nana Engelm., see **J. microcarpa** Berlandier

***Juglans nigra L.** **†black walnut**

†*Juglans nigra* L., Sp. Pl. 997. 1753.
Wallia nigra (L.) Alef., Bonplandia 9: 336. 1861.
DERIVATION.—Black, perhaps referring to the dark wood.
OTHER COMMON NAMES.—eastern black walnut (SPN), American walnut.
RANGE.—Western Massachusetts, New York, extreme southern Ontario, southern Michigan, southern Wisconsin, southern Minnesota, and southeastern South Dakota, south to eastern Nebraska, western Oklahoma, and eastern Texas, and east to northwestern Florida and Georgia.

Juglans rupestris Engelm., see **J. microcarpa** Berlandier

Juniperus L. (Family Pinaceae) **juniper**

†*Juniperus* L., Sp. Pl. 1038. 1753; Gen. Pl. Ed. 5, 461. 1754.
Sabina Mill., Gard. Dict. Abridged. Ed. 4, v. 3. 1754.
DERIVATION.—The classical Latin name.
OTHER COMMON NAMES.—redcedar, "cedar."
REFERENCES.—Hall, Marion Trufont. Variation and hybridization in Juniperus. Mo. Bot. Gard. Ann. 39: 1–64, illus. 1952.
Morton, C. V. Notes on Juniperus. Rhodora 43: 344–348. 1941.
Sudworth, George B. The cypress and juniper trees of the Rocky Mountain region. U. S. Dept. Agr. Bul. 207, 36 pp., illus. 1915.
Whiting, Albert F. Junipers of the Flagstaff region. Plateau 15: 23–31, illus. 1942.

One additional native species, *Juniperus horizontalis* Moench, creeping juniper, is a prostrate shrub.

Juniperus ashei Buchholz **Ashe juniper**

Cupressus sabinoides H. B. K., Nov. Gen. Sp. 2: 3. 1817.
†*Juniperus mexicana* Spreng., Syst. Veget. 3: 909. 1826; *nomen illegitimum.* Not *Juniperus mexicana* Schiede & Deppe in Schlecht. & Cham., Linnaea 5: 77. 1830.
Juniperus tetragona Schlecht., Linnaea 12: 495. 1838. Not *Juniperus tetragona* Moench, Meth. Pl. 699. 1794.
Juniperus sabinoides (H. B. K.) Nees, Linnaea 19: 706. 1847. Not *Juniperus sabinoides* Griseb., Spicil. Fl. Rum. 2: 352. 1845.
Juniperus tetragona var. *oligosperma* Engelm., Acad. Sci. St. Louis Trans. 3: 591. 1877.
Sabina sabinoides (H. B. K.) Small, Fl. Southeast. U. S. 33, 1326. 1903.
Juniperus ashei Buchholz, Bot. Gaz. 90: 329, figs. 1–2. 1930.

Juniperus monticola Martinez, Mex. Univ. Nac. An. Inst. Biol. 17: 79, figs. 66–76. 1946.

DERIVATION.—Named in honor of William Willard Ashe (1872–1932), pioneer forester of the United States Forest Service, who collected it in Arkansas.

OTHER COMMON NAMES.—†mountain cedar, rock cedar, Mexican juniper.

RANGE.—Southern Missouri, northern Arkansas, northeastern and southern Oklahoma, central Texas (Edwards Plateau), and Trans-Pecos Texas. Also in Mexico (Coahuila southward).

REFERENCES.—Hopkins, Milton. Rhodora 45: 275. 1943.
Johnston, Ivan M. Arnold Arboretum Jour. 24: 337. 1943.
Little, Elbert L., Jr. Amer. Jour. Bot. 31: 593. 1944.

Also referred to *Juniperus mexicana* Spreng., which must be rejected as a later homonym.

Juniperus barbadensis L., see note under **J. silicicola** (Small) Bailey

Juniperus californica Carr. **†California juniper**

†*Juniperus californica* Carr., Rev. Hort. [Paris], Sér. 4, 3: 352, fig. 21. 1854.

Sabina californica (Carr.) Ant., Cupress.-Gatt. 52, pl. 72. 1857-60.

DERIVATION.—Of California.

OTHER COMMON NAME.—desert white-cedar.

RANGE.—Southwestern Oregon (Jackson County) and from northern California south to northern Lower California, Mexico.

Juniperus communis L. **common juniper**

†*Juniperus communis* L., Sp. Pl. 1040. 1753.

Juniperus sibirica Burgsd., Anleit. Sich. Erzieh. Holzart. 272. 1787.

Juniperus communis α *erecta* Pursh, Fl. Amer. Sept. 2: 646. 1814.

DERIVATION.—Common. To Linnaeus (in Sweden) this was indeed the *common* juniper.

OTHER COMMON NAMES.—juniper, †dwarf juniper, prostrate juniper.

RANGE.—Greenland, Newfoundland, and Labrador, across Canada to northwestern Alaska, south in western United States, chiefly in mountains, from Washington to central California, northeastern Arizona, northern New Mexico, Montana, and North Dakota, and south in East from Minnesota to northern Illinois, Indiana, northern Ohio, and eastern Virginia, and in mountains to North Carolina, South Carolina, and Georgia. Also in Europe and Asia.

Usually a low mat-forming shrub but rarely a small tree to 25 feet high in New England and elsewhere and commonly a tree in Europe. Specimens up to 25 feet high have been recorded in Maine, according to H. B. Peirson (Forest Trees Me. 22. 1951). In addition to the typical tree variety, *Juniperus communis* var. *communis* (var. *erecta* Pursh), a number of

shrubby varieties have been distinguished, among which are oldfield common juniper, *J. communis* var. *depressa* Pursh, and mountain common juniper, *J. communis* var. *saxatilis* Pall. (*J. sibirica* Burgsd. and *J. communis* var. *alpina* Gaud., var.*montana* Ait., and var. *nana* (Schkh.) Baumgarten).

***Juniperus deppeana** Steud. **†alligator juniper**

Juniperus mexicana Schiede & Deppe in Schlecht. & Cham., Linnaea 5: 77. 1830. Not *Juniperus mexicana* Spreng., Syst. Veg. 3: 909. 1826.

Juniperus deppeana Steud., Nomencl. Bot. Ed. 2, 1: 835. 1840.

†*Juniperus pachyphloea* Torr. in U. S. Rpts. Expl. Surv. Miss. Pacif. 4(5): 142. 1857; as "*pachyphlaea.*"

Juniperus deppeana var. *pachyphlaea* (Torr.) Martínez, Méx. Inst. Biol. Anal. 17: 53, figs. 40–43. 1946.

DERIVATION.—In honor of Ferdinand Deppe (died 1861), German botanist who had given this species a name previously used for another species.

OTHER COMMON NAMES.—checkered-bark juniper, western juniper (lumber), cedro chino.

RANGE.—Trans-Pecos Texas to western New Mexico and central Arizona, and south to northern and central Mexico (from Sonora to Coahuila, south to Zacatecas, Durango, Puebla, and Veracruz).

REFERENCES.—Johnston, I. M. Arnold Arboretum Jour. 24: 336. 1943.

Little, Elbert L., Jr. Older names for two western species of Juniperus. Leafl. West. Bot. 5: 125–132. 1948.

Juniperus erythrocarpa Cory, see **J. monosperma** (Engelm.) Sarg.

***Juniperus flaccida** Schlecht. **†drooping juniper**

†*Juniperus flaccida* Schlecht., Linnaea 12: 495. 1838.

DERIVATION.—Relaxed, or hanging down, referring to the pendulous or drooping branches.

OTHER COMMON NAME.—Mexican drooping juniper (SPN).

RANGE.—Trans-Pecos Texas south to southern Mexico (Tamaulipas to Sonora, south to Guerrero and Oaxaca).

Juniperus gymnocarpa (Lemm.) Cory, see **J. monosperma** (Engelm.) Sarg.

Juniperus knightii A. Nels., see **J. osteosperma** (Torr.) Little

Juniperus lucayana Britton, see note under **J. silicicola** (Small) Bailey

Juniperus megalocarpa Sudw., see **J. osteosperma** (Torr.) Little

Juniperus mexicana Spreng., see **J. ashei** Buchholz

Juniperus mexicana Schiede & Deppe, see **J. deppeana** Steud.

***Juniperus monosperma** (Engelm.) Sarg. **†one-seed juniper**

Juniperus occidentalis Hook. var. *texana* Vasey, Cat. Forest

Trees U. S. 37. 1876; U. S. Comm. Agr. Rpt. 1875 (v. 18): 185. 1876; *nom. subnud.*

Juniperus occidentalis var. *β monosperma* Engelm., Acad. Sci. St. Louis Trans. 3: 590. 1877.

Juniperus occidentalis var. *gymnocarpa* Lemm., Handb. W.-Amer. Cone-Bearers. Ed. 3, 80. 1895.

†*Juniperus monosperma* (Engelm.) Sarg., Silva No. Amer. 10: 89, pl. 522. 1896.

Sabina monosperma (Engelm.) Rydb., Torrey Bot. Club. Bul. 32: 598. 1905.

?*Juniperus erythrocarpa* Cory, Rhodora 38: 186. 1936.

Juniperus gymnocarpa (Lemm.) Cory, Rhodora 38: 184. 1936.

Juniperus mexicana var. *monosperma* (Engelm.) Cory, Rhodora 38: 183. 1936.

?*Juniperus texensis* Van Melle, Phytologia 4: 26. 1952.

DERIVATION.—One-seeded.

OTHER COMMON NAMES.—cherry-stone juniper, †redberry juniper, West Texas juniper, sabina.

RANGE.—Colorado, Utah, and Nevada, south to southeastern Arizona, southern New Mexico, Trans-Pecos, central and northwestern Texas, and extreme northwestern Oklahoma. Also in northern Mexico (Sonora to Coahuila, south to Zacatecas and Durango).

REFERENCE.—Van Melle, P. J. Juniperus texensis sp. nov.—West-Texas juniper in relation to J. monosperma, J. ashei et al. Phytologia 4: 26–35. 1952.

***Juniperus occidentalis** Hook. **†western juniper**

†*Juniperus occidentalis* Hook., Fl.-Bor. Amer. 2: 166. 1839.

Sabina occidentalis (Hook.) Ant., Cupress.-Gatt. 64, pls. 84–86. 1857–60.

DERIVATION.—Western.

OTHER COMMON NAME.—Sierra juniper.

RANGE.—Mountains of Pacific coast region of western Montana, Idaho, and Washington, south to Oregon and southern California and to western Nevada (Douglas County).

***Juniperus osteosperma** (Torr.) Little **†Utah juniper**

Juniperus tetragona Schlecht. var. *osteosperma* Torr. in U. S. Rpts. Expl. Surv. Miss. Pacif. 4(5): 141. 1857.

Sabina osteosperma (Torr.) Ant., Cupress.-Gatt. 51. 1857–60.

Juniperus californicus var. *utahense* Vasey, Cat. Forest Trees U. S. 37. 1876; U. S. Comm. Agr. Rpt. 1875: 185. 1876; *nomen subnudum.*

Juniperus californica var. *utahensis* Engelm., Acad. Sci. St. Louis Trans. 3: 588. 1877.

†*Juniperus utahensis* (Engelm.) Lemm., Calif. State Bd. Forestry Bien. Rpt. 3: 183, pl. 28, fig. 2. 1890.

Juniperus knighti A. Nels., Bot. Gaz. 25: 198, figs. 1–2. 1898.

Sabina utahensis (Engelm.) Rydb., Torrey Bot. Club Bul. 32: 598. 1905.

Juniperus megalocarpa Sudw., Forestry and Irrig. 13: 307, figs. 1–2. 1907.

†*Juniperus utahensis* var. *megalocarpa* (Sudw.) Sarg., Bot. Gaz. 67: 208. 1919.

Juniperus osteosperma (Torr.) Little, Leaflets West. Bot. 5: 125. 1948.

DERIVATION.—Bone-seeded.

OTHER COMMON NAMES.—bigberry juniper, western juniper (lumber), sabina.

RANGE.—Great Basin region, chiefly, from southwestern Wyoming to southern Idaho and Nevada, south to eastern and southeastern California, central Arizona, and western New Mexico. Also local in southern Montana (Carbon County).

REFERENCES.—Little, Elbert L., Jr. Older names for two western species of Juniperus. Leafl. West. Bot. 5: 125–132. 1948.

Van Melle, P. J. Juniperus utahensis Lemm. Phytologia 3: 299-300. 1950.

Juniperus pachyphloea Torr., see **J. deppeana** Steud.

Juniperus pinchotii Sudw. **Pinchot juniper**

†*Juniperus pinchotii* Sudw., Forestry and Irrig. 11: 204, figs. 1–4. 1905; as "*pinchoti.*"

Juniperus monosperma var. *pinchotii* (Sudw.) Van Melle, Phytologia 4: 29. 1952.

DERIVATION.—In honor of Gifford Pinchot (1865–1946), distinguished American forester and statesman and first chief of the United States Forest Service.

OTHER COMMON NAME.—†redberry juniper.

RANGE.—Central to northwestern and Trans-Pecos Texas. Also in western Oklahoma and reported from southeastern New Mexico.

Juniperus sabinoides (H. B. K.) Nees, see **J. ashei** Buchholz

***Juniperus scopulorum** Sarg. **Rocky Mountain juniper**

Juniperus virginiana var. *montana* Vasey, Cat. Forest Trees U. S. 37. 1876; U. S. Comm. Agr. Rpt. 1875 (v. 18): 185. 1876; *nom. subnud.*

†*Juniperus scopulorum* Sarg., Gard. and Forest 10: 420, fig. 54. 1897; *nomen provisorum.* Sarg., Silva No. Amer. 14: 93, pl. 739. 1902.

Juniperus virginiana var. *scopulorum* Lemm., Handb. W.-Amer. Cone-Bearers. Ed. 4, 113. 1900.

Sabina scopulorum (Sarg.) Rydb., Torrey Bot. Club Bul. 32: 598. 1905.

Juniperus scopulorum var. *columnaris* Fassett, Torrey Bot. Club Bul. 72: 482. 1945.

DERIVATION.—Of rocky cliffs, or crags, referring to its habitat.

OTHER COMMON NAMES.—western juniper (lumber), redcedar, †Rocky Mountain redcedar, river juniper, cedro rojo.

RANGE.—Western North Dakota and Montana, northwest to southwestern Alberta, and eastern and southern British Columbia, south from Washington and eastern Oregon to southern Nevada, Arizona, New Mexico, and Tran-Pecos and northwestern Texas, and north to Colorado, northwestern Nebraska, and central South Dakota.

REFERENCE.—See **J. virginiana** L.

Juniperus sibirica Burgsd., see **J. communis** L.

***Juniperus silicicola** (Small) Bailey **†southern redcedar**

Juniperus virginiana var. *bermudiana* Vasey, Cat. Forest Trees U. S. 37. 1876; U. S. Comm. Agr. Rpt. 1875 (v. 18): 185. 1876; *nom. subnud.*

Sabina silicicola Small, N. Y. Bot. Gard. Jour. 24: 5. 1923.

Juniperus silicicola (Small) Bailey, Cult. Conif. No. Amer. 197. 1933.

DERIVATION.—Growing in sand.

OTHER COMMON NAMES.—redcedar, eastern redcedar (lumber).

RANGE.—Coastal Plain, chiefly near coast, from southeastern North Carolina and South Carolina south to central Florida, and west to southern Mississippi and in southeastern Texas.

Formerly referred to *Juniperus barbadensis* L. of the West Indies, and in the 1927 Check List to †*J. lucayana* Britton, which was treated as a synonym of the former by J. P. Carabia (Caribbean Forester 2: 97–99. 1941).

Juniperus tetragona Schlecht., see **J. ashei** Buchholz

Juniperus texensis Van Melle, see **J. monosperma** (Engelm.) Sarg.

Juniperus utahensis (Engelm.) Lemm., see **J. osteosperma** (Torr.) Little

***Juniperus virginiana** L. **†eastern redcedar**

†*Juniperus virginiana* L., Sp. Pl. 1039. 1753.

Sabina virginiana (L.) Ant., Cupress.-Gatt. 61. pls. 83, 84. 1857–60.

Juniperus virginiana var. *crebra* Fern. & Griscom, Rhodora 37: 133, pl. 333. 1935.

Sabina virginiana var. *crebra* (Fern. & Griscom) Moldenke, Phytologia 2: 473. 1948.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—red juniper, redcedar, savin.

RANGE.—Southwestern Maine, west to northern New York, extreme southern Quebec, southern Ontario, southern Michigan, southern Wisconsin, southern Minnesota, and southwestern North Dakota, and south to western Kansas, western Oklahoma, and central Texas, and east to Georgia.

REFERENCES.—Fassett, Norman C. The validity of Juniperus virginiana var. crebra. Amer. Jour. Bot. 30: 469–477, illus. 1943.

Fassett, Norman C. Juniperus virginiana, J. horizontalis, and J. scopulorum—V. Taxonomic treatment. Torrey Bot. Club Bul. 72: 480-482, illus. 1945.

Kalmia L. (Family Ericaceae) **kalmia**

†*Kalmia* L., Sp. Pl. 391. 1753; Gen. Pl. Ed. 5. 185. 1754.

DERIVATION.—Dedicated by Linnaeus to his student Peter Kalm (1716–79), Swedish botanist who traveled and collected in Canada and the eastern United States.

Kalmia latifolia L. **†mountain-laurel**

†*Kalmia latifolia* L., Sp. Pl. 391. 1753.

Kalmia latifolia var. *laevipes* Fern., Rhodora 42: 53. 1940.

DERIVATION.—Broad-leaved, contrasted with a narrow-leaved species.

OTHER COMMON NAMES.—mountain-laurel kalmia (SPN), calico-bush, ivybush, laurel.

RANGE.—New Brunswick and Maine to southern Ontario, Ohio, southern Indiana, and western Kentucky, south to western Tennessee and southeastern Louisiana, and east to northwestern Florida and Georgia.

Koeberlinia Zucc. (Family Koeberliniaceae) **allthorn**

†*Koeberlinia* Zucc., K. Bayer. Akad. Wiss. München, Abhandl. Math.-Phys. 1: 358. 1832. Flora [Jena] 15(2), Beibl. 73. 1832.

DERIVATION.—In honor of C. L. Köberlin, German clergyman and amateur botanist.

Koeberlinia spinosa Zucc. **†allthorn**

OTHER COMMON NAMES.—spiny allthorn (SPN), corona de Cristo, corona de púas, crown-of-thorns, crucifixion-thorn, junco.

Koeberlinia spinosa var. **spinosa** **allthorn (typical)**

†*Koeberlinia spinosa* Zucc., K. Bayer. Akad. Wiss. München, Abhandl. Math.-Phys. 1: 359. 1832. Also Flora [Jena] 15(2), Beibl. 74. 1832.

Koeberlinia spinosa var. *verniflora* Bogusch, Torreya 31: 74, fig. 1. 1931.

DERIVATION.—Spiny, the leafless branches bearing numerous spines.

RANGE.—Southern Texas to Edwards Plateau and Trans-Pecos Texas, southern New Mexico, and southeastern Arizona. Also in northern and central Mexico (Sonora to Tamaulipas, south to Puebla and Oaxaca). Recorded from a limited area of Bolivia by I. M. Johnston (Arnold Arboretum Jour. 21: 357. 1940).

Koeberlinia spinosa var. tenuispina Kearney & Peebles ———

Koeberlinia spinosa var. *tenuispina* Kearney & Peebles, Wash. Acad. Sci. Jour. 29: 486. 1939.

DERIVATION.—Slender-spined.

RANGE.—Desert mountains of southwestern Arizona and southeastern California (Chocolate Mountains). Also in Sonora, Mexico.

This variety described since publication of the 1927 Check List, reaches a height of 15 feet. The typical variety is commonly a low shrub but rarely becomes a tree 20 to 25 feet high and 1 foot in trunk diameter southward into Mexico.

Krugiodendron Urban (Family Rhamnaceae) **leadwood**

†*Krugiodendron* Urban, Symb. Ant. 3: 313. 1902.

DERIVATION.—Krug's tree, honoring Leopold Krug (1833–98), German businessman, botanist, and patron of science, who resided in Puerto Rico and studied the flora of the West Indies.

Krugiodendron ferreum (Vahl) Urban **leadwood**

Rhamnus ferreus Vahl ex West, Bidrag Ste. Croix 276. 1793; *nomen nudum.*

Rhamnus ferreus Vahl, Symb. Bot. 3: 41, pl. 58. 1794.

Rhamnidium ferreum (Vahl) Sarg., Gard. and Forest 4: 16. 1891; *nom. provisor.* Sarg., Silva No. Amer. 2: 29, pl. 58. 1891.

†*Krugiodendron ferreum* (Vahl) Urban, Symb. Ant. 3: 314. 1902.

DERIVATION.—Of iron, referring to the very heavy wood, which has the highest specific gravity of all the native woods in the United States.

OTHER COMMON NAME.—†black ironwood.

RANGE.—Southern Florida, north on east coast to Cape Canaveral, and including Florida Keys. Also in West Indies. Also in Mexico (Tamaulipas, San Luis Potosí, and Yucatán) and British Honduras.

†*Lagerstroemia indica* L. (Syst. Nat. Ed. 10; 1076. 1759; family Lythraceae), common crapemyrtle or †crapemyrtle, native of Asia, is widely planted for ornament from Maryland to Florida and eastern Texas. It is long persistent at old home sites and occasionally escapes but perhaps should not be accepted as naturalized.

Laguncularia Gaertn. f. (Family Combretaceae) **white-mangrove**

†*Laguncularia* Gaertn. f., Sup. Carp. Fruct. Sem. Pl. 3: 209, pl. 217, fig. 3. 1807.

DERIVATION.—From Latin *laguncula,* a small flask or bottle, from the fancied resemblance of the calyx and fruit.

OTHER COMMON NAME.—false-mangrove (SPN).

Laguncularia racemosa (L.) Gaertn. f. **white-mangrove**

Conocarpus racemosus L., Syst. Nat. Ed. 10, 2: 930. 1759; as "*racemos.*"

†*Laguncularia racemosa* (L.) Gaertn. f., Sup. Carp. Fruct. Sem. Pl. 3: 209, pl. 217, fig. 3. 1807.

DERIVATION.—Racemose, referring to the flower clusters.

OTHER COMMON NAMES.—false-mangrove (SPN), buttonwood, †white buttonwood.

RANGE.—Coasts of central and southern Florida, including Florida Keys. Also in West Indies, Mexico from Tamaulipas southward, Central America, and South America, and in western Africa.

Larix Mill. (Family Pinaceae) larch

†*Larix* Mill., Gard. Dict. Abridged. Ed. 4, v. 2. 1754.

DERIVATION.—The classical name of *Larix decidua* Mill., European larch.

OTHER COMMON NAME.—tamarack.

REFERENCES.—Jaurès, R., and Ferré, Y. de. A propos des Larix d'Amérique du Nord. Lab. Forest. Toulouse Trav. tome 1, v. 4, art. 33, 16 pp., illus. 1949.

Ostenfeld, C. H., and Larsen, C. Syrach. The species of the genus *Larix* and their geographical distribution. Danske Vidensk. Selsk., Biol. Meddel. 9(2), 107 pp., illus. 1930.

Larix decidua Mill. (Gard. Dict. Ed. 8, *Larix* No. 1. 1768; *Larix larix* (L.) Karst.), European larch, is planted in southern Canada and northeastern United States and has become established and naturalized locally in Connecticut and New York and perhaps elsewhere. REFERENCE.—Cook, David B. European larch reproduces in eastern New York. Jour. Forestry 37: 891–893. 1939.

***Larix laricina** (Du Roi) K. Koch **†tamarack**

Pinus laricina Du Roi, Dissert. Inaug. Observ. Bot. 49. 1771.

Pinus intermedia Pott in Du Roi, Harbk. Baumz. Ed. 2, 2: 114. 1800.

Larix americana Michx., Fl. Bor.-Amer. 2: 203. 1803.

†*Larix laricina* (Du Roi) K. Koch, Dendrol. 2(2): 263. 1873.

Larix alaskensis W. F. Wight, Smithsn. Inst. Misc. Collect. 1: 174, pl. 17. 1908.

Larix laricina var. *alaskensis* (W. F. Wight) Raup, Sargentia 6: 105. 1947.

Larix laricina var. *lutea* Jaurès & Ferré, Lab. Forest. Toulouse Trav. tome 1, v. 4, art. 33: 6. 1949.

Larix laricina var. *parvistrobus* Jaurès & Ferré, Lab. Forest. Toulouse Trav. tome 1, v. 4, art. 33: 4, figs. 11-14. 1949.

DERIVATION.—Like a larch; originally placed in the genus *Pinus*, pine.

OTHER COMMON NAMES.—eastern larch (SPN), hackmatack, Alaska larch, American larch, black larch.

RANGE.—Newfoundland and Labrador west across Canada along northern limit of trees to Hudson Bay, Northwest Terri-

tories, Yukon, and northwestern Alaska, south to interior Alaska, and east to northwestern British Columbia, central Alberta, and southern Manitoba and south in northeastern United States from Minnesota to Wisconsin, northeastern Illinois, northern Indiana, northern Pennsylvania, northern New Jersey and Maine. Also local in northern West Virginia and western Maryland.

Larix lyallii Parl. **subalpine larch**

†*Larix lyallii* Parl., Conif. Nov. Nonn. Descr. 3. 1863 (Jan.). Parl. ex Seemann, Jour. Bot. Brit. Foreign 1: 35. 1863 (Feb.?).

DERIVATION.—Named in honor of its discoverer, David Lyall (1817–95), Scotch surgeon and naturalist on various British expeditions and surveys.

OTHER COMMON NAMES.—†alpine larch, tamarack.

RANGE.—High mountains of southern Alberta, southeastern British Columbia, Washington, northern Idaho, and western Montana.

***Larix occidentalis** Nutt. **†western larch**

Larix occidentalis Nutt., No. Amer. Sylva 3: 143, pl. 120. 1849.

DERIVATION.—Western.

OTHER COMMON NAMES.—hackmatack, larch, Montana larch, mountain larch, tamarack, western tamarack.

RANGE.—Western Montana and northern and western Idaho to southeastern British Columbia, central Washington, and northern and northeastern Oregon.

Laurocerasus Duhamel, see **Prunus** L.

Leitneria Chapm. (Family Leitneriaceae) **corkwood**

†*Leitneria* Chapm., Fl. South. U. S. 427. 1860.

DERIVATION.—In memory of E. F. Leitner, German naturalist who was killed in Florida during the Seminole War.

Leitneria floridana Chapm. **†corkwood**

†*Leitneria floridana* Chapm., Fl. South. U. S. 428. 1860.

DERIVATION.—Of Florida, where it was discovered.

RANGE.—Rare and local in coastal plain in southeastern Georgia, northwestern Florida, southeastern Texas, southeastern and northeastern Arkansas, and southeastern Missouri.

Lepargyrea Raf., see **Shepherdia** Nutt.

Leucaena Benth. (Family Leguminosae) **leadtree**

†*Leucaena* Benth., Hook. Jour. Bot. 4: 416. 1842.
Caudoleucaena Britton & Rose, No. Amer. Fl. 23: 130. 1928.
Ryncholeucaena Britton & Rose, No. Amer. Fl. 23: 130. 1928.

DERIVATION.—From Greek *leukainein,* to whiten, referring to the color of the flowers.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Leucaena. Ryncholeucaena. Caudoleucaena. No. Amer. Fl. 23: 121–131. 1928.

LEUCAENA GLAUCA (L.) Benth. LEADTREE

Mimosa glauca L., Sp. Pl. 520. 1753.
Leucaena glauca (L.) Benth., Hook. Jour. Bot. 4: 416. 1842.

DERIVATION.—Glaucous, or covered with a bloom, from the pale green foliage.

OTHER COMMON NAME.—white-popinac leadtree (SPN).

RANGE.—Southern Florida, including Florida Keys, and southern Texas. Also in West Indies, Mexico, Central America, and South America.

Mentioned in a note in the 1927 Check List. Generally shrubby and naturalized rather than native in the United States.

Leucaena greggii S. Wats. **Gregg leadtree**

†*Leucaena greggii* S. Wats., Amer. Acad. Arts and Sci. Proc. 23: 272. 1888.
Ryncholeucaena greggii (S. Wats.) Britton & Rose, No. Amer. Fl. 23: 130. 1928.

DERIVATION.—In commemoration of Josiah Gregg (1806–50), American explorer and trader who collected a specimen of this species in northern Mexico in 1847.

RANGE.—Southern Texas and northeastern Mexico (Nuevo León and Coahuila).

Leucaena pulverulenta (Schlecht.) Benth. **great leadtree**

Acacia pulverulenta Schlecht., Linnaea 12: 571. 1838.
†*Leucaena pulverulenta* (Schlecht.) Benth., Hook. Jour. Bot. 4: 417. 1842.

DERIVATION.—Pulverulent, or powdered, referring to the dusty appearance of the foliage.

RANGE.—Extreme southern Texas and northeastern and eastern Mexico (Nuevo León, Tamaulipas, and Veracruz).

Leucaena retusa Benth. **littleleaf leadtree**

†*Leucaena retusa* Benth. in A. Gray, Pl. Wright. 1: 64. 1852.
Caudoleucaena retusa (Benth.) Britton & Rose, No. Amer. Fl. 23: 131. 1928.

DERIVATION.—Retuse, with a shallow notch at a rounded apex, in reference to the leaflets.

RANGE.—Southern Texas to Edwards Plateau and Trans-Pecos Texas and southern New Mexico.

Libocedrus Endl. (Family Pinaceae) **incense-cedar**

†*Libocedrus* Endl., Synops. Conif. 42. 1847.
Heyderia K. Koch, Dendrol. 2(2): 177. 1873.

DERIVATION.—From Greek, drop or tear, and *Cedrus*, cedar, referring to the trickling of resin.

***Libocedrus decurrens** Torr. **†incense-cedar**

†*Libocedrus decurrens* Torr., Smithsn. Inst. Contrib. Knowl. 5(1) [6(2)] (Plant. Frémont.): 7, pl. 3. 1853 (Apr.).
Thuja craigana Grev. & Balf. in A. Murr., Bot. Exped. Ore. [Rpt. No. 8] 2, No. 750. [1853, before Oct. 15.]
Heyderia decurrens (Torr.) K. Koch, Dendrol. 2(2): 179. 1873.

DERIVATION.—Decurrent, the scale leaves running down the twig.

OTHER COMMON NAME.—California incense-cedar (SPN).

RANGE.—Mountains from western Oregon south in higher Coast Ranges and Sierra Nevada to southern California and to western Nevada. Also in Lower California, Mexico.

Licaria Aubl. (Family Lauraceae) **licaria**

Licaria Aubl., Hist. Pl. Guiane Franç. 1: 313, pl. 121. 1775.
†*Misanteca* Schiede & Deppe ex Schlecht. & Cham., Linnaea 6: 367. 1831.
Acrodiclidium Nees, Pl. Laurin. Sec. 13. 1833.

The older name *Licaria*, formerly rejected as of uncertain application, has been identified with this genus, replacing *Misanteca*.

DERIVATION.—From the Carib name *licari kanali* used in French Guiana.

OTHER COMMON NAME.—misanteca.

REFERENCE.—Kostermans, A. J. G. H. Revision of the Lauraceae II. The genera Endlicheria, Cryptocarya (American species) and Licaria. Rec. des Trav. Bot. Néerland. 34: 500–609. 1937.

Licaria triandra (Sw.) Kosterm. **Gulf licaria**

Laurus triandra Sw., Nov. Gen. Sp. Pl. Prodr. 65. 1788.
†*Misanteca triandra* (Sw.) Mez, Berlin K. Bot. Gart. u. Mus. Jahrb. 5: 103. 1889.
Licaria triandra (Sw.) Kosterm., Rec. des Trav. Bot. Néerland. 34: 588. 1937.
Acrodiclidium triandrum (Sw.) Lundell, Mich. Univ. Herbarium Contrib. 7: 12. 1942.

DERIVATION.—Three stamens.

OTHER COMMON NAME.—Gulf misanteca.

RANGE.—Very rare and local at Miami (Dade County) in southern Florida. Also in West Indies.

Two trees of this West Indian species were first discovered in the United States in 1910, according to Sargent (Trees and Shrubs 2: 135, pl. 155. 1911). Small (Man. Southeast. Fl. 924. 1933) reported that the trees probably had been destroyed as a result of real estate developments. However, Walter M. Buswell (Miami (Fla.) Univ. Bul. 19(6): 18. 1945) stated later that a few trees were left in Brickell hammock at Miami. In a letter Dec. 30, 1946, he mentioned having found about 25 trees at one place in Miami but predicted they would soon be cut and replaced by houses.

LIGUSTRUM L. (Family Oleaceae) **PRIVET**

Ligustrum L., Sp. Pl. 7. 1753; Gen. Pl. Ed. 5, 8. 1754.

DERIVATION.—The classical Latin name of *Ligustrum vulgare* L., European privet.

This introduced genus was not in the 1927 Check List. Besides *Ligustrum ovalifolium* Hassk., which is accepted here, other mostly shrubby species have been recorded as escaping from cultivation and may eventually be found as naturalized trees. Small (Man. Southeast. Fl. 1042–1043. 1933) reported that *Ligustrum lucidum* Ait. f., glossy privet, a shrub or small tree native of China and Japan and cultivated in southeastern United States, is occasionally spontaneous about towns on the coasts of North Carolina and Louisiana. *Ligustrum vulgare* L., European privet, of Europe, has escaped from cultivation in eastern United States and is naturalized locally as a shrub, though becoming a small tree in cultivation.

LIGUSTRUM OVALIFOLIUM Hassk. CALIFORNIA PRIVET

Ligustrum ovalifolium Hassk., Cat. Pl. Hort. Bot. Bogor. Alt. 119. 1844.

DERIVATION.—Oval-leaved.

RANGE.—Escaped from cultivation, Florida to Texas, according to Small (Man. Southeast. Fl. 1042. 1933). Listed by Fernald (Gray's Man. Bot. Ed. 8, 1151. 1950) as naturalized in northeastern States. Native of Japan. A shrub or small tree.

Liquidambar L. (Family Hamamelidaceae) **sweetgum**

†*Liquidambar* L., Sp. Pl. 999. 1753; Gen. Pl. Ed. 5, 434. 1754.

DERIVATION.—From Latin, liquid and amber, in reference to the fragrant resin.

***Liquidambar styraciflua L.** **sweetgum**

†*Liquidambar styraciflua* L., Sp. Pl. 999. 1753.

DERIVATION.—Old name of this genus meaning styrax- (or storax-) flowing, alluding to the production of medicinal storax, which is from *Liquidambar orientalis* Mill. of western Asia and from this species.

OTHER COMMON NAMES.—American sweetgum (SPN), bilsted, †redgum (lumber), sapgum (lumber).

RANGE.—Connecticut and southeastern New York to Virginia, West Virginia, southern Ohio, southern Illinois, southeastern Missouri, Arkansas, and southeastern Oklahoma, south to eastern Texas and central Florida. Also in northeastern Mexico (Tamaulipas) and from central Mexico (Veracruz and Hidalgo to Oaxaca and Chiapas) southward in Central America to Guatemala, Salvador, Honduras, and Nicaragua.

Liriodendron L. (Family Magnoliaceae) **yellow-poplar**

†*Liriodendron* L., Sp. Pl. 535. 1753; Gen. Pl. Ed. 5, 239. 1754; as "*Liriodendrum.*"

DERIVATION.—From Greek, lily and tree, because of the showy, "lilylike" (or, better, tuliplike or magnolialike) flowers.

OTHER COMMON NAME.—tuliptree (SPN).

***Liriodendron tulipifera L.** **†yellow-poplar**

†*Liriodendron tulipifera* L., Sp. Pl. 535. 1753.

DERIVATION.—Old generic name meaning tulip-bearing.

OTHER COMMON NAMES.—tuliptree (SPN), "poplar," tulip-poplar, white-poplar, whitewood.

RANGE.—Massachusetts and southern Vermont to New York, extreme southern Ontario, and southern Michigan, south to Indiana, southern Illinois, southeastern Missouri, eastern Arkansas, and Louisiana, and east to central Florida.

Lithocarpus Blume (Family Fagaceae) **tanoak**

†*Lithocarpus* Blume, Bijr. Fl. Ned. Indië 526. 1825.
Synaedrys Lindl., Nat. Syst. Bot. Ed. 2, 441. 1836.
Balanaulax Raf., Alsogr. Amer. 28. 1838.
Arcaula Raf., Alsogr. Amer. 30. 1838.
Pasania (Miq.) Oerst., Kjoeb. Vidensk. Meddel. 1866: 81. 1867.

DERIVATION.—From Greek, stone and fruit, in allusion to the hard acorns.

REFERENCE.—Rehder, Alfred, and Wilson, E. H. *In* Sargent, C. S. Plantae Wilsonianae 3: 205. 1916.

***Lithocarpus densiflorus** (Hook. & Arn.) Rehd. **†tanoak**

Quercus densiflora Hook. & Arn., Bot. Beech Voy. 391. 1840.
Pasania densiflora (Hook. & Arn.) Oerst., Kjoeb. Vidensk. Meddel. 1866: 83. 1867.
†*Lithocarpus densiflorus* (Hook. & Arn.) Rehd. in Bailey, Standard Cyclop. Hort. 6: 3569. 1917; as "*densiflora.*"

DERIVATION.—Densely flowered.

OTHER COMMON NAME.—tanbark-oak.

RANGE.—Southwestern Oregon and south to southern California, mostly near coast but also in Sierra Nevada.

Lucuma campechiana H. B. K., see *Pouteria campechiana* (H. B. K.) Baehni

Lyonia Nutt. (Family Ericaceae) **lyonia**

†*Lyonia* Nutt., Gen. No. Amer. Pl. 1: 266. 1818; *nomen conservandum.* Not *Lyonia* Raf., Med. Repos. 11 (Ser. 2, v. 5): 353. 1808. Not *Lyonia* Ell., Sketch Bot. S.-C. Ga. 1: 36. 1817.
Xolisma Raf., Amer. Monthly Mag. 4: 193. 1819; *nomen rejiciendum.*

DERIVATION.—Named for John Lyon (17—?–1818), early American botanist and explorer of the southern Appalachians, who introduced many plants into England.

Lyonia ferruginea Nutt. **tree lyonia**

Andromeda ferruginea Walt., Fl. Carol. 138. 1788.
Andromeda ferruginea var. α *arborescens* Michx., Fl. Bor.-Amer. 1: 252. 1803.
†*Lyonia ferruginea* Nutt., Gen. No. Amer. Pl. 1: 266. 1818.
Xolisma ferruginea (Walt.) Heller, Cat. No. Amer. Pl. 6. 1898.

Lyonia ferruginea var. *arborescens* (Michx.) Rehd. in Bailey & Miller, Cycl. Amer. Hort. 2: 960. 1900.

DERIVATION.—Ferrugineous, or rusty colored, describing the lower surfaces of the leaves.

OTHER COMMON NAMES.—stagger-bush, titi.

RANGE.—Coastal Plain of South Carolina and Georgia to central and northwestern Florida. This or closely related species occur also in West Indies and Mexico.

Lyonothamnus A. Gray (Family Rosaceae) **Lyontree**

†*Lyonothamnus* A. Gray, Amer. Acad. Arts and Sci. Proc. 20: 291. 1885.

DERIVATION.—Lyon's shrub, in honor of its discoverer, William Scrugham Lyon (1852–1916), American horticulturist and forester who collected plants on Santa Catalina Island in 1884–85.

Lyonothamnus floribundus A. Gray **Lyontree**

†*Lyonothamnus floribundus* A. Gray, Amer. Acad. Arts and Sci. Proc. 20: 292. 1885.

Lyonothamnus asplenifolius Greene, Calif. Acad. Sci. Bul. 1: 136. 1890.

Lyonothamnus floribundus var. *asplenifolius* (Greene) Brandegee, Zoe 1: 136. 1890.

DERIVATION.—Abounding in flowers.

OTHER COMMON NAMES.—Catalina-ironwood, lyonothamnus, Santa-Cruz-ironwood.

RANGE.—Santa Catalina, San Clemente, Santa Cruz, and Santa Rosa Islands off the southern coast of California.

Lysiloma Benth. (Family Leguminosae) **lysiloma**

†*Lysiloma* Benth., Hook. London Jour. Bot. 3: 82. 1844.

DERIVATION.—From Greek, loosing and border, in reference to the separation of the sides of the pods from the borders at maturity.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Lysiloma. No. Amer. Fl. 23: 76-84. 1928.

Lysiloma bahamensis Benth. **Bahama lysiloma**

†*Lysiloma bahamensis* Benth., Hook. London Jour. Bot. 3: 82. 1844.

DERIVATION.—Of the Bahama Islands, where it was discovered.

OTHER COMMON NAME.—†wild-tamarind.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and Yucatán, Mexico.

At one time referred to *Lysiloma latisqua* (L.) Benth., sabicu lysiloma, of the West Indies.

Lysiloma microphylla Benth. (Lond. Jour. Bot. 3: 83. 1844; †*L. watsonii* Rose; *L. thornberi* Britton & Rose), littleleaf lysiloma, is a very rare native shrub less than 10 feet high at two localities in southern Arizona. However, it becomes a small tree to 15 feet high and 5 inches in trunk diameter when cultivated

in Arizona, though killed back by cold winters. It is also a small tree southward in its range from northwestern to southern Mexico and West Indies.

Maclura Nutt. (Family Moraceae) **Osage-orange**

Ioxylon Raf., Amer. Monthly Mag. and Crit. Rev. 2: 118. 1817; *nomen rejiciendum.*

Maclura Nutt., Gen. No. Amer. Pl. 2: 233. 1818; *nomen conservandum.*

†*Toxylon* Raf., Amer. Monthly Mag. and Crit. Rev. 4: 188. 1818.

Joxylon Raf., Jour. de Phys. Chim. Hist. Nat. Arts 89: 260. 1819; *nomen rejiciendum.*

DERIVATION.—In compliment to William Maclure (1763–1840), American geologist.

As *Maclura* Nutt. has been conserved for this genus under the International Code, it replaces *Toxylon* Raf. of the 1927 Check List.

***Maclura pomifera** (Raf.) Schneid. **†Osage-orange**

Ioxylon pomiferum Raf., Amer. Month. Mag. and Crit. Rev. 2: 118. 1817.

†*Toxylon pomiferum* Raf. ex Sarg., Silva No. Amer. 7: 89, pls. 322, 323. 1895.

Maclura pomifera (Raf.) Schneid., Illus. Handb. Laubholzk. 1: 806. 1906.

DERIVATION.—Bearing pomes or apples, in allusion to the large ball fruits.

OTHER COMMON NAMES.—bodark, bois-d'arc, bowwood, hedge, mockorange.

RANGE.—Native of southern Arkansas, southeastern Oklahoma, eastern Texas, and perhaps northwestern Louisiana, though the original range is not accurately known and might have extended to southeastern Kansas. Widely planted in eastern half of United States except northern border and escaped and naturalized from southern New England and New York to Michigan, Illinois, Iowa, and eastern Kansas, south to Texas and Georgia. Also local in southeastern Washington, Oregon, and perhaps elsewhere in West.

Magnolia L. (Family Magnoliaceae) **magnolia**

†*Magnolia* L., Sp. Pl. 535. 1753; Gen. Pl. Ed. 5, 140. 1754.

Tulipastrum Spach, Hist. Nat. Vég. Phanér. 7: 481. 1839.

DERIVATION.—In honor of Pierre Magnol (1638–1715), professor of medicine and director of the botanical garden at Montpellier, France.

***Magnolia acuminata** L. **cucumbertree**

Magnolia acuminata var. acuminata **cucumbertree (typical)**

Magnolia virginiana ε *acuminata* L., Sp. Pl. 536. 1753.

Magnolia acuminata L., Syst. Nat. Ed. 10, 2: 1082. 1759.

Tulipastrum acuminatum (L.) Small, Fl. Southeast. U. S. 451, 1331. 1903.

†*Magnolia acuminata* var. *ludoviciana* Sarg., Bot. Gaz. 67: 232. 1919.

Magnolia acuminata var. *ozarkensis* Ashe, Elisha Mitchell Sci. Soc. Jour. 41: 269. 1926.

Tulipastrum acuminatum var. *ludovicianum* (Sarg.) Ashe, Torrey Bot. Club Bul. 55: 464. 1928.

Tulipastrum acuminatum var. *ozarkense* (Ashe) Ashe, Torrey Bot. Club Bul. 55: 464. 1928.

Magnolia acuminata var. *alabamensis* Ashe, Torreya 31: 37. 1931.

Magnolia acuminata aurea (Ashe) Ashe, Torreya 31: 38. 1931.

DERIVATION.—Acuminate, referring to the pointed leaves.

OTHER COMMON NAMES.—cucumbertree magnolia (SPN), †cucumber magnolia, mountain magnolia.

RANGE.—Western New York to extreme southern Ontario, Ohio, southern Indiana, southern Illinois, and southern Missouri, south to southeastern Oklahoma and Louisiana, east to Georgia, and north in mountains to Pennsylvania.

Ashe (Torreya 31: 37–39. 1931) recognized in addition to the typical variety of this species four varieties cited above and published a key to them. They differed slightly in pubescence of leaves and twigs and by color and size of flowers.

Magnolia acuminata var. **cordata** (Michx.) Sarg. **yellow cucumbertree**

†*Magnolia cordata* Michx., Fl. Bor.-Amer. 1: 328. 1803.

Magnolia acuminata var. *cordata* (Michx.) Sarg., Amer. Jour. Sci. 132: 473. 1886.

Tulipastrum cordatum (Michx.) Small, Fl. Southeast. U. S. 451, 1331. 1903.

Tulipastrum acuminatum aureum Ashe, Charleston Mus. Bul. 13: 28. 1917.

Magnolia acuminata aurea (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 137. 1918; *nomen provisorium.*

DERIVATION.—Cordate, or heart-shaped, of doubtful application.

OTHER COMMON NAMES.—yellow cucumbertree magnolia (SPN), †yellow-flower magnolia.

RANGE.—Central North Carolina to central South Carolina and central Georgia. Rare and local.

REFERENCE.—Coker, W. C. Magnolia cordata Michaux. Elisha Mitchell Sci. Soc. Jour. 59: 81–88, illus. 1943.

Magnolia ashei Weatherby **Ashe magnolia**

†*Magnolia ashei Weatherby,* Rhodora 28: 35. 1926.

DERIVATION.—Named for its discoverer, William Willard Ashe (1872–1932), of the United States Forest Service.

RANGE.—Northwestern Florida and in eastern Texas.

Closely related to *Magnolia macrophylla* Michx., from which it was segregated.

Magnolia australis **Ashe, see M. virginiana L.**

Magnolia cordata Michx., see **M. acuminata** var. **cordata** (Michx.) Sarg.

Magnolia foetida (L.) Sarg., see **M. grandiflora** L.

Magnolia fraseri Walt. **Fraser magnolia**

†*Magnolia fraseri* Walt., Fl. Carol. 159, pl. 1788.

DERIVATION.—Dedicated to John Fraser (1750–1811), Scotchman who introduced this and other North American plants to Europe and who published the book containing its description.

OTHER COMMON NAMES.—†mountain magnolia, ear-leaf cucumbertree.

RANGE.—Mountains from western Virginia to southeastern Kentucky, south to eastern Tennessee, northern Alabama, northern Georgia, South Carolina, and North Carolina.

Magnolia glauca L., see **M. virginiana** L.

***Magnolia grandiflora** L. **southern magnolia**

Magnolia virginiana β foetida L., Sp. Pl. 536. 1753.
Magnolia grandiflora L., Syst. Nat. Ed. 10, 2: 1082. 1759.
Magnolia foetida (L.) Sarg., Gard. and Forest 2: 615. 1889.

DERIVATION.—Large-flowered.

OTHER COMMON NAMES.—bull-bay, evergreen magnolia.

RANGE.—Coastal Plain from southeastern North Carolina south to central Florida and west to eastern Texas.

Magnolia macrophylla Michx. **†bigleaf magnolia**

†*Magnolia macrophylla* Michx., Fl. Bor.-Amer. 1: 327. 1803.

DERIVATION.—Long-leaved, or large-leaved, referring to the largest simple leaves of all native trees except palms.

OTHER COMMON NAME.—large-leaf magnolia.

RANGE.—Rare and local from western North Carolina to central Kentucky, southwest to central Tennessee and Louisiana, and east to Mississippi, Alabama, Georgia, northwestern Florida, and South Carolina. Also in southern Ohio (Jackson County).

Magnolia pyramidata Bartr. **pyramid magnolia**

†*Magnolia pyramidata* Bartr., Travels N. S. Car. Ga. Fla. 6, 408. 1791.
Magnolia pyramidata Bartr. ex Pursh, Fl. Amer. Sept. 2: 382. 1814.

DERIVATION.—Pyramidal, from the shape of the crown.

OTHER COMMON NAMES.—southern cucumbertree, †mountain magnolia.

RANGE.—Coastal Plain from South Carolina to Georgia, northwestern Florida, Alabama, Mississippi, and southeastern Louisiana.

REFERENCE.—Harper, Francis. Two more available plant names of William Bartram. Bartonia 21: 6-8. 1942.

Magnolia tripetala L. **†umbrella magnolia**

Magnolia virginiana δ *tripetala* L., Sp. Pl. 536. 1753.
†*Magnolia tripetala* L., Syst. Nat. Ed. 10, 2: 1082. 1759.

DERIVATION.—With three petals.

OTHER COMMON NAME.—umbrella-tree.

RANGE.—Southern Pennsylvania to Ohio, central Kentucky, and southern Indiana (Crawford County), south to central Tennessee, northeastern Mississippi, Alabama, and Georgia. Also in central and southwestern Arkansas and southeastern Oklahoma.

***Magnolia virginiana** L. **†sweetbay**

†*Magnolia virginiana* L., Sp. Pl. 535. 1753.
Magnolia virginiana α *glauca* L., Sp. Pl. 535. 1753.
Magnolia glauca L., Syst. Nat. Ed. 10, 1082. 1759.
†*Magnolia virginiana* var. *australis* Sarg., Bot. Gaz. 67: 231. 1919.
Magnolia virginiana var. *parva* Ashe, Torrey Bot. Club Bul. 55: 464. 1928.
Magnolia australis Ashe, Torreya 31: 39. 1931.
Magnolia australis var. *parva* (Ashe) Ashe, Torreya 31: 39. 1931.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—sweetbay magnolia (SPN), swamp-bay, southern sweetbay, magnolia (lumber), evergreen magnolia, laurel magnolia, swamp magnolia.

RANGE.—Coastal Plain, chiefly, from Long Island, New Jersey, and eastern Pennsylvania, south to southern Florida and west to eastern Texas, and north to southern Arkansas and southern Tennessee. Also local in eastern Massachusetts.

Malachodendron Cav., see **Stewartia** L.

Malosma Nutt., see **Rhus L.**

Malus Mill. (Family Rosaceae) **apple**

Pyrus L., Sp. Pl. 479. 1753; Gen. Pl. Ed. 5, 214. 1754; in part.
†*Malus* Mill., Gard. Dict. Abridged. Ed. 4, v. 2. 1754.

DERIVATION.—The classical Latin name for apple.

OTHER COMMON NAME.—crab apple.

REFERENCES.—Bailey, L. H. The Pyrus-Malus puzzle. Gentes Herbarum 8: 40–43, illus. 1949.
Fernald, M. L. Rhodora 45: 450–452. 1943.
Fernald, M. L. Minor transfers in Pyrus. Rhodora 49: 229–233. 1947.
Rehder, Alfred. Arnold Arboretum Jour. 2: 47-58. 1920.

***Malus*, like its relative *Crataegus*, is a taxonomically difficult genus with numerous intergrading variations and hybrids for which many scientific names have been given. In this conservative treatment varieties have not been distinguished and specific names for minor variations have been placed in synonymy.**

Malus baccata (L.) Borkh., Siberian crab apple, and *Malus prunifolia* (Willd.) Borkh., pear-leaf apple, or Chinese apple, both introduced from Asia, have escaped from cultivation in northeastern United States but apparently are not naturalized.

Malus angustifolia (Ait.) Michx. **southern crab apple**

Pyrus angustifolia Ait., Hort. Kew. 2: 176. 1789.
†*Malus angustifolia* (Ait.) Michx., Fl. Bor.-Amer. 1: 292. 1803.

DERIVATION.—Narrow-leaved.

OTHER COMMON NAMES.—†narrowleaf crab apple, wild crab.

RANGE.—Coastal Plain from Maryland and southeastern Virginia to Georgia and northwestern Florida and west to Louisiana, and northward to Arkansas, Tennessee, and southern Illinois.

Malus baccata (L.) Borkh., see note under **Malus** L.

Malus bracteata Rehd., see **M. coronaria** (L.) Mill.

Malus carolinensis Ashe, see **M. coronaria** (L.) Mill.

Malus coronaria (L.) Mill. **†sweet crab apple**

Pyrus coronaria L., Sp. Pl. 480. 1753.
†*Malus coronaria* (L.) Mill., Gard. Dict. Ed. 8, *Malus* No. 2. 1768.
†*Malus glaucescens* Rehd. in Sarg., Trees and Shrubs 2: 139, pl. 157. 1911.
Malus lancifolia Rehd., in Sarg., Trees and Shrubs 2: 141, pl. 158. 1911.
†*Malus bracteata* Rehd. in Sarg., Trees and Shrubs 2: 230. 1913.
Malus fragrans Rehd. in Sarg., Trees and Shrubs 2: 228. 1913.
Malus fragrans var. *elongata* Rehd. in Sarg., Trees and Shrubs 2: 229. 1913.
†*Malus coronaria* var. *elongata* Rehd., Deut. Dendrol. Gesell. Mitt. 23: 261. 1914.
Pyrus bracteata (Rehd.) Bailey, Rhodora 18: 154. 1916.
Pyrus coronaria var. *elongata* (Rehd.) Bailey, Rhodora 18: 154. 1916.
Pyrus glaucescens (Rehd.) Bailey, Rhodora 18: 154. 1916.
Pyrus lancifolia (Rehd.) Bailey, Rhodora 18: 154. 1916.
Malus cuneata Ashe, Charleston Mus. Bul. 12: 38. 1916.
Malus elongata (Rehd.) Ashe, Charleston Mus. Bul. 12: 38. 1916.
Malus redolens Ashe, Charleston Mus. Bul. 12: 39. 1916.
Pyrus elongata (Rehd.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 139. 1918; later homonym.
Pyrus redolens (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 139. 1918.
Malus carolinensis Ashe, Charleston Mus. Bul. 14: 10. 1918.
Malus coronaria var. *dasycalyx* Rehd., Arnold Arboretum Jour. 2: 52. 1920.

Malus elongata var. *pubens* Ashe, Torrey Bot. Club. Bul. 49: 368. 1922.

Pyrus coronaria var. *fragrans* (Rehd.) Farwell, Amer. Midland Nat. 11: 60. 1928.

Pyrus coronaria var. *tomentella* Farwell, Amer. Midland Nat. 11: 60. 1928.

Pyrus coronaria var. *dasycalyx* (Rehd.) Fern., Rhodora 49: 232. 1947.

Pyrus coronaria var. *lancifolia* (Rehd.) Fern., Rhodora 49: 232. 1947.

Besides the typical variety, Fernald (Gray's Man. Bot. Ed. 8, 759. 1950) accepted under the specific name *Pyrus coronaria* L. two varieties which may merit recognition, var. *dasycalyx* and var. *lancifolia*.

DERIVATION.—For a crown or wreath.

OTHER COMMON NAMES.—wild sweet crab apple (SPN), †crab apple, wild crab, garland-tree.

RANGE.—Central New York and southern Ontario to Indiana, Missouri, and eastern Kansas, and east to Tennessee, northern Alabama, northern Georgia, western South Carolina, and North Carolina.

Malus cuneata Ashe, see **M. coronaria** (L.) Mill.

Malus ×*dawsoniana* Rehd., see note under **M. diversifolia** (Bong.) Roem.

Malus diversifolia (Bong.) Roem. **†Oregon crab apple**

Pyrus fusca Raf., Med. Fl. 2: 254. 1830; as "*fusea*"; *nomen subnudum*.

Pyrus diversifolia Bong., Acad. Imp. Sci. St. Pétersbourg Mém., Sér. 6, Sci. Math. Phys. Nat. 2: 133. 1832.

Pyrus rivularis Dougl. ex Hook., Fl. Bor.-Amer. 1: 203, pl. 68. [1834].

Pyrus rivularis β *levipes* Nutt., No. Amer. Sylva 2: 24. 1842.

†*Malus diversifolia* (Bong.) Roem., Fam. Nat. Regn. Veg. Synops. 3: 215. 1847.

Malus rivularis (Dougl.) Roem., Fam. Nat. Regn. Veg. Synops. 3: 215. 1847.

Malus fusca (Raf.) Schneid., Illus. Handb. Laubholzk. 1: 723, figs. 399d, 400i-l. 1906.

Malus fusca var. *levipes* (Nutt.) Schneid., Illus. Handb. Laubholzk. 1: 724. 1906.

This species has also been known as *Malus fusca* and *Malus diversifolia* as well as under *Pyrus*. *Malus fusca*, though based upon the oldest name, *Pyrus fusca*, is rejected here because the latter was very briefly and inadequately described.

DERIVATION.—Separated leaves, the leaves sometimes slightly 3-lobed.

OTHER COMMON NAMES.—Pacific crab apple, western crab apple, wild crab apple.

RANGE.—Pacific Coast region from southern Alaska (Prince William Sound) southeast to southeastern Alaska and southward near coast in British Columbia, Washington, Oregon, and northwestern California.

†*Malus* ×*dawsoniana* Rehd. (*Malus diversifolia* × *pumila*), †Dawson crab apple, included in the 1927 Check List, apparently is not now known in the wild state. It originated in cultivation from seed collected in Oregon.

Malus elongata (Rehd.) Ashe, see **M. coronaria** (L.) Mill.

Malus fragrans Rehd., see **M. coronaria** (L.) Mill.

Malus fusca (Raf.) Schneid., see **M. diversifolia** (Bong.) Roem.

Malus glabrata Rehd. **Biltmore crab apple**

†*Malus glabrata* Rehd. in Sarg., Trees and Shrubs 2: 225, pl. 188. 1913.

Pyrus glabrata (Rehd.) Bailey, Rhodora 18: 154. 1916.

DERIVATION.—Glabrate, or becoming hairless, referring to the foliage.

OTHER COMMON NAME.—†crab apple.

RANGE.—Western North Carolina to Alabama.

Malus glaucescens Rehd., see **M. coronaria** (L.) Mill.

Malus ioensis (Wood) Britton **prairie crab apple**

Pyrus coronaria β *ioensis* Wood, Class-book Bot. Rev. Ed., 333. 1861.

Pyrus ioensis (Wood) Bailey, Amer. Gard. 12: 473, figs. 7, 8. 1891.

†*Malus ioensis* (Wood) Britton in Britton & Brown, Illus. Fl. North. States Canada 2: 235, fig. 1980. 1897.

†*Malus ioensis* var. *palmeri* Rehd. in Sarg., Trees and Shrubs 2: 142. 1911.

†*Malus ioensis* var. *texana* Rehd. in Sarg., Trees and Shrubs 2: 142. 1911.

†*Malus ioensis* var. *bushii* Rehd. in Sarg., Trees and Shrubs 2: 232. 1913.

†*Malus ioensis* var. *creniserrata* Rehd. in Sarg., Trees and Shrubs 2: 231. 1913.

Malus ioensis var. *spinosa* Rehd. in Sarg., Trees and Shrubs 2: 231. 1913.

Pyrus ioensis var. *bushii* (Rehd.) Bailey, Rhodora 18: 154. 1916.

Pyrus ioensis var. *creniserrata* (Rehd.) Bailey, Rhodora 18: 154. 1916.

Pyrus ioensis var. *palmeri* (Rehd.) Bailey, Rhodora 18: 154. 1916.

Pyrus ioensis var. *texana* (Rehd.) Bailey, Rhodora 18: 154. 1916.

Pyrus ioensis var. *spinosa* (Rehd.) Bailey, Rhodora 18: 154. 1916.

DERIVATION.—Of Iowa, where it was first distinguished as a variety.

OTHER COMMON NAMES.—†crab apple, Iowa crab, prairie crab, wild crab.

RANGE.—Indiana to Illinois, Wisconsin, and southeastern Minnesota, south to southeastern Nebraska, eastern Kansas, central Texas, east to Louisiana, and north to Missouri.

HYBRID.—*Malus* ×*soulardii* (Bailey) Britton (*M. ioensis* × *pumila*).

Malus lancifolia Rehd., see **M. coronaria** (L.) Mill.

Malus malus (L.) Britton, see M. PUMILA Mill.

Malus ×platycarpa Rehd. **bigfruit crab apple**

Malus pumila × *Malus* spp. (Sect. *Chloromeles*).

†*Malus platycarpa* Rehd. in Sarg., Trees and Shrubs 2: 227, pl. 189. 1913.

Malus coronaria var. *hoopesii* Rehd. in Sarg., Trees and Shrubs 2: 142. 1911.

Malus platycarpa var. *hoopesii* (Rehd.) Rehd. in Sarg., Trees and Shrubs 2: 227. 1913.

Pyrus platycarpa (Rehd.) Bailey, Rhodora 18: 154. 1916.

Malus platycarpa var. *parvula* Ashe, Torrey Bot. Club Bul. 49: 268. 1922.

McVaugh concluded that most, if not all, of the plants previously referred to *Malus platycarpa* and to var. *hoopesii* are of hybrid origin. He thought that hybridization had taken place between cultivated apple, *Malus pumila* Mill., and the native species of crab apples, *Malus* (Sect. *Chloromeles*), occurring in the same region. Some authors have united *Malus platycarpa* with *Malus coronaria* (L.) Mill.

DERIVATION.—Broad-fruited, in reference to the large fruits.

OTHER COMMON NAME.—†crab apple.

RANGE.—Recorded from Delaware, Maryland, Virginia, West Virginia, Kentucky, Ohio, and southern Illinois, south to North Carolina and Georgia.

REFERENCE.—McVaugh, Rogers. The status of certain anomalous native crabapples in eastern United States. Torrey Bot. Club Bul. 70: 418–429, illus. 1943.

Malus prunifolia (Willd.) Borkh., see note under **Malus** L.

MALUS PUMILA Mill. APPLE

Pyrus malus L., Sp. Pl. 479. 1753.

†*Malus pumila* Mill., Gard. Dict. Ed. 8, *Malus* No. 3. 1768.

Malus malus (L.) Britton in Britton & Brown, Illus. Fl. North. States Canada 2: 236, fig. 1982. 1897.

DERIVATION.—Dwarf.

OTHER COMMON NAMES.—common apple (SPN), †wild apple.

RANGE.—Escaped from cultivation and naturalized locally from Nova Scotia to Quebec, southern Ontario, and other parts of Canada, in eastern United States from Maine west and southward, and also in eastern Washington and northern Idaho. Native of western Asia and Europe.

HYBRIDS.—*Malus* ×*platycarpa* Rehd. (*Malus pumila* × *Malus* spp., Sect. *Chloromeles*); *Malus* ×*soulardii* (Bailey) Britton (*M. ioensis* × *pumila*).

Malus redolens Ashe, see **M. coronaria** (L.) Mill.

Malus rivularis (Dougl.) Roem., see **M. diversifolia** (Bong.) Roem.

Malus ×soulardii (Bailey) Britton **†Soulard crab apple**

Malus ioensis × *pumila*
Pyrus soulardi Bailey, Amer. Gard. 12: 472, figs. 4–6. 1891.
†*Malus soulardi* (Bailey) Britton in Britton & Brown, Illus. Fl. North. States Canada 2: 235, fig. 1981. 1897.

DERIVATION.—Named for James G. Soulard, who introduced this species and Miner plum to horticulture.

OTHER COMMON NAME.—Soulard crab.

RANGE.—Southeastern Minnesota to Missouri and eastern Texas.

MANGIFERA L. (Family Anacardiaceae) MANGO

†*Mangifera* L., Sp. Pl. 200. 1753; Gen. Pl. Ed. 5, 93. 1754.

DERIVATION.—Bearing mangoes, from the Portuguese common name of this popular tropical fruit.

MANGIFERA INDICA L. †MANGO

†*Mangifera indica* L., Sp. Pl. 200. 1753.

DERIVATION.—Of India.

OTHER COMMON NAME.—common mango (SPN).

RANGE.—Escaped from cultivation and naturalized in southern Florida, including Florida Keys. Native of tropical Asia but widely cultivated and naturalized in tropical regions.

Manilkara Adans., see **Achras** L.

Mastichodendron Cronquist, see **Sideroxylon** L.

Maytenus Molina (Family Celastraceae) **mayten**

†*Maytenus* Molina, Sagg. Stor. Nat. Chili 177. 1782.

DERIVATION.—From the Chilean name of one of the species.

Maytenus phyllanthoides Benth. **guttapercha mayten**

†*Maytenus phyllanthoides* Benth., Bot. Voy. Sulphur 54. 1844.

DERIVATION.—Like *Phyllanthus,* leaf-flower, a genus of Euphorbiaceae.

OTHER COMMON NAME.—maytenus.

RANGE.—Coasts of southern Florida, including Florida Keys, and southeastern and southern Texas. Also in Cuba and in Mexico (Lower California and Sonora to Yucatán) and Central America.

MELALEUCA L. (Family Myrtaceae) MELALEUCA

Cajuputi Adans., Fam. Pl. 2: 84. 1763; as *"Caju puti"; nomen rejiciendum.*

Melaleuca L., Mant. Pl. 1: 14. 1767; *nomen conservandum.*

DERIVATION.—From Greek, black and white, in allusion to the black trunk and white branches of one species.

MELALEUCA LEUCADENDRON L. CAJEPUT-TREE

Myrtus leucadendron L. in L. & Stickman, Herbar. Amboin. 9. 1754; Amoen. Acad. 4: 120. 1759; as *"Leucadendra."*

Melaleuca leucadendron L., Mant. Pl. 1: 105. 1767; as *"Leucadendra."*

DERIVATION.—White tree, in reference to the thick whitish bark, which separates into thin layers.

OTHER COMMON NAME.—punk-tree.

RANGE.—Escaped from cultivation and naturalized in Everglades and swamps of southern Florida. Native from Burma through Malayan Peninsula to Molucca Islands and also in Australia. Planted and naturalized in tropical regions.

REFERENCE.—Merrill, E. D. Interpret. Rumph. Herb. Amboin. 402–403. 1917.

This species was recorded as naturalized in southern Florida by Small (Man. Southeast. Fl. 938. 1933) adding a tree genus to the United States.

MELIA L. (Family Meliaceae) CHINABERRY

†*Melia* L., Sp. Pl. 384. 1753; Gen. Pl. Ed. 5, 182. 1754.

DERIVATION.—A classical Greek name for the ash tree, and transferred by Linnaeus to this genus.

MELIA AZEDARACH L. †CHINABERRY

†*Melia azedarach* L., Sp. Pl. 384. 1753.

†*Melia azedarach umbraculifera* G. W. Knox, Gard. Monthly 27: 260. 1885.

DERIVATION.—From the Persian name (*azad dirakht,* literally "noble tree") for this species.

OTHER COMMON NAMES.—†umbrella chinaberry, chinatree, pride-of-India, umbrella-tree.

RANGE.—Widely planted and escaped and naturalized in southeastern United States from southeastern Virginia to Florida and west to southern and central Texas, and north to southeastern Oklahoma, Arkansas, and western Tennessee. Sometimes escaping in California. Native of Himalaya and perhaps elsewhere in Asia but widely naturalized in tropical and subtropical regions.

Metopium P. Br. (Family Anacardiaceae) **poisontree**

†*Metopium* P. Br., Civ. Nat. Hist. Jamaica 177, pl. 13, fig. 3. 1756.

DERIVATION.—A Latin word from Greek *metopion,* literally forehead, also reported to be the classical name of an African tree.

REFERENCE.—See under **Rhus** L.

Metopium toxiferum (L.) Krug & Urban **Florida poisontree**

Amyris toxifera L., Syst. Nat. Ed. 10, 2: 1000. 1759.
†*Metopium toxiferum* (L.) Krug & Urban in Urban, Bot. Jahrb. 21: 612. 1896.

DERIVATION.—Bearing poison, the sap causing skin irritation similar to that produced by its relative poison-ivy.

OTHER COMMON NAMES.—†poisonwood, West Indies poisontree.

RANGE.—Southern Florida, including Florida Keys. Also in Bahamas, Cuba, Hispaniola, and Puerto Rico.

The Florida tree has also been referred to *Metopium brownei* (Jacq.) Urban (*Rhus metopium* L., *Metopium metopium* (L.) Small), a related species of the West Indies, southeastern Mexico, and Central America.

Micropteryx Walp., see **Erythrina** L.

Mimusops L., see **Achras** L.

Misanteca Cham. & Schlecht., see **Licaria** Aubl.

Mohrodendron Britton, see **Halesia** Ellis

Morella Lour., see **Myrica** L.

MORINGA Lam. (Family Moringaceae) HORSERADISH-TREE

†*Moringa* Lam., Encycl. Méth. Bot. 1: 398. 1785.

DERIVATION.—Reported to be the native Malabar name, cognate with Tamil *morunga* and Singhalese *murungha* for the type species, *M. oleifera* Lam.

MORINGA OLEIFERA Lam. †HORSERADISH-TREE

Guilandina moringa L., Sp. Pl. 381. 1753.
Moringa oleifera Lam., Encycl. Méth. Bot. 1: 398. 1785.
†*Moringa pterygosperma* Gaertn., Fruct. Sem. Pl. 2: 314, pl. 147, fig. 2. 1791.
Moringa moringa (L.) Millsp., Field Columb. Mus. Pub. Bot. Ser. 1: 490. 1902.

DERIVATION.—Oil-bearing, the seeds yielding oil.

RANGE.—Escaped from cultivation in southern Florida, including Florida Keys, but perhaps not naturalized. Planted and naturalized also in West Indies and from Mexico southward. Native of East Indies, southeastern Asia, and India.

Morus L. (Family Moraceae) **mulberry**

†*Morus* L., Sp. Pl. 986. 1753; Gen. Pl. Ed. 5, 424. 1754.

DERIVATION.—The classical Latin name of mulberry.

MORUS ALBA L. †WHITE MULBERRY

†*Morus alba* L., Sp. Pl. 986. 1753.

DERIVATION.—White, referring to the fruit.

OTHER COMMON NAME.—silkworm mulberry.

RANGE.—Widely planted in eastern United States and escaped and naturalized from New York to Indiana, Missouri, and Kansas,

south to central Texas and Georgia. Also in southeastern Washington. Native of China.

A common form of this species is Russian mulberry, *Morus alba* f. *tartarica* Seringe.

Morus microphylla Buckl. **Texas mulberry**

†*Morus microphylla* Buckl., Acad. Nat. Sci. Phila. Proc. 1862 [v. 14]: 8. 1862.

DERIVATION.—Small-leaved.

OTHER COMMON NAMES.—Mexican mulberry, mountain mulberry, baya.

RANGE.—Central Texas west to Edwards Plateau and Trans-Pecos Texas, southern New Mexico, and southern and central Arizona. Also in northern Mexico (Sonora and Chihuahua to Durango).

Closely related to *Morus celtidifolia* H. B. K., of Mexico to Peru, and has been united with that species.

MORUS NIGRA L. †BLACK MULBERRY

†*Morus nigra* L., Sp. Pl. 986. 1753.

DERIVATION.—Black, the color of its fruit.

RANGE.—Naturalized in southeastern United States from Florida to Texas and escaped from cultivation northward in eastern United States. Native of western Asia.

***Morus rubra** L. **†red mulberry**

†*Morus rubra* L., Sp. Pl. 986. 1753.

Morus tomentosa Raf., Fl. Ludovic. 113. 1817.

Morus rubra β tomentosa (Raf.) Bur. in A. DC., Prodr. 17: 246. 1873.

DERIVATION.—Red, the color of the ripe fruits.

RANGE.—Massachusetts and Vermont to New York, extreme southern Ontario, southern Michigan, southern Wisconsin, southeastern Minnesota, and southeastern Nebraska, south to central Kansas, western Oklahoma, and central Texas, and east to southern Florida.

Mosiera Small, see **Eugenia** L.

Myrica L. (Family Myricaceae) **bayberry**

†*Myrica* L., Sp. Pl. 1024. 1753; Gen. Pl. Ed. 5, 449. 1754.

Morella Lour., Fl. Cochinch. 548. 1790.

Cerothamnus Tidestr., Elysium Marianum 40, pl. 10. 1910.

DERIVATION.—The Latin name (from Greek *murike*) for tamarisk, *Tamarix*, and arbitrarily transferred by Linnaeus to this unrelated and dissimilar genus.

OTHER COMMON NAME.—waxmyrtle.

REFERENCE.—Youngken, Heber Wilkinson. The comparative morphology, taxonomy, and distribution of the Myricaceae of the eastern United States. Pa. Univ. Bot. Lab. Contrib. 4: 339–400, illus. 1919.

Myrica californica Cham. **Pacific bayberry**

†*Myrica californica* Cham., Linnaea 6: 535. 1831.

DERIVATION.—Of California, first collected at San Francisco.

OTHER COMMON NAMES.—†Pacific waxmyrtle (SPN), western waxmyrtle.

RANGE.—Pacific coast region near coast, from western Washington south to western Oregon and southern California.

Myrica cerifera L. **southern bayberry**

†*Myrica cerifera* L., Sp. Pl. 1024. 1753.

Morella cerifera (L.) Small, Fl. Southeast. U. S. 337, 1329. 1903.

Cerothamnus ceriferus (L.) Small, Fl. Miami 61, 200. 1913.

DERIVATION.—Bearing wax, the fruits having waxy coats and used in making candles.

OTHER COMMON NAMES.—bayberry, candle-berry, †waxmyrtle, southern waxmyrtle (SPN).

RANGE.—Coastal Plain from southern New Jersey to southern Florida, west to eastern Texas, and north to southeastern Oklahoma and Arkansas. Also in Bermuda, Bahamas, Cuba, Hispaniola, and Puerto Rico. The same or a closely related species is found also in Mexico and Central America.

Myrica ×*macfarlanei* Youngken (*Myrica cerifera* × *pensylvanica*), Macfarlane waxmyrtle, a hybrid described from New Jersey, apparently is a shrub and not known to reach tree size.

Myrica curtissi Chev., see **M. heterophylla** Raf.

Myrica heterophylla Raf. **evergreen bayberry**

Myrica heterophylla Raf., Alsogr. Amer. 9. 1838; as "*heterophyla.*"

Myrica curtissi Chev., Soc. Sci. Nat. Cherbourg Mém. 32: 269. 1901.

Myrica heterophylla var. *curtissi* (Chev.) Fern., Rhodora 40: 410. 1938.

DERIVATION.—With different or variable leaves.

RANGE.—Coastal Plain from southern New Jersey and Virginia to Florida and Louisiana.

REFERENCE.—Fernald, M. L. Rhodora 40: 409–410. 1938.

This species, which was restored by Fernald in 1938, is a shrub or small tree to 16 feet high, according to Rehd. (Man. Cult. Trees Shrubs Ed. 2, 113. 1940) and Fernald (Gray's Man. Bot. Ed. 8, 524. 1950).

Myrica inodora Bartr. **odorless bayberry**

†*Myrica inodora* Bartr., Travels N. S. Car. Ga. Fla. 405. 1791.

Morella inodora (Bartr.) Small, Fl. Southeast. U. S. 337, 1329. 1903.

Cerothamnus inodorus (Bartr.) Small, Fla. Trees 12, 102. 1913.

DERIVATION.—Odorless, the plant not aromatic as in related species.

OTHER COMMON NAMES.—ordorless waxmyrtle (SPN), †waxmyrtle.

RANGE.—Coastal Plain from northwestern Florida to Mississippi and southeastern Louisiana.

Myrica pensylvanica Loisel. **northern bayberry**

Myrica pensylvanica Loisel. in Du Hamel, Traité Arb. Arbust. Ed. 2, 2: 190, pl. 55. 1804.

DERIVATION.—Of Pennsylvania.

OTHER COMMON NAMES.—bayberry, candle-berry.

RANGE.—Near coast, chiefly, from Newfoundland and Nova Scotia to New York and North Carolina, and locally to Ohio.

REFERENCE.—Fernald, M. L. Rhodora 37: 423. 1935.

Commonly a low shrub but rarely a tree to 15 feet high, according to Fernald (Gray's Man. Bot. Ed. 8, 524. 1950). It was referred to *Myrica caroliniensis* Mill. until 1935, when Fernald showed that the latter was a synonym of *M. cerifera* L.

Nectandra Roland. (Family Lauraceae) **nectandra**

Nectandra Roland. ex Rottboell, Univ. Hafn. Acta Litt. 1: 279. 1778; *nomen conservandum.* Not *Nectandra* Berg., Descr. Fl. Cap. 131. 1767; *nomen rejiciendum.*

Porostema Schreb., Gen. Pl. 2: 517. 1791.

DERIVATION.—From Greek, nectar and stamens.

†*Ocotea Aubl.* (Hist. Pl. Guiane Franç. 2: 780, pl. 310. 1775) was accepted **for this genus and its single native species in the 1927 Check List and by Sargent (Man. Trees No. Amer. Ed. 2, corr. 359–360, fig. 323. 1926).** However, authorities on the family Lauraceae now regard *Nectandra* **Roland. as a segregate genus, even though the differences seem minor and partly artificial.**

Nectandra coriacea (Sw.) Griseb. **Jamaica nectandra**

Laurus coriacea Sw., Nov. Gen. Sp. Pl. Prodr. 65. 1788.

Laurus catesbyana Michx., Fl. Bor.-Amer. 1: 244. 1803.

Nectandra coriacea (Sw.) Griseb., Fl. Brit. West. Ind. 281. 1860.

†*Ocotea catesbyana* (Michx.) Sarg., Silva No. Amer. 7: 11, pl. 303. 1895.

Ocotea coriacea (Sw.) Britton in Britton & Millsp., Bahama Fl. 143. 1920.

DERIVATION.—Leathery, referring to the thick evergreen leaves.

OTHER COMMON NAMES.—Jamaica ocotea (SPN), †lancewood.

RANGE.—Southern Florida north on east coast to Cape Canaveral and on Florida Keys. Also in West Indies.

Negundo Ludw. & Boehm., see **Acer** L.

Neostyphonia Shafer, see **Rhus** L.

NERIUM L. (Family Apocynaceae) OLEANDER

†*Nerium* L., Sp. Pl. 209. 1753; Gen. Pl. Ed. 5, 99. 1754.

DERIVATION.—Latinized from the classical Greek *nērion,* oleander.

REFERENCE.—Woodson, Robert Everard, Jr. Nerium. No. Amer. Fl. 29: 164–165. 1938.

NERIUM OLEANDER L. †OLEANDER

†*Nerium oleander* L., Sp. Pl. 209. 1753.

DERIVATION.—From the medieval Latin and French common name, referring to the resemblance of the leaves to olive.

OTHER COMMON NAME.—common oleander (SPN).

RANGE.—Escaped from cultivation and naturalized from Florida to southeastern and southern Texas. Planted in tropical and subtropical regions of the world. Native of the Mediterranean region and the Orient.

Nicotiana L. (Family Solanaceae) **tobacco**

Nicotiana L., Sp. Pl. 180. 1753; Gen. Pl. Ed. 5, 84. 1754.

DERIVATION.—Named for Jean Nicot (1530–1600), French ambassador to Portugal, who introduced tobacco into France in 1560.

NICOTIANA GLAUCA Graham TREE TOBACCO

Nicotiana glauca Graham, Edinb. New Phil. Jour. 1828 [v. 5]: 175. 1828. Also Curt. Bot. Mag. 55: No. 2837, pl. 2837. 1828 (July 1).

DERIVATION.—Glaucous, or covered with a bloom, in reference to blue-green foliage and branches.

OTHER COMMON NAMES.—sacred-mustard, tronadora.

RANGE.—Naturalized in Florida and from southern to Trans-Pecos Texas west to southern New Mexico, southern and central Arizona, and southern and central California. Native of Argentina and Chile but extensively naturalized in the New World and Old World tropics.

This naturalized species is a shrub or small tree reaching 15 to 20 feet in height. Though not in the 1927 Check List, *Nicotiana* is represented also by native species of herbs and shrubs.

Nolina Michx. (Family Liliaceae) **nolina**

Nolina Michx., Fl. Bor.-Amer. 1: 207. 1803.

DERIVATION.—In honor of P. C. Nolin, French author of an essay on agriculture in 1755 and grower of American plants.

This genus of coarse, grasslike plants mostly without erect stems and formerly not recorded among the native trees is now known to have one native species of tree size.

Nolina bigelovii (Torr.) S. Wats. **Bigelow nolina**

Dasylirion bigelovii Torr. in U. S. Rpts. Expl. Surv. Miss. Pacif. 4(5): 151. 1857.

Nolina bigelovii (Torr.) S. Wats., Amer. Acad. Arts and Sci. Proc. 14: 247. 1879.

DERIVATION.—Named for its discoverer, John Milton Bigelow (1804–78), American physician and botanist, who made large plant collections in the Southwest on Government surveys from 1850 to 1854.

RANGE.—Western Arizona, southern California, and adjacent Mexico (Lower California and Sonora).

Nolina bigelovii is described in manuals as a shrub with a trunk 3 to 6 feet high and formerly was not known to reach tree size. However, Leslie N. Goodding in 1940 reported his discovery in Tinajas Altas Mountains of Yuma County, southwestern Arizona, of small trees up to 15 feet in height with massive unbranched trunks 2 to 3 feet in diameter bearing leaves at the top. Accordingly, this species was accepted as a tree by Little (Southwest. Trees. U. S. Dept. Agr. Handb. 9: 30–31, fig. 1950).

James E. Cole in 1945 recorded also trees of this species reaching the same size at Joshua Tree National Monument near Twentynine Palms in southern California Though the average size there is about 10 feet in height, not including flower stalks 4 to 8 feet long, and 2 feet in trunk diameter, many trees are larger.

Nyssa L. (Family Cornaceae) tupelo

Nyssa L., Sp. Pl. 1058. 1753; Gen. Pl. Ed. 5, 478. 1754.

DERIVATION.—The name of a water nymph, so called because the original species, *Nyssa aquatica* L., water tupelo, grows in water.

REFERENCE.—Rickett, Harold William. Nyssaceae. No. Amer. Fl. 28B: 313–316. 1945.

Some authors place this genus in a separate family, Nyssaceae.

***Nyssa aquatica L. water tupelo**

Nyssa aquatica L., Sp. Pl. 1058. 1753; in part.
Nyssa uniflora Wangenh., Betyr. Teutsch. Forstwiss. Nordamer. Holz. 83, pl. 27, fig. 57. 1787.

Rickett (No. Amer. Fl. 28B: 313, 315. 1945) has rejected *Nyssa aquatica* L. as *nomen confusum* based upon two species and has taken up *N. uniflora* Wangenh. as the name of this species.

DERIVATION.—Aquatic, from its habitat in swamps.

OTHER COMMON NAMES.—cotton-gum, sour-gum, tupelo, swamp tupelo, tupelo-gum.

RANGE.—Coastal Plain from southeastern Virginia to northern Florida and southeastern Texas, and north in Mississippi Valley to eastern Arkansas, southeastern Missouri, southern Illinois, western Kentucky, and western Tennessee.

***Nyssa ogeche Bartr. Ogeechee tupelo**

Nyssa ogeche Bartr. ex Marsh., Arbustr. Amer. 97. 1785.

DERIVATION.—From Ogeechee River in Georgia.

OTHER COMMON NAMES.—Ogeechee-lime, sour tupelo, sour tupelo-gum.

RANGE.—Coastal Plain in southeastern South Carolina, Georgia, and northern and northwestern Florida.

***Nyssa sylvatica Marsh. black tupelo; blackgum**

Nyssa sylvatica var. sylvatica black tupelo (typical)

Nyssa aquatica L., Sp. Pl. 1058. 1753; in part.
Nyssa sylvatica Marsh., Arbustr. Amer. 97. 1785.
Nyssa caroliniana Poir. in Lam., Encycl. Méth. Bot. 4: 507. 1797.

Nyssa sylvatica var. *caroliniana* (Poir.) Fern., Rhodora 37: 436, pl. 400. 1935.

Nyssa sylvatica var. *dilatata* Fern., Rhodora 37: 436, pl. 399. 1935.

DERIVATION.—Of the woods.

OTHER COMMON NAMES.—pepperidge, sour-gum, tupelo, tupelo-gum.

RANGE.—Southwestern Maine west to New York, extreme southern Ontario, central Michigan, Illinois, and central Missouri, south to eastern Oklahoma, eastern Texas, and northern Florida. Also southeastern Wisconsin, perhaps now extinct. Local in central and southern Mexico (Hidalgo, Pueblo, and Chiapas).

REFERENCE.—Fernald, M. L. The varieties of Nyssa sylvatica (Plates 397–400). Rhodora 37: 433–437, illus. 1935.

Nyssa sylvatica var. biflora (Walt.) Sarg. **swamp tupelo; blackgum**

Nyssa biflora Walt., Fl. Carol. 253. 1788.

Nyssa sylvatica var. *biflora* (Walt.) Sarg., Sylva No. Amer. 5: 76, pl. 218. 1893.

DERIVATION.—Two-flowered.

OTHER COMMON NAMES.—swamp black tupelo (SPN), swamp blackgum.

RANGE.—Coastal Plain, chiefly, from Delaware, eastern Maryland, and southeastern Virginia south to southern Florida and eastern Texas, and north to western and southern Tennessee.

Nyssa ursina Small **bear tupelo**

Nyssa ursina Small, Torreya 27: 92. 1927.

DERIVATION.—Of bears; from the report that bears eat large quantities of the fruit in fall and winter.

OTHER COMMON NAME.—bear-gum.

RANGE.—Northwestern Florida (Appalachicola River delta).

A much-branched shrub or sometimes a small tree with a trunk up to 4 inches in diameter.

Ocotea Aubl., see note under**Nectandra** Roland.

Olneya A. Gray (Family Leguminosae) **tesota**

†*Olneya* A. Gray, Amer. Acad. Arts and Sci. Mem., New Ser. 5: 328. 1855.

DERIVATION.—In honor of Stephen Thayer Olney (1812–78), businessman and botanist of Rhode Island.

Olneya tesota A. Gray **†tesota**

†*Olneya tesota* A. Gray, Amer. Acad. Arts and Sci. Mem., New Ser. 5: 328. 1855.

DERIVATION.—The Indian name.

OTHER COMMON NAMES.—Arizona-ironwood, desert-ironwood, palo de hierro, palo fierro.

RANGE.—Southern and southwestern Arizona and southeastern California. Also in northwestern Mexico (Lower California and Sonora).

Opuntia Mill. (Family Cactaceae) **pricklypear; cholla**

†*Opuntia* Mill., Gard. Dict. Abridged. Ed. 4, v. 2. 1754.

Brasiliopuntia (K. Schum.) Berger, Entwickl. Kakt. 17, 18, 94, 100. 1926.

Cylindropuntia (Engelm.) Knuth in Backeberg & Knuth, Kaktus-ABC 117, 410. 1935.

DERIVATION.—Old Latin name of some plant which grew near Opus, a town in Greece.

REFERENCE.—Benson, Lyman. The cacti of Arizona. Ed. 2, 134 pp., illus. 1950. *Opuntia*, pp. 15–66, illus.

A few of the larger species of *Opuntia* may be classed as trees. Division between shrubs and trees in this genus is not sharp, and many additional native species are shrubs.

The two species listed next below have been recorded as trees but scarcely meet the raised minimum size limits and have a low-branching trunk. J. W. Toumey (The tree Opuntias of the United States. Bot. Gaz. 25: 119–124. 1898) recorded three Arizona species, *Opuntia fulgida*, *O. spinosior*, and *O. versicolor*, as trees. This reference may be the original source of acceptance of these three species as trees by Sargent (Silva No. Amer. 14: 9–19, illus. 1902; Man. Trees No. Amer. Ed. 2, corr. 759–763, illus. 1926) and in the 1927 Check List. *Opuntia fulgida* definitely becomes a small tree to 15 feet in height.

†*Opuntia spinosior* (Engelm.) Toumey (Bot. Gaz. 25: 119. 1898), †tasajo, is usually less than 8 feet high but sometimes as much as 10 feet and treelike. Its range is southwestern New Mexico, southeastern and central Arizona, and Sonora, Mexico.

†*Opuntia versicolor* Engelm. (ex Coult., U. S. Dept. Agr., Div. Bot., Contrib. U. S. Natl. Herbarium 3: 452. 1896), staghorn cholla, or †cholla, is usually less than 7 feet high but treelike and rarely 12 feet in height. Its range is southern Arizona and northern Sonora, Mexico.

Opuntia acanthocarpa Engelm. & Bigel. (in Engelm., Amer. Acad. Arts **and Sci. Proc. 3: 308. 1856), buckhorn cholla is commonly a shrub less than 8 feet high but rarely to 15 feet in height with a short trunk and treelike, according to Robert H. Peebles (Cact. and Succulent Jour. 9: 36. 1937). This and the two preceding species were included as trees by Little (Southwest. Trees 92–95, figs. 1950). More information about individuals of these species as trees is desired.**

OPUNTIA BRASILIENSIS (Willd.) Haw. BRAZIL PRICKLYPEAR

Cactus brasiliensis Willd., Enum. Pl. Hort. Berol. Sup. 33. 1813.

Opuntia brasiliensis (Willd.) Haw., Sup. Pl. Succ. 79. 1819; as "*braziliensis*."

Brasiliopuntia brasiliensis (Willd.) Berger, Entwickl. Kakt. 94, 100. 1926.

DERIVATION.—Of Brazil.

RANGE.—Naturalized in southern Florida, including Florida Keys, according to Small (Man. Southeast. Fl. 911. 1933). Native of South America. An erect tree up to 16 feet high, with a definite trunk.

OPUNTIA FICUS-INDICA (L.) Mill. INDIANFIG

Cactus ficus-indica L., Sp. Pl. 468. 1753; as "*Ficus indica*."

Opuntia ficus-indica (L.) Mill., Gard. Dict. Ed. 8, *Opuntia* No. 2. 1768; as *"Ficus Indica."*

DERIVATION.—Indianfig.

RANGE.—Naturalized from cultivated plants in Florida, according to Small (Man. Southeast. Fl. 911. 1933). Also escaped from cultivation in southern California, according to Jepson (Man. Fl. Pl. Calif. 657. 1925), Munz (Man. South. Calif. Bot. 326. 1935), and Abrams (Illus. Fl. Pacif. States 3: 150, fig. 3318. 1951). Native locality unknown but doubtless originated from prehistoric tropical American ancestors. Widely cultivated and naturalized in tropical and subtropical countries.

Perhaps this species may be included as a tree, as it often becomes tree-like and to 16 feet in height with a definite trunk.

Opuntia fulgida Engelm. **jumping cholla**

†*Opuntia fulgida* Engelm., Amer. Acad. Arts and Sci. Proc. 3: 306. 1856.

Cylindropuntia fulgida (Engelm.) Knuth in Backeberg & Knuth, Kaktus-ABC 126. 1935.

DERIVATION.—Shining.

OTHER COMMON NAMES.—Sonora jumping cholla (SPN), †cholla.

RANGE.—Southern and western Arizona and northwestern Mexico (Sonora and Sinaloa).

Opuntia megacantha Salm-Dyck (Hort. Dyck. 363. 1834), mission pricklypear, is cultivated and has escaped from cultivation in southern California, according to Jepson (Man. Fl. Pl. Calif. 657. 1925), Munz (Man. South. Calif. Bot. 326. 1935), and Abrams (Illus. Fl. Pacif. States 3: 150, fig. 3317. 1951). It is treelike with a distinct trunk and as much as 12 to 16 feet high but apparently is not naturalized. This species is a cultivated fruit tree of Mexico.

Oreodoxa Willd., see note under **Roystonea** O. F. Cook

Osmanthus Lour. (Family Oleaceae) **osmanthus**

†*Osmanthus* Lour., Fl. Cochinch. 1: 28. 1790.

Cartrema Raf., Sylva Tellur. 184. 1838.

Amarolea Small, Man. Southeast. Fl. 1043, 1507. 1933.

DERIVATION.—From Greek, odor and flower, referring to the fragrant flowers.

Osmanthus americanus (L.) Benth. & Hook. f. **†devilwood**

Olea americana L., Mant. Pl. 1: 24. 1767.

†*Osmanthus americanus* (L.) Benth. & Hook. f. ex A. Gray, Synopt. Fl. No. Amer. 2(1): 78. 1878.

Osmanthus floridanus Chapm., Fl. South. U. S. Ed. 2, Sup. 2, 693. 1892.

Amarolea americana (L.) Small, Man. Southeast. Fl. 1043. 1933.

Amarolea floridana (Chapm.) L. E. Arnold, Elisha Mitchell Sci. Soc. Jour. 52: 86. 1936; without basonym. L. E. Arnold ex Hill & Salisb., Index Kew. Sup. 10: 11. 1947.

DERIVATION.—American.

OTHER COMMON NAME.—devilwood osmanthus (SPN).

RANGE.—Coastal Plain from southeastern Virginia to central Florida and southeastern Louisiana.

Osmanthus megacarpus (Small) Small **bigfruit osmanthus**

Amarolea megacarpa Small, Man. Southeast. Fl. 1043, 1507. 1933.

Osmanthus megacarpus (Small) Small, Man. Southeast. Fl. 1043. 1933; as "*megacarpa*"; as synonym.

Osmanthus megacarpus (Small) Small ex Little, Wash. Acad. Sci. Jour. 33: 10. 1943.

DERIVATION.—Large-fruited.

RANGE.—Central Florida.

Osmaronia cerasiformis (Torr. & Gray) Greene (Pittonia 2: 191. 1891; family Rosaceae), osoberry, generally a several-stemmed shrub less than 10 feet high, rarely may become a small tree as much as 15 feet in height. It was recorded as a small tree by Abrams (Illus. Fl. Pacif. States 2: 469, fig. 2528. 1944) and other authors. Its range is from southwestern British Columbia and western Washington south to central California.

Ostrya Scop. (Family Betulaceae) **hophornbeam**

†*Ostrya* Scop., Pl. Carn. 414. 1760.

DERIVATION.—Latinized from the Greek *ostrua*, a tree with very hard wood, and very likely the related European hornbeam, *Carpinus betulus* L.

Ostrya knowltonii Cov. **Knowlton hophornbeam**

†*Ostrya knowltoni* Cov., Gard. and Forest 7: 115, fig. 23. 1894.

Ostrya baileyi Rose, U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 8: 293. 1905.

DERIVATION.—Named for its discoverer, Frank Hall Knowlton (1860–1926), American botanist and paleobotanist.

OTHER COMMON NAMES.—†western hophornbeam, ironwood.

RANGE.—Mountains and canyons of Trans-Pecos Texas, southeastern New Mexico, northern Arizona, and southeastern Utah. Rare and local.

***Ostry virginiana** (Mill.) K. Koch **eastern hophornbeam**

Carpinus virginiana Mill., Gard. Dict. Ed. 8, *Carpinus* No. 4. 1768.

Ostrya virginica Willd. α *glandulosa* Spach, Ann. des Sci. Nat. Bot., Sér. 2, 16: 246. 1841.

†*Ostrya virginiana* (Mill.) K. Koch, Dendrol. 2(2): 6. 1873.

†*Ostrya virginiana* var. *glandulosa* (Spach) Sarg., Bot. Gaz. 67: 216. 1919.

Ostrya virginiana var. *lasia* Fern., Rhodora 38: 414. 1936.
DERIVATION.—Of Virginia.
OTHER COMMON NAMES.—American hophornbeam (SPN), hornbeam, †hophornbeam, ironwood.
RANGE.—Nova Scotia to Maine, southern Quebec, Ontario, northern Michigan, northern Minnesota, southern Manitoba, and eastern North Dakota, south to Black Hills of South Dakota, northwestern Nebraska, eastern Kansas, eastern Oklahoma, and eastern Texas, and east to northern Florida. Also in northern Mexico (Nuevo León to Sonora).

Oxydendrum DC. (Family Ericaceae) **sourwood**

†*Oxydendrum* DC., Prodr. 7: 601. 1839.
DERIVATION.—From Greek, sour and tree, from the acid taste of the leaves.

Oxydendrum arboreum (L.) DC. **†sourwood**

Andromeda arborea L., Sp. Pl. 394. 1753.
†*Oxydendrum arboreum* (L.) DC., Prodr. 7: 601. 1839.
DERIVATION.—Arboreal, its close relatives being shrubby.
OTHER COMMON NAME.—sorrel-tree.
RANGE.—New Jersey to southern Pennsylvania, southern Ohio, southern Indiana, and southern Illinois, south to western Kentucky, western Tennessee, and southeastern Louisiana, and east to northern Florida.
REFERENCE.—Baldwin, J. T., Jr. Cytogeography of Oxydendrum arboreum. Torrey Bot. Club Bul. 69: 134–136, illus. 1942.

Padus Mill., see **Prunus** L.

Papyrius Lam., see BROUSSONETIA L'Hér.

Pariti Adans., see **Hibiscus** L.

Parkinsonia L. (Family Leguminosae) **parkinsonia**

†*Parkinsonia* L., Sp. Pl. 375. 1753; Gen. Pl. Ed. 5, 177. 1754.
DERIVATION.—In commemoration of John Parkinson (1567–1650), English botanist and herbalist to James I.
REFERENCES.— See under **Cercidium Tulasne.**

Parkinsonia L., see also **Cercidium** Tulasne

Parkinsonia aculeata L. **Jerusalem-thorn**

†*Parkinsonia aculeata* L., Sp. Pl. 375. 1753.
DERIVATION.—Furnished with spines.
OTHER COMMON NAMES.—†horsebean, paloverde, Mexican paloverde, retama.
RANGE.—Native in southern Texas and southwestern Arizona. Naturalized in Florida and from eastern to central and Trans-Pecos Texas. Also escaped from cultivation in southern New Mexico, southern Arizona, and southern California. Native also

south through Mexico to Central America and South America. Widely planted and naturalized in tropical regions.

Parosela Cav., see **Dalea** Juss.

Pasania (Miq.) Oerst., see **Lithocarpus** Blume

PAULOWNIA Sieb. & Zucc. (Family Bignoniaceae) PAULOWNIA

†*Paulownia* Sieb. & Zucc., Fl. Jap. 1: 25, pl. 10. 1835.

DERIVATION.—In honor of Anna Paulownia (1795–1865), daughter of Czar Paul I of Russia and princess of the Netherlands, and great grandmother of the present queen of that country.

Paulownia **Sieb. & Zucc. is here regarded as a member of the family Bignoniaceae, though until recently and in the 1927 Check List this genus was placed in the family Scrophulariaceae as the only tree representative of that family in the United States. The relationships of *Paulownia* are more closely with the Bignoniaceae, according to some recent authors, including Britton (N. Y. Bot. Gard. Jour. 21: 72–73. 1920), Campbell (Torrey Bot. Club Bul. 57: 47–50, illus. 1930), and Pennell (Acad. Nat. Sci. Phila. Monog. 1: 176. 1935). It may be noted that this species was originally placed in the genus *Bignonia* in 1784.**

PAULOWNIA TOMENTOSA (Thunb.) Sieb & Zucc.
†ROYAL PAULOWNIA

Bignonia tomentosa Thunb., Fl. Iaponica 252. 1784.

†*Paulownia tomentosa* (Thunb.) Sieb & Zucc. ex Steud., Nom. Bot. Ed. 2, 2: 278. 1841.

DERIVATION.—Tomentose, or densely soft hairy.

OTHER COMMON NAMES.—paulownia, princess-tree.

RANGE.—Cultivated and naturalized in eastern United States from southern New York to West Virginia, southern Indiana, southern Illinois, and eastern Missouri, and south to southern Texas and northern Florida. Native of China.

Paurotis O. F. Cook (Family Palmae) **paurotis**

†*Acoelorraphe* H. Wendl., Bot. Ztg. 37: 148. 1879; *nomen provisorium* without adequate description.

Paurotis O. F. Cook in Northrop, Torrey Bot. Club Mem. 12: 21. 1902.

DERIVATION.—Unexplained.

REFERENCES.—Bailey, L. H. Acoelorraphe vs. Paurotis—Silversaw palm. Gentes Herbarum 4: 361–365, illus. 1940.

Small, John K. The saw-cabbage palm. The history and distribution of Paurotis wrightii. N. Y. Bot. Gard. Jour. 23: 61–70, illus. 1922.

Acoelorraphe **H. Wendl., the generic name adopted in the 1927 Check List, has been rejected by Bailey as a provisional name mentioned briefly in a key without adequate description.**

Paurotis wrightii (Griseb. & H. Wendl.) Britton **paurotis**

Copernicia wrightii Griseb. & H. Wendl. in Griseb., Cat. Pl. Cub. 220. 1866.

Serenoa arborescens Sarg., Bot. Gaz. 27: 90. 1899.

†*Acoelorraphe wrightii* (Griseb. & H. Wendl.) H. Wendl. ex Becc., Webbia 2: 109. 1907.
†*Acoelorraphe arborescens* (Sarg.) Becc., Webbia 2: 113. 1907.
Paurotis wrightii (Griseb. & H. Wendl.) Britton in Britton & Shafer, No. Amer. Trees 141, fig. 107. 1908.

DERIVATION.—From Charles Wright (1811–86), American botanical collector, who discovered it in Cuba, while making extensive plant collections there.

OTHER COMMON NAMES.—saw paurotis (SPN), saw-cabbage-palm.

RANGE.—Southern Florida at two localities. Also in Bahama Islands and Cuba.

Persea Gaertn. f. (Family Lauraceae) **persea**

†*Persea* Mill., Gard. Dict. Abridged. Ed. 4, v. 3. 1754.
Borbonia Mill., Gard. Dict. Abridged. Ed. 4, v. 1. 1754. Not *Borbonia* L., Sp. Pl. 707. 1753; Gen. Pl. Ed. 5, 317. 1754.
Farnesia Heist. ex Fabricius, Enum. Pl. Horti Med. Helmstad. Ed. 2, 400. 1763 (not seen); *nomen rejiciendum.*
Persea Gaertn. f., Sup. Carp. Fruct. Sem. Pl. 3: 222, pl. 221. 1805; *nomen conservandum.*
Tamala Raf., Sylva Tellur. 136. 1838.

DERIVATION.—Ancient Greek name for an unidentified Egyptian tree with fruit growing directly from the stem, later transferred to this genus.

PERSEA AMERICANA Mill. †AVOCADO

Laurus persea L., Sp. Pl. 370. 1753.
Persea americana Mill., Gard. Dict. Ed. 8. 1768.
†*Persea gratissima* Gaertn. f., Sup. Carp. Fruct. Sem. Pl. 3: 222, pl. 221. 1805.
Persea persea (L.) Cock., Torrey Bot. Club Bul. 19: 95. 1892.

DERIVATION.—American.

OTHER COMMON NAMES.—American avocado (SPN), alligator-pear.

RANGE.—Naturalized from cultivation in southern Florida, including Florida Keys. Also in West Indies, Mexico, Central America, and South America. Native of tropical America, probably Mexico.

REFERENCE.—Blake, S. F. A preliminary revision of the North American and West Indian avocados (Persea spp.). Wash. Acad. Sci. Jour. 10: 9–21, illus. 1920.

Persea borbonia (L.) Spreng. **†redbay**

Laurus borbonia L., Sp. Pl. 370. 1753.
Laurus carolinensis β pubescens Pursh, Fl. Amer. Sept. 1: 276. 1814.
†*Persea borbonia* (L.) Spreng., Syst. Veget. Ed. 16, 2: 268. 1825.
Tamala borbonia Raf., Sylva Tellur. 136. 1838.

Tamala palustris Raf., Sylva Tellur. 137. 1838.
Persea palustris Sarg., Silva No. Amer. 7: pl. 302. 1895; *nomen.*
Tamala pubescens (Pursh) Small, Fl. Southeast. U. S. Ed. 2, 822, 1375. 1913.
Persea palustris (Raf.) Sarg., Bot. Gaz. 67: 229. 1919.
†*Persea pubescens* (Pursh) Sarg., Silva No. Amer. 7: 7 (pl. 302). 1895.
Persea borbonia f. *pubescens* (Pursh) Fern., Rhodora 47: 149. 1945.

DERIVATION.—An old generic name of *Persea.*

OTHER COMMON NAMES.—redbay persea (SPN), swampbay persea (SPN), †swampbay.

RANGE.—Coastal Plain, from southern Delaware and eastern Virginia to southern Florida and west to southeastern and southern Texas.

REFERENCE.—Fernald, M. L. Rhodora 47: 149–151. 1945.

***Persea palustris* (Raf.) Sarg., swampbay, has been accepted as a separate species by most authors, including the 1927 Check List. However, Coker and Totten (Trees Southeast. States 183–184. 1934) noted that the differences were not consistent. Fernald reduced swampbay to a form, *Persea borbonia* f. *pubescens* (Pursh) Fern.**

Persea gratissima Gaertn. f., see P. AMERICANA Mill.

Persea humilis Nash **silkbay**

Persea humilis Nash, Torrey Bot. Club Bul. 22: 157. 1895.
Tamala humilis (Nash) Small, Fl. Southeast. U. S. Ed. 2, 822, 1375. 1913.

DERIVATION.—Dwarf, or low growing; originally found as a compact shrub 6 to 10 feet in height.

RANGE.—Central Florida.

This species, mentioned in a note in the 1927 Check List, is included here as a shrub or small tree. Reported from Texas by Cory and Parks (Texas Agr. Exp. Sta. Bul. 550: 47. 1938).

Persea littoralis Small **shorebay**

Persea littoralis Small, Fl. Southeast. U. S., 820, 1335. 1903.
Tamala littoralis (Small) Small, Fl. Southeast. U. S. Ed. 2, 822, 1375. 1913.

DERIVATION.—Of the sea shore.

OTHER COMMON NAME.—dune redbay.

RANGE.—Southern Forida, near coasts.

This shrub or small tree species, which was mentioned in a note in the 1927 Check List, was reported from Texas by Small (Addisonia 17: 45–46, pl. 567. 1932). Doubtfully distinct from *Persea borbonia* (L.) Spreng.

Persea palustris (Raf.) Sarg., see **P. borbonia** (L.) Spreng.

Persea pubescens (Pursh) Sarg., see **P. borbonia** (L.) Spreng.

PHOENIX L. (Family Palmae) DATE

Phoenix L., Sp. Pl. 1188. 1753; Gen. Pl. Ed. 5, 496. 1754.

DERIVATION.—Name given by Theophrastus to the date palm.

PHOENIX DACTYLIFERA L. **DATE**

Phoenis dactylifera L., Sp. Pl. 1188. 1753.

DERIVATION.—Bearing fingers.

OTHER COMMON NAME.—date palm.

RANGE.—Naturalized in southern Florida, according to Small (Man. Southeast. Fl. 239. 1933). Native of northern Africa and Arabia but widely cultivated in semiarid tropical regions.

Photinia Lindl. (Family Rosaceae) **photinia**

Photinia Lindl. ex Edwards in Edwards' Bot. Reg. 6: No. 491, pl. 491. 1820.

†*Heteromeles* M. J. Roem., Fam. Nat. Regn. Veg. Synops. Monogr. 3: 105. 1847.

DERIVATION.—From Greek *photeinos,* shining, referring to the shiny evergreen leaves.

The genus *Heteromeles* Roem., accepted in the 1927 Check List, contains only the following species and now is generally regarded as not distinct from *Photinia* Lindl.

Photinia arbutifolia Lindl. **†Christmasberry**

Crataegus arbutifolia Ait. f., Hort. Kew. Ed. 2, 3: 202. 1811. Not *Crataegus arbutifolia* Lam., Encycl. Méth. Bot. 1: 83. 1783.

Photinia arbutifolia [Ait.] Lindl. ex Edwards in Edwards' Bot. Reg. 6: No. 491, pl. 491. 1820.

†*Heteromeles arbutifolia* (Lindl) M. J. Roem., Fam. Nat. Regn. Veg. Synops. Monogr. 3: 205. 1847.

Photinia salicifolia Presl, Epim. Bot. 204. 1849.

Heteromeles salicifolia (Presl) Abrams, N. Y. Bot. Gard. Bul. 6: 381. 1910.

Photinia arbutifolia var. *cerina* Jeps., Man. Fl. Pl. Calif. 508. 1925.

Photinia arbutifolia var. *macrocarpa* Munz, South. Calif. Acad. Sci. Bul. 31: 64. 1932.

DERIVATION.—With leaves of *Arbutus,* or madrone, from the similar foliage.

OTHER COMMON NAMES.—California-holly, hollyberry, toyon.

RANGE.—Northern to southern California in Coast Ranges and Sierra Nevada foothills. Also in northern Lower California, Mexico.

Phyllanthus L. (Family Euphorbiaceae) **leaf-flower**

Phyllanthus L., Sp. Pl. 981. 1753; Gen. Pl. Ed. 5, 422. 1754.

†*Cicca* L., Mant. Pl. 1: 124. 1767.

DERIVATION.—From Greek, leaf flower, the flowers of some species appearing as if borne on leaves.

The genus *Cicca* L., adopted in the 1927 Check List, is generally combined with *Phyllanthus* L., which is represented in the United States by several native herbaceous species and the following naturalized tree species.

PHYLLANTHUS ACIDUS (L.) Skeels OTAHEITE GOOSEBERRY-TREE

Averrhoa acida L., Sp. Pl. 428. 1753.
†*Cicca disticha* L., Mant. Pl. 1: 124. 1767.
Phyllanthus acidus (L.) Skeels, U. S. Dept. Agr., Pl. Ind. Bul. 148: 17. 1909; as "*acida.*"

DERIVATION.—Acid, or sour, describing the fruit.

OTHER COMMON NAMES.—Otaheite-gooseberry leafflower (SPN), †Otaheite-gooseberry.

RANGE.—Cultivated and naturalized in southern Florida, including Florida Keys. Native of tropical Asia or East Indies but widely planted in tropical regions.

Picea A. Dietr. (Family Pinaceae) **spruce**

†*Picea* A. Dietr., Fl. Berlin 794. 1824.

DERIVATION.—The ancient Latin name (from *pix, picis,* pitch) of a pitchy pine, probably Scotch pine, *Pinus sylvestris* L.

REFERENCES.—Lacassagne, Marcel. Étude morphologique, anatomique et systématique du genre *Picea.* Lab. Forest. Toulouse Trav. tome 2, v. 3, art. 1, 292 pp., illus. 1934.

Wyman, Donald. Simple foliage key to the hemlocks and spruces. Arnoldia 3: 57–64, illus. 1943.

Picea abies (L.) Karst. (Deut. Fl. Pharm.-Med. Bot. 325, fig. 155. 1881; *Picea excelsa* Link), Norway spruce, native of Europe, is planted in southeastern Canada and northeastern United States and has escaped from cultivation in Connecticut and elsewhere but apparently is not naturalized.

Picea alba (Ait.) Link, see **P. glauca** (Moench) Voss

Picea albertiana S. Brown, see **P. glauca** var. **albertiana** (S. Brown) Sarg.

Picea americana [Gaertn.] Suringar, see **P. rubens** Sarg.

Picea australis Small, see **P. rubens** Sarg.

Picea brevifolia Peck, see **P. mariana** (Mill.) B. S. P.

Picea breweriana S. Wats. **Brewer spruce**

†*Picea breweriana* S. Wats., Amer. Acad. Arts and Sci. Proc. 20: 378. 1885.

DERIVATION.—Named for its discoverer, William Henry Brewer (1828–1910), American botanist and professor of agriculture at Yale University.

OTHER COMMON NAME.—†weeping spruce.

RANGE.—Southwestern Oregon and northern California.

Picea canadensis (Mill.) B. S. P., see **P. glauca** (Moench) Voss

Picea columbiana Lemm., see **P. engelmannii** Parry

***Picea engelmannii** Parry **†Engelmann spruce**

Abies engelmanni Parry, Acad. Sci. St. Louis Trans. 2: 122. 1863; *nomen nudum.*

†*Picea engelmanni* Parry ex Engelm., Acad. Sci. St. Louis Trans. 2: 212. 1863.

Picea columbiana Lemm., Gard. and Forest 10: 183. 1897.

Picea engelmanni var. *glabra* Goodman, Madroño 10: 177. 1950.

DERIVATION.—In honor of George Engelmann (1809–84), German-born physician and botanist of St. Louis, an authority on conifers who first recognized this species as undescribed.

OTHER COMMON NAMES.—Columbian spruce, mountain spruce, silver spruce, white spruce.

RANGE.—Rocky Mountain region, chiefly, from southwestern Alberta to central British Columbia, and south in high mountains of western United States from Washington to northern California, eastern and southeastern Nevada, southeastern Arizona, and southern New Mexico, and north to central Colorado and central Montana.

REFERENCE.—Little, Elbert L., Jr. Amer. Jour. Bot. 31: 593. 1944.

Picea excelsa Link, see P. ABIES (L.) Karst.

Picea falcata (Raf.) Suringar, see **P. sitchensis** (Bong.) Carr.

***Picea glauca** (Moench) Voss **†white spruce**

HYBRID.—*Picea* ×*lutzii Little* (*P. glauca* × *sitchensis*).

Picea glauca var. **glauca** **white spruce (typical)**

?*Abies canadensis* Mill., Gard. Dict. Ed. 8, *Abies* No. 4. 1768; *nomen confusum.*

Pinus glauca Moench, Verzeichn. Baeume Weissenst. 73. 1785.

Pinus alba Ait., Hort. Kew. 3: 371. 1789.

Picea alba Link, Grundr. Kraüt. (Handb. v. 2) 3: 478. 1831.

?*Picea canadensis* (Mill.) B. S. P., Prelim. Cat. Anth. Pter. N. Y. 71. 1888. Not *Picea canadensis* (Michx.) Link, Linnaea 15: 524. 1841.

Picea glauca Beissn., Handb. Conif. 59. 1887; as synonym.

Picea canadensis [var.] *glauca* (Moench) Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 37. 1897.

Picea glauca (Moench) Voss, Deut. Dendrol. Gesell. Mitt. 16: 93. 1907 [1908].

Picea glauca var. *densata* Bailey, Cult. Conif. 108. 1933.

DERIVATION.—Glaucous, or covered with a bloom, referring to the blue-green foliage.

OTHER COMMON NAMES.—Canadian spruce, eastern spruce (lumber), Black Hills spruce, skunk spruce.

RANGE.—Newfoundland and Labrador west across Canada along northern limit of trees to Hudson Bay, Northwest Territories, Yukon, and northwestern Alaska, south to interior (but not southeastern) Alaska, southern British Columbia, southern Manitoba, and south in northeastern United States from central

Minnesota to central Michigan, northern New York, northwestern Massachusetts, and Maine. Also in Black Hills of South Dakota and local in Montana and Wyoming.

REFERENCES.—Rehder, Alfred. The name of the hemlock spruce. Rhodora 17: 59–62. 1915.

Rehder, Alfred. Arnold Arboretum Jour. 1: 57. 1919.

Rydberg, P. A. Brittonia 1: 80-81. 1931.

Picea glauca var. **albertiana** (S. Brown) Sarg. **†western white spruce**

Picea albertiana S. Brown, Torreya 7: 126. 1907.

Picea alba var. *albertiana* (S. Brown) Beissn., Handb. Nadelholzk. Ed. 2, 273. 1909.

†*Picea glauca* var. *albertiana* (S. Brown) Sarg., Bot. Gaz. 67: 208. 1919.

DERIVATION.—Of Alberta, Canada, where it was discovered.

OTHER COMMON NAME.—Alberta white spruce (SPN).

RANGE.—Southwestern Alberta, British Columbia, and Yukon. This minor variety overlaps in range with the typical variety and var. *porsildii* Raup in western Canada.

Picea glauca var. porsildii Raup **Porsild spruce**

Picea glauca var. *porsildii* Raup, Sargentia 6: 102, pl. 12. 1947.

DERIVATION.—Named for A. E. Porsild, botanist of the National Museum of Canada at Ottawa.

RANGE.—Northwestern Canada from southwestern Northwest Territories to Yukon and northern British Columbia west to southern Alaska (to Kenai Peninsula).

A newly described minor variety or form distinguished chiefly by smooth bark with resin blisters and by its relatively broad crown.

Picea ×lutzii Little **Lutz spruce**

Picea glauca × *sitchensis*

Picea ×lutzii Little, Jour. Forestry 51: 745–747. 1953; as *Picea glauca* × *sitchensis*.

DERIVATION.—Named for Harold John Lutz, American forester, who collected it in 1950 while working with the United States Forest Service.

RANGE.—Kenai Peninsula, southern Alaska. This hybrid occurs in the limited area where the ranges of the two parent species meet and has been produced artificially in Europe.

***Picea mariana** (Mill.) B. S. P. **†black spruce**

Abies mariana Mill., Gard. Dict. Ed. 8, *Abies* No. 5. 1768.

Pinus nigra Ait., Hort. Kew. 3: 370. 1789.

Picea nigra Link, Grundr. Kraüt. (Handb. v. 2) 3: 478. 1831.

†*Picea mariana* (Mill.) B. S. P., Prel. Cat. Anth. Pter. N. Y. 71. 1888.

Picea brevifolia Peck, Spruces Adirond. 13. 1897.

†*Picea mariana* var. *brevifolia* (Peck) Rehd., Rhodora 9: 109. 1907.

DERIVATION.—Of Maryland.

OTHER COMMON NAMES.—bog spruce, eastern spruce (lumber), †shortleaf black spruce, swamp spruce.

RANGE.—Newfoundland and Labrador west across Canada along northern limit of trees to Hudson Bay, Northwest Territories, Yukon, and northwestern Alaska, south to interior (but not southeastern) Alaska, central British Columbia, southern Manitoba, and south in northeastern United States from central Minnesota to southeastern Michigan, New York, northern Pennsylvania, northern New Jersey, and Maine.

Picea menziesii Dougl., see **P. sitchensis** (Bong.) Carr.

Picea nigra (Ait.) Link, see **P. mariana** (Mill.) B. S. P.

Picea parryana Sarg., see **P. pungens** Engelm.

***Picea pungens** Engelm. **†blue spruce**

Abies menziesii parryana André, L'Illus. Hort. 23: 199. 1876.

†*Picea pungens* Engelm., Gard. Chron., New Ser. 11: 334. 1879.

Picea parryana Sarg., Gard. and Forest 10: 481. 1897.

DERIVATION.—Sharp-pointed, referring to the needles.

OTHER COMMON NAMES.—Colorado spruce (SPN), Colorado blue spruce, silver spruce.

RANGE.—Rocky Mountain region in high mountains from western Wyoming and southeastern Idaho south to Utah, northern and eastern Arizona, New Mexico, and central Colorado.

***Picea rubens** Sarg. **†red spruce**

Pinus mariana rubra Du Roi, Dissert. Inaug. Observ. Bot. 39. 1771.

†*Picea rubra* (Du Roi) Link, Grundr. Kraüt. (Handb. v. 2) 3: 478. 1831. Not *Picea rubra* A. Dietr., Fl. Berlin 795. 1824.

Picea rubens Sarg., Silva No. Amer. 12: 33, pl. 597. 1898.

Picea australis Small, Fl. Southeast. U. S. 30, 1326. 1903.

Picea americana [Gaertn.] Suringar, Leyden Rijks Herbarium Meded. 55: 47. 1928.

DERIVATION.—Reddish, referring to the reddish brown cones.

OTHER COMMON NAMES.—eastern spruce (lumber), he-balsam, yellow spruce.

RANGE.—Nova Scotia to Maine and southern Quebec, south to eastern New York, northeastern Pennsylvania, and northern New Jersey. Also south in Appalachian Mountains of western Virginia, western Maryland, West Virginia, western North Carolina, and eastern Tennessee.

***Picea sitchensis** (Bong.) Carr. **Sitka spruce**

Pinus sitchensis Bong., Acad. Imp. Sci. St. Pétersbourg Mém., Sér. 6, Sci. Math. Phys. Nat. 2: 164. 1832 (Aug.).

Pinus menziesii Dougl. ex D. Don in Lamb., Descr. Genus Pinus. Ed. 3 (8°), v. 2, unnumbered p. between pp. 144 and 145. 1832.

?*Abies falcata* Raf., Atlant. Jour. 1: 120. 1832 (autumn).

Picea sitchensis (Bong.) Carr., Traité Gén. Conif. 260. 1855.

?*Picea falcata* (Raf.) Suringar, Nederland, Dendrol. Ver. Jaarb. 2: 96. 1926.

DERIVATION.—Of Sitka Island in southeastern Alaska, where this species was discovered.

OTHER COMMON NAMES.—coast spruce, tideland spruce, yellow spruce.

RANGE.—Pacific coast region from southern Alaska (Kodiak Island and Cook Inlet) southeast in southeastern Alaska and western British Columbia, and south along coast of western Washington, western Oregon, and northwestern California.

REFERENCE.—Little, Elbert L., Jr. Amer. Jour. Bot. 31: 588. 1944.

HYBRID.—*Picea* ×*lutzii* Little (*P. glauca* × *sitchensis*).

Picramnia Sw. (Family Simaroubaceae) **bitterbush**

?*Pseudobrasilium* Adans., Fam. Pl. 2: 341. 1763; *nomen rejiciendum.*

Tariri Aubl., Hist. Pl. Guiane Franç. Sup. 37, pl. 390. 1775; *nomen rejiciendum.*

Brasiliastrum Lam., Encycl. Méth. Pl. 1: 462. 1783; *nomen rejiciendum.*

Picramnia Sw., Nov. Gen. Sp. Prodr. 2, 27. 1788; *nomen conservandum.*

DERIVATION.—From Greek, bitter and bush, referring to the bitter bark and wood.

Picramnia pentandra Sw. **bitterbush**

Picramnia pentandra Sw., Fl. Ind. Occ. 1: 220. 1797.

DERIVATION.—Five stamens.

OTHER COMMON NAME.—Florida bitterbush (SPN).

RANGE.—Shores of southern Florida, including Florida Keys; rare. Also in West Indies and Colombia.

Pilocereus Lem., see **Cephalocereus** Pfeiff.

Pinckneya Michx. (Family Rubiaceae) **pinckneya**

Pinckneya Michx., Fl. Bor.-Amer. 1: 103, pl. 13. 1803.

DERIVATION.—In honor of Charles Cotesworth Pinckney (1746-1825), of South Carolina, statesman and general in the Revolutionary War, who also was interested in botany.

Pinckneya pubens Michx. **pinckneya**

Bignonia bracteata Bartr., Travels No. So. Car. Ga. Fla. 468. 1791; *nomen nudum;* description on p. 16.

Pinckneya pubens Michx., Fl. Bor.-Amer. 1: 105, pl. 13. 1803.

Pinckneya bracteata (Bartr.) Raf., Casket 1827: 194, fig. 17. 1827.

DERIVATION.—Downy, or soft-hairy, referring to the young twigs.

OTHER COMMON NAMES.—fever-bark, Georgia-bark.

RANGE.—Coastal Plain of southern South Carolina, Georgia, and northern and northwestern Florida. Very rare.

REFERENCES.—Harper, Francis. Two more available plant names of William Bartram. Bartonia 21: 6–8. 1942.

Merrill, E. D. Bartonia 23: 23–24. 1945.

Pinus L. (Family Pinaceae) **pine**

†*Pinus* L., Sp. Pl. 1000. 1753; Gen. Pl. Ed. 5, 434. 1754.

Apinus Neck., Elem. Bot. 3: 269. 1791.

Strobus (Sweet) Opiz, Lotos [Prag] 4: 94. 1854.

Caryopitys Small, Fl. Southeast. U. S. 29, 1326. 1903.

DERIVATION.—The classical Latin name.

REFERENCES.—Harlow, W. M. The identification of the pines of the United States, native and introduced, by needle structure. N. Y. State Col. Forestry, Syracuse Univ. Tech. Pub. 32, 21 pp., illus. 1931.

Little, Elbert L., Jr. Notes on nomenclature in Pinaceae. Amer. Jour. Bot. 31: 587–596. 1944.

Shaw, George Russell. The genus Pinus. Arnold Arboretum Pub. 5, 96 pp., illus. 1914.

Sudworth, George B. The pine trees of the Rocky Mountain region. U. S. Dept. Agr. Bul. 460, 47 pp., illus. 1917.

Wyman, Donald. Simple key to the pines (native or available from nurseries in the United States). Arnoldia 11: 63–70, illus. 1951.

Pinus albicaulis Engelm. **†whitebark pine**

Pinus cembroides Newb., U. S. Rpts. Expl. Miss. Pacif. 6(3): 44, fig. 15. 1857. Not *Pinus cembroides* Zucc., K. Bayer. Acad. Wiss. München, Abhandl. Math.-Phys. 1: 392. 1832.

†*Pinus albicaulis* Engelm., Acad. Sci. St. Louis Trans. 2: 209. 1863.

Pinus flexilis var. *albicaulis* (Engelm.) Engelm. in S. Wats., Bot. Calif. 2: 124. 1879.

Apinus albicaulis (Engelm.) Rydb., Torrey Bot. Club Bul. 32: 598. 1905.

DERIVATION.—White-stemmed.

OTHER COMMON NAMES.—scrub pine, white pine.

RANGE.—High mountains of southwestern Alberta to central British Columbia, south to Washington, Oregon, and in Sierra Nevada to central California and western Nevada and east to western Wyoming and central Montana.

Pinus apacheca Lemm., see **P. engelmannii Carr.**

Pinus aristata Engelm. **†bristlecone pine**

†*Pinus aristata* Engelm. in Parry & Engelm., Amer. Jour. Sci. and Arts, Ser. 2, 34: 331. 1862.

DERIVATION.—Awned, in reference to the long slender prickles on the cones.

OTHER COMMON NAMES.—foxtail pine, hickory pine.

RANGE.—High mountains of Colorado, Utah, Nevada, and eastern California, south to northern Arizona (San Francisco Mountain) and northern New Mexico. Very local and widely scattered.

Pinus arizonica Engelm., see **P. ponderosa** var. **arizonica** (Engelm.) Shaw

***Pinus attenuata** Lemm. **†knobcone pine**

Pinus tuberculata Gord., Hort. Soc. London Jour. 4: 218, illus. 1849. Not *P. tuberculata* D. Don, Linn. Soc. London Trans. 17: 442. 1836.

†*Pinus attenuata* Lemm., Mining and Sci. Press 64: 45. 1892 (Jan. 16). Lemm. ex Sarg., Gard. and Forest 5: 65. 1892 (Feb. 10).

DERIVATION.—Attenuate, gradually narrowed to a point, suggested by the long, tapering cones and by the slender crown.

RANGE.—Mountains of southwestern Oregon and south to southern California and northwestern Lower California, Mexico.

REFERENCE.—Dayton, William A. Rhodora 54: 71–74. 1952.

HYBRID.—*Pinus* ×*attenuradiata* Stockwell & Righter (*P. attenuata* × *radiata*).

Pinus ×**attenuradiata** Stockwell & Righter ———

Pinus attenuata × *radiata*

Pinus ×*attenuradiata* Stockwell & Righter, Madroño 8: 160. 1946.

DERIVATION.—From the specific names of the two parent species from which this hybrid was produced artificially.

RANGE.—California (Santa Cruz County).

Pinus australis Michx., see **P. palustris** Mill.

Pinus balfouriana Grev. & Balf. **†foxtail pine**

†*Pinus balfouriana* Grev. & Balf. in A. Murr., Bot. Exped. Ore. [Rpt. No. 8] No. 618, pl. 1853.

DERIVATION.—In honor of John Hutton Balfour (1808–1884), botany professor in the University of Edinburgh, Scotland, and chairman of the committee sending the discoverer, John Jeffrey, to California.

RANGE.—High mountains of northern and central California.

***Pinus banksiana** Lamb. **†jack pine**

Pinus sylvestris δ *divaricata* Ait., Hort Kew. 3: 366. 1789.

Pinus divaricata Dum.-Cours., Bot. Cult. 3: 760. 1802; as var. of *P. sylvestris* L.; *nom. subnud.*

†*Pinus banksiana* Lamb., Descr. Genus Pinus 1: 7, pl. 3. 1803.

Pinus divaricata (Ait.) Sudw., Torrey Bot. Club Bul. 20: 44. 1893.

DERIVATION.—Dedicated to Joseph Banks (1743–1820), President of the Royal Society of London, to whom its author was obliged for first knowledge of it.

OTHER COMMON NAMES.—gray pine, scrub pine, Banksian pine.

RANGE.—Nova Scotia and central Quebec west across Canada to northern Saskatchewan and Northwest Territories, south to northern British Columbia, central Alberta, and southern Manitoba, and south in northeastern United States to Minnesota, Wisconsin, Michigan, and Maine. Also local in northern Illinois, northwestern Indiana, northern New York, Vermont, and New Hampshire.

HYBRID.—*Pinus* ×*murraybanksiana* Righter & Stockwell (*P. banksiana* × *contorta*).

Pinus brachyptera Engelm., see **P. ponderosa** Laws.

Pinus caribaea Morelet, see note under **P. elliottii** Engelm.

Pinus cembroides Zucc. **†Mexican pinyon**

†*Pinus cembroides* Zucc., K. Bayer. Akad. Wiss. München, Abhandl. Math.-Phys. 1: 392. 1832; Flora [Jena] 15(2), Beibl. 93. 1832.

DERIVATION.—Resembling *Pinus cembra* L., Swiss stone pine, of Europe and Asia.

OTHER COMMON NAMES.—Mexican pinyon pine (SPN), nut pine, pinyon pine, pinyon.

RANGE.—Mountains of southwestern New Mexico and southeastern Arizona. Also in northern Mexico (Sonora to Coahuila and south to Hidalgo).

Pinus chihuahuana Engelm., see **P. leiophylla** var. **chihuahuana** (Engelm.) Shaw

***Pinus clausa** (Chapm.) Vasey **†sand pine**

Pinus clausa Chapm. ex Vasey, Gard. Monthly and Hort. 18: 151. 1876. Cat. Forest Trees U. S. 30. 1876; *nomen nudum.*

Pinus inops var. *clausa* Chapm. ex Engelm., Bot. Gaz. 2: 125. 1877.

†*Pinus clausa* (Engelm.) Vasey ex Sarg., U. S. Census, 10th, 1880, v. 9 (Rpt. Forests No. Amer.): 199. 1884.

DERIVATION.—Closed, some cones remaining closed a few years before releasing the seeds.

OTHER COMMON NAMES.—scrub pine, spruce pine.

RANGE.—Northern to southern Florida and west to extreme southern Alabama (Baldwin County).

REFERENCE.—Little, Elbert L., Jr., and Dorman, Keith W. Geographic differences in cone-opening in sand pine. Jour. Forestry 50: 204–205. 1952.

***Pinus contorta** Dougl. **†lodgepole pine**

†*Pinus contorta* Dougl. ex Loud., Arb. Frut. Brit. 4: 2292, figs. 2210–2211. 1838.

Pinus murrayana Grev. & Balf. in A. Murr., Bot. Exped. Ore. [Rpt. No. 8] 2, No. 740, illus. 1853.

Pinus contorta var. *latifolia* Engelm. in S. Wats. in King, Rpt. U. S. Geol. Expl. 40th Par. 5: 331. 1871.

Pinus contorta var. *murrayana* (Grev. & Balf.) Engelm. in S. Wats., Bot. Calif. 2: 126. 1879.

DERIVATION.—Contorted or twisted, alluding to the irregular crown of the typical, scrubby shore pine of the coast.

OTHER COMMON NAMES.—black pine, scrub pine, shore pine, coast pine, tamarack pine.

RANGE.—Rocky Mountain and Pacific coast regions from Alberta to Yukon, and south through southeastern Alaska and British Columbia, and south in western United States from Washington to southern California and western Nevada and from Idaho and central Montana south to Wyoming, northern Utah, and Colorado. Local in Black Hills of South Dakota and southwestern Saskatchewan. Also in northern Lower California, Mexico.

HYBRID.—*Pinus* ×*murraybanksiana* Righter & Stockwell (*P. banksiana* × *contorta*).

Some authors distinguish two varieties, of which *Pinus contorta* var. *contorta*, shore pine, is a low scrubby tree of the Pacific coast from southeastern Alaska to northern California. *Pinus contorta* var. *latifolia* Engelm., lodgepole pine, is the taller, inland tree form of the mountains from Yukon southeast to Colorado. However, the differences are largely in habit rather than in botanical characters.

Pinus coulteri D. Don **†Coulter pine**

†*Pinus coulteri* D. Don, Linn. Soc. London Trans. 17: 440. 1836.

DERIVATION.—Named for its discoverer, Thomas Coulter (1793–1843), Irish botanist and physician who collected plants in Mexico and California.

OTHER COMMON NAME.—pitch pine.

RANGE.—Mountains of central and southern California. Also in northern Lower California, Mexico.

REFERENCES.—Keck, David D. Bibliographic notes on Abies bracteata and Pinus coulteri. Madroño 8: 177–179. 1946.

Little, Elbert L., Jr., Lambert's "Description of the Genus Pinus," 1832 edition. Madroño 10: 33–47. 1949.

Pinus deflexa Torr., see **P. jeffreyi** Grev. & Balf.

Pinus divaricata (Ait.) Sudw., see **P. banksiana** Lamb.

***Pinus echinata** Mill. **†shortleaf pine**

†*Pinus echinata* Mill., Gard. Dict. Ed. 8, *Pinus* No. 12. 1768.

Pinus mitis Michx., Fl. Bor.-Amer. 2: 204. 1803.

DERIVATION.—Spiny, or prickly, describing the cones.

OTHER COMMON NAMES.—Arkansas pine (lumber), North Carolina pine (lumber), shortleaf yellow pine, southern pine (lumber), southern yellow pine, yellow pine.

RANGE.—Southeastern New York and New Jersey to Pennsylvania, southern Ohio, Kentucky, southern Illinois, and southern Missouri, south to eastern Oklahoma and eastern Texas, and east to northern Florida and Georgia.

***Pinus edulis** Engelm. **†pinyon**

†*Pinus edulis* Engelm. in Wisliz., Mem. Tour North. Mex. 88. 1848.

Caryopitys edulis (Engelm.) Small, Fl. Southeast. U. S. 29, 326. 1903.

Pinus cembroides var. *edulis* (Engelm.) Voss, Deut. Gartenrat Beilage 123. 1904 (not seen). Deut. Dendrol. Gesell. Mitt. 16: 95. 1907 [1908]; as "*cembrodes*."

Pinus monophylla var. *tenuis* Tidestrom in Tidestrom & Kittell, Fl. Ariz. N. Mex. 2. 1941; without Latin diagnosis.

DERIVATION.—Edible, describing the large seeds, which are known as pinyon nuts, Indian nuts, pine nuts, and piñones.

OTHER COMMON NAMES.—Colorado pinyon pine (SPN), nut pine, pinyon pine.

RANGE.—Rocky Mountain region from Colorado and Utah south to Arizona, New Mexico, and Trans-Pecos Texas. Local in extreme northwestern Oklahoma, southwestern Wyoming, and southeastern California. Also in northern Mexico (Chihuahua).

***Pinus elliottii** Engelm. **†slash pine**

Pinus elliottii var. **elliottii** **slash pine (typical)**

Pinus taeda L. var. *heterophylla* Ell., Sketch Bot. S.-Car. Ga. 2: 636. 1824.

Pinus elliottii Engelm. ex Vasey, Cat. Forest Trees U. S. 30. 1876; U. S. Commr. Agr. Rpt. 1875: 178. 1876; *nomen nudum*.

Pinus elliottii Engelm., Acad. Sci. St. Louis Trans. 4: 186, pls. 1–3. 1880; also reprinted as folio.

Pinus heterophylla (Ell.) Sudw., Torrey Bot. Club Bul. 20: 45. 1893. Not *P. heterophylla* K. Koch, Linnaea 22: 295. 1849. Not *P. heterophylla* Presl, Epim. Bot. 236. 1849.

Formerly and in the 1927 Check List included under †*Pinus caribaea* Morelet, Caribbean pine, a closely related species of Bahama Islands, western Cuba, Isle of Pines, and Central America from British Honduras to eastern Guatemala, northern Honduras, and northeastern Nicaragua. Also referred to *Pinus palustris* Mill., the name generally accepted for longleaf pine, by Small (Man. Southeast. Fl. 4. 1933) and others.

DERIVATION.—Named for its discoverer, Stephen Elliott (1771–1830), botanist and banker of South Carolina and author of a classic work, Sketch of the Botany of South-Carolina and Georgia.

OTHER COMMON NAMES.—pitch pine, southern pine (lumber), swamp pine, yellow slash pine.

RANGE.—Coastal Plain from southern South Carolina to central Florida and southeastern Louisiana.

REFERENCES.—De Vall, Wilbur B. The taxonomic status of *Pinus caribaea* Mor. Fla. Acad. Sci. Proc. 5(1940): 121–132. 1941.

Little, Elbert L., Jr., and Dorman, Keith W. Slash pine (*Pinus elliottii*), its nomenclature and varieties. Jour. Forestry 50: 918–923, illus. 1952.

Pinus elliottii var. **densa** Little & Dorman

South Florida slash pine

Pinus elliottii var. *densa* Little & Dorman, Jour. Forestry 50: 921, figs. 1, 2. 1952.

DERIVATION.—Dense, referring to the dense, very heavy, hard wood with very thick summerwood; also to the grasslike seedlings with crowded needles, very thick hypocotyl, and thick tap root, and to the thick hypoderm of the needles.

RANGE.—Southern Florida and north along coasts to central Florida and on Lower Florida Keys (Big Pine Key, Little Pine Key, No Name Key, and five others).

***Pinus engelmannii** Carr. **†Apache pine**

Pinus macrophylla Engelm. in Wisliz., Mem. Tour North. Mex. 103. 1848. Not *P. macrophylla* Lindl., Edwards' Bot. Reg. v. 25, Misc. 63. 1839.

Pinus engelmannii Carr., Rev. Hort., Sér. 4, 3: 227. 1854; as "*engelmanni.*"

Pinus latifolia Sarg., Gard. and Forest 2: 496, fig. 135. 1889.

†*Pinus apacheca* Lemm., Erythea 2: 103, pl. 3. 1894.

Pinus mayriana Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 21. 1897.

Pinus ponderosa var. *mayriana* (Sudw.) Sarg., Silva No. Amer. 11: 81. 1897.

Pinus ponderosa var. *macrophylla* Shaw, Pines Mex. 24, pl. 17, figs. 2, 3, 6. 1897.

The names *Pinus apacheca* Lemm. and *P. latifolia* Sarg., which have been given to this pine north of the Mexican border, have been united under the older name used in Mexico, *P. engelmannii* Carr.

DERIVATION.—In honor of George Engelmann (1809–84), German-born physician and botanist of Saint Louis, Missouri, who first named this species.

OTHER COMMON NAME.—Arizona longleaf pine.

RANGE.—Mountains of extreme southwestern New Mexico and southeastern Arizona. Also in northern Mexico (Sonora and Chihuahua to Sinaloa, Durango, and Zacatecas).

REFERENCE.—Little, Elbert L., Jr. Amer. Jour. Bot. 31: 593–594. 1944.

***Pinus flexilis** James **†limber pine**

Pinus flexilis var. **flexilis** **limber pine (typical)**

†*Pinus flexilis* James, Exped. Rocky Mts. 2: 27, 35. 1823.
Apinus flexilis (James) Rydb., Torrey Bot. Club Bul. 32: 598. 1905.

DERIVATION.—Flexible, or limber.

OTHER COMMON NAMES.—white pine, Rocky Mountain white pine.

RANGE.—Rocky Mountain region, chiefly, from southern Alberta and southeastern British Columbia south in mountains of Montana, Idaho, Nevada, central and southern California, east to Arizona, New Mexico, and Trans-Pecos Texas, and north to Colorado and Wyoming. Local in northeastern Oregon, western Nebraska, Black Hills of South Dakota, and southwestern North Dakota. Also in northern Mexico (Coahuila and Nuevo León).

Pinus flexilis var. **reflexa** Engelm. ———

Pinus flexilis var. γ *reflexa* Engelm. in Rothr., Wheeler Rpt. U. S. Geogr. Surv. 6: 258. 1878.
†*Pinus strobiformis* Engelm. in Wisliz., Mem. Tour North. Mex. 102. 1848.
Pinus reflexa (Engelm.) Engelm., Bot. Gaz. 7: 4. 1882.
Pinus ayacahuite Ehrenb. var. *strobiformis* Sarg. ex Lemm., Handb. West-Amer. Cone-bearers, Ed. 2, 4. 1892.
Pinus ayacahuite var. *reflexa* (Engelm.) Voss, Deut. Dendrol. Gesell. Mitt. 16: 92. 1907 [1908].
Pinus ayacahuite var. *brachyptera* Shaw, Pines Mex. 11, pl. 6. 1909.

DERIVATION.—Reflexed, or bent back, referring to the scales of open cones.

COMMON NAMES.—†Mexican white pine, border limber pine, white pine, border white pine, southwestern white pine.

RANGE.—Mountains of southwestern New Mexico and southeastern Arizona. Also in northern Mexico (Sonora and Chihuahua south to Sinaloa, Durango, and Zacatecas).

This variety of the Mexican border region is also regarded by some authors as a separate species, *Pinus reflexa* (Engelm.) Engelm. or *P. strobiformis* Engelm.

***Pinus glabra** Walt. **†spruce pine**

†*Pinus glabra* Walt., Fl. Carol. 237. 1788.

DERIVATION.—Glabrous, or smooth, referring to the smoothish bark.

OTHER COMMON NAMES.—cedar pine, Walter pine.

RANGE.—Coastal Plain from South Carolina to northern Florida and west to southeastern Louisiana.

Pinus heterophylla (Ell.) Sudw., see **P. elliottii Engelm.**

Pinus inops Ait., see **P. virginiana** Mill.

Pinus insignis Dougl., see **P. radiata** D. Don

***Pinus jeffreyi** Grev. & Balf. **†Jeffrey pine**

†*Pinus jeffreyi* Grev. & Balf. in A. Murr., Bot. Exped. Ore. [Rpt. No. 8] 2, pl. 1853.

Pinus deflexa Torr. in Emory, U. S. Mex. Bound. Surv. Rpt. 2(1): 209, pl. 56. 1859.

Pinus ponderosa var. *jeffreyi* Balf. ex Vasey, Cat. Forest Trees U. S. 31. 1876; U. S. Commr. Agr. Rpt. 1875: 179. 1876.

Pinus ponderosa var. *jeffreyi* (Grev. & Balf.) Engelm. in S. Wats., Bot. Calif. 2: 126. 1879.

Pinus jeffreyi var. b *deflexa* (Torr.) Lemm., Calif. State Board Forestry Bien. Rpt. 2: 74, 100. 1888.

DERIVATION.—Named for its discoverer, John Jeffrey (died 1853?), Scotch botanical explorer who collected seeds from British Columbia to California for introduction to Scotland.

OTHER COMMON NAME.—western yellow pine.

RANGE.—Mountains from southwestern Oregon south in California through Sierra Nevada to western Nevada and to southern California. Also in northern Lower California, Mexico.

REFERENCES.—Little, Elbert L., Jr. The reports of the Botanical Expedition to Oregon, 1849–59. Amer. Jour. Bot. 31: 588–590. 1944.

Mirov, N. T. Chemical analysis of the oleoresins as a means of distinguishing Jeffrey pine and western yellow pine. Jour. Forestry 27: 176–187, illus. 1929.

***Pinus lambertiana** Dougl. **†sugar pine**

†*Pinus lambertiana* Dougl., Linn. Soc. London Trans. 15: 500. 1827.

DERIVATION.—In honor of Aylmer Bourke Lambert (1761–1842), of England, author of a classic illustrated work on the genus *Pinus* and also a patron of botany.

OTHER COMMON NAME.—California sugar pine.

RANGE.—Mountains from western Oregon south to southern California and in Sierra Nevada to western Nevada. Also in northern Lower California, Mexico.

Pinus latifolia Sarg., see **P. engelmannii** Carr.

Pinus leiophylla var. **chihuahuana** (Engelm.) Shaw **†Chihuahua pine**

Pinus chihuahuana Engelm. in Wisliz., Mem. Tour North. Mex. 103. 1848.

Pinus leiophylla Schiede & Deppe in Schlecht. & Cham. var. *chihuahuana* (Engelm.) Shaw, Pines of Mexico 14, pl. 7, figs. 10–11. 1909.

DERIVATION.—Smooth-leaved; the varietal name, meaning of Chihuahua, refers to the State in Mexico where the variety was discovered.

OTHER COMMON NAMES.—yellow pine, pino real.

RANGE.—Mountains of extreme southwestern New Mexico and southeastern to central Arizona. Also in northern Mexico (Sonora and Chihuahua to Durango, Nayarit, and Jalisco).

The typical variety of †*Pinus leiophylla* Schiede & Deppe (in Schlecht. & Cham., Linnaea 6: 354. 1831), *Pinus leiophylla* var. *leiophylla*, is not native in the United States but has a wide range in Mexico from Chihuahua to Michoacán, Veracruz, and Oaxaca. It is characterized by five needles in a fascicle, while *P. leiophylla* var. *chihuahuana* differs mainly by having three needles in a fascicle.

Pinus llaveana Torr., see **P. quadrifolia** Parl.

Pinus macrophylla Engelm., see **P. engelmannii** Carr.

Pinus mayriana Sudw., see **P. engelmannii** Carr.

***Pinus monophylla** Torr. & Frém. **†singleleaf pinyon**

†*Pinus monophylla* Torr. & Frém. in Frém., Rpt. Explor. Exped. Rocky Mts. 319, pl. 4. 1845; as "*monophyllus*."

Caryopitys monophylla (Torr. & Frém.) Rydb., Torrey Bot. Club Bul. 32: 597. 1905.

Pinus cembroides var. *monophylla* (Torr. & Frém.) Voss, Deut. Gartenrat Beilage 123. 1904 (not seen). Deut. Dendrol. Gesell. Mitt. 16: 95. 1907 [1908]; as "*cembrodes*."

DERIVATION.—One-leaf, alluding to the solitary needles in a sheath.

OTHER COMMON NAMES.—singleleaf pinyon pine (SPN), nut pine, pinyon.

RANGE.—Mountains, chiefly of Great Basin region, from southern Idaho and northern and western Utah to Nevada, central and southern California and northwestern Arizona. Also in northern Lower California, Mexico.

***Pinus monticola** Dougl. **†western white pine**

†*Pinus monticola* Dougl. ex D. Don in Lamb., Descr. Genus Pinus. Ed. 3 (8°), v. 2, unnumbered page between p. 144 and p. 145. 1832.

Pinus monticola Laws., Agr. Man. 363. 1836.

Strobus monticola (Dougl.) Rydb., Fl. Rocky Mts. 13, 1060. 1917.

DERIVATION.—Inhabiting mountains.

OTHER COMMON NAMES.—Idaho white pine (lumber), silver pine, white pine.

RANGE.—Western Montana and northern Idaho to southern British Columbia and Washington and south to Oregon and in Sierra Nevada to central California and western Nevada.

Pinus muricata D. Don **†bishop pine**

†*Pinus muricata* D. Don, Linn. Soc. London Trans. 17: 441. 1836.

Pinus remorata Mason, Madroño 2: 9. 1930.

Pinus remorata Mason, described as a new species from Santa Cruz Island, was reduced to a variation of *P. muricata* D. Don by John Thomas Howell, who reported finding intergrading forms there.

DERIVATION.—Muricate, or rough with hard, sharp points, describing the cone scales.

OTHER COMMON NAMES.—prickle-cone pine, Santa Cruz Island pine.

RANGE.—Coast of northern and central California and Santa Cruz Island off coast of southern California. Also in northwestern Lower California, Mexico, and a variety on Cedros Island.

REFERENCE.—Howell, John Thomas. The closed-cone pines of insular California. Leaflets West. Bot. 3: 1–8. 1941.

Pinus murrayana Grev. & Balf., see **P. contorta** Dougl.

Pinus ×murraybanksiana Righter & Stockwell ———

Pinus banksiana × *contorta*

Pinus ×murraybanksiana Righter & Stockwell, Madroño 10: 69, figs. 1, 2. 1949; as *P. contorta* var. *latifolia* × *banksiana*.

DERIVATION.—From the names of the parent species in an artificial cross, *Pinus murrayana* Grev. & Balf. (synonym of *P. contorta* var. *latifolia* Engelm.) and *P. banksiana* Lamb.

RANGE.—Central and northwestern Alberta, where the ranges of the parent species overlap.

REFERENCE.—Moss, E. H. Natural pine hybrids in Alberta. Canad. Jour. Res. Sect. C, Bot. Sci. 27: 218–229, illus. 1949.

Pinus nigra Arnold (Reise Mariazell. 8, pl. 1785; *P. laricio Poir.*), Austrian pine, has been planted extensively in the United States and has escaped from cultivation locally in the Northeast west to Missouri but apparently is not yet naturalized. It is native of central and southern Europe and Asia Minor.

***Pinus palustris** Mill. **†longleaf pine**

†*Pinus palustris* Mill., Gard. Dict. Ed. 8, *Pinus* No. 14. 1768.

Pinus australis Michx. f., Hist. Arbr. Amér. Sept. 1: 64, pl. 6. 1810.

Some authors have rejected *Pinus palustris* as a confused name and have taken up *P. australis* for this species.

DERIVATION.—Of marshes.

OTHER COMMON NAMES.—hard pine, heart pine, longleaf yellow pine, longstraw pine, pitch pine, southern pine (lumber), southern yellow pine.

RANGE.—Coastal Plain from southeastern Virginia to central Florida and west to eastern Texas.

REFERENCES.—Fernald, M. L. The confused bases of the name Pinus palustris. Rhodora 50: 241–249. 1948.

Fernald, M. L., and Schubert, Bernice G. Rhodora 50: 181–186. 1948.

Little, Elbert L., Jr. Phytologia 2: 457–458. 1948.

HYBRID.—*Pinus ×sondereggeri* H. H. Chapm. (*P. palustris* × *taeda*).

Pinus parryana Engelm., see **P. quadrifolia** Parl.

***Pinus ponderosa** Laws. **ponderosa pine**

Pinus ponderosa var. **ponderosa** **ponderosa pine (typical)**

Pinus ponderosa Dougl. ex Loud., Hort. Brit. 387. 1830; *nomen nudum.*

†*Pinus ponderosa* Laws., Agr. Man. 354. 1836.

Pinus brachyptera Engelm. in Wisliz., Mem. Tour. North. Mex. 89. 1848.

Pinus ponderosa var. *scopulorum* Engelm. in S. Wats., Bot. Calif. 2: 126. 1879.

Pinus scopulorum (Engelm.) Lemm., Gard. and Forest 10: 183. 1897.

DERIVATION.—Ponderous, or heavy, referring to the heavy wood.

OTHER COMMON NAMES.—blackjack pine, bull pine, pondosa pine, rock pine, Rocky Mountain ponderosa pine, †western yellow pine, yellow pine, pinabete, pino real.

RANGE.—Widely distributed, chiefly in Rocky Mountains and mountains of Pacific coast region from southwestern North Dakota and Montana to southern British Columbia, south through Washington and Oregon to southern California, east to Arizona and Trans-Pecos Texas, north to New Mexico, extreme northwestern Oklahoma, Colorado, western Nebraska, and Black Hills of South Dakota. Also in northern Mexico (Sonora and Chihuahua to Durango).

REFERENCE.—Weidman, R. H. Evidences of racial influence in a 25-year test of ponderosa pine. Jour. Agr. Res. 59: 855–887, illus. 1939.

This widespread species includes several minor geographic races which intergrade. In addition to the variety listed below, the race occurring east of the Continental Divide and in the Central Plateau of western Colorado, Utah, and eastern Nevada is distinguished by some authors as a variety, *Pinus ponderosa* var. *scopulorum* Engelm.

Pinus ponderosa var. **arizonica** (Engelm.) Shaw **†Arizona pine**

†*Pinus arizonica* Engelm. in Rothr., Wheeler, U. S. Geogr. Surv. West 100th Merid. Rpt. 6: 260. 1878.

Pinus ponderosa var. *arizonica* (Engelm.) Shaw, Pines Mex. 24, pl. 4, pl. 17, fig. 4. 1909.

DERIVATION.—Of Arizona, where it was discovered.

OTHER COMMON NAMES.—Arizona ponderosa pine (SPN), yellow pine.

RANGE.—Mountains of extreme southwestern New Mexico, southeastern Arizona, and northern Mexico (Sonora, Chihuahua, Nuevo León, and Tamaulipas).

Pinus pungens Lamb. **Table-Mountain pine**

Pinus pungens Lamb., Ann. Bot. 2: 198. 1805.

DERIVATION.—Sharp-pointed, from the peculiar, stout, hooked spines on the cones.

OTHER COMMON NAMES.—hickory pine, †mountain pine, prickly pine.

RANGE.—Mountains from New Jersey, Pennsylvania, and West Virginia, south to South Carolina, northern Georgia, and eastern Tennessee.

Pinus quadrifolia Parl. **†Parry pinyon**

Pinus llaveana Torr., U. S. Mex. Bound. Surv. Bot. 208, pl. 53. 1859. Not *P. llaveana* Otto ex Loud., Arb. Frut. Brit. 4: 2267, figs. 2177–2179. 1838.

†*Pinus parryana* Engelm., Amer. Jour. Sci. and Arts, Ser. 2, 34: 332. 1862. Not *P. parryana* Gordon, Pinetum 202. 1858.

Pinus quadrifolia Parry ex Parl. in A. DC., Prodr. 16(2): 302. 1868; as synonym.

Pinus quadrifolia Parl. ex Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 17. 1897.

Pinus cembroides var. *parryana* Voss, Deut. Gartenrat Beilage 123. 1904 (not seen). Deut. Dendrol. Gesell. Mitt. 16: 95. 1907 [1908]; as "*cembrodes.*"

DERIVATION.—Four-leaved, the needles commonly in bundles of four.

OTHER COMMON NAMES.—Parry pinyon pine (SPN), nut pine, pinyon.

RANGE.—Southern California (Riverside and San Diego Counties), rare and local. Also in northern Lower California, Mexico.

Pinus radiata D. Don **†Monterey pine**

†*Pinus radiata* D. Don, Linn. Soc. London Trans. 17: 442. 1836.

Pinus insignis Dougl. ex Loud., Arb. Frut. Brit. 4: 2265, figs. 2170–2172. 1838.

DERIVATION.—Radiate, or rayed, referring to markings on the cone scales.

RANGE.—Coast of central California, local in Santa Cruz, Monterey, and San Luis Obispo Counties. Also on Santa Cruz and Santa Rosa Islands and on Guadalupe Island off coast of Lower California, Mexico.

REFERENCE.—Howell, John Thomas. The closed-cone pines of insular California. Leaflets West. Bot. 3: 1–8. 1941.

HYBRID.—*Pinus* ×*attenuradiata* Stockwell & Righter (*P. attenuata* × *radiata*).

Pinus reflexa (Engelm.) Engelm., see **P. flexilis** var. **reflexa** Engelm.

Pinus remorata Mason, see **P. muricata** D. Don

***Pinus resinosa** Ait. **red pine**

†*Pinus resinosa* Ait., Hort. Kew. 3: 367. 1789.

DERIVATION.—Resinous.

OTHER COMMON NAME.—†Norway pine (lumber).

RANGE.—Newfoundland and Quebec west to Ontario and southeastern Manitoba, south to northeastern Minnesota, Wisconsin, Michigan, northern Pennsylvania, New York, Connecticut, and Maine. Also local in West Virginia (North Fork Mountain, Pendleton County).

***Pinus rigida** Mill. **†pitch pine**

†*Pinus rigida* Mill., Gard. Dict. Ed. 8, *Pinus* No. 10. 1768.

DERIVATION.—Rigid, or stiff, referring to the cone scales.

OTHER COMMON NAMES.—southern pine (lumber), southern yellow pine.

RANGE.—Central Maine to New York and extreme southeastern Ontario, south to Pennsylvania, southern Ohio, and Virginia, and south in mountains to eastern Tennessee, northern Georgia, and western South Carolina.

***Pinus sabiniana** Dougl. **†Digger pine**

†*Pinus sabiniana* Dougl. ex D. Don in Lamb., Descr. Genus Pinus Ed. 3 (8°), v. 2, unnumbered p. between page 144 and page 145, pl. 80. 1832. Dougl., Linn. Soc. London Trans. 16: 749. 1833.

DERIVATION.—Named by David Douglas in compliment to his friend and patron, Joseph Sabine, secretary of Horticultural Society of London.

OTHER COMMON NAMES.—bull pine, gray pine.

RANGE.—Northern to southern California.

Pinus scopulorum (Engelm.) Lemm., see **P. ponderosa** Laws.

***Pinus serotina** Michx. **†pond pine**

Pinus serotina Michx., Fl. Bor.-Amer. 2: 205. 1803.

Pinus (*r.*) *serotina* Michx. ex Loud., Arb. Frut. Brit. 4: 2242, figs. 2127–2130. 1838; as a species, not a new variety.

†*Pinus rigida* var. *serotina* (Michx.) Loud. ex Hoopes, Book Evergreens 120. 1868.

Pinus rigida subsp. *serotina* (Michx.) Clausen, Torreya 39: 126. 1939.

DERIVATION.—Late, referring to the cones which remain closed on the trees a few years before opening to release the seeds.

OTHER COMMON NAMES.—marsh pine, pocosin pine.

RANGE.—Coastal Plain from southern New Jersey and southeastern Virginia south to central and northwestern Florida and Alabama.

Pinus ×sondereggeri H. H. Chapm. **Sonderegger pine**

Pinus palustris × *taeda*

†*Pinus* ×*sondereggeri* H. H. Chapm., Jour. Forestry 20: 734, pl. 1. 1922; as *P. palustris* × *taeda*.

DERIVATION.—Named for V. Hugo Sonderegger (died 1949), State forester of Louisiana, who discovered this hybrid in 1915.

RANGE.—North Carolina, Louisiana, and Texas.

Pinus strobiformis Engelm., see **P. flexilis** var. **reflexa** Engelm.

***Pinus strobus L.** **eastern white pine**

†*Pinus strobus* L., Sp. Pl. 1001. 1753.
Strobus weymouthiana Opiz, Lotus [Prag] 4: 94. 1854.
Strobus strobus (L.) Small, Fl. Southeast. U. S. 29, 1326. 1903.
Pinus strobus var. *chiapensis* Martínez, Mex. Univ. Nac. Inst. Biol. An. 11: 81, figs. 19–22. 1940.

DERIVATION.—A Latin word for pine cone, related to the Greek *strobos,* whirling around, and *strobilos,* pine cone; according to some authors, the ancient name of an incense-bearing tree.

OTHER COMMON NAMES.—soft pine, northern pine, †northern white pine (lumber), Weymouth pine, white pine.

RANGE.—Newfoundland and Gaspé Peninsula of Quebec west to central Ontario and extreme southeastern Manitoba, south to Minnesota, northeastern Iowa, northern Illinois, northwestern Indiana, Ohio, Pennsylvania, and New Jersey, and south in mountains to western North Carolina, northern Georgia, and Tennessee. Local in western Kentucky and western Tennessee. Also in southern Mexico (Veracruz, Puebla, Oaxaca, and Chiapas) and Guatemala.

PINUS SYLVESTRIS L. SCOTCH PINE

Pinus sylvestris L., Sp. Pl. 1000. 1753.

DERIVATION.—Of forests.

OTHER COMMON NAME.—Scots pine.

RANGE.—Extensively planted and naturalized locally in southeastern Canada and northeastern United States from Massachusetts and Vermont to New York, New Jersey, Delaware, Pennsylvania, Ohio, and Iowa. Native of Eurasia.

REFERENCE.—York, Harlan H., and Littlefield, E. W. The naturalization of Scotch pine, northeastern Oneida County, N. Y. Jour. Forestry 40: 552–559, illus. 1942.

***Pinus taeda L.** **†loblolly pine**

†*Pinus taeda* L., Sp. Pl. 1000. 1753.

DERIVATION.—Ancient name of resinous pines.

OTHER COMMON NAMES.—Arkansas pine (lumber), North Carolina pine (lumber), oldfield pine, shortleaf pine, southern pine (lumber).

RANGE.—Coastal Plain and Piedmont from southern New Jersey south to central Florida and west to eastern Texas and north in Mississippi Valley to southeastern Oklahoma, Arkansas, and southern Tennessee.

HYBRID.—*Pinus* ×*sondereggeri* H. H. Chapm. (*P. palustris* × *taeda*).

Pinus torreyana Parry **†Torrey pine**

†*Pinus torreyana* Parry ex Carr., Traité Gén. Conif. 326. 1855.

DERIVATION.—In honor of John Torrey (1796–1873), American botanist who named many new species of southwestern plants and who sent specimens of this species to France in 1853.

RANGE.—Southern California on coast at Torrey Pines State Park and vicinity, San Diego County, and Santa Rosa Island. Very rare and local.

Pinus tuberculata Gord., see **P. attenuata** Lemm.

***Pinus virginiana** Mill. **†Virginia pine**

†*Pinus virginiana* Mill., Gard. Dict. Ed. 8, *Pinus* No. 9. 1768.

Pinus inops Ait., Hort. Kew. 3: 367. 1789.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—Jersey pine, North Carolina pine (lumber), scrub pine, spruce pine.

RANGE.—Southeastern New York, New Jersey, Pennsylvania, Ohio, and southern Indiana, and Kentucky, south to northeastern Mississippi, Alabama, and northern Georgia.

Pinus washoensis Mason & Stockwell **Washoe pine**

Pinus washoensis Mason & Stockwell, Madroño 8: 62. 1945.

DERIVATION.—The name commemorates the Washoe Indians who hunted in this forest.

RANGE.—Washoe County (east side of Mount Rose, Sierra Nevada), western Nevada. Rare and local.

This newly described local species is related to *Pinus jeffreyi* Grev. & Balf.

Piscidia L. (Family Leguminosae) **fishpoison-tree**

†*Icthyomethia* P. Br., Civ. Nat. Hist. Jamaica 296. 1756; *nomen rejiciendum.*

Piscipula Loefl., Iter. Hisp. 275. 1758; *nomen rejiciendum.*

Piscidia L., Syst. Nat. Ed. 10, 2: 1155, 1376. 1759; *nomen conservandum.*

DERIVATION.—From Latin, fish and kill, in reference to the use of the foliage and bark in stupefying fish.

OTHER COMMON NAME.—fishfuddletree (SPN).

REFERENCE.—Blake, S. F. Revision of *Ichthyomethia,* a genus of plants used for poisoning fish. Wash. Acad. Sci. Jour. 9: 241–252. 1919.

***Piscidia* L. has been conserved over *Ichthyomethia* P. Br., the older generic name used in the 1927 Check List.**

Piscidia piscipula (L.) Sarg. **Florida fishpoison-tree**

Erythrina piscipula L., Sp. Pl. 707. 1753.

Piscidia piscipula (L.) Sarg., Gard. and Forest 4: 436. 1891.

Piscidia erythrina L., Syst. Nat. Ed. 10, 1155. 1759.

†*Ichthyomethia piscipula* (L.) Hitchc., Gard. and Forest 4: 472. 1891.

Ichthyomethia communis Blake, Wash. Acad. Sci. Jour. 9: 247. 1919.

Piscidia communis (Blake) Harms in Loes., Bot. Ver. der Brandenb. Verhandl. 65: 91. 1923.

DERIVATION.—Fish-catching.

OTHER COMMON NAMES.—Jamaica fishfuddletree (SPN), Florida fishfuddletree, †Jamaica-dogwood.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and from eastern Mexico (Tamaulipas and San Luis Potosí to Yucatán) south to Honduras.

Pisonia L. (Family Nyctaginaceae) **pisonia**

Pisonia L., Sp. Pl. 1026. 1753; Gen. Pl. Ed. 5, 451. 1754.

DERIVATION.—In commemoration of Willem Pison (1611–78), Dutch physician and naturalist who traveled in Brazil.

Pisonia rotundata Griseb. **pisonia**

Pisonia rotundata Griseb., Cat. Pl. Cub. 283. 1866.

Torrubia rotundata (Griseb.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 119. 1927.

DERIVATION.—Rounded, from the shape of the leaves.

RANGE.—Florida Keys. Also in Bahamas and Cuba.

This genus and species were mentioned in a note in the 1927 Check List.

Pistacia L. (Family Anacardiaceae) **pistache**

Pistacia L., Sp. Pl. 1025. 1753; Gen. Pl. Ed. 5, 450. 1754.

DERIVATION.—From the Greek *pistakey* or *pistakia,* pistache, and ultimately from ancient Persian *pistah,* pistache nut.

REFERENCE.—Barkley, Fred A. Pistacia L. *In* Lundell, Cyrus Longworth. Fl. Tex. 3: 90–91. 1943.

Pistacia texana Swingle **Texas pistache**

Pistacia texana Swingle, Arnold Arboretum Jour. 2: 107. 1920.

DERIVATION.—Of Texas.

OTHER COMMON NAMES.—American pistachio, wild pistachio.

RANGE.—Southern Texas (Bexar to Val Verde Counties). Also in northeastern Mexico (Coahuila to San Luis Potosí and Tamaulipas).

Closely related to *Pistacia mexicana* H. B. K., Mexican pistache, which ranges from central Mexico south to Guatemala, and with which it has been united as a synonym by some authors.

Pithecellobium Mart. (Family Leguminosae) **blackbead**

Zygia P. Br., Civ. Nat. Hist. Jamaica 279, pl. 22, fig. 3. 1756.

Zygia Ludw. & Boehm., Def. Gen. Pl. 72. 1760; *nomen rejiciendum.*

Pithecellobium Mart., Hort. Reg. Man. 188. 1829; *nomen nudum.*

†*Pithecellobium* Mart., Flora 20(2), Beibl. 114. 1837; as *"Pithecollobium"; nomen conservandum.*

Siderocarpos Small, N. Y. Bot. Gard. Bul. 2: 91. 1901. Not *Siderocarpus* Pierre, Not. Bot. Sapot. 31. 1890.
Havardia Small, N. Y. Bot. Gard. Bul. 2: 92. 1901.
Ebenopsis Britton & Rose, No. Amer. Fl. 23: 33. 1928.

DERIVATION.—From Greek, ape's earring, referring to the coiled pods of some species.

OTHER COMMON NAME.—apes-earring (SPN).

The variant spelling "*Pithecolobium*" was used in the 1927 Check List.

Pithecellobium flexicaule (Benth.) Coult. **ebony blackbead**

Acacia flexicaulis Benth., Hook. London Jour. Bot. 1: 505. 1842.
Pithecellobium flexicaule (Benth.) Coult., Bot. Gaz. 15: 270. 1890; as "*Pithecolobium*"; *nom. provisor.*
†*Pithecellobium flexicaule* (Benth.) Coult., U. S. Dept. Agr., Contrib. U. S. Natl. Herbarium 2: 101. 1891; as "*Pithecolobium.*"
Zygia flexicaulis (Benth.) Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 248. 1897.
Siderocarpos flexicaulis (Benth.) Small, N. Y. Bot. Gard. Bul. 2: 91. 1901.
Ebenopsis flexicaulis (Benth.) Britton & Rose, No. Amer. Fl. 23: 33. 1928.

DERIVATION.—Flexible-stemmed.

OTHER COMMON NAMES.—ebony apes-earring (SPN), ebony, †Texas ebony.

RANGE.—Southern Texas. Also in Mexico (Tamaulipas and Nuevo León to Yucatán and in Lower California).

Pithecellobium guadalupense (Pers.) Chapm. **Guadeloupe blackbead**

Mimosa guadalupensis Pers., Synops. Pl. 2: 262. 1806.
Pithecellobium guadalupense (Pers.) Chapm., Fl. South. U. S. 116. 1960; as "*Pithecolobium.*"
Pithecellobium keyense Britton in Britton & Rose, No. Amer. Fl. 23: 22. 1928.

DERIVATION.—Of Guadeloupe, the West Indian island where it was discovered.

OTHER COMMON NAME.—blackbead.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies and Yucatán, Mexico.

A shrub or small spreading tree, according to Small (Man. Southeast. Fl. 653. 1933). Mentioned in a note in the 1927 Check List.

Pithecellobium pallens (Benth.) Standl. **†huajillo**

Calliandra pallens Benth., Hook. London Jour. Bot. 5: 102. 1846.
†*Pithecellobium brevifolium* Benth. in A. Gray, Pl. Wright. 1: 67. 1852; as "*Pithecolobium.*"
Zygia brevifolia (Benth.) Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 248. 1897.

Havardia brevifolia (Benth.) Small, N. Y. Bot. Gard. Bul. 2: 92. 1901.
Havardia pallens (Benth.) Britton & Rose, No. Amer. Fl. 23: 42. 1928.
Pithecellobium pallens (Benth.) Standl., Yale Univ., School Forestry, Trop. Woods 34: 39. 1933; as "*Pithecolobium.*"

DERIVATION.—Pale, referring to the foliage.

OTHER COMMON NAME.—huajillo apes-earring (SPN).

RANGE.—Southern Texas and northeastern Mexico (Tamaulipas to Coahuila, San Luis Potosí, and Hidalgo).

Pithecellobium unguis-cati (L.) Benth. **catclaw blackbead**

Mimosa unguis-cati L., Sp. Pl. 517. 1753; as "*Unguis cati.*"
Inga unguis-cati (L.) Willd., Sp. Pl. 4: 1006. 1805.
†*Pithecellobium unguis-cati* (L.) Benth., Hook. London Jour. Bot. 3: 200. 1844; as "*Pithecolobium.*"
Zygia unguis-cati (L.) Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 248. 1897.

DERIVATION.—From Latin cat and claw, from the paired spines at base of the leaves.

OTHER COMMON NAMES.—catclaw apes-earring (SPN), catclaw, †Florida catclaw.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies, Mexico (Tamaulipas to Yucatán and in Sinaloa), Central America, and northern South America.

Planera Gmel. (Family Ulmaceae) **planertree**

†*Planera* Gmel., Syst. Nat. Ed. 13, 2: 150. 1791.

DERIVATION.—In memory of Johann Jakob Planer (1743–89), German botanist and professor of medicine at Erfurt.

OTHER COMMON NAME.—waterelm (SPN).

Planera Aquatica Gmel. **†planertree**

Anonymos aquatica Walt., Fl. Carol. 230. 1788; as "*aquatic;*" *nom. illegit.* Not *Anonymos aquatica* Walt., Fl. Carol. 109. 1788. Not *Anonymos aquatica* Walt., Fl. Carol. 127. 1788; as "*aquatic.*" Not *Anonymos aquatica* Walt., Fl. Carol. 137. 1788.
†*Planera aquatica* Gmel., Syst. Nat. Ed. 13, 2: 150. 1791.

DERIVATION.—Aquatic, from the habitat in swamp forests.

OTHER COMMON NAME.—waterelm (SPN).

RANGE.—Coastal Plain from southeastern North Carolina south to northern Florida and west to eastern Texas, and north in Mississippi Valley to southeastern Oklahoma, southeastern Missouri, southern Illinois, western Kentucky, and western Tennessee.

Platanus L. (Family Platanaceae) **sycamore**

†*Platanus* L., Sp. Pl. 999. 1753; Gen. Pl. Ed. 5, 433. 1754.

DERIVATION.—The classical Latin and Greek name of *Platanus orientalis* L., Oriental planetree, from the Greek word for broad, referring to the leaves.

OTHER COMMON NAMES.—planetree (SPN), buttonwood.

***Platanus occidentalis L.** **American sycamore**

Platanus occidentalis L., Sp. Pl. 999. 1753.

Platanus glabrata Fern., Amer. Acad. Arts and Sci. Proc. 36: 493. 1901.

†*Platanus occidentalis* var. *glabrata* (Fern.) Sarg., Bot. Gaz. 67: 230. 1919.

†*Platanus occidentalis* var. *attenuata* Sarg., Man. Trees No. Amer. Ed. 2, 372. 1922.

DERIVATION.—Western, referring to the western hemisphere.

OTHER COMMON NAMES.—American planetree (SPN), buttonball-tree, buttonwood, planetree, †sycamore.

RANGE.—Southwestern Maine to New York, southern Ontario, central Michigan, Illinois, Iowa, and eastern Nebraska, south to central Oklahoma and central Texas, and east to northwestern Florida. Also in northeastern Mexico (Coahuila, Nuevo León, and San Louis Potosí).

Platanus racemosa Nutt. **†California sycamore**

Platanus racemosa Nutt. ex Audubon, Birds Amer. 4: pl. 362. 1837; as *"racemosus"; nomen nudum.*

†*Platanus racemosa* Nutt., No. Amer. Sylva 1: 47, pl. 15. 1842; as *"racemosus."*

Platanus californica Benth., Bot. Voy. Sulphur 54. 1844.

DERIVATION.—With flowers in racemes, referring to the flower heads along one axis.

OTHER COMMON NAMES.—California planetree (SPN), western sycamore, aliso.

RANGE.—Central to southern California. Also in northwestern Mexico (Lower California to Sinaloa).

Platanus wrightii S. Wats. **†Arizona sycamore**

†*Platanus wrightii* S. Wats., Amer. Acad. Arts and Sci. Proc. 10: 349. 1875.

Platanus racemosa Nutt. var. *wrightii* (S. Wats.) L. Benson, Amer. Jour. Bot. 30: 237. 1943.

DERIVATION.—In honor of Charles Wright (1811–86), American botanical collector, who obtained the type while collecting many specimens in the Southwest in 1851.

OTHER COMMON NAMES.—Arizona planetree (SPN), álamo.

RANGE.—Southwestern New Mexico and southeastern to central Arizona. Local in southeastern California. Also in northern Mexico (Sonora and Chihuahua).

Closely related to *Platanus racemosa* Nutt. and also regarded as a variety of that species.

Poinciana L. (Family Leguminosae) **poinciana**

†*Poinciana* L., Sp. Pl. 380. 1753; Gen. Pl. Ed. 5, 178. 1754.

Erythrostemon Link, Klotsch, & Otto, Icon. Pl. Hort. Bot. Berol. 1: 97, pl. 39. 1841.

Poincianella Britton & Rose, No. Amer. Fl. 23: 327. 1930.

DERIVATION.—In honor of M. de Poinci, a governor of the French West Indies in the seventeenth century.

REFERENCE.—Britton, Nathaniel Lord, and Rose, Joseph Nelson. Poinciana. Erythrostemon. Poincianella. No. Amer. Fl. 23: 323, 326–336. 1930.

POINCIANA GILLIESII Hook. PARADISE POINCIANA

Poinciana gilliesii Hook., Bot. Misc. 1: 129, pl. 34. 1829.

Caesalpinia gilliesii Wall. ex Hook., Bot. Misc. 1: 129, pl. 34. 1829; as synonym.

Erythrostemon gilliesii (Hook.) Link, Klotsch, & Otto, Icon. Pl. Hort. Bot. Berol. 1: 97, pl. 39. 1843.

DERIVATION.—Named for its discoverer, John Gillies (1747–1836).

OTHER COMMON NAME.—bird-of-paradise.

RANGE.—Escaped from cultivation and naturalized locally from southern and central Texas to southern New Mexico and western Arizona, according to Britton and Rose (No. Amer. Fl. 23: 326. 1930) and other authors. Native of Argentina and Chile but widely planted and naturalized.

A shrub or small tree to 13 feet high as naturalized, according to Benson and Darrow (Man. Southwest. Desert Trees Shrubs 174. 1945).

Poinciana mexicana (A. Gray) Rose Mexican poinciana

Caesalpinia mexicana A. Gray, Amer. Acad. Arts and Sci. Proc. 5: 157. 1861.

Poinciana mexicana (A. Gray) Rose, U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 13: 303. 1911.

Poincianella mexicana (A. Gray) Britton & Rose, No. Amer. Fl. 23: 330. 1930.

DERIVATION.—Of Mexico.

RANGE.—Southern Texas and Mexico (Tamaulipas to Chihuahua, Sinaloa, and Guerrero), according to Britton and Rose (No. Amer. Fl. 23: 330. 1930).

A shrub or small tree up to 33 feet high in Mexico, possibly not reaching tree size in the United States.

POINCIANA PULCHERRIMA L. †FLOWERFENCE

†*Poinciana pulcherrima* L., Sp. Pl. 380. 1753.

Caesalpinia pulcherrima (L.) Sw., Obs. Bot. 166. 1791.

DERIVATION.—Very beautiful.

OTHER COMMON NAMES.—flowerfence poinciana (SPN), Barbados-flower, dwarf poinciana.

RANGE.—Southern Florida, including Florida Keys. Widely planted and naturalized in tropical regions, its original range unknown.

Poinciana regia Bojer, see DELONIX REGIA (Bojer) Raf.

PONCIRUS Raf. (Family Rutaceae) TRIFOLIATE-ORANGE

Poncirus Raf., Sylva Tellur. 143. 1838.

DERIVATION.—From the French name of a kind of citrus.

REFERENCE.—See under CITRUS L.

PONCIRUS TRIFOLIATA (L.) Raf. TRIFOLIATE-ORANGE

Citrus trifoliata L., Sp. Pl. Ed. 2, 1101. 1763.

Poncirus trifoliata (L.) Raf., Sylva Tellur. 143. 1838.

DERIVATION.—Three-leaved, from the three leaflets.

OTHER COMMON NAMES.—bitter orange, hardy-orange.

RANGE.—Naturalized after cultivation from Florida and Georgia to Texas, according to Small (Man. Southeast. Fl. 760. 1933). Southeastern to southern Texas, listed by Cory and Parks (Tex. Agr. Expt. Sta. Bul. 550: 63. 1938). Native of central and northern China but widely cultivated elsewhere.

A shrub or small tree to 20 feet or more in height, adding a naturalized genus to the 1927 Check List.

Populus L. (Family Salicaceae) cottonwood; poplar

†*Populus* L., Sp. Pl. 1034. 1753; Gen. Pl. Ed. 5, 456. 1754.

DERIVATION.—The classical Latin name.

REFERENCES.—Houtzagers, G. Het geslacht Populus in verband met zijn beteekenis voor de houtteelt. (The genus Populus and its significance in silviculture.) 266 pp., illus. 1937. German translation: Houtzagers, G. Die gattung Populus und ihre forstliche bedeutung, von dr. G. Houtzagers . . . Nach der holländischen auflage ins deutsche übersetzt and herausgegeben von dr. W. Kemper. 196 pp., illus. 1941.

Pourtet, Jean. The poplar—its place in the world. Unasylva 5: 55–59. 1951.

Schneider, Camillo. Die bisher bekannten Pappel-Bastarde. Deut. Dendrol. Gesell. Mitt. 44: 25–30. 1932.

Smith, E. Chalmers. A study of cytology and speciation in the genus Populus L. Arnold Arboretum Jour. 24: 275–304, illus. 1943.

Sudworth, George B. (ed. and annotated by W. A. Dayton). Poplars, principal tree willows, and walnuts of the Rocky Mountain region. U. S. Dept. Agr. Tech. Bul. 420, 111 pp., illus. 1934.

White, Wilfred W. Native cottonwoods of Montana. Mont. Acad. Sci. Proc. 9: 33–39. 1951.

A few kinds of cultivated cottonwoods and poplars should be mentioned here, as they are often listed as introduced trees, sometimes also as naturalized. These cultivated variations are clons, rather than species, being propagated vegetatively and perhaps derived from a single distinctive individual, such as a hybrid. As the sexes are separate in *Populus*, the individual trees of one clon all belong to the same sex and thus do not produce seeds. These introduced trees often escape from cultivation by spreading vigorously from root sprouts, especially after removal of parent trunk, and may be long persistent or become established locally on old home sites and roadsides. However, since seeds are not formed, the trees cannot migrate far and cannot establish themselves naturally in forests as though native. They are strictly planted trees and therefore should not be accepted here as naturalized species.

†*Populus alba* L. (Sp. Pl. 1034. 1753), †white poplar, of Europe and Asia, is planted in southern Canada and across the United States and has escaped locally in the East. Silver poplar and Bolleana poplar are clons.

Populus ×*canadensis* Moench. (Verz. Ausl. Baume Weissenst. 81. 1785; *P.* ×*eugenei* Simon-Louis); *P. deltoides* × *nigra* L.) †Carolina poplar, includes hybrid clons originating in different places. It is in cultivation across the United States and in southern Canada and has escaped locally.

Populus ×*canescens* (Ait.) Sm. (Fl. Brit. 3: 1080. 1804; *P. alba* × *tremula* L.), gray poplar, of Europe and Asia, is a hybrid of white poplar and European aspen. It has escaped from cultivation locally in the Northeast. The clon curly poplar is prized for veneers.

†*Populus nigra* L. (Sp. Pl. 1034. 1753), †black poplar, of Europe and Asia, likewise is planted and has escaped. *Populus nigra* var. *italica* Muenchh. (Hausvater 5: 230. 1770), Lombardy poplar, is a hybrid clon widely cultivated almost throughout the United States and in southern Canada and locally escaped.

Populus ×acuminata Rydb. **†lanceleaf cottonwood**

Populus angustifolia × *sargentii*

†*Populus acuminata* Rydb., Torrey Bot. Club Bul. 20: 50, pl. 141. 1893.

†*Populus* ×*andrewsii* Sarg., Trees and Shrubs 2: 212. 1913; as *P. acuminata* × *sargentii*.

†*Populus acuminata* var. *rehderi* Sarg., Arnold Arboretum Jour. 1: 61. 1919.

DERIVATION.—Acuminate, or tapering to a point, in reference to the leaves.

OTHER COMMON NAMES.—lanceleaf poplar (SPN), smooth-bark cottonwood, Andrews poplar.

RANGE.—Southern Alberta, Montana(?), Black Hills of South Dakota, Wyoming, Nebraska, Colorado, and New Mexico.

REFERENCE.—Blankinship, J. W. Mont. Agr. Col. Sci. Stud. 1: 45. 1905.

Populus acuminata Rydb. is here regarded as a hybrid between *P. angustifolia* James and *P. sargentii* Dode with wide distribution within their overlapping ranges. Ernest Rouleau in identifying Forest Service specimens has indicated this hybrid status, which was mentioned by Little (Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 9: 32. 1950). Wilfred W. White (Mont. Acad. Sci. Proc. 9: 33–39. 1951) concluded also that *P. acuminata* Rydb. is a hybrid and cited J. W. Blankinship's similar interpretation in 1905. *P.* ×*andrewsii* Sarg., described from Colorado as a hybrid between *P. angustifolia* and *P. sargentii*, should be included under the same hybrid binomial.

Records of *P. acuminata* from outside the range of *P. sargentii*, such as in Arizona and Nevada, possibly represent hybrids of *P. angustifolia* with *P. fremontii* or another species with broad leaves.

Populus alba L., see note under **Populus** L.

Populus ×*andrewsii* Sarg., see **P. ×acuminata** Rydb.

Populus angustifolia James **†narrowleaf cottonwood**

†*Populus angustifolia* James, Exped. Rocky Mts. 1: 497. 1823.

Populus fortissima A. Nels. & Macbr., Bot. Gaz. 56: 473. 1913.

DERIVATION.—Narrowleaf.

OTHER COMMON NAMES.—narrowleaf poplar (SPN), black cottonwood, mountain cottonwood, álamo.

RANGE.—Southern Saskatchewan and southern Alberta south to Montana, Idaho, Washington, southeastern Oregon, Nevada, Arizona, east to New Mexico and Trans-Pecos Texas, and north to Colorado, western Nebraska, and Black Hills. Also in northern Mexico (Chihuahua).

HYBRID.—*Populus* ×*acuminata* Rydb. (*P. angustifolia* × *sargentii*).

Populus arizonica Sarg., see **P. fremontii** S. Wats.

Populus atheniensis Lodd., see **P. tremuloides** Michx.

Populus aurea Tidestr., see **P. tremuloides** Michx.

***Populus balsamifera L.** **†balsam poplar**

HYBRID.—*Populus* ×*jackii* Sarg. (*P. balsamifera* × *deltoides*).

Populus balsamifera L., see also **P. deltoides** Bartr.

Populus balsamifera var. balsamifera **balsam poplar (typical)**

†*Populus balsamifera* L., Sp. Pl. 1034. 1753; in part.

Populus tacamahaca Mill., Gard. Dict. Ed. 8, *Populus* No. 5. 1768; as "*tacamahacca.*"

Populus balsamifera var. *lanceolata* Marsh., Arbustr. Amer. 108. 1785.

Populus candicans Ait., Hort. Kew. 3: 406. 1789.

Populus balsamifera var. *candicans* (Ait.) A. Gray, Bot. North U.S. Ed. 2, 419. 1856.

Populus michauxi Dode, Soc. Hist. Nat. Autun Bul. 18: 220, pl. 12, fig. 100. 1905; Extr. Monogr. Ined. Populus 62, pl. 12, fig. 100. 1905.

Populus tweedyi Britton in Britton & Shafer, No. Amer. Trees 173, fig. 129. 1908.

Populus balsamifera var. *michauxii* (Dode) Henry, Gard. Chron., Ser. 3, 59: 230, fig. 97. 1916.

Populus tacamahacca var. *lanceolata* (Marsh.) Farwell, Rhodora 21: 101. 1919.

Populus tacamahacca var. *michauxii* (Dode) Farwell, Rhodora 21: 101. 1919.

?*Populus manitobensis* Dode, Soc. Dendrol. de France Bul. 38: 30, fig. 2. 1921.

Populus tacamahacca var. *candicans* (Ait.) Stout, N. Y. Bot. Gard. Jour. 30: 32, figs. 5–7. 1929.

The name *Populus balsamifera* L., by which this species has long been known, has been used also since 1919 for *P. deltoides* Marsh., eastern cottonwood. Farwell (Rhodora 21: 101–102. 1919) and Sargent (Arnold Arboretum Jour. 1: 62–63. 1919) in making this change adopted *P. tacamahaca* Mill. for balsam poplar. Application of the name *P. balsamifera* to two different species led to confusion. As a result, Davy (Forestry 10: 166–168. 1936), Houtzagers (Geslacht Populus 61–69, 226–227. 1937), and Cansdale (Black Poplars 17–18. 1938) proposed that *P. balsamifera* be rejected as an ambiguous name, or *nomen ambiguum*. Fortunately, how-

ever, Rouleau has shown that *P. balsamifera* must be retained for the major element of Linnaeus' composite species, balsam poplar, instead of eastern cottonwood.

DERIVATION.—Balsam-bearing, referring to the odor of balsam; the buds are resinous and fragrant.

OTHER COMMON NAMES.—tacamahac poplar (SPN), cottonwood, hackmatack, tacamahac.

RANGE.—Newfoundland and Labrador west across Canada along northern limit of trees to Northwest Territories, Yukon, and northwestern Alaska, south to Kodiak Island and northern end of southeastern Alaska, northern and eastern British Columbia, east through Alberta to Manitoba, northern and eastern North Dakota, Minnesota, Wisconsin, Michigan, extreme southern Ontario, New York, and Maine. Also local in north Illinois, northwestern Indiana, Ohio, and West Virginia. In northwestern States local in Idaho, Montana(?), Wyoming, Colorado, Black Hills, and northwestern Nebraska. Introduced in Oregon (Multnomah County.

REFERENCES.—Redman, Kenneth. Nomenclature confusion in the case of the balsam poplar or tacamahac. Amer. Pharm. Assoc. Jour., Sci. Ed. 31: 220–223, illus. 1942.

Rouleau, Ernest. Populus balsamifera of Linnaeus not a nomen ambiguum. Rhodora 48: 103–110. 1946.

Rouleau, Ernest. Two new names in Populus. Rhodora 50: 233–236. 1948.

Rouleau, Ernest. Populus: a correction. Rhodora 51: 149–150. 1949.

Valckenier-Suringar, J. Populus balsamifera, tacamahaca, candicans und deltoides. Eine dreuzweise Anderung von Namen. Deut. Dendrol. Gesell. Mitt. 41: 29–33, illus. 1929.

Populus balsamifera var. **subcordata** Hylander

heartleaf balsam poplar

Populus balsamifera var. *subcordata* Hylander, Fören. Dendrol. Parkv. Årsb. Lustgarden 111. 1945.

Populus balsamifera var. *fernaldiana* Rouleau, Rhodora 50: 234. 1948.

DERIVATION.—Slightly heart-shaped, referring to the leaves.

OTHER COMMON NAME.—heartleaf tacamahac poplar.

RANGE.—Newfoundland, Quebec, and Ontario, south to northern Michigan, northern New York, and Maine.

This variety has been known until recent years as †*Populus balsamifera* var. *candicans* (Ait.) A. Gray, the name used in the 1927 Check List, and *P. balsamifera* var. *michauxii* (Dode) Henry. However, Rouleau (Rhodora 50: 234. 1948; 51: 149–150. 1949) showed that the original specimens upon which those names were based belonged instead to the typical variety.

Balm-of-Gilead poplar (balm-of-Gilead), an ornamental tree widely planted in northeastern United States and southeastern Canada and spreading by sprouts, persistent and escaping after cultivation, is a clon from a single pistillate tree of this variety or of a hybrid of it, according to Stout (N. Y. Bot. Gard. Jour. 30: 32. 1929), who adopted the varietal name *Populus tacamahacca* var. *candicans* (Ait.) Stout. As a sterile clon of *P. balsamifera* var. *subcordata*, balm-of-Gilead poplar needs no additional scientific name and has no natural range. However, the following binomial indicating a hybrid

origin is available also for balm-of-Gilead poplar: *Populus* ×*gileadensis* Rouleau (Rhodora 50: 235. 1948; as *P. balsamifera* × *deltoides* var. *missouriensis* Henry).

Populus besseyana Dode, see **P. sargentii** Dode

Populus ×*canadensis* Moench, see note under **Populus** L.

Populus ×*canescens* (Ait.) Sm., see note under **Populus** L.

Populus candicans Ait., see **P. balsamifera** L.

Populus cercidiphylla Britton, see **P. tremuloides** Michx.

***Populus deltoides** Bartr. **†eastern cottonwood**

Populus balsamifera L., Sp. Pl. 1034. 1753; in part.
†*Populus deltoides* Bartr. ex Marsh., Arbustr. Amer. 106. 1785; as "*deltoide.*"
Populus virginiana Foug., Mém. Agr. Paris 1786: 87. 1787.
?*Populus angulata* Ait., Hort. Kew. 3: 407. 1789.
Populus monilifera Ait., Hort. Kew. 3: 406. 1789.
Populus nigra β *virginiana* (Foug.) Castigl., Viagg. Stati Uniti 2: 334. 1790.
Populus angulata var. *missouriensis* Henry in Elwes & Henry, Trees Great Brit. Ireland 7: 1811. 1913.
?*Populus deltoides* var. *angulata* (Ait.) Sarg., Trees and Shrubs 2: 212. 1913 (Aug.); as "*deltoidea.*"
Populus deltoides var. *missouriensis* (Henry) Henry, Gard. Chron., Ser. 3, 56: 46. 1914; as "*deltoidea.*"
Populus balsamifera var. *pilosa* Sarg., Arnold Arboretum Jour. 1: 63. 1919.
Populus balsamifera var. *virginiana* (Foug.) Sarg., Arnold Arboretum Jour. 1: 63. 1919.
Populus canadensis var. *virginiana* (Foug.) Fiori, Icon. Fl. Ital. Ill. Ed. 2, 109. 1921; Nuova Fl. Anal. Italia 1: 351. 1923.
†*Populus deltoides pilosa* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 65. 1927.
†*Populus deltoides virginiana* (Foug.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 65. 1927.
Populus balsamifera var. *missouriensis* (Henry) Rehd., Man. Cult. Trees Shrubs 92. 1927.
Populus virginiana pilosa (Sarg.) F. C. Gates, Kansas. Acad. Sci. Trans. 41: 101. 1938.

DERIVATION.—Deltoid, or triangular, from the shape of the leaves.

OTHER COMMON NAMES.—eastern poplar (SPN), cottonwood, southern cottonwood, Carolina poplar, necklace poplar.

RANGE.—New Hampshire to New York, southern Quebec, southern Ontario, central Michigan, Wisconsin, central Minnesota, southern Manitoba, and southern Saskatchewan, south to North Dakota, western Kansas, western Oklahoma, and central and southeastern Texas, and east to northwestern Florida and Georgia.

REFERENCES.—See under **Populus balsamifera** L.

HYBRIDS.—*Populus* ×*eugenei* Simon-Louis (*P. deltoides* × *nigra* var. *italica*); *Populus* ×*jackii* Sarg. (*P. balsamifera* × *deltoides*).

This species has been known also as *Populus balsamifera*, the name used here for balsam poplar. Farwell (Rhodora 21: 101–102. 1919) and Sargent (Arnold Arboretum Jour. 1: 62–63. 1919) applied *P. balsamifera* to eastern cottonwood to replace *P. deltoides* and adopted *P. tacamahaca* for balsam poplar. As confusion resulted, it was proposed that *P. balsamifera* be rejected as an ambiguous name, *nomen ambiguum*. However, Rouleau (Rhodora 48: 103–110. 1946) concluded that *P. balsamifera* is not *nomen ambiguum* but must be retained for the major element of the original species, balsam poplar. Thus, *P. deltoides* remains the scientific name of eastern cottonwood.

Populus ×*eugenei* Simon-Louis, see note under **Populus** L.

Populus fortissima A. Nels. & Macbr., see **P. angustifolia** James

***Populus fremontii** S. Wats. **Fremont cottonwood**

HYBRID.—*Populus* ×*parryi* Sarg. (*P. fremontii* × *trichocarpa*).

Populus fremontii var. fremontii Fremont cottonwood (typical)

†*Populus fremontii* S. Wats., Amer. Acad. Arts and Sci. Proc. 10: 350. 1875.

†*Populus macdougalii* Rose, Smithsn. Inst. Misc. Collect. v. 61, No. 12 (Pub. 2239): 1, pl. 1. 1913.

†?*Populus arizonica* Sarg., Bot. Gaz. 67: 210. 1919.

†*Populus fremontii* var. *pubescens* Sarg., Bot. Gaz. 67: 213. 1919.

†*Populus fremontii* var. *thornberii* Sarg., Bot. Gaz. 67: 213. 1919.

†*Populus fremontii* var. *toumeyi* Sarg., Bot. Gaz. 67: 214. 1919.

†*Populus fremontii* var. *macrodisca* Sarg., Arnold Arboretum Jour. 1: 62. 1919.

?*Populus fremontii* var. *arizonica* (Sarg.) Jeps., Man. Fl. Pl. Calif. 268. 1923.

Populus fremontii var. *macdougalii* (Rose) Jeps., Man. Fl. Pl. Calif. 268. 1923; as "*macdougallii.*"

At one time part of the variations included here were referred to *Populus mexicana* Wesm., a Mexican species.

DERIVATION.—Named for its discoverer, General John Charles Frémont (1813–90), politician, soldier, and explorer of western United States.

OTHER COMMON NAMES.—Fremont poplar (SPN), †cottonwood, †Arizona cottonwood, †MacDougal cottonwood, álamo.

RANGE.—Southwestern Utah, Nevada, and northern to southern California, south to Arizona and southwestern New Mexico. Also in northwestern Mexico (Lower California and Sonora).

REFERENCE.—Johnston, Ivan M. Arnold Arboretum Jour. 25: 434–435. 1944.

Populus fremontii var. wislizenii S. Wats. **Rio Grande cottonwood**

Populus fremontii var. (?) *wislizenii* S. Wats., Amer. Jour. Sci. and Arts, Ser. 3, 15: 136. 1878; as "*wislizeni.*"

†*Populus wislizenii* (S. Wats.) Sarg., Silva No. Amer. 14: 71, pl. 732. 1902; as *"wislizeni."*

DERIVATION.—Named for its discoverer, Friedrich Adolph Wislizenus (1810–1889), German-born physician of St. Louis, Missouri, who made an important plant collection on a trip to northern Mexico in 1846–47.

OTHER COMMON NAMES.—Rio Grande poplar (SPN), †cottonwood, valley cottonwood, Wislizenus cottonwood, álamo.

RANGE.—Southern Colorado, southern Utah, New Mexico, and Trans-Pecos Texas. Also in northern Mexico (Chihuahua).

Populus ×*gileadensis* Rouleau, see note under **P. balsamifera** var. **subcordata** Hylander

***Populus grandidentata** Michx. **bigtooth aspen**

†*Populus grandidentata* Michx., Fl. Bor.-Amer. 2: 243. 1803.

†*Populus grandidentata β meridionalis* Tidestr., Rhodora 16: 205, figs. 3, 4. 1914.

Populus grandidentata var. *angustata* Victorin, Montréal Univ. Lab. Bot. Contrib. 16: 14, fig. 4. 1930.

Populus grandidentata var. *subcordata* Victorin, Montréal Univ. Lab. Bot. Contrib. 16: 16, fig. 4. 1930.

DERIVATION.—Big-toothed, describing the leaf margins.

OTHER COMMON NAMES.—†largetooth aspen, aspen, poplar, popple.

RANGE.—Nova Scotia and Gaspé Peninsula of Quebec to Maine, Ontario, and extreme southeastern Manitoba, south to Minnesota, northeastern Iowa, east to Illinois, Kentucky, West Virginia, Maryland, and Delaware, and south locally in western Tennessee and in mountains of western Virginia and western North Carolina.

REFERENCE.—Marie-Victorin, Frère. Les variations laurentiennes du Populus tremuloides et du P. grandidentata. Montréal Univ. Lab. Bot. Contrib. 16, 16 pp., illus. 1930.

Populus hastata Dode, see **P. trichocarpa** Torr. & Gray

***Populus heterophylla** L. **†swamp cottonwood**

†*Populus heterophylla* L., Sp. Pl. 1034. 1753.

DERIVATION.—Various-leaved.

OTHER COMMON NAMES.—swamp poplar (SPN), cottonwood, black cottonwood, river cottonwood, downy poplar.

RANGE.—Coastal Plain from Connecticut and southeastern New York to Georgia and northwestern Florida and west to Louisiana, north in Mississippi Valley to southeastern Missouri, western Tennessee, Kentucky, southern Illinois, Indiana, southern Michigan, and Ohio.

Populus ×jackii Sarg. **†Jacks cottonwood**

Populus balsamifera × *deltoides*

†*Populus* ×*jackii* Sarg., Trees and Shrubs 2: 212. 1913; as *P. balsamifera* × *deltoides.*

DERIVATION.—Named for its discoverer, John George Jack (1861–1949), Canadian-born dendrologist at Arnold Arboretum of Harvard University.

OTHER COMMON NAME.—Jacks poplar (SPN).

RANGE.—Vermont to southern Quebec, southern Ontario, and Michigan.

Populus macdougalii Rose, see **P. fremontii** S. Wats.

Populus manitobensis Dode, see **P. balsamifera** L.

Populus mexicana Wesm., see note under **P. fremontii** S. Wats.

Populus michauxi Dode, see **P. balsamifera** L.

Populus monilifera Ait., see **P. deltoides** Bartr.

Populus nigra L., see note under **Populus** L.

Populus occidentalis (Rydb.) Britton, see **P. sargentii** Dode

Populus palmeri Sarg. **Palmer cottonwood**

†*Populus palmeri* Sarg., Bot. Gaz. 67: 211. 1919.

DERIVATION.—Named for its discoverer, Ernest Jesse Palmer, American dendrologist at Arnold Arboretum of Harvard University and authority on *Crataegus* and other woody plants.

OTHER COMMON NAMES.—Palmer poplar (SPN), †cottonwood.

RANGE.—Central to Trans-Pecos Texas. Also in northern Mexico (Sonora).

Populus ×parryi Sarg. **Parry cottonwood**

Populus fremontii × trichocarpa

†*Populus ×parryi* Sarg., Bot. Gaz. 67: 214. 1919.

DERIVATION.—Named for its discoverer, Charles Christopher Parry (1823–90), English-born American botanist and explorer, who made extensive plant collections in western United States.

OTHER COMMON NAME.—Parry poplar (SPN).

RANGE.—Southern California.

***Populus sargentii** Dode **plains cottonwood**

Populus deltoides occidentalis Rydb., N. Y. Bot. Gard. Mem. 1: 115. 1900.

Populus besseyana Dode, Soc. Hist. Nat. Autun Bul. 18: 196, pl. 11, fig. 41. 1905; Extr. Monog. Inéd. Populus 38, pl. 11, fig. 41. 1905.

†*Populus sargentii* Dode, Soc. Hist. Nat. Autun Bul. 18: 198, pl. 11, fig. 46. 1905; Extr. Monog. Inéd. Populus 40, pl. 11, fig. 46. 1905.

Populus occidentalis (Rydb.) Britton ex Rydb., Fl. Colo. 91. 1906.

†*Populus texana* Sarg., Bot. Gaz. 67: 211. 1919.

DERIVATION.—Named for Charles Sprague Sargent (1841–1927), American dendrologist and director of the Arnold Arbo-

retum of Harvard University, who had included this and other variations under *Populus deltoides*.

OTHER COMMON NAMES.—plains poplar (SPN), †cottonwood, Texas cottonwood.

RANGE.—Southern Saskatchewan and southern Alberta south to Montana, Wyoming, eastern Colorado, northeastern New Mexico, and northwestern and northern Texas, and north to western Oklahoma, Kansas, Nebraska, and western South Dakota.

HYBRID.—*Populus* ×*acuminata* Rydb. (*P. angustifolia* × *sargentii*).

Populus tacamahaca Mill., see **P. balsamifera** L.

Populus texana Sarg., see **P. sargentii** Dode

***Populus tremuloides** Michx. **quaking aspen**

?*Populus atheniensis* Lodd. ex Ludw., Neue Wilde Baumz. 35. 1783; *nomen nudum*.

Populus tremuloides Michx., Fl. Bor.-Amer. 2: 243. 1803.

Populus cercidiphylla Britton in Britton & Shafer, No. Amer. Trees 180, fig. 139. 1908.

Populus aurea Tidestr., Amer. Midland Nat. 2: 35, figs. 3–7. 1911.

†*Populus tremuloides* [var.] *aurea* (Tidestr.) Daniels, Mo. Univ. Studies, Sci. Ser., 2(2) (Fl. Boulder, Colo.): 98, 265. 1911.

Populus vancouveriana Trel. ex Tidestr. in Piper & Beattie, Fl. Northwest Coast 118. 1915.

†*Populus tremuloides* var. *vancouveriana* (Trel.) Sarg., Bot. Gaz. 67: 208. 1919.

†*Populus tremuloides cercidiphylla* (Britton) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 61. 1927.

Populus tremuloides var. *intermedia* Victorin, Montréal Univ. Lab. Bot. Contrib. 16: 8, fig. 2. 1930.

Populus tremuloides var. *magnifica* Victorin, Montréal Univ. Lab. Bot. Contrib. 16: 10, fig. 2. 1930.

Populus tremuloides var. *rhomboidea* Victorin, Montréal Univ. Lab. Bot. Contrib. 16: 10, fig. 2. 1930.

DERIVATION.—Like *Populus tremula* L., European aspen, from Latin trembling.

OTHER COMMON NAMES.—quaking asp, †aspen, golden aspen, mountain aspen, trembling aspen, †Vancouver aspen, poplar, trembling poplar, popple, álamo blanco.

RANGE.—Very widespread from Newfoundland and Labrador west across Canada along northern limit of trees to Northwest Territories, Yukon, and northwestern Alaska, south to northern end of southeastern Alaska and British Columbia; south in high mountains of western United States from Washington south to southern California, Arizona, New Mexico, and Trans-Pecos Texas (Davis Mountains), and north to Colorado, northwestern Nebraska, Black Hills, and Montana; south in northeastern United States from northern and eastern North Dakota, extreme

eastern South Dakota, Iowa, Illinois, Ohio, West Virginia, Pennsylvania, New Jersey, and Maine. Local in northern Virginia and northeastern Missouri. Also in mountains of northern Mexico (Sonora and Chihuahua to Durango and San Luis Potosí).

REFERENCE.—Marie-Victorin, Frère. Les variations laurentiennes du Populus tremuloides et du P. grandidentata. Montréal Univ. Lab. Bot. Contrib. 16, 16 pp., illus. 1930.

***Populus trichocarpa** Torr. & Gray **†black cottonwood**

†*Populus trichocarpa* Torr. & Gray ex Hook., Icon. Pl. 9 (New Ser.): pl. 878. 1852.

Populus hastata Dode, Soc. Hist. Nat. Autun Bul. 18: 222, pl. 12, fig. 105. 1905; Extr. Monogr. Inéd. Populus 64, pl. 12, fig. 105. 1905.

Populus trichocarpa f. *ingrata* Jeps., Fl. Calif. 1: 346. 1909.

†*Populus trichocarpa* var. *hastata* (Dode) Henry in Elwes & Henry, Trees Great Brit. Ireland 7: 1837. 1913; *nomen provisorium.*

Populus trichocarpa var. *ingrata* (Jeps.) Parish, Pl. World 20: 210. 1917.

Populus trichocarpa subsp. *hastata* Dode, Soc. Dendrol. de France Bul. 44: 80. 1922; *nomen nudum.* Validated by Gray Herbarium Card-index Issue 182.

DERIVATION.—Hairy-fruited, describing the seed capsules.

OTHER COMMON NAMES.—California poplar (SPN), cottonwood, balsam cottonwood, western balsam poplar.

RANGE.—Southern Alaska (Cook Inlet and Kodiak Island), southeastern Alaska, and southern Yukon south through British Columbia to southern Alberta and in western United States from central Montana, Idaho, and Washington south to Oregon, southern California, and western Nevada. Local in Wyoming and southwestern North Dakota. Also in northern Lower California, Mexico.

HYBRID.—*Populus* ×*parryi* Sarg. (*P. fremontii* × *trichocarpa*).

Populus tweedyi Britton, see **P. balsamifera** L.

Populus vancouveriana Trel., see **P. tremuloides** Michx.

Populus virginiana Foug., see **P. deltoides** Bartr.

Populus wislizenii (S. Wats.) Sarg., see **P. fremontii var. wislizenii** S. Wats.

Porlieria Ruiz & Pav. (Family Zygophyllaceae) **porlieria**

†*Porlieria* Ruiz & Pav., Fl. Peruv. Chil. Prodr. 55, pl. 9. 1794.

DERIVATION.—Dedicated to Antonio Porlier, Spanish marquis and minister of the Indies, who aided Ruiz and Pavón in their work.

The variant spelling "*Porliera*" was used in the 1927 Check List.

Porlieria angustifolia (Engelm.) A. Gray **Texas porlieria**

Guaiacum angustifolium Engelm. in Wislizenus, Mem. Tour. North. Mex. 113. 1848; as "*Guajacum.*"

†*Porlieria angustifolia* (Engelm.) A. Gray, Pl. Wright. 1: 28. 1852; as "*Porliera.*"

DERIVATION.—Narrowleaf, referring to the very narrow leaflets.

OTHER COMMON NAME.—guayacan.

RANGE.—Southern to central and Trans-Pecos Texas. Also in northeastern Mexico (Coahuila to Tamaulipas).

Pouteria campechiana (H. B. K.) Baehni (Candollea 9: 398. 1942; *Pouteria campechiana* var. *nervosa* (A. DC.) Baehni, Candollea 9: 401. 1942; *Lucuma campechiana* H. B. K.; †*Lucuma nervosa* A. DC.; Family Sapotaceae), canistel (canistel lucuma, SPN; egg-fruit tree), has escaped from cultivation on the Florida Keys but apparently is not established as naturalized. This species was included in the 1927 Check List on the authority of Small, who afterwards recorded it from the Florida Keys (Small, Man. Southeast. Fl. 1032, fig. 1933). Cronquist (Lloydia 9: 280-282. 1946) cited it from the Florida Keys, though perhaps only in cultivation or as a recent escape. Native from southern Mexico (Yucatán to Tabasco, Veracruz, and Guerrero southward) south to South America. Also cultivated elsewhere for the edible fruit.

Pouteria dominigensis (Gaertn. f.) Baehni (Candollea 9: 402. 1942; *Lucuma dominigensis* Gaertn. f.), of Bahamas, Cuba, and Hispaniola was recorded also from southern Florida (two collections) by Cronquist (Lloydia 9: 278–279. 1946). Additional data about this species are desired.

Prosopis L. (Family Leguminosae) **mesquite**

†*Prosopis* L., Mant. Pl. 1: 10. 1767.

Neltuma Raf., Sylva. Tellur. 119. 1838.

Prosopis sect. *Strombocarpa* Benth., Jour. Bot. 4: 351. 1842.

Strombocarpa Engelm. & Gray, Boston Jour. Nat. Hist. 5: 243. 1845; *nomen nudum.*

Strombocarpa (Benth.) A. Gray, Pl. Wright. 1: 60. 1852.

DERIVATION.—Ancient Greek plant name, and used by Dioscorides apparently for the burdock.

REFERENCES.—Benson, Lyman. The mesquites and screwbeans of the United States. Amer. Jour. Bot. 28: 748–754, illus. 1941.

Britton, Nathaniel Lord, and Rose, Joseph Nelson. Strombocarpa. Neltuma. No. Amer. Fl. 23: 183–187. 1928.

Burkart, Arturo. Materiales para una monografía del género Prosopis (Leguminosae). Darwinia 4: 57–128, illus. 1940.

Svenson, Henry K. Amer. Jour. Bot. 33: 451–453, pl. 11. 1946.

Prosopis juliflora (Sw.) DC. **†mesquite**

Mimosa juliflora Sw., Nov. Gen. Sp. Prodr. Veg. Ind. Occ. 85. 1788.

†*Prospopis juliflora* (Sw.) DC., Prodr. 2: 447. 1825.

Neltuma juliflora (Sw.) Raf. ex Britton & Rose, No. Amer. Fl. 23: 184. 1928.

DERIVATION.—Catkin-flowered, from the narrow flower clusters.

OTHER COMMON NAME.—common mesquite (SPN).

RANGE.—Southwestern United States from Texas to Kansas, Utah, and California, south through Mexico and Central America to Colombia and Venezuela. Also in West Indies, where probably naturalized. Naturalized south to Brazil and Argentina, in Hawaii, Philippine Islands, and elsewhere in warm regions.

Some recent authors have used the older name *Prosopis chilensis* (Mol.) Stuntz (U. S. Dept. Agr. Bur. Pl. Ind., Inv. Seeds 31: 85. 1914) to include this species. However, Burkart (Darwinia 4: 106. 1940) has shown that *P. chilensis* (Mol.) Stuntz should be applied instead to a distinct but related species of Chile, Argentina, and Peru.

Prosopis juliflora var. *juliflora*, mesquite (typical), the typical variety, is not found in the United States but is a tree with range from Mexico to Central America, Colombia, and Venezuela and in West Indies. In the United States this species is represented by the three intergrading geographical varieties listed below.

Prosopis juliflora var. **glandulosa** (Torr.) Cockerell
†honey mesquite

Prosopis glandulosa Torr., N. Y. Lyc. Nat. Hist. Ann. 2: 192, pl. 2. 1828.

†*Prosopis juliflora* var. *glandulosa* (Torr.) Cockerell, N. Mex. Agr. Expt. Sta. Bul. 15: 58. 1895.

Prosopis juliflora var. *constricta* Sarg., Trees and Shrubs 2: 249, pl. 193. 1913.

Prosopis chilensis glandulosa (Torr.) Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 23: 1658. 1926.

Neltuma constricta (Sarg.) Britton & Rose, No. Amer. Fl. 23: 186. 1928.

Neltuma glandulosa (Torr.) Britton & Rose, No. Amer. Fl. 23: 186. 1928.

Neltuma neomexicana Britton in Britton & Rose, No. Amer. Fl. 23: 186. 1928.

DERIVATION.—Glandular; the petioles enlarged and glandular at base.

RANGE.—South central Kansas to southeastern Colorado, south to eastern and southern New Mexico, southern and eastern Texas, and western Oklahoma. Introduced in northwestern Louisiana and extending its range northeastward. Also in northeastern Mexico.

Prosopis juliflora var. **torreyana** L. Benson
western honey mesquite

Prosopis juliflora var. *torreyana* L. Benson, Amer. Jour. Bot. 28: 751, fig. 4. 1941.

DERIVATION.—In honor of John Torrey (1796–1873), American botanist of Columbia University, one of the first to study *Prosopis* in the United States.

RANGE.—Southern to Trans-Pecos Texas, southern New Mexico, southeastern and western Arizona, southwestern Utah, southern Nevada, and southern California. Also in northern Mexico.

This variety, which was not distinguished until after publication of the 1927 Check List, is usually shrubby or sometimes a small tree.

Prosopis juliflora var. **velutina** (Woot.) Sarg. **velvet mesquite**

?*Prosopis articulata* S. Wats., Amer. Acad. Arts and Sci. Proc. 24: 48. 1889.

Prosopis velutina Woot., Torrey Bot. Club Bul. 25: 456. 1898.

†*Prosopis juliflora* var. *velutina* (Woot.) Sarg., Silva No. Amer. 13: 15, pl. 628. 1902.

Prosopis chilensis velutina (Woot.) Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 23: 1658. 1926.

?*Neltuma articulata* (S. Wats.) Britton & Rose, No. Amer. Fl. 23: 187. 1928.

Neltuma velutina (Woot.) Britton & Rose, No. Amer. Fl. 23: 186. 1928.

?*Prosopis juliflora* var. *articulata* (S. Wats.) Wiggins, Stanford Univ., Dudley Herbarium Contrib. 4: 17. 1950.

DERIVATION.—Velvety, from the finely hairy to velvety foliage, twigs, and pods.

OTHER COMMON NAME.—†mesquite.

RANGE.—Southwestern New Mexico and southern and central Arizona. Also in northern and central Mexico (Lower California to Michoacán and Veracruz).

Prosopis pubescens Benth. **†screwbean mesquite**

†*Prosopis odorata* Torr. & Frém. in Frém., Rpt. Explor. Exped. Rocky Mts. 313, pl. 1. 1845; in part; *nomen confusum.*

Prosopis pubescens Benth., Hook. London Jour. Bot. 5: 82. 1846.

Strombocarpa pubescens (Benth.) A. Gray, Pl. Wright. 1: 60. 1852.

Strombocarpa odorata (Torr. & Frém.) Torr. in Sitgreaves, Rpt. Exped. Zuni Colo. Rivers 158. 1853.

DERIVATION.—Pubescent, or finely hairy, referring to the foliage and twigs.

OTHER COMMON NAMES.—Fremont screwbean mesquite (SPN), tornillo.

RANGE.—Trans-Pecos Texas to southern New Mexico, Arizona, southwestern Utah, southern Nevada, and southeastern California. Also in northern Mexico (Lower California, Sonora, and Chihuahua).

Prunus L. (Family Rosaceae) **cherry; peach; plum**

†*Prunus* L., Sp. Pl. 473. 1753; Gen. Pl. Ed. 5, 213. 1754.

†*Amygdalus* L., Sp. Pl. 472. 1753; Gen. Pl. Ed. 5, 212. 1754.

Padus Mill., Gard. Dict. Abridged. Ed. 4, v. 3, p. [1]. 1754.

Laurocerasus Duhamel, Traité Arbr. Arbust. 1: 345, pl. 133, fig. 1755; as "*Lauro-cerasus.*"

Cerasus Adans., Fam. Pl. 2: 305. 1763.

DERIVATION.—The classical Latin name of the plum tree.

REFERENCES.—Groh, Herbert, and Senn, Harold A. Prunus in eastern Canada. Canad. Jour. Res. Sect. C, Bot. Sci. 18: 318–346, illus. 1940.

Wight, W. F. Native American species of Prunus. U. S. Dept. Agr. Bul. 179. 75 pp., illus. 1915.

Prunus alabamensis Mohr, see **P. serotina** var. **alabamensis** (Mohr) Little

Prunus alleghaniensis Porter **Allegheny plum**

†*Prunus alleghaniensis* Porter, Bot. Gaz. 2: 85. 1877.

Prunus alleghaniensis davisii W. F. Wight, U. S. Dept. Agr. Bul. 179: 51, pl. 5, fig. 3, pl. 12, figs. 4-6. 1915.

DERIVATION.—Of the Allegheny Mountains, discovered in Pennsylvania.

OTHER COMMON NAMES.—sloe plum, sloe, †Allegheny sloe, northern sloe.

RANGE.—Connecticut to Pennsylvania and south in mountains to western Virginia, northwestern North Carolina, and northeastern Tennessee; also in Michigan.

Prunus americana Marsh. **American plum**

Prunus americana var. **americana** **American plum (typical)**

†*Prunus americana* Marsh., Arbustr. Amer. 111. 1785.

Prunus americana var. *floridana* Sarg., Arnold Arboretum Jour. 2: 113. 1920.

DERIVATION.—American.

OTHER COMMON NAMES.—red plum, river plum, †wild plum, yellow plum, ciruela.

RANGE.—Massachusetts to New York, extreme southern Ontario, Michigan, Minnesota, southern Manitoba, and western Montana, south in Rocky Mountains to Wyoming, northern Utah, Colorado, and New Mexico and south in eastern United States from North Dakota to central Texas and northwestern Florida.

Prunus americana var. **lanata** Sudw. **inch plum**

Prunus americana β mollis Torr. & Gray, Fl. No. Amer. 1: 407. 1840; in part.

Prunus americana lanata Sudw., U. S. Div. Forestry Bul. 14: 237. 1897.

†*Prunus lanata* (Sudw.) Mackenzie & Bush, Man. Fl. Jackson Co., Mo. 109. 1902.

Prunus arkansana Sarg., Trees and Shrubs 2: 157, pl. 165. 1911.

Prunus palmeri Sarg., Trees and Shrubs 2: 247, pl. 192. 1913.

DERIVATION.—Woolly, referring to the hairy twigs and leaves.

OTHER COMMON NAMES.—†wild plum, woollyleaf plum.

RANGE.—Indiana to Iowa and Kansas, south to central Texas and Louisiana. Also local in Alabama.

REFERENCE.—Bush, Benjamin Franklin. The identity of Prunus lanata M. & B. Amer. Midland Nat. 16: 254. 1935.

Prunus angustifolia Marsh. **†Chickasaw plum**

†*Prunus angustifolia* Marsh., Arbustr. Amer. 111. 1785.
†*Prunus angustifolia varians* Wight & Hedr. in Hedr., N. Y. Agr. Expt. Sta. Rpt. 1910, pt. 2 (Plums of N. Y.): 87. 1911.

DERIVATION.—Narrow-leaved.

OTHER COMMON NAME.—sand plum.

RANGE.—Missouri to southern Nebraska and western Kansas, south to northwestern and central Texas and Louisiana. Also naturalized east to central Florida and north to New Jersey, Maryland, Kentucky, Indiana, and southern Illinois. Extensively naturalized and perhaps spread also by Indians in prehistoric times. The original native range thus is not accurately known.

Prunus arkansana Sarg., see **P. americana** var. **lanata** Sudw.

Prunus australis Beadle, see **P. serotina** var. **alabamensis** (Mohr) Little

PRUNUS AVIUM (L.) L. **MAZZARD**

Prunus cerasus [var.] *avium* L., Sp. Pl. 474. 1753.
†*Prunus avium* (L.) L., Flora Suec. Ed. 2, 165. 1755.

DERIVATION.—Of birds.

OTHER COMMON NAMES.—mazzard cherry (SPN), †sweet cherry.

RANGE.—Escaped from cultivation and naturalized locally in southeastern Canada and northeastern United States from Nova Scotia and Maine to northern Florida and westward. Native of Europe and Asia.

Prunus caroliniana (Mill.) Ait. **Carolina laurelcherry**

Padus caroliniana Mill., Gard. Dict. Ed. 8, *Padus* No. 6. 1768.
†*Prunus caroliniana* (Mill.) Ait., Hort. Kew. 2: 163. 1789.
Laurocerasus caroliniana (Mill.) Roem., Fam. Nat. Regn. Veg. Synops. Monog. 3: 90. 1847.

DERIVATION.—Of Carolina.

OTHER COMMON NAMES.—Carolina cherry, †laurel cherry, mock-orange, wild-orange, wild-peach.

RANGE.—Coastal Plain from southeastern North Carolina to central Florida and eastern Texas.

PRUNUS CERASUS L. **†SOUR CHERRY**

†*Prunus cerasus* L., Sp. Pl. 474. 1753.

DERIVATION.—Classical Latin and Greek name of the cherry, which was brought into Europe from Crimea, or the Chersonese (ancient Cerasus).

OTHER COMMON NAMES.—Morello cherry, pie cherry.

RANGE.—Escaped from cultivation and naturalized locally in southeastern Canada and eastern United States from Nova Scotia to northern Florida and westward. Native of western Asia and southeastern Europe.

Prunus crenulata (Greene) Tidestrom, see **P. emarginata** Dougl.

Prunus cuthbertii Small, see **P. serotina** var. **alabamensis** (Mohr) Little

Prunus demissa (Nutt.) D. Dietr., see **P. virginiana** L.

PRUNUS DOMESTICA L. GARDEN PLUM

†*Prunus domestica* L., Sp. Pl. 475. 1753.

DERIVATION.—Domesticated, long cultivated for the edible plums.

OTHER COMMON NAMES.—plum, †Damson plum.

RANGE.—Escaped from cultivation in southeastern Canada, northeastern United States, and Oregon, and naturalized locally. Native of western Asia and Europe.

Prunus emarginata Dougl. **†bitter cherry**

Cerasus emarginata Dougl. ex Hook., Fl. Bor.-Amer. 1: 169. [1834].

Cerasus mollis Dougl. ex Hook., Fl. Bor.-Amer. 1: 169. [1834].

†*Prunus emarginata* Dougl. ex Eaton, Man. Bot. No. Amer. Ed. 7, 463. 1836.

Cerasus erecta Presl, Epim. Bot. 194. 1849.

Prunus emarginata var. *mollis* (Dougl.) Brewer in Brewer & S. Wats., Bot. Calif. 1: 167. 1876.

†*Prunus emarginata villosa* Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 240. 1897.

Cerasus crenulata Greene, Biol. Soc. Wash. Proc. 18: 56. 1905.

Prunus prunifolia (Greene) Shafer in Britton & Shafer, No. Amer. Trees 500. 1908.

Prunus emarginata erecta (Presl) Piper in Piper & Beatti, Fl. Northwest Coast 199. 1915.

Prunus crenulata (Greene) Tidestrom in Dayton, Biol. Soc. Wash. Proc. 40: 119. 1927.

Prunus emarginata var. *crenulata* (Greene) Kearney & Peebles, Wash. Acad. Sci. Jour. 29: 481. 1939.

DERIVATION.—Emarginate, or having a shallow notch at apex, referring to the petals and sepals.

OTHER COMMON NAMES.—quinine cherry, wild cherry.

RANGE.—Western Montana to Idaho, southern British Columbia, and Washington, south to Oregon, southern California, Nevada, Arizona, and southwestern New Mexico.

Prunus eriogyna S. C. Mason, see **P. fremontii** S. Wats.

Prunus eximia Small, see **P. serotina** var. **eximia** (Small) Little

Prunus fremontii S. Wats. **desert apricot**

Prunus fremontii S. Wats., Bot. Calif. 2: 442. 1880.
Amygdalus fremontii (S. Wats.) Abrams, N. Y. Bot. Gard. Bul. 6: 385. 1910.
Prunus eriogyna S. C. Mason, Jour. Agr. Res. 1: 168, fig. 5. 1913.
Prunus fremontii var. *pilulata* Jeps., Man. Fl. Pl. Calif. 507. 1925.
Emplectocladus fremontii Dayton, U. S. Dept. Agr. Misc. Pub. 101: 70. 1931; *nomen nudum.* Validated by Gray Herbarium Card-Index Issue 166.
Amygdalus eriogyna (Mason) Kovolev & Kostina, Bul. Appl. Bot. Gen. Pl. Breed., Ser. 8, 5: 153, 1936; as *"eriogina."*

DERIVATION.—Named for General John Charles Frémont (1813–90), American explorer who collected one of the specimens cited in the original description.

OTHER COMMON NAME.—Fremont peachbrush (SPN).

RANGE.—Southern California and northern Lower California, Mexico.

REFERENCE.—Jepson, Willis Linn. Fl. Calif. 2: 228. 1936.

This species is a shrub or rarely a small tree 16 feet high, according to William Franklin Wight (Stanford Univ. Pubs., Univ. Ser., Dudley Memorial Vol. 137. 1913) and later authors.

Prunus fultonensis Sarg., see **P. mexicana** S. Wats.

Prunus hirsutus Ell., see **P. serotina** var. **alabamensis** (Mohr) Little

Prunus hortulana Bailey **hortulan plum**

†*Prunus hortulana* Bailey, Gard. and Forest 5: 90. 1892.
†*Prunus hortulana* var. *mineri* Bailey, Cornell Univ. Agr. Expt. Sta. Bul. 38: 23, figs. 4, 5. 1892.
†*Prunus hortulana* var. *pubens* Sarg., Trees and Shrubs 2: 248. 1913.

DERIVATION.—Of gardens, because this species became noticed through work of horticulturists.

OTHER COMMON NAMES.—Miner plum, wild plum, †wildgoose plum.

RANGE.—Kentucky to southern Illinois, eastern Iowa, and eastern Kansas, south to northeastern Oklahoma, Arkansas, and Tennessee.

Prunus ilicifolia (Nutt.) D. Dietr. **†hollyleaf cherry**

Cerasus ilicifolia Nutt. ex Hook. & Arn., Bot. Beech Voy. 340, pl. 83. 1840.
†*Prunus ilicifolia* (Nutt.) D. Dietr., Synops. Pl. 3: 43. 1843 (before March).
Prunus ilicifolia (Nutt.) Walp., Repert. Bot. Syst. 2: 10. 1843.
Laurocerasus ilicifolia (Nutt.) Roem., Fam. Nat. Regn. Veg. Synops. Monog. 3: 92. 1847.

DERIVATION.—Hollyleaf, the leaves evergreen and spiny-toothed.
OTHER COMMON NAMES.—evergreen cherry, islay.
RANGE.—Pacific coast region from central to southern California and northern Lower California, Mexico.

Prunus injucunda Small, see **P. umbellata** Ell.

PRUNUS INSITITIA L. BULLACE PLUM

Prunus insititia L. in L. & Juslenius Cent. I. Pl. 1755; Amoen. Acad. 4: 273. 1759.
DERIVATION.—Grafted, or used in grafting.
OTHER COMMON NAMES.—bullace, Damson.
RANGE.—Escaped from cultivation in southeastern Canada and northeastern United States from Nova Scotia to Maine and New York southwestward and naturalized locally. Native of western Asia and Europe.

Prunus integrifolia Sarg., see **P. lyonii** (Eastw.) Sarg.

Prunus lanata (Sudw.) Mackenzie & Bush, see **P. americana var. lanata** Sudw.

Prunus lyonii (Eastw.) Sarg. **†Catalina cherry**

Prunus occidentalis W. S. Lyon, Bot. Gaz. 11: 202, (333). 1886. Not *P. occidentalis* Sw., Nov. Gen. Sp. Prodr. 80. 1788.
Prunus ilicifolia var. *occidentalis* [Lyon] Brandegee, Calif. Acad. Sci. Proc., Ser. 2, 1: 209. 1888.
Prunus ilicifolia var. *integrifolia* Sudw., Gard. and Forest 4: 51. 1891.
Prunus integrifolia Sarg., Man. Trees No. Amer. 531, fig. 441. 1905. Not *P. integrifolia* Walp., Ann. Bost Syst. 3: 854. 1853.
Cerasus lyoni Eastw., Calif. Acad. Sci. Occas. Papers 9 (Handb. Trees Calif.): 54. 1905.
Laurocerasus lyoni (Eastw.) Britton in Britton & Shafer, No. Amer. Trees 512, fig. 474. 1908.
†*Prunus lyonii* (Eastw.) Sarg., Arnold Arboretum Pubs. No. 4 (Pl. Wilson.), 1: 74. 1911.
DERIVATION.—In honor of William Scrugham Lyon (1852–1916), American horticulturist and forester, who discovered this species and first named it.
RANGE.—Santa Catalina, San Clemente, and Santa Cruz Islands, California.

PRUNUS MAHALEB L. †MAHALEB CHERRY

†*Prunus mahaleb* L., Sp. Pl. 474. 1753.
DERIVATION.—The Persian name.
OTHER COMMON NAMES.—perfumed cherry, St. Lucie cherry, mahaleb.

RANGE.—Escaped from cultivation in southeastern Canada and northeastern United States and naturalized locally. Native of Europe and western Asia.

Prunus melanocarpa (A. Nels.) Rydb., see **P. virginiana** L.

Prunus mexicana S. Wats. **†Mexican plum**

†*Prunus mexicana* S. Wats., Amer. Acad. Arts and Sci. Proc. 17: 353. 1882.
Prunus polyandra Sarg., Trees and Shrubs 2: 155, pl. 164. 1911.
Prunus reticulata Sarg., Trees and Shrubs 2: 151, pl. 162. 1911.
†*Prunus tenuifolia* Sarg., Trees and Shrubs 2: 153, pl. 163. 1911.
Prunus fultonensis Sarg., Trees and Shrubs 2: 248. 1913.
†*Prunus mexicana* var. *fultonensis* (Sarg.) Sarg., Arnold Arboretum Jour. 2: 114. 1920.
†*Prunus mexicana* var. *polyandra* (Sarg.) Sarg., Arnold Arboretum Jour. 2: 114. 1920.
†*Prunus mexicana* var. *reticulata* (Sarg.) Sarg., Arnold Arboretum Jour. 2: 114. 1920.

DERIVATION.—Of Mexico.

OTHER COMMON NAME.—bigtree plum.

RANGE.—Western Kentucky, western Tennessee, southern Missouri, and southeastern Kansas, south to central Texas and Louisiana. Also in northeastern Mexico (Coahuila and Nuevo León).

Prunus mitis Beadle, see **P. umbellata** Ell.

Prunus munsoniana Wight & Hedr. **†wildgoose plum**

†*Prunus munsoniana* Wight & Hedr., N. Y. Agr. Expt. Sta. Rpt. 1910, pt. 2 (Plums of N. Y.): 88, illus. 1911.

DERIVATION.—In honor of Thomas Volney Munson (1843–1913), American nurseryman and authority on grape culture.

OTHER COMMON NAME.—Munson plum.

RANGE.—Western Kentucky, southern Illinois, Missouri, and southeastern Kansas, south to central Texas, northern Louisiana, and northern Mississippi. Also naturalized east to Georgia and southern Ohio.

Prunus myrtifolia (L.) Urban **myrtle laurelcherry**

Celastrus myrtifolius L., Sp. Pl. 196. 1753.
Prunus sphaerocarpa Sw., Nov. Gen. Sp. Pl. Prodr. 80. 1788.
Laurocerasus sphaerocarpa (Sw.) Roem., Fam. Nat. Regn. Veg. Synops. Monog. 3: 89. 1847.
†*Prunus myrtifolia* (L.) Urban, Symb. Ant. 5: 93. 1904.
Laurocerasus myrtifolia (L.) Britton in Britton & Shafer, No. Amer. Trees 510, fig. 472. 1908.

DERIVATION.—Myrtle-leaved.

OTHER COMMON NAMES.—†West Indian cherry, laurelcherry.
RANGE.—Southern Florida, including Florida Keys. Also in West Indies and to Brazil and Argentina.

Prunus nana Du Roi, see **P. virginiana** L.

Prunus nigra Ait. **†Canada plum**

†*Prunus nigra* Ait., Hort. Kew. 2: 165. 1789.
DERIVATION.—Black, referring to the dark branches.
OTHER COMMON NAMES.—horse plum, red plum, wild plum.
RANGE.—New Brunswick and Maine to southern Quebec, southern Ontario, northern Michigan, and southern Manitoba, south to Minnesota, Iowa, northern Illinois, Indiana, Ohio, West Virginia, and New England. Introduced in Nova Scotia.

Prunus occidentalis W. S. Lyon, see **P. lyonii** (Eastw.) **Sarg.**

Prunus oregana Greene, see **P. subcordata** Benth.

Prunus padus L. (Sp. Pl. 473. 1923), European bird-cherry, a small tree native of Eurasia, has spread locally from cultivation in southeastern Canada and northeastern United States. Bayard Long (Naturalized occurrence of Prunus padus in America. Rhodora 25: 169–177. 1923) recorded it as naturalized in several places in the vicinity of Philadelphia, Pa., mostly around old estates.

Prunus palmeri Sarg., see **P. americana** var. **lanata** Sudw.

Prunus parksii Cory, see **P. serotina** var. **rufula** (Woot. & Standl.) McVaugh

Prunus pensylvanica L. f. **†pin cherry**

†*Prunus pensylvanica* L. f., Sup. Pl. Ed. 13, 252. 1781.
†*Prunus pensylvanica* var. *saximontana* Rehd., Deut. Dendrol. Gesell. Mitt. 17: 160. 1908; as "*pennsylvanica.*"
DERIVATION.—Of Pennsylvania.
OTHER COMMON NAMES.—bird cherry, fire cherry, northern pin cherry, pigeon cherry, wild red cherry.
RANGE.—Newfoundland and southern Labrador to northern Ontario and west across Canada to British Columbia, south in Rocky Mountains to Wyoming and Colorado, to Black Hills, and in East from North Dakota to Minnesota, Iowa, northern Illinois, northern Indiana, Pennsylvania, and New York, and in mountains south to Virginia, North Carolina, northern Georgia, and eastern Tennessee.

The original spelling of the specific name was "*pensylvanica,*" though "*pennsylvanica*" has been used in some references, including the 1927 Check List.

PRUNUS PERSICA Batsch †PEACH

†*Amygdalus persica* L., Sp. Pl. 472. 1753.
Prunus persica Batsch, Beytr. Entw. Pragm. Gesch. Naturr. 30. 1801.

DERIVATION.—Persian; also an old generic name for peach.

OTHER COMMON NAME.—common peach.

RANGE.—Escaped from cultivation from New York to southern Ontario, south to eastern Texas and Florida and naturalized locally, especially in the Southeast. Native of China.

The genus *Amygdalus* L., which was used for this species in the 1927 Check List, is generally combined with *Prunus* L.

Prunus polyandra Sarg., see **P. mexicana** S. Wats.

Prunus reticulata Sarg., see **P. mexicana** S. Wats.

Prunus rufula (Woot. & Standl.) see **P. serotina** var. **rufula** (Woot. & Standl.) McVaugh

Prunus salicifolia H. B. K. var. *acutifolia* S. Wats., see **P. serotina** var. **rufula** (Woot. & Standl.) McVaugh

***Prunus serotina** Ehrh. **black cherry**

RANGE.—Widely distributed from Nova Scotia and southern Quebec to Minnesota, Texas, and Florida, also from southern New Mexico and western Arizona south through Mexico to Guatemala. Naturalized in northwestern South America from Venezuela to Bolivia.

REFERENCE.—McVaugh, Rogers. A revision of the North American black cherries (Prunus serotina Ehrh., and relatives). Brittonia 7: 279–315. 1951.

Besides the four varieties listed below, another variety, *Prunus serotina* var. *salicifolia* (H. B. K.) Koehne (*P. serotina* subsp. *capuli* (Cav.) McVaugh; *P. capuli* Cav.), capulin black cherry, is native from central Mexico (Guanajuato and Jalisco) southeast to Guatemala and is naturalized in northwestern South America from Venezuela to Bolivia.

Prunus serotina var. serotina **black cherry (typical)**

Prunus virginiana L., Sp. Pl. 473. 1753; in part.

Padus virginiana (L.) Mill., Gard. Dict. Ed. 8, *Padus* No. 3. 1768; in part.

Prunus serotina Ehrh., Beitr. Naturk. 3: 20. 1788.

Padus serotina Borkh., Archiv für Bot. (Römer) 1(2): 38. 1797.

Cerasus serotina var. *montana* Small in Small & Vail, Torrey Bot. Club Mem. 4: 114. 1894.

Prunus serotina [var.] *montana* (Small) Britton, Torrey Bot. Club Mem. 5: 357. 1894.

†*Prunus serotina neomontana* Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 245. 1897.

DERIVATION.—Late, referring to the relatively late-maturing fruit.

OTHER COMMON NAMES.—†mountain black cherry, rum cherry.

RANGE.—Nova Scotia to Maine, southern Quebec, Ontario, northern Michigan, and Minnesota, south to eastern South Dakota, southeastern Nebraska, eastern Kansas, and eastern Texas, and east to central Florida. Also in eastern and southern

Mexico (Durango to Tamaulipas and south to Chiapas; also the Revilla Gigedo Isands) and Guatemala.

Prunus serotina var. **alabamensis** (Mohr) Little
Alabama black cherry

Prunus hirsutus Ell., Sketch Bot. S.-C. Ga. 1: 541. 1821.
†*Prunus alabamensis* Mohr, Torrey Bot. Club Bul. 26: 118. 1899.
†*Prunus cuthbertii* Small, Torrey Bot. Club Bul. 28: 290. 1901.
†*Prunus australis* Beadle, Biltmore Bot. Studies 1: 162. 1902.
Padus australis (Beadle) Beadle ex Small, Fl. Southeast. U. S. 574, 1331. 1903.
Padus alabamensis (Mohr) Small, Fl. Southeast. U. S. 574, 1331. 1903.
Padus cuthbertii (Small) Small, Fl. Southeast. U. S. 574, 1331. 1903.
Prunus serotina [f.] 6 *alabamensis* Schneid. ex Schwerin, Deut. Dendrol. Gesell. Mitt. 15: 3. 1906 [1907].
Prunus serotina subsp. *hirsuta* (Ell.) McVaugh, Brittonia 7: 299. 1951.
Prunus serotina var. *alabamensis* (Mohr) Little, Phytologia 4: 309. 1953.

DERIVATION.—Hirsute or hairy, referring to the foliage, peduncles, and calyx.

OTHER COMMON NAMES.—Alabama chokecherry (SPN), Beadle chokecherry, south Alabama chokecherry, †Alabama cherry.

RANGE.—Eastern Georgia to northeastern Alabama, south to northwestern Florida. Probably also in South Carolina.

Prunus serotina var. **eximia** (Small) Little **Escarpment cherry**

Prunus eximia Small, Torreya 1: 146. 1901.
Padus eximia (Small) Small, Fl. Southeast. U. S. 573, 1331. 1903.
Prunus serotina subsp. *eximia* (Small) McVaugh, Brittonia 7: 302. 1951.
Prunus serotina var. *eximia* (Small) Little, Phytologia 4: 309. 1953.

DERIVATION.—Distinguished, or extraordinary.

OTHER COMMON NAME.—Edwards Plateau cherry.

RANGE.—Central Texas (Edwards Plateau and Balcones Escarpment).

In the 1927 Check List *Prunus eximia* Small was mentioned in a note under *P. serotina* Ehrh.

Prunus serotina var. **rufula** (Woot. & Standl.) McVaugh
southwestern black cherry

Prunus salicifolia H. B. K. var. *acutifolia* S. Wats., Amer. Acad. Arts Sci. Proc. 22: 411. 1887; *nom. provisor.*

Padus rufula Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 16: 132. 1913.
Padus virens Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 16: 133. 1913.
†*Prunus virens* (Woot. & Standl.) Shreve, Carnegie Inst. Wash. Pub. 217: 43. 1915.
†*Prunus virens* var. *rufula* (Woot. & Standl.) Sarg., Arnold Arboretum Jour. 2: 117. 1920.
Prunus rufula (Woot. & Standl.) Tidestr., Biol. Soc. Wash. Proc. 48: 39. 1935.
Prunus parksii Cory, Rhodora 45: 326. 1943.
Prunus serotina subsp. *virens* (Woot. & Standl.) McVaugh, Brittonia 7: 303. 1951.
Prunus serotina subsp. *virens* var. *virens* (Woot. & Standl.) McVaugh, Brittonia 7: 305. 1951.
Prunus serotina subsp. *virens* var. *rufula* (Woot. & Standl.) McVaugh, Brittonia 7: 307. 1951.

DERIVATION.—Slightly reddish, referring to the rusty brown hairs on the young twigs, petioles, and midribs of leaves.

OTHER COMMON NAMES.—Gila chokecherry (SPN), Chisos wild cherry, †southwestern chokecherry.

RANGE.—Trans-Pecos Texas (also Bexar County) to southern New Mexico and western Arizona, south to northern and central Mexico (Sonora and Chihuahua to Jalisco and Guanajuato).

Prunus sphaerocarpa Sw., see **P. myrtifolia** (L.) Urban

PRUNUS SPINOSA L. †SLOE; BLACKTHORN

†*Prunus spinosa* L., Sp. Pl. 475. 1753.

DERIVATION.—Spiny, referring to the spiny branches.

RANGE.—Escaped from cultivation in southeastern Canada and northeastern United States and naturalized locally. Native of Europe, northern Africa, and western Asia.

Prunus subcordata Benth. **Klamath plum**

†*Prunus subcordata* Benth., Pl. Hartw. 308. 1848.
Prunus subcordata var. *kelloggii* Lemmon, Pittonia 2: 67. 1890.
Prunus oregana Greene, Pittonia 3: 21. 1896.
Prunus subcordata var. *oregana* (Greene) W. F. Wight, U. S. Dept. Agr. Bul. 179: 33. 1915.

DERIVATION.—Somewhat cordate or heart-shaped, referring to the leaves.

OTHER COMMON NAMES.—†Pacific plum, Sierra plum, western plum, wild plum.

RANGE.—Western and southern Oregon south to central California.

Prunus tarda Sarg., see **P. umbellata** Ell.

Prunus tenuifolia Sarg., see **P. mexicana** S. Wats.

Prunus umbellata Ell. **flatwoods plum**

†*Prunus umbellata* Ell., Sketch Bot. S.-C. Ga. 1: 541. 1821.
Prunus injucunda Small, Torrey Bot. Club Bul. 25: 149. 1898.
†*Prunus umbellata* var. *injucunda* (Small) Sarg., Silva No. Amer. 13: 21, pl. 631. 1902.
Prunus mitis Beadle, Biltmore Bot. Studies 1: 162. 1902.
Prunus tarda Sarg., Bot. Gaz. 33: 108. 1902.
†*Prunus umbellata tarda* (Sarg.) W. F. Wight, U. S. Dept. Agr. Bul. 179: 54. 1915.

DERIVATION.—With umbels, referring to the flower clusters.

OTHER COMMON NAMES.—hog plum, sloe, †black sloe.

RANGE.—Coastal Plain, chiefly, from southern North Carolina south to central Florida, west to eastern and central Texas, and north to southern Arkansas.

Prunus valida (Woot. & Standl.) Rydb., see **P. virginiana** L.

Prunus virens (Woot. & Standl.) Shreve, see **P. serotina** var. **rufula** (Woot. & Standl.) McVaugh

Prunus virginiana L. **common chokecherry**

†*Prunus virginiana* L., Sp. Pl. 473. 1753; in part.
Padus virginiana (L.) Mill., Gard. Dict. Ed. 8, *Padus* No. 3. 1768; in part.
Prunus nana Du Roi, Harbk. Wilde Baumz. 2: 194, pl. 4. 1772.
Padus nana (Du Roi) Borkh., Archiv. Bot. 1(2): 38. 1797.
Cerasus demissa Nutt. in Torr. & Gray, Fl. No. Amer. 1: 411. 1840.
Prunus demissa (Nutt.) D. Dietr., Synops. Pl. 3: 43. 1843 (before March).
Prunus demissa (Nutt.) Walp., Repert. Bot. Syst. 2: 10. 1843.
†*Prunus virginiana* var. *demissa* (Nutt.) Torr. in Wilkes, U. S. Expl. Exped. 17: 284. 1874.
Cerasus demissa var. *melanocarpa* A. Nels., Bot. Gaz. 34: 25. 1902.
Prunus melanocarpa (A. Nels.) Rydb., Torrey Bot. Club Bul. 33: 143. 1906.
Padus melanocarpa (A. Nels.) Shafer in Britton & Shafer, No. Amer. Trees 504. 1908.
Prunus demissa var. *melanocarpa* A. Nels. ex Koehne, Deut. Dendrol. Gesell. Mitt. 20: 231. 1911.
Padus valida Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 16: 134. 1913.
Prunus valida (Woot. & Standl.) Rydb., Fl. Rocky Mts. Plains 451, 1062. 1917
†*Prunus virginiana* var. *melanocarpa* (A. Nels.) Sarg., Arnold Arboretum Jour. 2: 117. 1920.
Padus virginiana var. *melanocarpa* (A. Nels.) Moldenke, Phytologia 3: 420. 1951.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—†chokecherry, black chokecherry, California chokecherry, eastern chokecherry, †western chokecherry, caupulín.

RANGE.—Widely distributed from Newfoundland and eastern Quebec west across Canada to British Columbia, south from Washington to southern California, east to Arizona, New Mexico, Kansas, Missouri, Illinois, Indiana, Maryland, and Maine, and south in mountains to eastern Kentucky, Virginia, North Carolina, and Georgia.

REFERENCES.—Fernald, M. L. *Prunus virginiana* the correct name of the chokecherry. Rhodora 18: 140–141. 1916.

Mackenzie, Kenneth K. Concerning the proper identification of Linnaean species, especially those based on material collected by Clayton. Rhodora 30: 232–237. 1929.

Rehder, Alfred. Arnold Arboretum Jour. 10: 55. 1929.

Some authors have used the name *Prunus nana* Du Roi (*Padus nana* (Du Roi) Borkh.) for this species and have applied the name *Prunus virginiana* L. (*Padus virginiana* (L.) Mill.) to the black cherry, *Prunus serotina* Ehrh. of this list.

Prunus virginiana L., see also **P. serotina** Ehrh.

Pseudophoenix H. Wendl. (Family Palmae) **cherrypalm**

Pseudophoenix H. Wendl. ex Sarg., Bot. Gaz. 11: 314. 1886; *nomen provisorium.* H. Wendl. ex. Sarg., Gard. and Forest 1: 352, figs. 55, 56. 1888.

DERIVATION.—False *Phoenix,* or false date palm, from the resemblance to the palm genus *Phoenix* L.

REFERENCE.—Bailey, L. H. The Pseudophoenix puzzle. Gentes Herbarum 4: 276–284, illus. 1939.

Pseudophoenix sargentii H. Wendl. **Florida cherrypalm**

Pseudophoenix sargentii H. Wendl. ex Sarg., Bot. Gaz. 11: 314. 1886; *nomen provisorium.* H. Wendl. ex Sarg., Gard. and Forest 1: 352, fig. 55, 56. 1888.

DERIVATION.—In honor of its discoverer, Charles Sprague Sargent (1841–1927), American dendrologist, director of the Arnold Arboretum of Harvard University and author of the 14-volume Silva of North America.

OTHER COMMON NAMES.—Sargent cherrypalm (SPN), †hog cabbage-palm.

RANGE.—Upper Florida Keys (Sands, Elliott, Long, and Upper Matecumbe Keys), probably almost extinct except in cultivation. Also in Bahamas, Cuba, and Hispaniola.

In the 1927 Check List this species was included in †*Pseudophoenix vinifera* (Martius) Becc., which, as now interpreted, is confined to Hispaniola.

Pseudotsuga Carr. (Family Pinaceae) **Douglas-fir**

†*Pseudotsuga* Carr., Traité Gén. Conif. Ed. 2, 256. 1867.

DERIVATION.—False hemlock; from Greek *pseudo-,* false, and Japanese *tsuga,* hemlock, referring to the relationship to *Tsuga* (Endl.) Carr.

REFERENCES.—Flous, F. Diagnoses d'espèces et variétés nouvelles de Pseudotsuga américains. Soc. d'Hist. Nat. Toulouse Bul. 66: 329–346, illus. 1934. Reprinted as Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6, 18 pp., illus., 1934.

Flous, F. Révision du genre *Pseudotsuga*. Soc. d'Hist. Nat. Toulouse Bul. 71: 33–164, illus. 1937. Preprinted as Lab. Forest. Toulouse Trav. tome 2, v. 4, art. 2, 132 pp., illus. 1936.

Henry, Augustine, and Flood, Margaret G. The Douglas firs: a botanical and silvicultural description of the various species of Pseudotsuga. Roy. Irish Acad. Proc. 35(B): 67–92, illus. 1920.

Little, Elbert L., Jr. The genus Pseudotsuga (Douglas-fir) in North America. Leafl. West. Bot. 6: 181–198. 1952.

Pseudotsuga macrocarpa (Vasey) Mayr **bigcone Douglas-fir**

Abies douglasii var. *macrocarpa* Torr. in Ives, Rpt. Colo. R. pt. 4: 28. 1860; *nomen nudum.*

Abies macrocarpa Vasey, Gard. Monthly and Hort. 18: 21. 1876 (Jan.).

Abies douglasii var. *macrocarpa* Torr. ex Vasey, Cat. Forest Trees U. S. 33. 1876; U. S. Comm. Agr. Rpt. 1875: 181. 1876.

Pseudotsuga douglasii var. *macrocarpa* (Vasey) Engelm. in S. Wats., Bot. Calif. 2: 120. 1879.

†*Pseudotsuga macrocarpa* [Vasey] Mayr, Wald. Nordamer. 278, pls. 6, 8, 9. 1890.

Pseudotsuga californica Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 330, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 2, pl. 1934.

DERIVATION.—Large-fruited, referring to the very large cones.

OTHER COMMON NAMES.—†bigcone-spruce, hemlock.

RANGE.—Mountains of southern California.

***Pseudotsuga menziesii (Mirb.) Franco** **†Douglas-fir**

OTHER COMMON NAMES.—common Douglas-fir (SPN), Douglas-spruce, red fir, Oregon-pine.

Pseudotsuga menziesii var. menziesii **Douglas-fir (typical)**

Pinus taxifolia Lamb., Descr. Genus Pinus 1: 51, pl. 33. 1803. Not *P. taxifolia* Salisb., Prodr. 399. 1796.

Abies taxifolia [(Lamb.)] Poir. in Lam., Encycl. Méth. Bot. 6: 523. [1805.] Not *Abies taxifolia* Mus. ex Du Tour, Nouv. Dict. Hist. Nat. 20: 114. 1803; *nom. illegit.* Not *Abies taxifolia* Desf., Tabl. École Bot. Mus. Nat. 206. 1804.

Abies menziesii Mirb., Paris Mus. Hist. Nat. Mém. 13: 63, 70. 1825; as "*Menziezii.*"

Abies douglasii Hort. ex Loud., Hort. Brit. 388. 1830; *nomen nudum.*

Pinus douglasii Sabine ex D. Don in Lamb., Descr. Genus Pinus. Ed. 3 (8°), v. 2, unnumbered page between p. 144 and p. 145, pl. [47]. 1832.

Abies mucronata Raf., Atl. Jour. 1: 120. 1832 (autumn).

Abies douglasii (Lamb.) Lindl., Penny Cycl. 1: 32, illus. 1833.

Abies douglasii var. *taxifolia* Loud., Arb. Frut. Brit. 4: 2319, fig. 2231. 1838.

Pseudotsuga douglasii (Lindl.) Carr., Traité Gén. Conif. Ed. 2, 256. 1867.

Pseudotsuga taxifolia (Lamb.) Britton, N. Y. Acad. Sci. Trans. 8: 74. 1889.

Pseudotsuga mucronata (Raf.) Sudw. in Holz., U. S. Dept. Agr. Div. Botany, Contrib. U. S. Natl. Herbarium 3: 266. 1895.

†*Pseudotsuga taxifolia* (Poir.) Britton ex Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 46. 1897.

†*Pseudotsuga taxifolia* [var.] *pendula* (Neumann) Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 46. 1897.

Pseudotsuga douglasii [var.] *viridis* Schwerin, Deut. Dendrol. Gesell. Mitt. 76: 257. 1907 [1908].

Pseudotsuga taxifolia A *viridis* (Schwerin) Ascher. & Graebn., Syn. Mitteleur. Fl. Ed. 2, 1: 287. 1913.

Pseudotsuga vancouverensis Flous, Soc d'Hist. Nat. Toulouse Bul. 66: 340, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 12, pl. 1934.

Pseudotsuga menziesii (Mirb.) Franco, Soc. Broteriana (Coimbra) Bol., Sér. 2, 24: 74. 1950.

Pseudotsuga menziesii var. *viridis* (Schwerin) Franco, Soc. Broteriana (Coimbra) Bol., Sér. 2, 24: 77. 1950.

Recently Franco has shown that the name *Pseudotsuga taxifolia* (Poir.) Britton must be rejected because *Abies taxifolia* Poir., upon which it was based, is a later homonym of *A. taxifolia* Desf. (1804). In checking cross references among these and other contemporary works, he finds that the volume containing *A. taxifolia* Poir., generally accepted as published in 1804, did not appear until 1805 and thus lacks priority. Further he has proposed the new combination *P. menziesii* (Mirb.) Franco, based upon the next oldest name *A. menziesii* Mirb. (1825), which previously had been overlooked and unindexed.

DERIVATION.—Named for Archibald Menzies (1754-1842), Scotch physician and naturalist, who discovered it in 1791 at Nootka Sound on Vancouver Island, British Columbia.

OTHER COMMON NAMES.—Coast Douglas-fir, Oregon Douglas-fir.

RANGE.—Pacific coast region from southwestern British Columbia south through western Washington and western Oregon to central coastal California, east to the Cascade Mountains in Oregon and to the Sierra Nevada in California and western Nevada.

REFERENCES.—Franco, João do Amaral. Cedrus libanensis et Pseudotsuga menziesii. Soc. Broteriana (Coimbra) Bol., Sér. 2, 24: 73–76. 1950.

Franco, João do Amaral. Soc. Broteriana (Coimbra) Bol., Sér. 2, 25: 206. 1951.

Little, Elbert, L., Jr. Amer. Jour. Bot. 31: 594–595. 1944.

Sprague, T. A., and Greene, M. L. The botanical name of the Douglas fir. Kew Roy. Gard. Bul. Misc. Inform. 1938: 79–80. 1938.

Sudworth, George B. U. S. Dept. Agr. Div. Forestry Bul. 17: 23–24. 1898.

Pseudotsuga menziesii var. glauca (Beissn.) Franco ———

Tsuga lindleyana Roezl, Cat. Grain. Conif. Mex. 8. 1857; not seen. Roezl ex Otto, Hamburg. Gart. Blumenzeit. 13: 403. 1857. Roezl ex Schlecht., Linnaea 29: 329. 1858.

Pseudotsuga lindleyana [Roezl] Carr., Rev. Hort. [Paris] 40: 152, pl. 1868.

Abies lindleyana (Roezl) A. Murray in Ravenscroft, Pinetum Brit. v. 2 (pt. 32–34), sig. 29: 4, figs. 23, 26–29. 1869; "sub-sp." of *Abies douglasii* Lindl.

Tsuga douglasii var. *glauca* Beissn. in Jäger & Beissn., Ziergeh. Gärt. Park. Ed. 2, 446. 1884; not seen; seen in ed. 3, 446. 1889.

Pseudotsuga douglasii var. *glauca* Mayr, Wald. Nordamer. 307, pl. 6. 1890.

Pseudotsuga taxifolia [var.] *glauca* (Beissn.) Sudw., U. S. Dept. Agr. Forestry Bul. 14: 48. 1897.

Pseudotsuga glauca Mayr, Deut. Dendrol. Gesell. Mitt. 1901: 57. 1901; not seen; seen in ed. 2, 10: 319. 1910.

Pseudotsuga douglasii [var.] *caesia* Schwerin, Deut. Dendrol. Gesell. Mitt. 16: 257. 1907 [1908].

Pseudotsuga taxifolia B *caesia* (Schwerin) Ascherson & Graebner, Syn. Mitteleur. Fl. Ed. 2, 1: 287. 1913.

Pseudotsuga taxifolia subsp. *glauca* (Mayr) Schwerin, Deut. Dendrol. Gesell. Mitt. 33: 91. 1923.

Pseudotsuga glauca var. *caesia* (Schwerin) Fitschen in Beissner, Handb. Nadelh. Ed. 3, 93. 1930.

Pseudotsuga guinieri Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 211, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 2:1, pl. 1934.

Pseudotsuga macrolepis Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 219, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 2: 9, pl. 1934.

Pseudotsuga flahaulti Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 332, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 4, pl. 1934.

Pseudotsuga globulosa Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 334, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 6, pl. 1934.

Pseudotsuga guinieri var. *mediostrobus* Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 342, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 14, pl. 1934.

Pseudotsuga guinieri var. *parvistrobus* Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 342. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 14. 1934.

Pseudotsuga merrillii Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 366, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 8, pl. 1934.

Pseudotsuga rehderi Flous, Soc. d'Hist. Nat. Toulouse Bul. 66: 388, pl. 1934; Lab. Forest. Toulouse Trav. tome 1, v. 2, art. 6: 10, pl. 1934.

Pseudotsuga caesia (Schwerin) Flous, Soc. d'Hist. Nat. Toulouse Bul. 71: 74, pl. 1937; Lab. Forest. Toulouse Trav. tome 2, v. 4, art. 2: 42, pl. 1936.

Pseudotsuga menziesii var. *caesia* (Schwerin) Franco, Soc. Broteriana (Coimbra) Bol., Sér. 2, 24: 77. 1950.

Pseudotsuga menziesii var. *glauca* (Mayr) Franco, Soc. Broteriana (Coimbra) Bol., Sér. 2, 24: 77. 1950.

DERIVATION.—Glaucous, or covered with a bloom, referring to the blue-green foliage.

COMMON NAMES.—blue Douglas-fir (SPN), Colorado Douglas-fir, Rocky Mountain Douglas-fir.

RANGE.—Rocky Mountain region from southwestern Alberta and central British Columbia south in mountains in Montana, Idaho, eastern Washington, eastern Oregon, eastern Nevada, Utah, Wyoming, Colorado, Arizona, New Mexico, and Trans-Pecos Texas. Also south in mountains of northern and central Mexico (Sonora, Chihuahua, Durango, Zacatecas, Coahuila, Nuevo León, Hidalgo, and Puebla).

REFERENCE.—Frothingham, E. H. Douglas fir: a study of the Pacific Coast and Rocky Mountain forms. U. S. Dept. Agr. Forest Serv. Cir. 150, 38 pp., illus. 1909.

It seems desirable to recognize the Douglas-fir of the Rocky Mountain region as a separate geographical variety. Its differences from the Douglas-fir of the Pacific coast region certainly are of varietal rank, and some authors regard the two as different species. The silvicultural differences were summarized by Frothingham as long ago as 1909. This variation was recorded as a cultivated variety in the 1927 Check List.

PSIDIUM L. (Family Myrtaceae) GUAVA

Psidium L., Sp. Pl. 470. 1753; Gen. Pl. Ed. 5, 211. 1754.

DERIVATION.—A late Latin name for the pomegranate, employed by Linnaeus as a generic name for guava, after rejecting Tournefort's earlier *Guacaja*.

PSIDIUM GUAJAVA L. COMMON GUAVA

Psidium guajava L., Sp. Pl. 470. 1753.

DERIVATION.—From the Spanish name guayaba.

OTHER COMMON NAMES.—guava, guayaba.

RANGE.—Naturalized in Florida, including Florida Keys. Native of tropical America from southern Mexico to South America. Widely cultivated and naturalized northward to West Indies and in Old World tropics.

This genus and species were mentioned in a note in the 1927 Check List. Now well established in southern Florida, but the early report from southern California by Small (Fl. Southeast. U. S. 833. 1903) has not been confirmed by more recent authors.

Psilorhegma suffruticosa (Koenig) Britton, see *Cassia suffruticosa* Koenig

Psychotria L. (Family Rubiaceae) **balsamo**

Myrstiphyllum P. Br., Civ. Nat. Hist. Jamaica 152. 1756; *nomen rejiciendum.*

Psychotrophum P. Br., Civ. Nat. Hist. Jamaica 160. 1756; *nomen rejiciendum.*

†*Psychotria* L., Syst. Nat. Ed. 10, 929, 1364. 1759; *nomen conservandum.*

DERIVATION.—From a Greek word meaning life-giving, or revivifying, alluding to the use of seeds of some species as a substitute for coffee.

OTHER COMMON NAME.—wildcoffee (SPN).

Psychotria ligustrifolia (Northrop) Millsp. **Bahama balsamo**

Myrstiphyllum ligustrifolium Northrop, Torrey Bot. Club Mem. 12: 68. 1902.

†*Psychotria bahamensis* Millsp. in Britton, N. Y. Bot. Gard. Bul. 3: 451. 1905.

Psychotria ligustrifolia (Northrop) Millsp., Field Mus. Pub. Bot. 2: 172. 1906.

DERIVATION.—With leaves like *Ligustrum,* or privet-leaved.

OTHER COMMON NAME.—Bahama wildcoffee.

RANGE.—Florida Keys. Also in Bermuda, Bahamas, Cuba, Hispaniola, and Puerto Rico.

A shrub to 16 feet in height, reported to become a small tree.

Psychotria undata Jacq. **Seminole balsamo**

†*Psychotria undata* Jacq., Hort. Schoenbr. 3: 5, pl. 260. 1798.

Psychotria lanceolata Nutt., Amer. Jour. Sci. and Arts 5: 290. 1822.

†*Psychotria nervosa* var. *lanceolata* (Nutt.) Sarg., Trees and Shrubs 2: 185. 1911.

DERIVATION.—Wavy, perhaps referring to the leaf margins.

OTHER COMMON NAMES.—Seminole wildcoffee (SPN) †balsamo.

RANGE.—Florida, north on east coast to St. Johns County, and south to Florida Keys. Also in West Indies and from Mexico (Veracruz) to Central America.

Commonly shrubby but recorded also as a small tree.

†*Psychotria nervosa* Sw., which has been accepted by some authors for this species and which was included as a separate species in the 1927 Check List, is a species of Jamaica, according to Urban (Symb. Antill. 7: 454. 1913).

Ptelea L. (Family Rutaceae) **hoptree**

†*Ptelea* L., Sp. Pl. 118. 1753; Gen. Pl. Ed. 5, 54. 1754.

DERIVATION.—The classical Greek name of elm, applied by Linnaeus to this genus with similar fruit.

Ptelea angustifolia Benth. **narrowleaf hoptree**

?*Ptelea baldwinii* Torr. & Gray, Fl. No. Amer. 1: 215. 1838.

Ptelea angustifolia Benth., Pl. Hartw. 9. 1839.
Ptelea crenulata Greene, Pittonia 1: 216. 1888.
Ptelea baldwinii var. *crenulata* (Greene) Jeps., Fl. West. Middle Calif. 249. 1901.
Ptelea cognata Greene, U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 10: 62. 1906.
Ptelea angustifolia var. *cognata* (Greene) Kearney & Peebles, Wash. Acad. Sci. Jour. 29: 485. 1939.

DERIVATION.—Narrowleaf.

OTHER COMMON NAME.—western hoptree.

RANGE.—Central and southern Texas to New Mexico, Colorado, Utah, northern California, and Arizona. Also south into Mexico. A shrub or small tree 10 to 26 feet tall.

Ptelea pallida Greene (U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 10: 70. 1906), pale hoptree, is a shrub of New Mexico and Arizona which may sometimes become a small tree as defined here. It was recorded as a shrub or small tree 10 feet or more in height by Little (Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 9: 73–74, fig. 1950).

Ptelea trifoliata L. **common hoptree**

†*Ptelea trifoliata* L., Sp. Pl. 118. 1753.
Ptelea ? tomentosa Raf., Fl. Ludoviciana 108. 1817.
†*Ptelea trifoliata β mollis* Torr. & Gray, Fl. No. Amer. 1: 680. 1840.
Ptelea trifoliata var. *deamiana* Nieuwl., Amer. Midland Nat. 2:179. 1912.

DERIVATION.—Three-leaved, from the three leaflets.

OTHER COMMON NAMES.—†hoptree, woolly common hoptree, wafer-ash.

RANGE.—Connecticut and New York to extreme southern Ontario, central Michigan, Illinois, Missouri, and eastern Kansas, south to central and southern Texas, and east to northern Florida. Local in southern Quebec. Also south into Mexico.

PUNICA L. (Family Punicaceae) POMEGRANATE

†*Punica* L., Sp. Pl. 472. 1753; Gen. Pl. Ed. 5, 212. 1754.

DERIVATION.—From the Latin word for Carthage; the Romans called pomegranate *malum punicum* (Punic apple) and *malum* (or *pomum*) *granatum*, garnet apple or many-seeded apple.

PUNICA GRANATUM L. †POMEGRANATE

†*Punica granatum* L., Sp. Pl. 472. 1753.

DERIVATION.—A Latin word which may be translated "garnet" and also many-seeded.

OTHER COMMON NAME.—common pomegranate (SPN).

RANGE.—Escaped from cultivation and naturalized in Florida. Native of southern Asia and widely planted and naturalized in tropical and subtropical regions.

PYRUS L. (Family Rosaceae) PEAR

†*Pyrus* L., Sp. Pl. 479. 1753; Gen. Pl. Ed. 5, 214. 1754.

Pirus L. corr. Hall, Hist. 2: 34. 1768. *Nom. conserv. propos.*, Janchen, Repert. Spec. Novarum Regni Veg. 52: 154. 1943.
DERIVATION.—Classical Latin name of the pear tree.

Pyrus L., see also **Malus** Mill. and **Sorbus** L.

PYRUS COMMUNIS L. **†PEAR**

†*Pyrus communis* L., Sp. Pl. 479. 1753.
DERIVATION.—Common.
OTHER COMMON NAME.—common pear (SPN).
RANGE.—Escaped from cultivation and naturalized locally in various parts of the United States from Maine to Missouri, Texas, and Florida. Native of Europe and Asia.

Quercus L. (Family Fagaceae) **†oak**

†*Quercus* L., Sp. Pl. 994. 1753; Gen. Pl. Ed. 5, 431. 1754.
Erythrobalanus (Oerst.) O. Schwarz, [Berlin] Bot. Gard. u. Mus. Notizbl. 13: 4, 8. 1936; Repert. Spec. Novarum Regni Veg. Sonderbeih. D, 1: 35. 1936.
DERIVATION.—The classical Latin name of oaks.

Quercus is the largest genus of native trees in number of species, with the exception of *Crataegus*. In this summary, which excludes several shrubby species, 58 native species and 1 naturalized species are accepted.

Numerous hybrids have been distinguished in *Quercus*, more than the number of species, and the list continues to expand. The 69 accepted hybrids with binomial names are placed in alphabetical order with the species and are further listed under both parent species. Many natural hybrids between related species of *Quercus* have been reported, though in most cases the actual hybrid origin has not been confirmed experimentally and in a few instances the parentage is in doubt.

How to name hybrids is controversial. The simplest method is simply an informal union of the specific names of the supposed parents by means of the multiplication or times sign (×). However, the practice of designating hybrids by binomials, which was used in the 1927 Check List and which has been adopted widely, has been continued here. Some hybrids were first thought to be species when given binomial names, and the status may not be apparent or agreed upon. One binomial is sufficient to include all crosses from different varieties of the same two parent species and to embrace all intermediate individuals not better identified under a parental species. Varietal names of hybrids are unnecessary.

Palmer (1948), in the reference cited below, has prepared a valuable compilation of hybrids in *Quercus*, which has been followed with minor exceptions. Several additional hybrids in *Quercus* have not been given binomial names, either because specimens were sterile or inadequate or because the persons studying them preferred not to use binomials. These hybrids without binomial names have not been included here, but several were mentioned by Muller (1951) and Palmer (1948) in the references listed below.

The four binomials listed below represent doubtfully authenticated hybrids, according to Palmer, and perhaps should not be accepted until studied further.

†*Quercus* ×*benderi* Baenitz (Allg. Bot. Ztschr. 9: 84. 1903; as *Q. coccinea* × *rubra*) was described from cultivated trees in Germany but was afterward reported from Massachusetts. This cross would be difficult to distinguish, and the original specimens may be *Q. ellipsoidalis* E. J. Hill, instead, according to Palmer (Arnold Arboretum Jour. 29: 17–18. 1948).

Quercus ×*burnetensis* Little (Wash. Acad. Sci. Jour. 33: 9. 1943; as *Q. macrocarpa* × *virginiana*) was published as a new name for †*Quercus* ×*coloradensis* Ashe (Torrey Bot. Club Bul. 49: 268. 1922), not *Q. colora-*

densis Lesq. (Harvard Univ. Mus. Compar. Zool. Bul. 16: 46. 1888; fossil, Eocene, Colo.). No additional collections of this doubtful hybrid, originally cited from Burnet County, Tex., were reported by Palmer (Arnold Arboretum Jour. 29: 19. 1948) or Muller (Tex. Res. Found. Contrib. 1: 31. 1951).

†*Quercus* ×*cocksii* Sarg. (Bot. Gaz. 65: 459. 1918; as Q. *rhombica* × *velutina*), Cocks oak, was based upon sterile material from Rapides Parish, La. It may be synonymous with Q. ×*beaumontiana* Sarg., according to Palmer (Arnold Arboretum Jour. 29: 21. 1948).

†*Quercus* ×*oviedoensis* Sarg. (Bot. Gaz. 65: 459. 1918; as *Q. incana* × *myrtifolia*) likewise was named from sterile material collected in Seminole County, Fla., and is of doubtful identity, according to Palmer (Arnold Arboretum Jour. 29: 36. 1948).

REFERENCES.—Billings, W. D. A bud and twig key to the southeastern arborsecent oaks. Jour. Forestry 34: 475–476. 1936.

Camus, A. Les Chênes. Monographie du genre Quercus. 2 v., illus. (Also atlas of 2 folio v.) 1934–39. (*In* Encyclopédie Économique de Sylviculture, v. 6–7.)

Coker, William C., and Totten, Henry R. Trees of the southeastern States. Ed. 3, 419 pp., illus. 1945. *Quercus*, pp. 110–158, illus.

Dyal, Sarah C. A key to the species of oaks of eastern North America based on foliage and twig characters. Rhodora 38: 53–63, illus. 1936.

Muller, Cornelius H. Oaks of Trans-Pecos Texas. Amer. Midland Nat. 24: 703–728, illus. 1940.

Muller, Cornelius H. The oaks of Texas. Tex. Res. Found. Contrib. 1: 21–311, illus. 1951.

Palmer, Ernest J. The red oak complex in the United States. Amer. Midland Nat. 27: 732–740, illus. 1942.

Palmer, Ernest J. Hybrid oaks of North America. Arnold Arboretum Jour. 29: 1–48. 1948.

Tillson, A. H., and Muller, C. H. Anatomical and taxonomic approaches to segregation in American Quercus. Amer. Jour. Bot. 29: 523–529, illus. 1942.

Trelease, William. The American oaks. Natl. Acad. Sci. Mem. 20, 255 pp., illus. 1924.

Williams, Simon. Secondary vascular tissues of the oaks indigenous to the United States. I–III. Torrey Bot. Club Bul. 66: 353–365, illus. 1939; 69: 1–10, 115–129, illus. 1942.

Quercus acuminata (Michx.) Sarg., see **Q. muehlenbergii** Engelm.

***Quercus agrifolia** Née — **California live oak**

†*Quercus agrifolia* Née, An. Cien. Nat. [Madrid] 3: 271. 1801.

Quercus oxyadenia Torr. in Sitgreaves, Rpt. Exped. Zuni Colo. Rivers 172, pl. 17. 1853.

Quercus agrifolia var. *frutescens* Engelm. in S. Wats., Bot. Calif. 2: 98. 1879.

†*Quercus pricei* Sudw., Forestry and Irrig. 13: 157, fig. A. 1907.

Quercus agrifolia var. *oxyadenia* (Torr.) J. T. Howell, Madroño 2: 38. 1931.

DERIVATION.—Perhaps a printer's mistake for *acrifolia,* sharp-leaved, or *aquifolia,* hollyleaf; literally field-leaved.

OTHER COMMON NAMES.—†coast live oak, encina.

RANGE.—Northern to southern California in Coast Ranges and in northern Lower California, Mexico.

HYBRID.—*Quercus* ×*ganderi* C. B. Wolf (*Q. agrifolia* × *kelloggii*).

***Quercus alba L.** **†white oak**

†*Quercus alba* L., Sp. Pl. 996. 1753.

†*Quercus alba* [var.] *repanda* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 4, pl. 5, fig. 2. 1801.

†*Quercus alba* var. *latiloba* Sarg., Bot. Gaz. 65: 435. 1918.

DERIVATION.—White, from the light colored bark.

OTHER COMMON NAMES.—fork-leaf white oak, ridge white oak, stave oak.

RANGE.—Central Maine to southern Quebec, southern Ontario, Michigan, and Minnesota, south to Iowa, eastern Kansas and eastern Texas, and east to northwestern Florida and Georgia.

HYBRIDS.—*Quercus* ×*beadlei* Trel. (*Q. alba* × *michauxii*); *Q.* ×*bebbiana* Schneid. (*Q. alba* × *macrocarpa*); *Q.* ×*faxonii* Trel. (*Q. alba* × *prinoides*); *Q.* ×*fernowii* Trel. (*Q. alba* × *stellata*); *Q.* ×*jackiana* Schneid. (*Q. alba* × *bicolor*); *Q.* ×*saulii* Schneid. (*Q. alba* × *prinus*).

Quercus alexanderi Britton, see **Q. muehlenbergii** Engelm.

Quercus alvordiana Eastw., see **Q. dumosa** var. **alvordiana** (Eastw.) Jeps.

Quercus ×anceps Palmer ———

Quercus falcata × *imbricaria*

Quercus ×*anceps* Palmer, Arnold Arboretum Jour. 29: 14. 1948; as *Q. falcata* × *imbricaria.*

DERIVATION.—Two-edged.

RANGE.—Southeastern Illinois.

Quercus ×*andrewsii* Sarg., see **Q. havardii** Rydb.

Quercus andromeda Riddell, see **Q. virginiana** var. **maritima** (Michx.) Sarg.

Quercus annulata Buckl., see **Q. durandii** var. **breviloba** (Torr.) Palmer

Quercus arenicola Ashe, see **Q. laurifolia** Michx.

***Quercus arizonica Sarg.** **†Arizona white oak**

†*Quercus arizonica* Sarg., Gard. and Forest 8: 92. 1895.

Quercus arizonica var. *wootoni* Trel., Natl. Acad. Sci. Mem. 20: 89. 1924.

DERIVATION.—Of Arizona.

OTHER COMMON NAMES.—Arizona oak, roble.

RANGE.—Trans-Pecos Texas and southern New Mexico to central Arizona, and south to northern Mexico (Sonora to Coahuila and Durango).

HYBRID.—*Quercus* ×*organensis* Trel. (*Q. arizonica* × *grisea*).

Botanically, this is a white oak, though a few authors have placed it with black oaks on the basis of a minor character in wood anatomy. Further information may be found in the articles by A. H. Tillson and C. H. Muller (1942) and by Simon Williams (1939–42) cited as references under *Quercus*.

The report of *Quercus endemica* C. H. Muller (Amer. Midland Nat. 18: 846. 1937), a Mexican species, from Chisos Mountains, Brewster County, Tex., was later changed to *Q. arizonica* Sarg. by C. H. Muller (Tex. Res. Found. Contrib. 1: 60. 1951).

Quercus arkansana Sarg. **Arkansas oak**

†*Quercus arkansana* Sarg., Trees and Shrubs 2: 121, pl. 152. 1911.

Quercus ×*caput-rivuli* Ashe, Rhodora 25: 179. 1923.

†*Quercus arkansana* × *caput-rivuli* (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 44. 1924.

DERIVATION.—Named for Arkansas, where it was discovered at Fulton, Hempstead County.

OTHER COMMON NAMES.—Arkansas water oak, †water oak.

RANGE.—Southwestern Georgia, northern Florida, southeastern Alabama, and southwestern Arkansas.

†×*Quercus venulosa* Ashe (Elisha Mitchell Sci. Soc. Jour. 41: 268. 1936; as *Q. caput-rivuli* × *cinerea*) is related to *Q. arkansana*, but the other parent species is uncertain, according to Palmer (Arnold Arboretum Jour. 29: 44. 1948). Besides, the name must be rejected as a later homonym of a fossil species, *Q. venulosa* (Eichwald) Eichwald (Lethaoa Rossica 2(1): 63, pl. 3, fig. 11. 1865; fossil, Russia), as shown by Little (Wash. Acad. Sci. Jour. 33: 132. 1943).

REFERENCE.—Palmer, Ernest J. Is *Quercus arkansana* a hybrid? Arnold Arboretum Jour. 6: 195–200. 1925.

Quercus ×**asheana** Little **Ashe oak**

Quercus incana × *laevis*

Quercus cinerea × *catesbaei* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 88. 1894.

Quercus ×*ashei* Trel., Amer. Phil. Soc. Proc. 56: 48. 1917; as *Q. catesbaei* × *cinerea; nomen nudum.*

†*Quercus* ×*ashei* Trel., Natl. Acad. Sci. Mem. 20: 13, 156, 200. 1924; as *Q. cinerea* × *laevis*. Not *Q. ashei* Sterrett, Elisha Mitchell Sci. Soc. Jour. 37: 178. 1922.

Quercus ×*asheana* Little, Wash. Acad. Sci. Jour. 33: 8. 1943; as *Q. cinerea* × *laevis*.

DERIVATION.—Named for William Willard Ashe (1872–1932), pioneer forester of the United States Forest Service, who first described this hybrid in 1894.

RANGE.—Georgia to central Florida and Mississippi.

Quercus ashei Sterrett, see **Q. stellata** Wangenh.

Quercus ×**atlantica** Ashe **Albemarle oak**

Quercus incana × *laurifolia*

†*Quercus atlantica* Ashe, Soc. Amer. Foresters Proc. 11: 88. 1916.

Quercus ×*sublaurifolia* Trel., Amer. Phil. Soc. Proc. 56: 52. 1917; as *Q. cinerea* × *laurifolia; nomen nudum.*

Quercus ×*sublaurifolia* Trel. ex Palmer, Arnold Arboretum Jour. 29: 42. 1948; as *Q. incana* × *laurifolia.*

DERIVATION.—Atlantic.

RANGE.—South Carolina and Georgia to central and northwestern Florida and Alabama.

Quercus ×beadlei Trel. **Beadle oak**

Quercus alba × *michauxii*

Quercus ×*beadlei* Trel., Amer. Phil. Soc. Proc. 56: 48. 1917; as *Q. alba* × *prinus; nomen nudum.*

†*Quercus* ×*beadlei* Trel. ex Palmer, Arnold Arboretum Jour. 29: 16. 1948; as *Q. alba* × *prinus* [*michauxii*].

DERIVATION.—Named apparently for the discoverer, Chauncey Delos Beadle, American botanist.

RANGE.—Recorded from New Jersey, Delaware, Virginia, North Carolina, Florida, eastern Texas, and Indiana.

Quercus ×beaumontiana Sarg. **Beaumont oak**

Quercus falcata × *laurifolia*

†*Quercus* ×*beaumontiana* Sarg., Bot. Gaz. 65: 451. 1918; as *Q. rhombica* × *rubra.*

DERIVATION.—From the type locality, Beaumont, Tex.

RANGE.—Southeastern Texas.

Quercus ×bebbiana Schneid. **Bebb oak**

Quercus alba × *macrocarpa*

†*Quercus* ×*bebbiana* Schneid., Illus. Handb. Laubholzk. 1: 201. 1904; as *Q. macrocarpa* × *alba.*

Quercus ×*bebbiana orpheusi* Pepoon & Trel. ex Schantz, Amer. Bot. 40: 5, illus. 1934.

DERIVATION.—Named for the discoverer, Michael Schuck Bebb (1833–95), American botanist and specialist on willows.

RANGE.—Recorded from Quebec, Vermont, Ohio, Indiana, Illinois, and Missouri.

Quercus ×*benderi* Baenitz, see note under **Quercus** L.

Quercus ×bernardiensis W. Wolf **Bernard Oak**

Quercus prinus × *stellata*

Quercus bernardiensis W. Wolf, Torreya 18: 161. 1918.

DERIVATION.—From Saint Bernard or Saint Bernard College in Cullman County, northern Alabama, where it was discovered.

RANGE.—Recorded from District of Columbia and Alabama.

Originally proposed as a new species and later regarded as the hybrid *Quercus alba* × *stellata.* According to Palmer (Arnold Arboretum Jour. 29: 18. 1948), the parents are *Q. montana* (*Q. prinus*) and *Q. stellata.*

***Quercus bicolor Willd.** **†swamp white oak**

Quercus prinus β Quercus platanoides Lam., Encycl. Méth. Bot. 1: 720. 1785.

†*Quercus bicolor* Willd. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 3: 396. 1801.

Quercus bicolor β mollis Nutt., Gen. No. Amer. Pl. 2: 215. 1818.

Quercus platanoides (Lam.) Sudw., U. S. Dept. Agr. Rpt. Secy. Agr. 1892: 327. 1893.

DERIVATION.—Two-colored, referring to leaves, which are whitish beneath.

OTHER COMMON NAME.—white oak (lumber).

RANGE.—Southwestern Maine to New York, southwestern Quebec, southern Ontario, Michigan, Wisconsin, and southeastern Minnesota, south to eastern Iowa and northeastern Arkansas, and east to Tennessee, Kentucky, West Virginia, Maryland, and New Jersey. Also local in northeastern Kansas, northern Virginia, and North Carolina.

HYBRIDS.—*Quercus ×humidicola* Palmer (*Q. bicolor × lyrata*); *Q. ×jackiana* Schneid. (*Q. alba × bicolor*); *Q. ×schuettei* Trel. (*Q. bicolor × macrocarpa*); *Q. ×substellata* Trel. (*Q. bicolor × stellata*).

Quercus ×blufftonensis Trel. **Bluffton oak**

Quercus falcata × laevis

Quercus ×blufftonensis Trel., Amer. Phil. Soc. Proc. 56: 48. 1917; as *Q. catesbyi × cuneata; nomen nudum.*

†*Quercus ×blufftonensis* Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. laevis × rubra* [*falcata*].

DERIVATION.—Named for Bluffton, S. C., where it was discovered.

RANGE.—South Carolina.

Quercus borealis Michx. F., see **Q. rubra L.**

Quercus boyntoni Beadle, see **Q. stellata** var. **margaretta** (Ashe) Sarg.

Quercus brayi Small, see **Q. muehlenbergii Engelm.**

Quercus brevifolia (Lam.) Sarg., see **Q. incana** Bartr.

Quercus breviloba (Torr.) Sarg., see **Q. durandii** var. **breviloba (Torr.) Palmer**

Quercus brevilobata Sarg., see **Q. durandii** var. **breviloba (Torr.) Palmer**

Quercus ×brittonii W. T. Davis **Britton oak**

Quercus ilicifolia × marilandica

†*Quercus ×brittoni* W. T. Davis, Sci. Amer. 67: 145. 1892 (Sept. 3); as *Q. nigra × ilicifolia.*

DERIVATION.—Named in honor of Nathaniel Lord Britton (1859–1934), director of the New York Botanical Garden, who was born on Staten Island, where this hybrid was discovered.

RANGE.—Southern New York, New Jersey, and southeastern Pennsylvania.

REFERENCE.—Stebbins, G. L., Jr., Matzke, E. B., and Epling, C. Hybridization in a population of Quercus marilandica and Quercus ilicifolia. Evolution 1: 79–88, illus. 1947.

Quercus ×*burnetensis* Little, see note under **Quercus** L.

Quercus ×bushii Sarg. **Bushes oak**

Quercus marilandica × *velutina*

†*Quercus* ×*bushii* Sarg., Bot. Gaz. 65: 453. 1918; as *Q. marilandica* × *velutina.*

Quercus ×*incomita* Palmer, Arnold Arboretum Jour. 7: 120. 1926; as *Q. marilandica* × *rubra* [*falcata*].

DERIVATION.—Named for the discoverer, Benjamin Franklin Bush (1858–1937), botanist of Missouri.

RANGE.—Recorded from Pennsylvania, Indiana, Illinois, Iowa, Nebraska, Kansas, Missouri, Oklahoma, Arkansas, eastern Texas, Tennessee, Mississippi, Alabama, Georgia, South Carolina, North Carolina, Virginia, and Maryland. Apparently mostly rare and local.

Quercus ×byarsii Sudw. **Covington oak**

Quercus macrocarpa × *michauxii*

Quercus michauxii × *macrocarpa* Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 158. 1897.

†*Quercus* ×*byarsii* Sudw. ex Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. macrocarpa* × *prinus.*

DERIVATION.—Named for James Byars, who discovered it in 1888.

RANGE.—Tennessee (Covington, Tipton County).

Quercus ×caduca Trel. **caduca oak**

Quercus incana × *nigra*

Quercus cinerea × *aquatica* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 90. 1894.

Quercus ×*caduca* Trel., Amer. Phil. Soc. Proc. 56: 48. 1917; as *Q. cinerea* × *nigra; nomen nudum.*

†*Quercus* ×*caduca* Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. cinerea* × *nigra.*

DERIVATION.—Promptly falling.

RANGE.—Coastal Plain, recorded from southeastern Virginia, Georgia, Florida, Alabama, Mississippi, and eastern Texas.

Quercus californica (Torr.) Cooper, see **Q. kelloggii** Newb.

Quercus canbyi Trel., see note under **Q. graciliformis** C. H. Muller

Quercus ×capesii W. Wolf **Capesius oak**

Quercus nigra × *phellos*

Quercus ×*capesii* W. Wolf, Castanea 10: 91. 1945; as *Q. nigra* × *phellos*.

DERIVATION.—Named for A. Capesius, who discovered the hybrid in seedlings raised from a cultivated tree at St. Bernard, Ala.

RANGE.—New Jersey, South Carolina, and southeastern Texas. Also in cultivation.

Quercus ×*caput-rivuli* Ashe, see **Q. arkansana** Sarg.

Quercus ×*carolinensis* Trel., see **Q.** ×**cravenensis** Little

Quercus castanea Muhl., see **Q. muehlenbergii** Engelm.

Quercus catesbaei Michx., see **Q. laevis** Walt.

Quercus chapmanii Sarg. **Chapman oak**

Quercus obtusiloba Michx. var. *parvifolia* Chapm., Fl. South. U. S. 423. 1860.

†*Quercus chapmani* Sarg., Gard. and Forest 8: 93. 1895.

DERIVATION.—Named for Alvan Wentworth Chapman (1809–99), physician and botanist of Apalachicola, Fla., and author of Flora of the Southern United States, who first distinguished and named this oak.

OTHER COMMON NAME.—†Chapman white oak.

RANGE.—Coastal Plain from southeastern South Carolina to southern Florida.

Quercus ×*chasei* McMinn, see **Q.** ×**ganderi** C. B. Wolf

Quercus chesosensis (Sarg.) C. H. Muller, see **Q. gravesii** Sudw.

***Quercus chrysolepis** Liebm. **†canyon live oak**

Quercus chrysolepis var. chrysolepis **canyon live oak (typical)**

†*Quercus chrysolepis* Liebm., Dansk. Vidensk. Selsk. Forhandl. Overs. 1854: 173. 1854.

Quercus chrysolepis var. *grandis* (Jeps.) Jeps., Man. Fl. Pl. Calif. 275. 1923.

Quercus chrysolepis var. *hansenii* (Jeps.) Jeps., Man. Fl. Pl. Calif. 275. 1923.

Quercus chrysolepis var. *nana* (Jeps.) Jeps., Man. Fl. Pl. Calif. 275. 1923.

Quercus chrysolepis var. *pendula* (Jeps.) Jeps., Man. Fl. Pl. Calif. 275. 1923.

DERIVATION.—Golden-scaled, referring to the yellowish acorn cups.

OTHER COMMON NAMES.—canyon oak, goldcup oak, live oak, maul oak, white live oak.

RANGE.—Southwestern Oregon and California through Sierra Nevada and Coast Ranges to northern Lower California, Mexico. Also in western Nevada (Washoe County).

Quercus vaccinifolia Kellogg, †huckleberry oak, included in the 1927 Check List as †*Q. chrysolepis* var. *vaccinifolia* (Kellogg) Engelm., is a low shrub from southwestern Oregon to central California and omitted here.

Quercus chrysolepis var. palmeri (Engelm.) Sarg. **Palmer oak**

Quercus chrysolepis subsp. *Q. palmeri* Engelm., Acad. Sci. St. Louis Trans. 3: 393, 388. 1877.

Quercus dunni Kellogg, Pacific Rural Press 17: 371. 1879 (June 7); *nom. provisor.?* Sci. Bul. 1: 146. 1885.

Quercus palmeri (Engelm.) Engelm. in S. Wats., Bot. Calif. 2: 97. 1879 (Oct. 1).

Quercus dunnii Kellogg ex Curran, Calif. Acad. Sci. Bul. 1: 146. 1885.

†*Quercus chrysolepis* var. *palmeri* (Engelm.) Sarg., Silva No. Amer. 8: 107. 1895.

Quercus wilcoxii Rydb., N. Y. Bot. Gard. Bul. 2: 227, pl. 33, figs. 3–4. 1901.

DERIVATION.—Named for its discoverer, Edward Palmer (1831–1911), English-born American physician and collector of plants, animals, and archeological artifacts, primarily in Mexico and southwestern United States. More than 200 plant species bear his name.

OTHER COMMON NAME.—†canyon live oak.

RANGE.—Southwestern New Mexico to central Arizona and southern California, south to northwestern Mexico (northern Lower California and Sonora).

Quercus cinerea Michx., see **Q. incana** Bartr.

***Quercus coccinea** Muenchh. **†scarlet oak**

†*Quercus coccinea* Muenchh., Hausvater 5: 254. 1770.

†*Quercus* ×*richteri* Baenitz, Allg. Bot. Ztschr. 9: 85. 1903; as *Q. rubra* × *palustris*.

†*Quercus coccinea* var. *tuberculata* Sarg., Bot. Gaz. 65: 426. 1918.

DERIVATION.—Scarlet, referring to the brilliant fall coloring.

OTHER COMMON NAMES.—black oak, red oak (lumber), Spanish oak.

RANGE.—Southwestern Maine to New York, extreme southern Ontario, southern Michigan, southern Illinois, and southeastern Missouri, south to northeastern Arkansas, northeastern Mississippi, central Alabama, and northern Georgia, northward west of Coastal Plain to Maryland, Pennsylvania, and New Jersey.

REFERENCES.—Croizat, Leon. An interesting oak in New York City with brief notes on Quercus richteri Baen. Torreya 36: 139–142. 1936.

Palmer, Ernest J. ×Quercus richteri Baenitz. Arnold Arboretum Jour. 29: 38. 1948.

HYBRID.—*Quercus* ×*robbinsii* Trel. (*Q. coccinea* × *ilicifolia*).

Quercus ×*cocksii* Sarg., see note under **Quercus** L.

Quercus ×comptoniae Sarg. **Compton oak**

Quercus lyrata × *virginiana*

Quercus ×*comptonae* Sarg., Bot. Gaz. 65: 456. 1918; *Q. lyrata* × *virginiana*.

DERIVATION.—Named for Miss C. C. Compton, of Natchez, Miss., who aided C. S. Sargent in field study of this hybrid.

OTHER COMMON NAME.—Ness hybrid oak.

RANGE.—Reported to Coastal Plain in southeastern Virginia, Alabama, Mississippi, Louisiana, and southeastern Texas.

REFERENCE.—Ness, H. Hybrids of the live oak and overcup oak. Jour. Hered. 9: 263–268, illus. 1918.

Quercus confusa Woot. & Standl., see **Q. gambelii** Nutt.

Quercus ×cravenensis Little — **Carolina oak**

Quercus incana × *marilandica*

Quercus cinerea × *nigra* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 91. 1894.

Quercus ×carolinensis Trel., Amer. Phil. Soc. Proc. 56: 48. 1917; as *Q. cinerea* × *nigra; nomen nudum.*

†*Quercus ×carolinensis* Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. cinerea* × *marilandica.* Not *Q. carolinensis* Muenchh., Hausvater 5: 254. 1770. Not *Q. caroliniensis* Yong, Cat. Arbr. Arb. Pl. Herb. Amer. 53. 1783; *nomen subnudum.*

Quercus ×cravenensis Little, Wash. Acad. Sci. Jour. 33: 9. 1943; as *Q. cinerea* × *marilandica.*

DERIVATION.—Named for Craven County, N. C., one of the areas where it has been found.

RANGE.—Coastal Plain, reported from southeastern Virginia, North Carolina, South Carolina, Georgia, Alabama, and eastern Texas.

Quercus ×deamii Trel. — **Deam oak**

Quercus macrocarpa × *muehlenbergii*

Quercus alba × *muhlenbergii* Deam, Ind. State Bd. Forestry Ann. Rpt. 11 (1911): 176, pl. 44. 1912.

Quercus ×deami Trel., Amer. Phil. Soc. Proc. 56: 49. 1917; as *Q. alba* × *muhlenbergii; nomen nudum.*

†*Quercus ×deami* Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. alba* × *muhlenbergii.*

Quercus ×fallax Palmer, Arnold Arboretum Jour. 29: 24. 1948; as *Q. macrocarpa* × *muehlenbergii.*

DERIVATION.—Named for the discoverer, Charles Clemon Deam, botanist of Indiana.

RANGE.—Indiana (Wells County).

REFERENCE.—Bartlett, H. H. Regression of ×Quercus deamii toward Quercus macrocarpa and Quercus muhlenbergii. Rhodora 53: 249–264, illus. 1951.

Bartlett has shown from progeny tests of the type tree that *Quercus ×deamii* represents the cross *Q. macrocarpa* × *muehlenbergii,* rather than *Q. alba* × *muehlenbergii,* as originally believed. The hybrid *Q. alba* × *muehlenbergii,* recorded from Pennsylvania, Kentucky, and Illinois, is left without a binomial name.

Quercus ×demarei Ashe **Demaree oak**

Quercus nigra × *velutina*

†*Quercus* ×*demarei* Ashe, Elisha Mitchell Sci. Soc. Jour. 41: 268. 1926; as *Q. nigra* × *velutina*.

DERIVATION.—Named for the discoverer, Delzie Demaree, botanist of Arkansas.

RANGE.—Arkansas and Louisiana.

Quercus densiflora Hook. & Arn., see **Lithocarpus densiflorus** (Hook. & Arn.) Rehd.

Quercus digitata (Marsh.) Sudw., see **Q. falcata** Michx.

***Quercus douglasii** Hook. & Arn. **blue oak**

†*Quercus douglasii* Hook. & Arn., Bot. Beech. Voy. 391. 1840.

DERIVATION.—Named for its discoverer, David Douglas (1798–1834), Scotch botanical explorer.

OTHER COMMON NAMES.—†California blue oak, iron oak, mountain oak, mountain white oak.

RANGE.—Northern to southern California.

HYBRIDS.—*Quercus* ×*eplingii* C. H. Muller (*Q. douglasii* × *garryana*); *Q.* ×*jolonensis* Sarg. (*Q. douglasii* × *lobata*).

Quercus drummondii Liebm., see **Q. stellata** var. **margaretta** (Ashe) Sarg.

Quercus dumosa Nutt. **†California scrub oak**

HYBRID.—*Q.* ×*townei* Palmer (*Q. dumosa* × *lobata*).

Also considered as a hybrid between *Quercus dumosa* and *Q. engelmannii*. Mentioned in a note in the 1927 Check List.

Quercus dumosa var. **dumosa** **California scrub oak (typical)**

†*Quercus dumosa* Nutt., No. Amer. Sylva 1: 7. 1842.

Quercus dumosa var. *longigemma* (Millsp. & Nutt.) A. Camus, Chênes 2: 463. 1939.

Quercus dumosa var. *myrtifolia* (Millsp. & Nutt.) A. Camus, Chênes 2: 463. 1939.

DERIVATION.—Bushy, or shrubby.

RANGE.—Northern California south to northern Lower California, Mexico.

The typical variety, which has the same range as the species, is a shrub 3 to 10 feet high but very rarely may become a small tree. The two varieties listed are small trees.

Quercus durata Jeps. (†*Q. dumosa* var. *bullata* Engelm.), leather oak, also mentioned in the 1927 Check List, is a related shrubby species of California in Coast Ranges from Lake to San Luis Obispo Counties.

Quercus dumosa var. **alvordiana** (Eastw.) Jeps. **Alvord oak**

Quercus alvordiana Eastw., Calif. Acad. Sci. Occas. Papers 9: 48, pl. 27, fig. 4. 1905.

†*Quercus dumosa* var. *alvordiana* (Eastw.) Jeps., Fl. Calif. 1: 356. 1909.

DERIVATION.—Named in honor of William Alvord, president of the California Academy of Sciences.

OTHER COMMON NAMES.—brittle leaf oak, †California shrub oak.

RANGE.—California, inner south Coast Range from Fresno and Monterey Counties southeast to Kern, San Luis Obispo, and Ventura Counties.

Generally a shrub 6 to 10 feet high but sometimes a small tree 16 feet or more in height and becoming 1 to 2 feet or more in trunk diameter, according to Lyman Benson (Amer. Jour. Bot. 27: 190. 1940).

Quercus dumosa var. macdonaldii (Greene) Jeps. **McDonald oak**

Quercus macdonaldi Greene in Kellogg & Greene, Illus. West Amer. Oaks 25. 1889; 73, pl. 34. 1890.

Quercus dumosa var. *macdonaldii* (Greene) Jeps., Man. Fl. Pl. Calif. 274. 1923.

Quercus dumosa subsp. *macdonaldi* (Greene) A. Camus, Chênes 2: 470. 1939; Atlas 2: 68. 1936.

DERIVATION.—Dedicated to Capt. James M. McDonald, who financed the publication of Kellogg and Greene's volume, Illustrations of West American Oaks.

RANGE.—Santa Cruz, Santa Rosa, and Santa Catalina Islands off coast of southern California.

Quercus dunni Kellogg, see **Q. chrysolepis var. palmeri** (Engelm.) Sarg.

Quercus durandii Buckl. **Durand oak**

HYBRID.—*Quercus* ×*macnabiana* Sudw. (*Q. durandii* × *stellata*).

Quercus durandii var. durandii **Durand oak (typical)**

?*Quercus sinuata* Walt., Fl. Carol. 235. 1788; *nom. dubium.*

†*Quercus durandii* Buckl., Acad. Nat. Sci. Phila. Proc. [v. 12] 1860: 445. 1860.

†*Quercus austrina* Small, Fl. Southeast. U. S. 353, 1329. 1903.

Quercus durandii var. *austrina* (Small) Palmer, Amer. Midland Nat. 33: 518, fig. 2. 1945.

DERIVATION.—Named in honor of Elias Magloire Durand (1794–1873), American botanist.

OTHER COMMON NAMES.—bluff oak, †bastard white oak, †Durand white oak, white oak.

RANGE.—Gulf Coastal Plain from southeastern South Carolina to central Florida, west to southwestern Arkansas, northwestern Louisiana, and central and southern Texas.

REFERENCE.—Palmer, Ernest J. Quercus durandii and its allies. Amer. Midland Nat. 33: 514–519, illus. 1945.

Quercus durandii var. breviloba (Torr.) Palmer **Bigelow oak**

Quercus obtusifolia var.? *breviloba* Torr., U. S. Mex. Bound. Surv. Bot. 206. 1859.

†*Quercus annulata* Buckl., Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 445. 1860. Not *Q. annulata* J. E. Smith in Rees, Cycl. 29: *Quercus* No. 22. 1814(?). Not *Q. annulata* Korthals, Verhand. Nederland. Overz. Bezitt. Bot. 213. 1839–42 [1841?].

Quercus brevilobata Sarg., Gard. and Forest 8: 93. 1895.

Quercus breviloba (Torr.) Sarg., Silva No. Amer. 8: 71, pl. 384. 1895.

Quercus breviloba subsp. *pseudocrispata* A. Camus, Chênes 2: 680. 1939; Atlas 2: pl. 215, figs. 9–11. 1936.

Quercus sinuata var. *breviloba* (Torr.) C. H. Muller in Johnst., Arnold Arboretum Jour. 25: 439. 1944.

Quercus durandii var. *breviloba* (Torr.) Palmer, Amer. Midland Nat. 33: 516, fig. 3. 1945.

DERIVATION.—Short-lobed, referring to the leaves.

OTHER COMMON NAMES.—scrub oak, †shin oak, white oak.

RANGE.—Southern Oklahoma (Arbuckle Mountains) and from central Texas (Edwards Plateau) to Trans-Pecos Texas, south to northeastern Mexico (Coahuila to Tamaulipas).

Quercus durata Jeps., see note under **Q. dumosa** Nutt.

Quercus eastwoodiae Rydb., see **Q. gambelii** Nutt.

Quercus ×egglestonii Trel. **Eggleston oak**

Quercus imbricaria × *shumardii*

Quercus ×egglestoni Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. imbricaria*? × *shumardii*.

Quercus ×shirlingii Bush ex Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 521. 1935; as *Q. imbricaria* × *shumardii* var. *schneckii*.

DERIVATION.—Named for its discoverer, Willard Webster Eggleston (1863–1935), botanist of the United States Department of Agriculture.

RANGE.—Kentucky and Missouri.

***Quercus ellipsoidalis** E. J. Hill **northern pin oak**

†*Quercus ellipsoidalis* E. J. Hill, Bot. Gaz. 27: 204, pls. 2, 3. 1899.

Quercus ellipsoidalis var. *coccinioides* Farwell, Amer. Midland Nat. 12: 120. 1930.

Quercus ellipsoidalis var. *kaposianensis* J. W. Moore, Rhodora 52: 56. 1950.

DERIVATION.—Ellipsoidal, referring to the shape of the acorns.

OTHER COMMON NAMES.—black oak, †jack oak, Hill's oak.

RANGE.—Michigan, Wisconsin, Minnesota, southern Manitoba, and southeastern North Dakota, south to Iowa, northern Missouri, northern Illinois, and northern Indiana.

REFERENCE.—Wadmond, S. C. The Quercus ellipsoidalis—Quercus coccinea complex. Wis. Acad. Sci. Arts Let. Trans. 28: 197–203, illus. 1933.

HYBRID.—*Quercus* ×*palaeolithicola* Trel. (*Q. ellipsoidalis* × *velutina*).

Quercus elongata Willd., see **Q. falcata** Michx.

***Quercus emoryi** Torr. **†Emory oak**

†*Quercus emoryi* Torr. in Emory, Notes Mil. Reconn. Ft. Leav. Calif. 151, pl. 9. 1848.

DERIVATION.—Named for its discoverer, Lt. Col. William Hemsley Emory (1811–87), leader of two military and scientific expeditions in the Southwest, and a Major General in the Civil War.

OTHER COMMON NAMES.—bellota, black oak, blackjack oak, roble negro.

RANGE.—Trans-Pecos Texas to southwestern New Mexico and central Arizona, and south to northern Mexico (Sonora and Chihuahua).

HYBRIDS.—*Quercus* ×*robusta* C. H. Muller (*Q. emoryi* × *gravesii*); *Q.* ×*tharpii* C. H. Muller (*Q. emoryi* × *graciliformis*).

Quercus endemica C. H. Muller, see note under **Q. arizonica** Sarg.

Quercus engelmannii Greene **Engelmann oak**

†*Quercus engelmanni* Greene in Kellogg & Greene, Illus. West Amer. Oaks 33, pl. 9, fig. 3, pl. 15, figs. 2, 3, pl. 17. 1889.

Quercus dumosa var. *elegantula* (Greene) Jeps., Man. Fl. Pl. Calif. 274. 1923.

DERIVATION.—Named in memory of George Engelmann (1809–84), American physician and botanist of German birth, who studied this species and who monographed the American oaks and other groups.

OTHER COMMON NAMES.—†evergreen white oak, mesa oak.

RANGE.—Southwestern California (Los Angeles County to San Diego County) and northern Lower California, Mexico.

Quercus grandidentata Ewan (Torrey Bot. Club Bul. 64: 512. 1937) was described after publication of the 1927 Check List as a local species of Los Angeles County, Calif., becoming a small tree to 20 feet high. Apparently it is closely related to *Q. engelmannii* and may be a hybrid between that species and *Q. dumosa*. The name must be rejected as a later homonym of the fossil, *Q. grandidentata* Unger (Gen. Spec. Pl. Foss. 401. 1850; fossil, Miocene, Galicia), as shown by Little (Wash. Acad. Sci. Jour. 33: 132. 1943).

Quercus ×**eplingii** C. H. Muller **Epling oak**

Quercus douglasii × *garryana*

Quercus ×*eplingi* C. H. Muller, Amer. Midland Nat. 19: 585. 1938; as *Q. garryana* × *douglasii*.

DERIVATION.—Named for Carl Epling, botanist of California.

RANGE.—California (Lake County).

Quercus ×**exacta** Trel. **shinglepin oak**

Quercus imbricaria × *palustris*

Quercus imbricaria × *palustris* A. Braun, Gesell. f. Naturf. Freunde Berl. Sitzber. 1870: 82. 1871.

Quercus ×*exacta* Trel., Amer. Phil. Soc. Proc. 56: 49. 1917; as *Q. imbricaria* × *palustris; nomen nudum.*

†*Quercus* ×*exacta* Trel., Natl. Acad. Sci. Mem. 20: 14. 1924; as *Q. imbricaria* × *palustris.*

DERIVATION.—Exact, precise, or uniform, referring to the uniform, spreading teeth.

RANGE.—Pennsylvania, Indiana, Illinois, and Missouri.

***Quercus falcata** Michx. **†southern red oak**

REFERENCES.—See **Quercus rubra** L.

Some authors since 1915, including the 1927 Check List, adopted for southern red oak the name *Quercus rubra,* which is restored here for northern red oak, following Fernald (Gray's Man. Bot. Ed. 8, 546, 548. 1950).

HYBRIDS.—*Q.* ×*anceps* Palmer (*Q. falcata* × *imbricaria*); *Q.* ×*beaumontiana* Sarg. (*Q. falcata* × *laurifolia*); *Q.* ×*blufftonensis* Trel. (*Q. falcata* × *laevis*); *Q.* ×*garlandensis* Palmer (*Q. falcata* × *nigra*); *Q.* ×*joorii* Trel. (*Q. falcata* × *shumardii*); *Q.* ×*ludoviciana* Sarg. (*Q. falcata* × *phellos*); *Q.* ×*subintegra* Trel. (*Q. falcata* × *incana*); *Q.* ×*willdenowiana* (Dippel) Zabel (*Q. falcata* × *velutina*).

Quercus falcata var. falcata **southern red oak (typical)**

†*Quercus rubra* L., Sp. Pl. 996. 1753; in part.

Quercus nigra var. *digitata* Marsh., Arbustr. Amer. 121. 1785.

Quercus falcata Michx., Hist. Chênes Amér. Sept., *Quercus* No. 16, pl. 28. 1801.

Quercus triloba Michx., Hist. Chênes Amér. Sept., *Quercus* No. 14, pl. 26. 1801.

Quercus elongata Willd. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 3: 400. 1801.

Quercus falcata β triloba (Michx.) Nutt., Gen. No. Amer. Pl. 2: 214. 1818.

Quercus digitata (Marsh.) Sudw., Gard. and Forest 5: 99. 1892; *nomen provisorium*? U. S. Dept. Agr. Rpt. Secy. Agr. 1892: 328. 1893.

†*Quercus rubra* [var.] *triloba* (Michx.) Ashe, Soc. Amer. Foresters Proc. 11: 90. 1916; *nomen provisorium.*

Quercus rubra var. *triloba* (Michx.) Ashe ex Sarg., Bot. Gaz. 65: 427. 1918.

DERIVATION.—sickle-shaped.

OTHER COMMON NAMES.—red oak (lumber), Spanish oak, water oak.

RANGE.—Long Island (New York), New Jersey, and southeastern Pennsylvania to West Virginia, southern Ohio, southern Illinois, southern Missouri, and eastern Oklahoma, south to eastern Texas, northern Florida, and Georgia.

Quercus falcata var. pagodaefolia Ell. **cherrybark oak**

Quercus falcata var. *pagodaefolia* Ell., Sketch Bot. S.-C. Ga. 2: 605. 1824.

Quercus pagoda Raf., Alsogr. Amer. 23. 1838.
Quercus pagodaefolia (Ell.) Ashe, Bot. Gaz. 24: 375. 1897.
Quercus rubra [var.] *pagodaefolia* (Ell.) Ashe, Soc. Amer. Foresters Proc. 11: 90. 1916; *nomen provisorium.*
†*Quercus rubra* var. *leucophylla* Ashe, Charleston Mus. Bul. 13: 25. 1917.
Quercus leucophylla (Ashe) Ashe, Torreya 18: 73. 1918.
†*Quercus rubra* var. *pagodaefolia* (Ell.) Ashe ex Sarg., Bot. Gaz. 65: 427. 1918.
Quercus pagoda var. *leucophylla* (Ashe) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 136. 1918; *nomen provisorium.*
Quercus pagoda leucophylla (Ashe) Ashe ex Trel., Natl. Acad. Sci. Mem. 20: 202. 1924.
Quercus falcata var. *leucophylla* (Ashe) Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 518. 1935; Rhodora 40: 132. 1938.

DERIVATION.—Leaves like a pagoda.

OTHER COMMON NAMES.—bottomland red oak, Elliott oak, red oak, †swamp red oak, swamp Spanish oak.

RANGE.—Coastal Plain from New Jersey and Maryland south to northern Florida and eastern Texas, and north in Mississippi Valley to southeastern Missouri and southern Indiana.

This variety, distinguished as cherrybark oak, was included in the list of important bottom-land hardwoods of the lower Mississippi Valley by John A. Putnam (Management of bottomland hardwoods. U. S. Dept. Agr. Forest Serv., South. Forest Expt. Sta. Occas. Pap. 116, 60 pp. 1951).

Quercus ×*fallax* Palmer, see **Q. ×deamii Trel.**

Quercus ×faxonii Trel. **Faxon oak**

Quercus alba × *prinoides*
Quercus ×*faxoni* Trel., Amer. Phil. Soc. Proc. 56: 49. 1917; as *Q. alba* × *prinoides; nomen nudum.*
†*Quercus* ×*faxoni* Trel., Nat. Acad. Sci. Mem. 20: 14. 1924; as *Q. alba* × *prinoides.*

DERIVATION.—Named for Charles Edward Faxon (1864–1918), American botanical artist, who illustrated Sargent's Silva of North America.

RANGE.—Massachusetts, New York, and Michigan.

Quercus fendleri Liebm., see **Q. undulata Torr.**

Quercus ×fernaldii Trel. **Fernald oak**

Quercus ilicifolia × *rubra*
Quercus ×*fernaldi* Trel., Natl. Acad. Sci. Mem. 20: 15. 1924; as *Q. ilicifolia* × *maxima.*

DERIVATION.—Named for its discoverer, Merritt Lyndon Fernald (1873-1950), botanist of Harvard University, who prepared two revisions of Gray's Manual of Botany.

RANGE.—Massachusetts and Virginia.

Quercus ×fernowii Trel. **Fernow oak**

Quercus alba × *stellata*

Quercus ×*fernowi* Trel., Amer. Phil. Soc. Proc. 56: 49. 1917; as *Q. alba* × *stellata; nomen nudum.*

†*Quercus* ×*fernowi* Trel., Natl. Acad. Sci. Mem. 20: 15. 1924; as *Q. alba* × *stellata.*

DERIVATION.—Named for Bernhard Eduard Fernow (1851–1928), pioneer American forester of German birth and first chief of the Division of Forestry, United States Department of Agriculture.

RANGE.—Recorded from New Jersey, Delaware, Maryland, District of Columbia, Virginia, Indiana, Illinois, Missouri, eastern Texas, and Alabama.

Quercus ×filialis Little ———

Quercus phellos × *velutina*

Quercus ×*inaequalis* Palm. & Steyerm., Mo. Bot. Gard. Ann. 22: 521. 1935; as *Q. phellos* × *velutina.* Not *Q. inaequalis* Watelet, Descr. Pl. Foss. Bass. Paris 136, pl. 35, fig. 8. 1866 (fossil, Eocene, France).

Quercus ×*filialis* Little, Wash. Acad. Sci. Jour. 33: 10. 1943; as *Q. phellos* × *velutina.*

DERIVATION.—From the filial generation of a cross.

RANGE.—New Jersey, Delaware, Missouri, Arkansas, and Louisiana.

Quercus fusiformis Small, see **Q. virginiana** var. **fusiformis** (Small) Sarg.

***Quercus gambelii** Nutt. **Gambel oak**

Quercus gambelii Nutt., Acad. Nat. Sci. Phila. Jour., Ser. 2, 1: 179. 1848.

Quercus alba β? *gunnisoni* Torr. & Gray, U. S. Rpts. Surv. Explor. Miss. Pacif. 2(1): 130. 1857.

Quercus stellata Wangenh. δ *utahensis* A. DC., Prodr. 16(2): 22. 1864.

Quercus douglasii Hook. & Arn. γ *novomexicana* A. DC., Prodr. 16(2): 24. 1864.

Quercus eastwoodiae Rydb., N. Y. Bot. Gard. Bul. 2: 210, pl. 28, fig. 2. 1901.

Quercus gunnisonii (Torr. & Gray) Rydb., N. Y. Bot. Gard. Bul. 2: 206, pl. 26, fig. 3. 1901.

†*Quercus leptophylla* Rydb., N. Y. Bot. Gard. Bul. 2: 205, pl. 26, figs. 1, 2. 1901.

Quercus nitescens Rydb., N. Y. Bot. Gard. Bul. 2: 207, pl. 27, fig. 1. 1901.

Quercus novomexicana (A. DC.) Rydb., N. Y. Bot. Gard. Bul. 2: 208, pl. 27, fig. 2. 1901; as "*novo-mexicana.*"

Quercus submollis Rydb., N. Y. Bot. Gard. Bul. 2: 202, pl. 25, fig. 1. 1901.

†*Quercus utahensis* (A. DC.) Rydb., N. Y. Bot. Gard. Bul. 2: 202, pl. 25, fig. 2. 1901.

Quercus vreelandii Rydb., N. Y. Bot. Gard. Bul. 2: 204, pl. 25, fig. 3. 1901.

Quercus gambellii utahensis (A. DC.) Garrett, Spring Fl. Wasatch Reg. Ed. 2, 20. 1912.

Quercus confusa Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 16: 116. 1913.

†*Quercus utahensis* var. *submollis* (Rydb.) Sarg., Bot. Gaz. 65: 442. 1918.

Quercus utahensis var. *mollis* Sarg., Man. Trees No. Amer. Ed. 2, 297. 1922.

Quercus novomexicana var. *andrewsii* Trel., Natl. Acad. Sci. Mem. 20: 99, pl. 164. 1924.

Quercus gambelii subsp. *vreelandii* (Rydb.) A. Camus, Chênes 2: 708. 1939.

Quercus novomexicana var. *nitescens* (Rydb.) A. Camus, Chênes 2: 704. 1939; Atlas 2: 104, pl. 208, figs. 23–25. 1936.

Quercus pauciloba Rydb. subsp. *confusa* (Woot. & Standl.) A. Camus, Chênes 2: 676. 1939; Atlas 2: 102, pl. 207, figs. 3–5. 1936.

Quercus utahensis subsp. *submollis* (Rydb.) A. Camus, Chênes 2: 700. 1939; Atlas 2: 103, pl. 208, figs. 1–5. 1936.

DERIVATION.—Named for its discoverer, William Gambel 1821?–49), American naturalist who made an important collection of plants and birds in the southern Rocky Mountains in 1844.

OTHER COMMON NAMES.—†Rocky Mountain white oak, Utah white oak, white oak.

RANGE.—Mountains of Colorado, southwestern Wyoming, Utah, and southern Nevada, south to Arizona, New Mexico, Trans-Pecos Texas, and extreme northwestern Oklahoma (Cimarron County). Also in northern Mexico (Chihuahua and Coahuila).

Quercus ×ganderi C. B. Wolf **Gander oak**

Quercus agrifolia × *kelloggii*

Quercus ×ganderi C. B. Wolf, Calif. Acad. Sci. Proc., Ser. 4, 25: 178, pl. 18, pl. 19, figs. 19–30. 1944; as *Q. kelloggii* × *agrifolia* var. *oxyadenia*.

Quercus ×chasei McMinn, Babcock, & Righter, Madroño 10: 54, fig. 1. 1949; as *Q. agrifolia* × *kelloggii*.

DERIVATION.—Named for Frank F. Gander, botanist of San Diego, Calif., who discovered this hybrid in 1935.

RANGE.—Central and southern California (Santa Clara and San Diego Counties).

Since one binomial should be sufficient to include intermediate forms between all varieties of two parent species, *Q. ×chasei* is united here as a synonym.

Quercus ×garlandensis Palmer **Garland oak**

Quercus falcata × *nigra*

Quercus ×garlandensis Palmer, Arnold Arboretum Jour. 7: 119. 1926; as *Q. nigra* × *rubra* [*falcata*].

DERIVATION.—Named for Garland County, Arkansas, where it was discovered.

RANGE.—Virginia, Alabama, Arkansas, and Louisiana.

***Quercus garryana** Dougl. **†Oregon white oak**

†*Quercus garryana* Dougl. ex Hook., Fl. Bor.-Amer. 2: 159. 1839.

DERIVATION.—Named in honor of Nicholas Garry, secretary of the Hudson Bay Company, who aided David Douglas in his botanical explorations in the Northwest.

OTHER COMMON NAMES.—Garry oak, Oregon oak, post oak, white oak.

RANGE.—Southwestern British Columbia including Vancouver Island, western Washington, western Oregon, and northwestern California south to Santa Cruz Mountains. The only native oak in Washington and British Columbia.

HYBRID.—*Quercus* ×*eplingii* C. H. Muller (*Q. Douglasii* × *garryana*).

Quercus geminata Small, see **Q. virginiana var. maritima** (Michx.) Sarg.

Quercus georgiana M. A. Curtis **†Georgia oak**

†*Quercus georgiana* M. A. Curtis, Amer. Jour. Sci. and Arts, Ser. 2, 7: 408. 1849.

DERIVATION.—Named for Georgia, to which it is restricted.

RANGE.—Northern Georgia, rare and local.

HYBRID.—*Quercus* ×*smallii* Trel. (*Q. georgiana* × *marilandica*).

Quercus ×giffordii Trel. **Gifford oak**

Quercus ilicifolia × *phellos*

Quercus ×*giffordi* Trel., Amer. Phil. Soc. Proc. 56: 49. 1917; as *Q. ilicifolia* × *phellos; nomen nudum.*

†*Quercus* ×*giffordi* Trel., Natl. Acad. Sci. Mem. 20: 15. 1924; as *Q. ilicifolia* × *phellos.*

DERIVATION.—Named for one of its discoverers, John Clayton Gifford (1870–1949), American forester.

RANGE.—New Jersey and Delaware.

Quercus graciliformis C. H. Muller **Chisos oak**

Quercus graciliformis C. H. Muller, Torreya 34: 120. 1934; as "C. H. Mueller."

Quercus graciliformis var. *parvilobata* C. H. Muller, Torreya 34: 122. 1934.

DERIVATION.—Slender formed, from the long slender flexible branches.

RANGE.—Known only from several canyons of Chisos Mountains, Brewster County, Trans-Pecos Texas.

A small tree 20 to 26 feet high described after publication of the 1927 Check List. Closely related to *Quercus canbyi* Trel., of northeastern Mexico (Nuevo León) and to *Q. gravesii* Sudw., to which it was formerly referred.

HYBRID.—*Quercus* ×*tharpii* C. H. Muller (*Q. emoryi* × *graciliformis*).

Quercus grandidentata Ewan, see note under **Q. engelmannii** Greene

Quercus gravesii Sudw. **†Graves oak**

Quercus coccinea var. ? *microcarpa* Torr., U. S. Mex. Bound. Surv. Bot. 2: 206. 1859.

Quercus texana Buckl. var. *chesosensis* Sarg., Bot. Gaz. 65: 423. 1918.

†*Quercus texana* var. *stellipila* Sarg., Bot. Gaz. 65: 424. 1918; as "*stellapila.*"

†*Quercus gravesii* Sudw., U. S. Dept. Agr. Misc. Cir. 92: 86. 1927.

Quercus stellipila (Sarg.) Parks in Cory, Rhodora 38: 405. 1936.

Quercus chesosensis (Sarg.) C. H. Muller, Amer. Midland Nat. 18: 850. 1937.

DERIVATION.—Named in honor of Henry Solon Graves (1871–1950), second chief of the United States Forest Service and afterwards dean of Yale University School of Forestry.

RANGE.—Mountains of Trans-Pecos Texas and northeastern Mexico (Coahuila).

HYBRIDS.—*Quercus* ×*inconstans* Palmer (*Q. gravesii* × *hypoleucoides*); *Q.* ×*robusta* C. H. Muller (*Q. emoryi* × *gravesii*).

Quercus tardifolia C. H. Muller (Torrey Bot. Club Bul. 63: 154. 1936), found only in Chisos Mountains, Brewster County, Trans-Pecos Texas, where it is very rare, is related to *Q. gravesii*, but its mature fruit is unknown.

Quercus grisea Liebm. **gray oak**

Quercus grisea Liebm., Danske Vidensk. Selsk. Forhandl. Overs. 1854: 171. 1854.

DERIVATION.—Gray.

RANGE.—Trans-Pecos Texas to central New Mexico and northern Arizona, south to northern Mexico (Chihuahua and Coahuila).

A shrub or small tree 20 to 23 feet high but sometimes reaching a height of 65 feet.

HYBRID.—*Quercus* ×*organensis* Trel. (*Q. arizonica* × *grisea*).

Quercus ×**guadalupensis** Sarg. **Guadalupe oak**

Quercus macrocarpa × *stellata*

†*Quercus* ×*guadalupensis* Sarg., Bot. Gaz. 65: 454. 1918; as *Q. macrocarpa* × *stellata.*

DERIVATION.—Named for Guadalupe River, where it was discovered.

Known only from a single tree. Regarded as *Quercus stellata* by Muller (Tex. Res. Found. Contrib. 1: 31, 47. 1951).

Quercus gunnisonii (Torr. & Gray) Rydb., see **Q. gambelii** Nutt.

Quercus ×**harbisonii** Sarg. **Harbison oak**

Quercus stellata × *virginiana*

†*Quercus* ×*harbisonii* Sarg., Bot. Gaz. 65: 458. 1918; as

Quercus stellata var. *margaretta* × *virginiana* var. *geminata.*

DERIVATION.—Named for one of its discoverers, Thomas Grant Harbison (1862–1936), American botanist.

RANGE.—Florida (Jacksonville) and in eastern and central Texas.

Quercus ×hastingsii Sarg. **Hastings oak**

Quercus marilandica × *shumardii*

†*Quercus ×hastingsii* Sarg., Bot. Gaz. 65: 450. 1918; as *Q. marilandica* × *texana.*

DERIVATION.—Named for its discoverer, Stephen Harold Hastings, agronomist of the United States Department of Agriculture.

RANGE.—Central Texas.

Quercus havardii Rydb. **Havard oak**

Quercus havardi Rydb., N. Y. Bot. Gard. Bul. 2: 213, pl. 29, fig. 2. 1901; as *"havardii"* in key.

†*Quercus ×andrewsii* Sarg., Bot. Gaz. 65: 455. 1918; as *Q. macrocarpa* × *undulata.*

DERIVATION.—Named for Valéry Havard (1846–1927), United States Army surgeon of French birth, who collected plants in Texas and other States while stationed at Army posts.

OTHER COMMON NAMES.—shin oak, shinnery oak.

RANGE.—Southern Great Plains of western Oklahoma, western Texas including southern Panhandle, and southeastern New Mexico.

Generally a very low shrub growing in dense masses but also becoming a small tree, according to C. H. Muller (Tex. Res. Found. Contrib. 1: 53. 1951).

Quercus ×hawkinsiae Sudw. **†Hawkins oak**

Quercus rubra × *velutina*

†*Quercus ×hawkinsiae* Sudw., Amer. Forestry 23: 685, figs. 1, 2, 5. 1917; as *"hawkinsi"*; as *Q. borealis* × *velutina.*

Quercus ×porteri Trel., Amer. Phil. Soc. Proc. 56: 51. 1917; as *Q. rubra* (?) × *velutina; nomen nudum.*

†*Quercus ×porteri* Trel., Natl. Acad. Sci. Mem. 20: 16, 195. 1924; as *Q. rubra* × *velutina;* based upon description of supposed hybrid between *Q. velutina* and *Q. rubra* (Sarg., Silva No. Amer. 8: 126. 1895).

DERIVATION.—Named in honor of its discoverer, Mrs. Eugene Hawkins.

OTHER COMMON NAME.—Porter oak.

RANGE.—Recorded from Maine, Massachusetts, New York, Pennsylvania, Ohio, Tennessee, and Missouri.

Quercus hemisphaerica Bartr., see **Q. laurifolia** Michx.

Quercus ×heterophylla Michx. f. **†Bartram oak**

Quercus phellos × *rubra*

†*Quercus heterophylla* Michx. f., Hist. Arbr. Amér. Sept. 2: 87, pl. 16. 1812.

DERIVATION.—Various-leaved.

RANGE.—Recorded from southeastern New York, New Jersey, Pennsylvania, Delaware, District of Columbia, Virginia, Tennessee, Missouri, Arkansas, southeastern Oklahoma, Alabama, and North Carolina.

REFERENCE.—MacDougal, D. T. Hybridization of wild plants. Bot. Gaz. 43: 45–58, illus. 1907.

Quercus ×*hillii* Trel., see **Q. ×schuettei Trel.**

Quercus houstoniana C. H. Muller, see **Q. michauxii** Nutt.

Quercus ×humidicola Palmer **mounds oak**

Quercus bicolor × *lyrata*

Quercus ×*humidicola* Palmer, Arnold Arboretum Jour. 18: 140. 1937; as *Q. bicolor* × *lyrata.*

DERIVATION.—Moisture-dwelling, from its habitat in low woods.

RANGE.—Illinois and Missouri.

Quercus hybrida (Chapm.) Small, see **Q. laurifolia** Michx.

Quercus hypoleuca Engelm., see **Q. hypoleucoides** A. Camus

Quercus hypoleucoides A. Camus **silverleaf oak**

†*Quercus hypoleuca* Engelm., Acad. Sci. St. Louis Trans. 3: 384. 1876. Not *Q. hypoleuca* Miquel, Fl. Ind. Bot. 1(1): 869. 1855. Not *Q. hypoleuca* Gandoger, Fl. Eur. 21: 37. 1890.

Quercus hypoleucoides A. Camus, Paris Mus. d'Hist. Nat. Bul., Sér. 2, 4: 124. 1932.

DERIVATION.—A renaming of the homonym *Quercus hypoleuca.* Like *Q. hypoleuca,* which, in turn means white underneath, referring to the lower leaf surfaces.

OTHER COMMON NAME.—†white leaf oak.

RANGE.—Trans-Pecos Texas, southwestern New Mexico, and southeastern Arizona, and in northern Mexico (Sonora, Coahuila, and Chihuahua).

HYBRID.—*Quercus* ×*inconstans* Palmer (*Q. gravesii* × *hypoleucoides*).

Quercus ilicifolia Wangenh. **†bear oak**

Quercus rubra nana Marsh., Arbustr. Amer. 123. 1785.

†*Quercus ilicifolia* Wangenh., Beytr. Teutsch. Holzger. Forstwiss. Nordamer. Holz. 79, pl. 6, fig. 17. 1787; as "*illicifolia.*"

Quercus nana (Marsh.) Sarg., Gard. and Forest 8: 93. 1895.

DERIVATION.—holly-leaved.

OTHER COMMON NAME.—scrub oak.

RANGE.—Southern Maine to New York, and Pennsylvania, south to West Virginia, western North Carolina, and Virginia.

HYBRIDS.—*Quercus* ×*brittonii* W. T. Davis (*Q. ilicifolia* × *marilandica*); *Q.* ×*fernaldii* Trel. (*Q. ilicifolia* × *rubra*); *Q.* ×*giffordii* Trel. (*Q. ilicifolia* × *phellos*); *Q.* ×*rehderi* Trel. (*Q. ilicifolia* ×*velutina*); *Q.* ×*robbinsii* Trel. (*Q. coccinea* × *ilicifolia*).

Quercus imbricaria Michx. **†shingle oak**

†*Quercus imbricaria* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 9, pls. 15, 16. 1801.

Erythrobalanus imbricaria (Michx.) O. Schwarz, [Berlin] Bot. Gard. u. Mus. Notizbl. 13: 5, fig. 1. 1936; Repert. Spec. Novarum Regni Veg. Sonderbeih. D, 1: 24, fig. 1. 1936. O. Schwarz ex Hill & Salisb., Index Kew. Sup. 10: 88. 1947.

DERIVATION.—Overlapping, referring to the use of the wood by early settlers for shingles, as the common name also indicates.

OTHER COMMON NAME.—laurel oak.

RANGE.—New Jersey to Pennsylvania, southern Michigan, Illinois and Iowa, south to northeastern Kansas, Arkansas, Louisiana, northern Mississippi, Tennessee, and South Carolina. Perhaps introduced in Long Island and Massachusetts.

HYBRIDS.—*Quercus* ×*anceps* Palmer (*Q. falcata* × *imbricaria*); *Q.* ×*egglestonii* Trel. (*Q. imbricaria* × *shumardii*); *Q.* ×*exacta* Trel. (*Q. imbricaria* × *palustris*); *Q.* ×*leana* Nutt. (*Q. imbricaria* × *velutina*); *Q.* ×*runcinata* (A. DC.) Engelm. (*Q. imbricaria* × *rubra*); *Q.* ×*tridentata* (A. DC.) Engelm. (*imbricaria* × *marilandica*).

Quercus incana Bartr. **†bluejack oak**

Quercus phellos β brevifolia Lam., Encycl. Méth. Bot. 1: 722. 1785.

Quercus incana Bartr., Travels No. So. Car. Ga. Fla. 378. 1791.

†*Quercus cinerea* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 8, pl. 14. 1801.

Quercus cinerea β dentato-lobata A. DC., Prodr. 16(2): 73. 1864.

Quercus brevifolia (Lam.) Sarg., Silva No. Amer. 8: 171, pl. 431. 1895.

DERIVATION.—Hoary, referring to the lower leaf surfaces.

OTHER COMMON NAMES.—cinnamon oak, sand jack, shin oak, turkey oak, upland willow oak.

RANGE.—Coastal Plain from southeastern Virginia to southern Florida and eastern and central Texas, north to southeastern Oklahoma.

HYBRIDS.—*Quercus* ×*asheana* Little (*Q. incana* × *laevis*); *Q.* ×*atlantica* Ashe (*Q. incana* × *laurifolia*); *Q.* ×*caduca* Trel. (*Q. incana* × *nigra*); *Q.* ×*cravenensis* Little (*Q. incana* × *marilandica*); *Q.* ×*podophylla* Trel. (*Q. incana* × *velutina*); *Q.* ×*subintegra* Trel. (*Q. incana* × *falcata*).

REFERENCES.—Fernald, M. L. Rhodora 46: 44–45. 1944.

Harper, Francis. Quercus incana Bartram. Bartonia 22: 3. 1943.

Merrill, E. D. In defense of the validity of William Bartram's binomials. Bartonia 23: 10–35. 1945.
Rickett, H. W. Legitimacy of names in Bartram's "Travels." Rhodora 46: 389–391. 1944.

As indicated by the references above (except H. W. Rickett), *Quercus cinerea* Michx. has been replaced by *Q. incana* Bartr., an older name for bluejack oak. However, some authorities have not accepted Bartram's controversial names, which were published irregularly and briefly in a popular book of travels.

Quercus ×*incomita* Palmer, see **Q. ×bushii** Sarg.

Quercus ×inconstans Palmer **Livermore oak**

Quercus gravesii × *hypoleucoides*
Quercus ×*inconstans* Palmer, Arnold Arboretum Jour. 10: 34. 1929; as *Quercus emoryi* × *hypoleucoides.*
Quercus livermorensis C. H. Muller, Amer. Midland Nat. 19: 586. 1938.

DERIVATION.—Inconstant.

RANGE.—Davis Mountains, Jeff Davis County, Trans-Pecos Texas.

A small tree named both as a hybrid and species and referred to the hybrid *Quercus gravesii* × *hypoleucoides* by C. H. Muller (Tex. Res. Found Contrib. 1: 82, pls. 64, 65. 1929).

Quercus inopina Ashe, see **Q. myrtifolia** Willd.

Quercus ×jackiana Schneid. **Jacks oak**

Quercus alba × *bicolor*
†*Quercus* ×*jackiana* Schneid., Illus. Handb. Laubholzk. 1: 202. 1904; as *Q. platanoides* × *alba.*

DERIVATION.—Named for John George Jack (1861–1949), American dendrologist of Canadian birth, who discovered it in 1894.

RANGE.—Southern Quebec, Massachusetts, Rhode Island, New York, Indiana, and Illinois.

Quercus ×jolonensis Sarg. **Jolon oak**

Quercus douglasii × *lobata*
†*Quercus* ×*jolonensis* Sarg., Bot. Gaz. 65: 456. 1918; as *Q. douglasii* × *lobata.*

DERIVATION.—From Jolon, Monterey County, Calif., where it was discovered.

RANGE.—California (Monterey County).

Quercus ×joorii Trel. **Joor oak**

Quercus falcata × *shumardii*
Quercus ×*joorii* Trel., Natl. Acad. Sci. Mem. 20: 15. 1924; as *Q. rubra* [*falcata*] × *shumardii.*

DERIVATION.—Named for Joseph F. Joor (1848–92), who collected it in 1884.

RANGE.—Texas (Galveston).

C. H. Muller (Tex. Res. Found. Contrib. 1: 103. 1951) regarded *Q. joorii* as a synonym of *Q. falcata*.

***Quercus kelloggii** Newb. **†California black oak**

Quercus tinctoria Bart. var. *californica* Torr., U. S. Rpts. Explor. Surv. Miss. 4(1): 138. 1856.

†*Quercus kelloggii* Newb., U. S. Rpts. Expl. Surv. Miss. Pacif. 6(3): 28, 89, fig. 6. 1857.

Quercus californica (Torr.) Cooper, Smithsn. Inst. Rpt. 1858: 261. 1859.

DERIVATION.—In honor of Albert Kellogg (1813–87), physician and botanist of California, who later prepared drawings for a book entitled Illustrations of West American Oaks.

OTHER COMMON NAMES.—black oak, Kellogg oak.

RANGE.—Western Oregon and California through Sierra Nevada and Coast Ranges to San Diego County.

HYBRIDS.—*Quercus* ×*ganderi* C. B. Wolf (*Q. agrifolia* × *kelloggii*); *Q.* ×*moreha* Kellogg (*Q. kelloggii* × *wislizenii*).

Quercus laceyi Small **†Lacey oak**

†*Quercus laceyi* Small, Torrey Bot. Club Bul. 28: 358. 1901.

Quercus breviloba subsp. *laceyi* (Small) A. Camus, Chênes 2: 680. 1939; Atlas 2: pl. 215, figs. 14–17. 1936.

DERIVATION.—Named for Howard Lacey, who first collected it on his ranch near Kerrville, Tex.

RANGE.—Edwards Plateau, Texas, south to northeastern Mexico (Coahuila to Tamaulipas and San Luis Potosí).

***Quercus laevis** Walt. **†turkey oak**

Quercus laevis Walt., Fl. Carol. 234. 1788.

†*Quercus catesbaei* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 17, pls. 29, 30. 1801.

DERIVATION.—Smooth, referring to the leaves (which, however, are not wholly glabrous).

OTHER COMMON NAMES.—Catesby oak, scrub oak.

RANGE.—Coastal Plain from southeastern Virginia to central Florida and west to southeastern Louisiana.

HYBRIDS.—*Quercus* ×*asheana* Little (*Q. incana* × *laevis*); *Q.* ×*blufftonensis* Trel. (*Q. falcata* × *laevis*); *Q.* ×*mellichampii* Trel. (*Q. laevis* × *laurifolia*); *Q.* ×*walteriana* Ashe (*Q. laevis* × *nigra*).

***Quercus laurifolia** Michx. **†laurel oak**

Quercus hemisphaerica Bartr., Travels No. So. Car. Ga. Fla. 309, 320, etc. 1791; *nom. nud.*

†*Quercus laurifolia* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 10, pl. 17. 1801.

†*Quercus laurifolia* [var.] *hybrida* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 10, pl. 18. 1801.

Quercus hemisphaerica Bartr. ex Willd., Sp. Pl. 4(1): 443. 1805.

Quercus laurifolia β obtusa Willd., Sp. Pl. 4(1): 428. 1805.
Quercus rhombifolia Riddell, New Orleans Med. and Surg. Jour. 9: 614. 1853.
Quercus aquatica Catesb. var. *hybrida* Chapm., Fl. South. U. S. 421. 1860.
Quercus hybrida (Chapm.) Small, Fl. Southeast. U. S. 350, 1329. 1903. Not *Q. hybrida* Brotero, Fl. Lusit. 2: 31. 1804. Not *Q. hybrida* Bechst., Forstbot. Ed. 5, 211. 1829 (or 1816 Ed.?; neither seen). Not *Q. hybrida* Houba, Chênes Amér. Sept. Belg. 310, illus. 1887.
Quercus hybrida (Michx.) Ashe, Soc. Amer. Foresters Proc. 11: 88. 1916.
†*Quercus obtusa* (Willd.) Ashe, Torreya 18: 72. 1918 (May 8).
†*Quercus laurifolia* var. *tridentata* Sarg., Bot. Gaz. 65: 433. 1918.
Quercus rhombica Sarg., Bot. Gaz. 65: 430. 1918 (May 15).
Quercus arenicola Ashe, Rhodora 24: 17. 1922.
Quercus arenicola var. *integra* Ashe, Rhodora 24: 78. 1922.
Quercus obtusata Ashe ex Sarg., Man. Trees No. Amer. Ed. 2, 261, fig. 239. 1922. Not *Q. obtusata* Humb. & Bonpl., Pl. Aequinoct. 2: 26, pl. 76. 1809.
Quercus laurifolia var. *rhombica* (Sarg.) Trel., Natl. Acad. Sci. Mem. 20: 157. 1924.

DERIVATION.—Laurel-leaved.

OTHER COMMON NAMES.—Darlington oak, obtusa oak, diamond-leaf oak, swamp laurel oak, laurel-leaved oak, †water oak.

RANGE.—Coastal Plain from Cape May, N. J., south to central Florida, west to Louisiana and eastern and southeastern Texas.

REFERENCES.—Fernald, M. L. The identity of Quercus laurifolia (plates 1031–1036). Rhodora 48: 137–145, illus. 1946.

Muller, Cornelius H. Tex. Res. Found. Contrib. 1: 85–88, pls. 69–71. 1951.

HYBRIDS.—*Quercus* ×*atlantica* Ashe (*Q. incana* × *laurifolia*); *Q.* ×*beaumontiana* Sarg. (*Q. falcata* × *laurifolia*); *Q.* ×*mellichampii* Trel. (*Q. laevis* × *laurifolia*).

In the 1927 Check List *Quercus obtusa* was accepted as a distinct species, though Trelease (Natl. Acad. Sci. Mem. 20: 157. 1924) had regarded it as a variety. Fernald (Gray's Man. Bot. Ed. 8, 549–550, figs. 931, 935. 1950) used *Q. laurifolia* Michx. in place of *Q. obtusa* and adopted *Q. hemisphaerica* Bartr. for *Q. laurifolia*, as explained in the reference cited above. However, Palmer (Arnold Arboretum Jour. 29: 1–48. 1948) did not accept those changes. Muller's union of all these variations under a single species, *Q. laurifolia* is a simplified solution to the confused nomenclature and is adopted here.

Quercus ×leana Nutt. **†Lea oak**

Quercus imbricaria × *velutina*
†*Quercus leana* Nutt., No. Amer. Sylva 1: 13*, pl. 5 (bis). 1842.

DERIVATION.—Named for its discoverer, Thomas Gibson Lea (1785–1844).

RANGE.—Recorded from Pennsylvania, Maryland, District of

Columbia, Ohio, Michigan, Indiana, Illinois, Iowa, Missouri, and North Carolina.

Quercus leiodermis Ashe, see **Q. velutina** Lam.

Quercus leptophylla Rydb., see **Q. gambelii** Nutt.

Quercus leucophylla **(Ashe) Ashe, see Q. falcata var. pagodaefolia** Ell.

Quercus livermorensis C. H. Muller, see **Q.** ×**inconstans** Palmer

***Quercus lobata** Née **California white oak**

†*Quercus lobata* Née, An. Cien. Nat. [Madrid] 3: 277. 1801.
Quercus lobata var. *turbinata* Jeps., Fl. Calif. 1: 354. 1909.
Quercus lobata var. *walteri* Jeps., Fl. Calif. 1: 353, fig. 64. 1909.
Quercus lobata var. *argillarum* (Jeps.) Jeps., Man. Fl. Pl. Calif. 272. 1923.
Quercus lobata var. *insperata* (Jeps.) Jeps., Man. Fl. Pl. Calif. 272. 1923.

DERIVATION.—Lobed, referring to the leaves.

OTHER COMMON NAMES.—roble, valley oak, †valley white oak, water oak, weeping oak, white oak.

RANGE.—Northern to southern California, in valleys and foothills.

HYBRIDS.—*Quercus* ×*jolonensis* Sarg. (*Q. douglasii* × *lobata*); *Q.* ×*townei* Palmer (*Q. dumosa* × *lobata*).

Quercus ×**ludoviciana Sarg. St. Landry oak**

Quercus falcata × *phellos*
Quercus ×*falcata* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 94. 1894. Not *Q. falcata* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 16, pl. 28. 1801.
†*Quercus* ×*ludoviciana* Sarg., Trees and Shrubs 2: 223. 1913; as *Q. pagodaefolia* × *phellos*.
†*Quercus* ×*subfalcata* Trel., Amer. Phil. Soc. Proc. 56: 52. 1917; as *Q. cuneata* × *phellos*. Not *Q. subfalcata* Friedrich, Geol. Specialk. Preuss. Abh. 4(3): 257, pl. 9, figs. 4, 5. 1883 (fossil, Oligocene, Saxony).
Quercus ×*ludoviciana* var. *subfalcata* [(Trel.)] Rehd., Arnold Arboretum Jour. 7: 240. 1926; as *Q. phellos* × *rubra*.

DERIVATION.—Of Louisiana, where it was discovered.

RANGE.—Recorded from Virginia, Kentucky, Missouri, Arkansas, southeastern Texas, Louisiana, Mississippi, Alabama, and Georgia.

REFERENCE.—Little, Elbert L., Jr. Wash. Acad. Sci. Jour. 33:132. 1943.

The binomial *Quercus* ×*ludoviciana* Sarg., originally was proposed for the hybrid between *Q. falcata* var. *pagodaefolia* and *Q. phellos* but may be used also to include the cross, *Q. falcata* × *phellos*, designated in the 1927 Check List as ×*Q. subfalcata* Trel.

†*Quercus* ×*subfalcata* var. *microcarpa* Sarg. (Bot. Gaz. 65: 454. 1918; as *Q. phellos* × *rubra?*), later changed to *Q.* ×*ludoviciana* var. *microcarpa*

(Dippel) Rehd. (Arnold Arboretum Jour. 7: 239. 1926) is omitted here. This variation is known only in cultivation and according to Palmer (Arnold Arboretum Jour. 29: 33. 1948) is of unknown origin and of very doubtful relationship. If properly placed here, then this varietal name is unnecessary to designate a variation of a hybrid.

***Quercus lyrata** Walt. **†overcup oak**

†*Quercus lyrata* Walt., Fl. Carol. 235. 1788.

DERIVATION.—Lyre-shaped, referring to the leaves.

OTHER COMMON NAMES.—swamp post oak, swamp white oak, water white oak, white oak (lumber).

RANGE.—Coastal Plain from southern New Jersey and Maryland, south to Georgia, northwestern Florida, and eastern Texas, and north in Mississippi Valley to southeastern Oklahoma, southeastern Missouri, southern Illinois, and southwestern Indiana.

HYBRIDS.—*Quercus* ×*comptoniae* Sarg. (*Q. lyrata* × *virginiana*); *Q.* ×*humidicola* Palmer (*Q. bicolor* × *lyrata*); *Q.* ×*sterrettii* Trel. (*Q. lyrata* × *stellata*).

Quercus macdonaldi Greene, see **Q. dumosa var. macdonaldii** (Greene) Jeps.

Quercus ×macnabiana Sudw. **McNab oak**

Quercus durandii × *stellata*

Quercus durandii × *stellata* Palmer, Arnold Arboretum Jour. 4: 15. 1923.

†*Quercus* ×*macnabiana* Sudw., U. S. Dept. Agr. Misc. Cir. 92: 103. 1927; as *Q. durandii* × *stellata.*

Quercus ×*mahloni* Palmer, Arnold Arboretum Jour. 18: 139. 1937; as "*mahoni*" but corrected on p. 361; as *Q. breviloba* × *stellata.*

DERIVATION.—From McNab, Ark., where it was discovered.

RANGE.—Southwestern Arkansas and southern Oklahoma (Arbuckle Mountains) to central Texas.

***Quercus macrocarpa** Michx. **†bur oak**

†*Quercus macrocarpa* Michx., Hist. Chênes Amér. Sept. *Quercus* No. 2, pls. 2, 3. 1801.

Quercus olivaeformis Michx. f., Hist. Arbr. For. Amér. Sept. 2: 32, pl. 2. 1812.

Quercus obtusiloba Michx. *β depressa* Nutt., Gen. No. Amer. Pl. 2: 215. 1818.

Quercus macrocarpa var. *olivaeformis* (Michx. f.) A. Gray, Man. Bot. North. U. S. Ed. 2, 404. 1856.

Quercus macrocarpa var. *depressa* (Nutt.) Engelm., Acad. Sci. St. Louis Trans. 3: 382. 1876.

Quercus mandanensis Rydb., Brittonia 1: 86. 1931.

Quercus macrocarpa subsp. *olivaeformis* (Michx. f.) A. Camus, Chênes 2: 749. 1939; Atlas 2: 116, pl. 224. 1936.

DERIVATION.—Large-fruited.

OTHER COMMON NAMES.—blue oak, mossycup oak, mossy-overcup oak, scrub oak.

RANGE.—New Brunswick, central Maine, and southern Quebec, west to northern Michigan, southern Manitoba and southeastern Saskatchewan, south to North Dakota, southeastern Montana, northeastern Wyoming, central Nebraska, western Oklahoma, and central and eastern Texas, and northeast to Arkansas, Tennessee, Ohio, Pennsylvania, and New York. Also local in Louisiana, Alabama, West Virginia, Maryland, Delaware (formerly), and western New England.

REFERENCE.—Shimek, B. Quercus macrocarpa var. depressa (Nutt.) Engelm. Rhodora 35: 295–297. 1933.

HYBRIDS.—*Quercus* ×*bebbiana* Schneid. (*Q. alba* × *macrocarpa*); *Q.* ×*byarsii* Sudw. (*Q. macrocarpa* × *michauxii*); *Q.* ×*deamii* Trel. (*Q. macrocarpa* × *muehlenbergii*); *Q.* ×*guadalupensis* Sarg. (*Q. macrocarpa* × *stellata*); *Q.* ×*schuettei* Trel. (*Q. bicolor* × *macrocarpa*).

Quercus ×*mahloni* Palmer, see **Q.** ×**macnabiana** Sudw.

Quercus mandanensis Rydb., see **Q. macrocarpa** Michx.

Quercus margaretta Ashe, see **Q. stellata** var. **margaretta** (Ashe) Sarg.

***Quercus marilandica** Muenchh. **†blackjack oak**

†*Quercus marilandica* Muenchh., Hausvater 5: 253. 1770.
†*Quercus marilandica* [var.] *ashei* Sudw., Jour. Forestry 20: 167. 1922.
Quercus neo-ashei Bush, Torrey Bot. Club Bul. 55: 248. 1928.

DERIVATION.—Of Maryland.

OTHER COMMON NAMES.—blackjack, barren oak, black oak, jack oak.

RANGE.—Long Island (New York), New Jersey, and southeastern Pennsylvania to West Virginia, southern Ohio, Illinois, southern Iowa, south to eastern Kansas, western Oklahoma, central Texas, northwestern Florida, and Georgia. Also local in southern Michigan.

HYBRIDS.—*Quercus* ×*brittonii* W. T. Davis (*Q. ilicifolia* × *marilandica*); *Q.* ×*bushii* Sarg. (*Q. marilandica* × *velutina*); *Q.* ×*cravenensis* Little (*Q. incana* × *marilandica*); *Q.* ×*hastingsii* Sarg. (*Q. marilandica* × *shumardii*); *Q.* ×*rudkinii* Britton (*Q. marilandica* × *phellos*); *Q.* ×*smallii* Trel. (*Q. georgiana* × *marilandica*); *Q.* ×*sterilis* Trel. (*Q. marilandica* × *nigra*); *Q.* ×*tridentata* (A. DC.) Engelm. (*Q. imbricaria* × *marilandica*).

Quercus maritima (Michx.) Willd., see **Q. virginiana** var. **maritima** (Michx.) Sarg.

Quercus media Woot. & Standl., see **Q. undulata** Torr.

Quercus ×**mellichampii Trel.** **Mellichamp oak**

Quercus laevis × *laurifolia*
Quercus catesbaei × *laurifolia* Engelm., St. Louis Acad. Sci. Trans. 3: 539. 1877.

Quercus ×*mellichampi* Trel., Amer. Phil. Soc. Proc. 56: 50. 1917; *nomen nudum;* as *Q. catesbaei* × *laurifolia.*

†*Quercus* ×*mellichampii* Trel. ex Sarg., Bot. Gaz. 65: 451. 1918; as *Q. catesbaei* × *laurifolia.*

DERIVATION.—Named for its discoverer, Joseph Hinson Mellichamp (1829–1903), physician and amateur botanist of South Carolina.

RANGE.—South Carolina and northern and central Florida.

***Quercus michauxii** Nutt. **†swamp chestnut oak**

Quercus prinus L., Sp. Pl. 995. 1753; in part.

†*Quercus michauxii* Nutt., Gen. No. Amer. Pl. 2: 215. 1818.

Quercus houstoniana C. H. Muller, Amer. Midland Nat. 28: 743, fig. 1. 1942.

DERIVATION.—Named for Francois André Michaux (1770–1855), French botanist who prepared a classic illustrated work of three volumes on the trees of eastern United States and who described this species as a variety.

OTHER COMMON NAMES.—basket oak, cow oak, white oak (lumber).

RANGE.—Coastal Plain from New Jersey south to central Florida and eastern Texas, and north in Mississippi Valley to southeastern Missouri, central Illinois, southwestern Ohio, and eastern Kentucky.

HYBRIDS.—*Quercus* ×*beadlei* Trel. (*Q. alba* × *michauxii*); *Q.* ×*byarsii* Sudw. (*Q. macrocarpa* × *michauxii*).

Some authors since 1915, including the 1927 Check List, adopted for swamp chestnut oak the name *Quercus prinus*, which is restored here for chestnut oak, following Fernald (Gray's Man. Bot. Ed. 8, 544–545. 1950).

Quercus microcarya Small, see **Q. nigra** L.

Quercus minima (Sarg.) Small, see **Q. virginiana** Mill.

Quercus minor (Marsh) Sarg., see **Q. stellata** Wangenh.

Quercus mississippiensis Ashe, see **Q. stellata** var. **mississippiensis** (Ashe) Little

Quercus mohriana Buckl. **Mohrs oak**

†*Quercus mohriana* Buckl. ex Rydb., N. Y. Bot. Gard. Bul. 2: 219, pl. 31, figs. 1, 2. 1901.

DERIVATION.—Named for Charles Mohr (1824–1901), German-born manufacturing druggist and botanist of Alabama.

OTHER COMMON NAMES.—†shin oak, scrub oak.

RANGE.—Southwestern Oklahoma and Panhandle of Texas, south to Trans-Pecos Texas and northeastern Mexico (Coahuila).

Quercus montana Willd., see **Q. prinus** L.

Quercus ×moreha Kellogg **oracle oak**

Quercus kelloggii × *wislizenii*

†*Quercus morehus* Kellogg, Calif. Acad. Nat. Sci. Proc. 2: 36. 1863. Corrected to "*moreha*" by Trel., Amer. Phil. Soc. Proc. 56: 50. 1917.

Quercus wislizeni × *kelloggii* M. K. Curran, Calif. Acad. Sci. Bul. 1: 146. 1885.

DERIVATION.—Based upon Moreh, the Scriptural "land of Moriah" and dwelling place of Abram.

OTHER COMMON NAMES.—Abram's oak, †evergreen black oak, Moreh oak.

RANGE.—Northern to southern California; also rare in southwestern Oregon.

REFERENCE.—Wolf, Carl B. ×Quercus morehus Kellogg. Rancho Santa Ana. Bot. Gard. Occas. Pap. 1: 47–52, illus. 1938.

Quercus ×moultonensis Ashe **Moulton oak**

Quercus phellos × *shumardii*

Quercus ×moultonensis Ashe, Rhodora 24: 78. 1922; as *Q. phellos* × *shumardii;* excluding synonym *Q. hybrida* Houba.

DERIVATION.—From Moulton Valley of Tennessee River, Lawrence County, Alabama.

RANGE.—Southeastern Virginia, Tennessee, Arkansas, and Alabama.

***Quercus muehlenbergii Engelm.** **†chinkapin oak**

Quercus castanea Mühl., Gesell. Naturf. Freunde Berlin Neue Schr. 3: 397. 1801 (after April). Not *Quercus castanea* Née, Anal. Cien. Nat. [Madrid] 3: 276. 1801 (March).

Quercus prinus [var.] *acuminata* Michx., Hist. Chênes Amér. Sept. *Quercus* No. 5, pl. 8. 1801.

Quercus acuminata (Michx.) Sarg., Silva No. Amer. 8: 55, pl. 377. 1895. Not *Quercus acuminata* Roxb., Fl. Ind. 3: 636. 1832.

†*Quercus muehlenbergii* Engelm., Acad. Sci. St. Louis Trans. 3: 391. 1877; as *"mühlenbergii."*

Quercus alexanderi Britton, Man. Fl. North. States Canada 336. 1901.

Quercus brayi Small, Torrey Bot. Club Bul. 28: 358. 1901.

Quercus acuminata var. *alexandri* Farwell, Mich. Acad. Sci. Rpt. 6: 206. 1904.

†*Quercus muehlenbergii* var. *brayi* (Small) Sarg., Bot. Gaz. 65: 442. 1918.

Quercus muhlenbergii var. *alexandri* (Farwell) Farwell, Mich. Acad. Sci., Arts, and Letters Papers 3: 93. 1924.

Quercus muhlenbergii var. *alexanderi* (Britton) Camp, Ohio Jour. Sci. 33: 421. 1933.

Quercus prinoides Willd. var. *acuminata* (Michx.) Gleason, Phytologia 4: 23. 1952.

DERIVATION.—In honor of Gotthilf Henry Ernst Muhlenberg (1753–1815), minister and botanist of Pennsylvania, who first named this species.

OTHER COMMON NAMES.—chestnut oak, rock chestnut oak, rock oak, yellow chestnut oak, yellow oak. (The spelling chinquapin oak is also in use.)

RANGE.—Vermont and New York, west to extreme southern Ontario, southern Michigan, southern Wisconsin, and southeastern Nebraska, south to western Oklahoma, central and Trans-Pecos Texas, east to northwestern Florida and Georgia, and north in mountains to Maryland and to western Connecticut. Also local in southeastern New Mexico, and in northeastern Mexico (Coahuila and Nuevo León).

HYBRID.—*Quercus* ×*deamii* Trel. (*Q. macrocarpa* × *muehlenbergii*).

Quercus ×mutabilis Palmer & Steyerm. ———

Quercus palustris × *shumardii*

Quercus ×*mutabilis* Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 521. 1935; as *Q. palustris* × *shumardii* var. *schneckii.*

DERIVATION.—Variable.

RANGE.—Missouri.

Quercus myrtifolia Willd. **†myrtle oak**

†*Quercus myrtifolia* Willd., Sp. Pl. 4(1): 424. 1805.

Quercus inopina Ashe, Rhodora 21: 79. 1929.

DERIVATION.—Myrtle-leaved.

OTHER COMMON NAME.—scrub oak.

RANGE.—Coastal Plain from southern South Carolina to southern Florida, west to southern Mississippi.

Quercus nana (Marsh.) Sarg., see **Q. ilicifolia** Wangenh.

Quercus neo-ashei Bush, see **Q. marilandica** Muenchh.

Quercus ×neopalmeri Sudw. **Shumargra oak**

Quercus nigra × *shumardii*

Quercus nigra × *shumardii* Palmer, Arnold Arboretum Jour. 4: 21. 1923; *nomen nudum.*

†*Quercus* ×*neopalmeri* Sudw., U. S. Dept. Agr. Misc. Cir. 92: 92. 1927; as *Q. nigra* × *shumardii; nomen nudum.*

Quercus ×*neopalmeri* Sudw. ex Palmer, Arnold Arboretum Jour. 29: 35. 1948; as *Q. nigra* × *shumardii.*

DERIVATION.—A new name in honor of Ernest Jesse Palmer, American botanist and authority on woody plants, who discovered it. There is an earlier *Q. palmeri* Engelm., named for Edward Palmer, and here regarded as a variety of *Q. chrysolepis* Liebm.

RANGE.—Georgia, central Florida, Alabama, and Arkansas.

Quercus ×neo-tharpii A. Camus **Tharp live oak**

Quercus oleoides × *stellata*

Quercus ×*neo-tharpii* A. Camus, Chênes 2: 754. 1939; Atlas 2: pl. 226, figs. 9–19. 1938; as *Q. durandii* × *virginiana;* without Latin diagnosis.

Quercus ×*neo-tharpii* A. Camus, Soc. Bot. France Bul. 95: 68. 1948; as *Q. stellata* × *virginiana.*

Quercus ×*neo-tharpii* var. *per-stellata* A. Camus, Soc. Bot. France Bul. 95: 68. 1948; as *Q. stellata* × *virginiana.*

Quercus ×*neo-tharpii* var. *pervirginiana* A. Camus, Soc. Bot. France Bul. 95: 68. 1948; as *Q. stellata* × *virginiana*.

DERIVATION.—A new (or second) hybrid oak named for its discoverer, Benjamin C. Tharp, botanist of Texas.

RANGE.—Southeastern Texas (Calhoun County) near coast.

According to C. H. Muller (Tex. Res. Found. Contrib. 1: 74, 76. 1951), *Quercus* ×*neo-tharpii* A. Camus represents the cross *Q. oleoides* var. *quaterna* × *stellata*. *Q. oleoides* Schiede & Deppe in Schlecht. & Cham. (Linnaea 5: 79. 1830) is related to *Q. virginiana* (or united with the latter by some authors) but distributed in eastern Mexico and Central America and represented on the coast of southern and southeastern Texas by a shrubby variety, *Q. oleoides* var. *quaterna* C. H. Muller (Tex. Res. Found. Contrib. 1: 76, pls. 54, 55. 1951).

***Quercus nigra L.** **†water oak**

†*Quercus nigra* L., Sp. Pl. 995. 1753.

Quercus aquatica β *heterophylla* Ait., Hort. Kew. 3: 357. 1789.

Quercus aquatica γ *elongata* Ait., Hort. Kew. 3: 357. 1789.

Quercus microcarya Small, Torrey Bot. Club Bul. 28: 357. 1901.

†*Quercus nigra* var. *tridentifera* Sarg., Bot. Gaz. 65: 429. 1918.

Quercus nigra var. *megacarpa* Ashe, Charleston Mus. Bul. 14: 9. 1918.

Quercus rhombica var. *obovatifolia* Sarg., Bot. Gaz. 65: 431. 1918 (May 15).

Quercus nigra elongata (Ait.) Ashe, Torrey Bot. Club Bul. 49: 268. 1922.

Quercus nigra heterophylla (Ait.) Ashe, Rhodora 24: 79. 1922.

†*Quercus obtusa obovatifolia* (Sarg.) Ashe, Rhodora 24: 78. 1922.

Quercus nigra var. *microcarya* (Small) Trel., Natl. Acad. Sci. Mem. 20: 160. 1924; also as f. *microcarya* on p. 159 and pl. 309, fig. 1.

Quercus nigra var. *plenocarpa* Trel., Natl. Acad. Sci. Mem. 20: 160. 1924; also as f. *plenocarpa* on p. 159 and pl. 309, fig. 3.

Quercus nigra var. *saxicola* Trel., Natl. Acad. Sci. Mem. 20: 160. 1924; also as f. *saxicola* on p. 159 and pl. 309, fig. 2.

DERIVATION.—Black.

OTHER COMMON NAMES.—possum oak, red oak (lumber), spotted oak.

RANGE.—Coastal Plain from southern New Jersey south to central Florida and eastern Texas, and north in Mississippi Valley to eastern Oklahoma, and southeastern Missouri.

HYBRIDS.—*Quercus* ×*caduca* Trel. (*Q. incana* × *nigra*); *Q.* ×*capesii* W. Wolf (*Q. nigra* × *phellos*); *Q.* ×*demarei* Ashe (*Q. nigra* × *velutina*); *Q.* ×*garlandensis* Palmer (*Q. falcata* × *nigra*); *Q.* ×*neopalmeri* Sudw. (*Q. nigra* × *shumardii*); *Q.* ×*sterilis* Trel. (*Q. marilandica* × *nigra*); *Q.* ×*walteriana* Ashe (*Q. laevis* × *nigra*).

Quercus nitescens Rydb., see **Q. gambelii** Nutt.

Quercus novomexicana (A. DC.) Rydb., see **Q. gambelii** Nutt.

***Quercus nuttallii** Palmer **Nuttall oak**

Quercus nuttallii Palmer, Arnold Arboretum Jour. 8: 52. 1927.

Quercus palustris f. *nuttallii* (Palmer) C. H. Muller, Amer. Midland Nat. 27: 478. 1942.

Quercus nuttallii var. *cachensis* Palmer, Arnold Arboretum Jour. 18: 136, fig. 2. 1937.

DERIVATION.—Named in honor of Thomas Nuttall (1786–1859), English and American botanist and ornithologist.

OTHER COMMON NAME.—red oak (lumber).

RANGE.—Coastal Plain from Alabama to eastern Texas, north in Mississippi Valley to southeastern Oklahoma, Arkansas, southeastern Missouri, and western Tennessee.

A commercially important species not distinguished until 1927, too late for inclusion in the 1927 Check List.

***Quercus oblongifolia** Torr. **†Mexican blue oak**

†*Quercus oblongifolia* Torr., in Sitgreaves Rpt. Expl. Zuni Colo. Rivers 173, pl. 19. 1853; pl. 19, as "*obloncifolius.*"

DERIVATION.—Oblong-leaved.

RANGE.—Southwestern corner of New Mexico, southeastern and western (Mohave County) Arizona, and northern Mexico (Sonora, Chihuahua, and Coahuila).

Quercus obtusa (Willd.) Ashe, see **Q. laurifolia** Michx.

Quercus obtusata Ashe, see **Q. laurifolia** Michx.

Quercus obtusifolia (A. DC.) Rydb., see **Q. undulata** Torr.

Quercus oglethorpensis Duncan **Oglethorpe oak**

Quercus oglethorpensis Duncan, Amer. Midland Nat. 24: 756. 1940.

DERIVATION.—From Oglethorpe County, Ga., where this oak is most abundant, and indirectly honoring James Edward Oglethorpe (1696–1785), English general and founder of the colony of Georgia.

RANGE.—Local in western South Carolina (Edgefield, Greenwood, McCormick, and Saluda Counties) and northeastern Georgia (Elbert, Greene, Oglethorpe, and Wilkes Counties).

REFERENCE.—Duncan, Wilbur H. Quercus oglethorpensis—range extensions and phylogenetic relationships. Lloydia 13: 243–248, illus. 1950 (1951?).

Quercus olivaeformis Michx., see **Q. macrocarpa** Michx.

Quercus oleoides Schiede & Deppe, see note under **Q. ×neo-tharpii** A. Camus

Quercus ×organensis Trel. **Organ Mountains oak**

Quercus arizonica × *grisea*
Quercus arizonica × *grisea* Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 19: 171. 1915.
Quercus ×organensis Trel., Amer. Phil. Soc. Proc. 56: 50. 1917; as *Q. arizonica* × *grisea; nomen nudum.*
†*Quercus ×organensis* Trel., Natl. Acad. Sci. Mem. 20: 16. 1924; as *Q. arizonica* × *grisea.*

DERIVATION.—From Organ Mountains, where it was discovered.

RANGE.—Southern New Mexico (Organ Mountains, Dona Ana County); described from a single tree.

Quercus ×oviedoensis Sarg., see note under **Quercus** L.

Quercus pagoda Raf., see **Q. falcata** var. **pagodaefolia** Ell.

Quercus pagodaefolia (Ell.) Ashe, see **Q. falcata** var. **pagodaefolia** Ell.

Quercus ×palaeolithicola Trel. **Fink oak**

Quercus ellipsoidalis × *velutina*
†*Quercus ×palaeolithicola* Trel., Amer. Phil. Soc. Proc. 56: 50, pl. 1. 1917; as *Q. ellipsoidalis* × *velutina.*

DERIVATION.—Inhabitant of Paleozoic rock.

RANGE.—Wisconsin, Iowa, Illinois, and Indiana.

Quercus palmeri (Engelm.) Engelm., see **Q. chrysolepis** var. **palmeri** (Engelm.) Sarg.

***Quercus palustris** Muenchh.** **†pin oak**

†*Quercus palustris* Muenchh., Hausvater 5: 253. 1770.

DERIVATION.—Of marshes.

OTHER COMMON NAMES.—Spanish oak, swamp oak, swamp Spanish oak.

RANGE.—Massachusetts and southern New York to Pennsylvania, extreme southern Ontario, southern Michigan, northern Illinois, southeastern Iowa, and eastern Kansas, south to northeastern Oklahoma, northern Arkansas, Tennessee, and South Carolina.

HYBRIDS—*Quercus ×exacta* Trel. (*Q. imbricaria* × *palustris*); *Q. ×mutabilis* Palmer & Steyerm. (*Q. palustris* × *shumardii*); *Q. ×schochiana* Dieck (*Q. palustris* × *phellos*); *Q. ×vaga* Palmer & Steyerm. (*Q. palustris* × *velutina*).

Quercus pauciloba Rydb., see **Q. undulata** Torr.

Quercus ×petiolaris Ashe, see **Q. ×podophylla** Trel.

***Quercus phellos** L.** **†willow oak**

†*Quercus phellos* L., Sp. Pl. 944. 1753.

DERIVATION.—The ancient Greek name of *Quercus suber* L., the cork oak.

OTHER COMMON NAMES.—peach oak, pin oak, red oak (lumber), swamp willow oak.

RANGE.—Coastal Plain from Long Island, New Jersey, and southeastern Pennsylvania south to Georgia, northwestern Florida, and eastern Texas, and north in Mississippi Valley to southeastern Oklahoma, southeastern Missouri, southern Illinois, and western Kentucky.

HYBRIDS.—*Quercus* ×*capesii* W. Wolf (*Q. nigra* × *phellos*); *Q.* ×*filialis* Little (*Q. phellos* × *velutina*); *Q.* ×*giffordii* Trel. (*Q. ilicifolia* × *phellos*); *Q.* ×*heterophylla* Michx. f. (*Q. phellos* × *rubra*); *Q.* ×*ludoviciana* Sarg. (*Q. falcata* × *phellos*); *Q.* ×*moultonensis* Ashe (*Q. phellos* × *shumardii*); *Q.* ×*rudkinii* Britton (*Q. marilandica* × *phellos*); *Q.* ×*schochiana* Dieck (*Q. palustris* × *phellos*).

Quercus platanoides (Lam.) Sudw., see **Q. bicolor** Willd.

Quercus ×podophylla Trel. ———

Quercus incana × *velutina*

Quercus ×*petiolaris* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 90. 1894; as *Q. cinerea* × *tinctoria?* Not *Q. petiolaris* Benth., Pl. Hartw. 55. 1840.

†*Quercus* ×*podophylla* Trel., Amer. Phil. Soc. Proc. 56: 51. 1917; as *Q. cinerea* × *?velutina.*

DERIVATION.—From Greek, foot and leaf, referring to the stout petiole.

RANGE.—Coastal Plain of Virginia(?), North Carolina(?), and South Carolina(?).

Quercus ×*porteri* Trel., see **Q. ×hawkinsiae** Sudw.

Quercus pricei Sudw., see **Q. agrifolia** Née

Quercus prinoides Willd. **†dwarf chinkapin oak**

†*Quercus prinoides* Willd. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 3: 397. 1801.

Quercus prinoides var. *rufescens* Rehd., Rhodora 9: 61. 1907.

DERIVATION.—Resembling *Quercus prinus.*

OTHER COMMON NAMES.—chinkapin oak, dwarf chestnut oak. (The spelling dwarf chinquapin oak is also in use.)

RANGE.—Massachusetts and Vermont to southeastern Minnesota, south to eastern Kansas, central Oklahoma, Arkansas, Alabama (Montgomery County), Tennessee, and North Carolina.

HYBRIDS.—*Quercus* ×*faxonii* Trel. (*Q. alba* × *prinoides*); *Q.* ×*stelloides* Palmer (*Q. prinoides* × *stellata*).

***Quercus prinus** L. **†chestnut oak**

Quercus prinus L., Sp. Pl. 995. 1753; in part.

†*Quercus montana* Willd., Sp. Pl. 4(1): 440. 1805.

DERIVATION.—The classical Greek name of a European oak.

OTHER COMMON NAMES.—rock chestnut oak, rock oak, white oak (lumber).

RANGE.—Southwestern Maine to New York, extreme southern Ontario, Ohio, southern Indiana, and southern Illinois (Union County), south to northeastern Mississippi, northern Georgia, and southeastern Virginia.

REFERENCES.—Fernald, M. L. Types of some American trees. Arnold Arboretum Jour. 27: 386–394, illus. 1946.

Palmer, Ernest J. Quercus prinus Linnaeus. Amer. Midland Nat. 29: 783–784. 1943.

Sargent, C. S. Three of Clayton's oaks in the British Museum. Rhodora 17: 39–40. 1915.

Svenson, H. K. On the descriptive method of Linnaeus. Rhodora 47: 273–302, 363–388, illus. 1945.

HYBRIDS.—*Quercus* ×*bernardiensis* W. Wolf (*Q. prinus* × *stellata*); *Q.* ×*saulii* Schneid. (*Q. alba* × *prinus*).

Quercus prinus is restored here for chestnut oak, following Fernald (Gray's Man. Bot. Ed. 8, 544–545. 1950) and universal usage before 1915. Some authors after that date, including Sudworth in the 1927 Check List, applied *Q. prinus* to swamp chestnut oak and adopted *Q. montana* for this species.

†*Quercus* ×*sargentii* Rehd. (in Bailey, Stand. Cycl. Hort. 2886. 1916; as *Q. montana* × *robur*), representing the cross *Quercus prinus* [*montana*] × *robur*, is known only in cultivation in Massachusetts and England and is omitted here.

Quercus pseudomargaretta Trel., see **Q. stellata** var. **margaretta** (Ashe) Sarg.

Quercus pungens Liebm. **sandpaper oak**

Quercus pungens var. pungens **sandpaper oak (typical)**

Quercus pungens Liebm., Danske Vidensk. Selsk. Forhandl. Overs. 1854: 171. 1854.

Quercus undulata var. *pungens* (Liebm.) Engelm., Acad. Sci. St. Louis Trans. 3: 392. 1877.

DERIVATION.—Pricking or piercing, referring to the spiny-toothed leaves.

OTHER COMMON NAME.—scrub oak.

RANGE.—Trans-Pecos Texas, to central New Mexico, and southeastern Arizona. Also in northern Mexico (Chihuahua to Tamaulipas).

A shrub or moderate sized tree, according to C. H. Muller (Tex. Res. Found. Contrib. 1: 69. 1951).

Quercus pungens var. vaseyana (Buckl.) C. H. Muller **Vasey oak**

†*Quercus vaseyana* Buckl., Torrey Bot. Club Bul. 10: 91. 1883.

Quercus undulata vaseyana (Buckl.) Rydb., N. Y. Bot. Gard. Bul. 2: 218, pl. 30, fig. 5. 1902.

Quercus pungens var. *vaseyana* (Buckl.) C. H. Muller, Tex. Res. Found. Contrib. 1: 70, pl. 46. 1951.

DERIVATION.—Named for George Vasey (1822–93), botanist of the United States Department of Agriculture.

OTHER COMMON NAME.—†shin oak.

RANGE.—Southwestern Texas (Edwards Plateau to Trans-Pecos Texas) and northeastern Mexico (Coahuila to Tamaulipas).

Quercus pygmea (Sarg.) Ashe, see **Q. virginiana** Mill.

Quercus ×rehderi Trel. **Rehder oak**

Quercus ilicifolia × velutina
Quercus ilicifolia × velutina Rehd., Rhodora 3: 138, pl. 24, figs. 1, 2. 1903.
Quercus ×rehderi Trel., Amer. Phil. Soc. Proc. 56: 51. 1917; as *Q. ilicifolia × velutina; nomen nudum.*
†*Quercus ×rehderi* Trel., Natl. Acad. Sci. Mem. 20: 16. 1924; as *Q. ilicifolia × ?velutina.*

DERIVATION.—Named for Alfred Rehder (1863–1949), American dendrologist of German birth, who first described and illustrated this hybrid.

RANGE.—Maine, Massachusetts, Rhode Island, and Pennsylvania.

Quercus reticulata Humb. & Bonpl. **†netleaf oak**

†*Quercus reticulata* Humb. & Bonpl., Pl. Aequin. 2: 40, pl. 86. 1809.
Quercus diversicolor Trel., Natl. Acad. Sci. Mem. 20: 73, pls. 92, 93. 1924.
Quercus diversicolor var. *mearnsii* Trel., Natl. Acad. Sci. Mem. 20: 74, pl. 94. 1924.
Quercus diversicolor var. *socorronis* Trel., Natl. Acad. Sci. Mem. 20: 74. 1924.

DERIVATION.—Netted, from the prominent veins in the leaves.

RANGE.—Trans-Pecos Texas and southwestern New Mexico to central Arizona. Also south to central Mexico (Chihuahua and Coahuila to Guanajuato).

Quercus rhombica Sarg., see **Q. laurifolia** Michx.

Quercus rhombifolia Riddell, see **Q. laurifolia** Michx.

Quercus ×richteri Baenitz, see **Q. coccinea** Muenchh.

Quercus ×robbinsii Trel. **Robbins oak**

Quercus coccinea × ilicifolia
Quercus coccinea × ilicifolia A. Gray, Man. Bot. North. U. S. Ed. 5, 454. 1867; *nomen nudum.*
Quercus ilicifolia × coccinea Robbins ex Engelm., Acad. Sci. St. Louis Trans. 3: 542. 1877.
Quercus ×robbinsii Trel., Amer. Phil. Soc. Proc. 56: 51. 1917; as *Q. coccinea × ilicifolia; nomen nudum.*
†*Quercus ×robbinsii* Trel., Natl. Acad. Sci. Mem. 20: 16. 1924; as *Q. coccinea × ilicifolia.*

DERIVATION.—Named for the discoverer, James Watson Robbins (1801–1879).

RANGE.—Massachusetts, Rhode Island, and Pennsylvania.

QUERCUS ROBUR L. . ENGLISH OAK

Quercus robur L., Sp. Pl. 996. 1753.

DERIVATION.—Ancient Latin name, connoting the strength of the wood.

RANGE.—Escaping from cultivation and naturalized locally in southeastern Canada from Nova Scotia westward and in northeastern United States from Rhode Island west and south. Native of Europe, northern Africa, and western Asia.

Quercus ×robusta C. H. Muller ———

Quercus emoryi × gravesii

Quercus robusta C. H. Muller, Torreya 34: 119. 1934.

DERIVATION.—Robust.

RANGE.—Chisos Mountains, Brewster County, Trans-Pecos Texas.

A large tree described after publication of the 1927 Check List and later reduced to a hybrid by its author, C. H. Muller (Tex. Res. Found. Contrib. 1:80, pl. 62. 1951).

Quercus rolfsii Small, see **Q. virginiana** var. **maritima** (Michx.) Sarg.

***Quercus rubra L.** **northern red oak**

Quercus rubra L., Sp. Pl. 996. 1753; in part.

Quercus rubra L. emend. Du Roi, Harbk. Baumz. Nordamer. 2: 265, pl. 5, fig. 2. 1772.

Quercus rubra maxima Marsh., Arbustr. Amer. 122. 1785.

†*Quercus borealis* Michx. f., No. Amer. Sylva 1: 98. 1817.

Quercus rubra var. *borealis* (Michx. f.) Farwell, Mich. Acad. Sci. Ann. Rpt. 6: 206. 1904.

Quercus maxima (Marsh.) Ashe, Soc. Amer. Forest. Proc. 11: 90. 1916.

Quercus borealis [var.] *maxima* (Marsh.) Ashe, Soc. Amer. Forest. Proc. 11: 90. 1916 (after Jan. 22); *nomen provisorium.*

†*Quercus borealis* var. *maxima* (Marsh.) Sarg., Rhodora 18: 48. 1916 (March 13).

†*Quercus ×lowellii* Sarg., Bot. Gaz. 65: 459. 1918; as *Q. borealis × ilicifolia; nomen nudum.*

Quercus americana Valck. Suringar, Leyden Rijks Herbarium Mededeel. 56: 12. 1928; *nomen provisorium.*

Erythrobalanus rubra (L.) O. Schwarz, [Berlin] Bot. Gard. u. Mus. Notizbl. 13: 4, fig. 1. 1936; Repert. Spec. Novarum Regni Veg. Sonderbeih. D, 1: 24, fig. 1. 1936. O. Schwarz ex Hill & Salisb., Index Kew. Sup. 10: 88. 1947.

DERIVATION.—Red.

OTHER COMMON NAMES.—gray oak, common red oak, eastern red oak, mountain red oak, †red oak.

RANGE.—Cape Breton Island, Nova Scotia, to Maine, southern Quebec, southern Ontario, northern Michigan, and northern Minnesota, south to eastern Nebraska, southeastern Oklahoma, Arkansas, Mississippi, and Georgia. Also local in southeastern

Louisiana. The only native oak extending northeast to Nova Scotia.

REFERENCES.—Fernald, M. L. Types of some American trees. Arnold Arboretum Jour. 27: 386–394, illus. 1946.

Rehder, Alfred. Quercus rubra Linnaeus [proposed as *nomen ambiguum*]. Arnold Arboretum Jour. 19: 283–284. 1938.

Sargent, C. S. Three of Clayton's oaks in the British Museum. Rhodora 17: 39–40. 1915.

Sargent, C. S. The name of the red oak. Rhodora 18: 45–48. 1916.

Svenson, H. K. Quercus rubra once more. Rhodora 41: 521–524. 1939.

Svenson, H. K. On the descriptive method of Linneaus. Rhodora 47: 273–302, 363–388, illus. 1945.

Valckenier Suringar, J. Leyden Rijks Herbarium Mededeel. 56: 10–13, 64, illus. 1928.

HYBRIDS.—*Quercus* ×*fernaldii* Trel. (*Q. ilicifolia* × *rubra*); *Q.* ×*hawkinsiae* Sudw. (*Q. rubra* × *velutina*); *Q.* ×*heterophylla* Michx. f. (*Q. phellos* × *rubra*); *Q.* ×*runcinata* (A. DC.) Engelm. (*Q. imbricaria* × *rubra*).

Quercus rubra is restored here for the northern red oak, following Fernald (Gray's Man. Bot. Ed. 8, 546, 548. 1950) and universal usage before 1915. Some authors after that date, including Sudworth in the 1927 Check List, applied *Q. rubra* to the southern red oak and adopted *Q. borealis* for the northern red oak. Others rejected *Q. rubra* as a *nomen ambiguum* because of the confused usage for two species and took up *Q. falcata* for the southern red oak. *Q. rubra* L. was a composite species of red oaks and was first typified as the northern red oak by Du Roi. As the confusion has been relatively temporary, the simplest solution is to return to the older nomenclature.

Quercus ×rudkinii Britton **Rudkin oak**

Quercus marilandica × *phellos*

†*Quercus* ×*rudkini* Britton, Torrey Bot. Club Bul. 9: 14, pls. 10–12; figs. 3–5. 1882; as *Q. phellos* × *nigra*.

†*Quercus* ×*dubia* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 93. 1894; as *Q. phellos?* × ? Not *Q. dubia* Alm in L., Pl. Surinam. 15. 1775. Not *Q. dubia* Newberry, U. S. Natl. Mus. Proc. 5: 506. 1883; fossil, Miocene, Montana.

DERIVATION.—Named for its discoverer, William H. Rudkin.

RANGE.—Recorded from southern New York, New Jersey, Delaware, Virginia, North Carolina, South Carolina, Georgia, Florida, Louisiana, and Arkansas.

REFERENCE.—Allard, H. A. The hybrid oak, ×Quercus rudkini, at Arlington, Virginia. Rhodora 44: 262–266, illus. 1942.

Quercus ×runcinata (A. DC.) Engelm. **bottom oak**

Quercus imbricaria × *rubra*

Quercus rubra L. *β runcinata* A. DC. in DC., Prodr. 16(2): 60. 1864.

Quercus runcinata (A. DC.) Engelm., Oaks of U. S. 20. 1876; *nomen provisorium.* Acad. Sci. St. Louis Trans. 3: 542. 1877; *nomen provisorium.*

†*Quercus* ×*runcinata* (A. DC.) Engelm. ex Trel., Natl. Acad. Sci. Mem. 20: 16. 1924; as *Q. imbricaria* × *maxima.*

DERIVATION.—Runcinate, or sharply and deeply cut, with the segments turned backward, referring to the leaves.

RANGE.—Recorded from Pennsylvania, Ohio, Indiana, Illinois, Missouri, Kansas, Kentucky, and Maryland.

Quercus rydbergiana Cockerell, see **Q. undulata** Torr.

Quercus ×*sargentii* Rehd., see note under **Q. prinus** L.

Quercus ×saulii Schneid. **†Saul oak**

Quercus alba × *prinus*

†*Quercus* ×*saulii* Schneid., Illus. Handb. Laubholzk. 1: 203. 1904; as *Q. alba* × *prinus.*

DERIVATION.—Named for John Saul (1819–1897), nurseryman and florist at Washington, D. C., who collected it there in 1894.

RANGE.—Recorded from Vermont, Massachusetts, Rhode Island, New York, New Jersey, Pennsylvania, Ohio, Kentucky, Alabama, North Carolina, Virginia, District of Columbia, and Maryland.

REFERENCES.—Allard, H. A. A progeny study of the so-called oak species Quercus saulii, with notes on other probable hybrids found in or near the District of Columbia. Torrey Bot. Club. Bul. 59: 267–277, illus. 1932.

Allard, H. A. An analysis of seedling progeny of an individual of Quercus saulii compared with seedlings of a typical individual of the white oak (Quercus alba) and a typical rock chestnut oak (Quercus montana). Castanea 14: 109–117, illus. 1949.

Quercus schneckii Britton, see **Q. shumardii** Buckl.

Quercus ×schochiana Dieck **Schoch oak**

Quercus palustris × *phellos*

Quercus ×*schochiana* Dieck, Neuheit.-Off. Zöschen 1894–95: 20. 1894; as *Q. palustris* × *phellos; nom. nud.* (not seen).

Quercus ×*schochiana* Dieck ex Schoch, Deut. Dendrol. Gesell. Mitt. 1896: 9. 1896; as *Q. phellos* × *palustris; nom. subnud.* (seen in Ed. 2, 158. 1909).

Quercus ×*schochiana* Dieck ex Palmer, Arnold Arboretum Jour. 29: 40. 1948; as *Q. palustris* × *phellos.*

DERIVATION.—Named for State Garden Director Schoch, who discovered it in a park at Wörlitz, Germany.

RANGE.—Recorded from Virginia, Kentucky, Illinois, and Arkansas. Also in cultivation.

Quercus ×schuettei Trel. **Schuette oak**

Quercus bicolor × *macrocarpa*

Quercus ×*schuettei* Trel., Amer. Phil. Soc. Proc. 56: 51, pls. 2, 3. 1917; as *Q. bicolor* × *macrocarpa.*

Quercus ×*hillii* Trel., Amer. Phil. Soc. Proc. 56: 49. 1917; as *Q. macrocarpa* × *muehlenbergii; nomen nudum.*

†*Quercus* ×*hillii* Trel., Natl. Acad. Sci. Mem. 20: 15. 1924;

as *Q. macropara* × *muehlenbergii*.

DERIVATION.—Named for J. H. Schuette, of Green Bay, Wis., who collected it in 1893.

RANGE.—Recorded from southern Quebec, New York, Michigan, Wisconsin, Minnesota, and Indiana.

Quercus ×*shirlingii* Bush, see **Q. ×eggeestonii** Trel.

Quercus shrevei C. H. Muller, see note under **Q. wislizenii** A. DC.

***Quercus shumardii** Buckl. **Shumard oak**

HYBRIDS.—*Quercus* ×*egglestonii* Trel. (*Q. imbricaria* × *shumardii*); *Q.* ×*hastingsii* Sarg. (*Q. marilandica* × *shumardii*); *Q.* ×*joorii* Trel. (*Q. falcata* × *shumardii*); *Q.* ×*moultonensis* Ashe (*Q. phellos* × *shumardii*); *Q.* ×*mutabilis* Palmer & Steyerm. (*Q. palustris* × *shumardii*); *Q.* ×*neopalmeri* Sudw. (*Q. nigra* × *shumardii*).

Quercus shumardii var. shumardii **Shumard oak (typical)**

†*Quercus shumardii* Buckl., Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 444. 1860.

Quercus schneckii Britton in Rydb., N. Y. Bot. Gard. Bul. 2: 230. 1901.

†*Quercus shumardii* var. *schneckii* (Britton) Sarg., Bot. Gaz. 65: 425. 1918.

Quercus shumardii var. *acerifolia* Palmer, Arnold Arboretum Jour. 8: 54. 1927.

DERIVATION.—In honor of Benjamin Franklin Shumard (1820–69), State Geologist of Texas.

OTHER COMMON NAMES.—red oak (lumber), Schneck oak, †Schneck red oak, †Shumard red oak, southern red oak, spotted oak, swamp red oak.

RANGE.—Coastal Plain from North Carolina to northern Florida and eastern and central Texas, north in Mississippi Valley to southwestern Oklahoma, eastern Kansas, southern Illinois, Indiana, and southern Ohio. Also local in southern Pennsylvania, Maryland, and West Virginia.

Quercus shumardii var. texana (Buckl.) Ashe **Texas oak**

†*Quercus texana* Buckl., Acad. Nat. Sci. Phila. Proc. 1860 [v. 12]: 444. 1860.

Quercus rubra var. *texana* (Buckl.) Buckl., Acad. Nat. Sci. Phila. Proc. 1881 [v. 33]: 123. 1881.

Quercus shumardii var. *texana* (Buckl.) Ashe, Charleston Mus. Bul. 14: 9. 1918; *nomen provisorium*. Name validated by Gray Herbarium Card-Index, Issue No. 78.

DERIVATION.—Of Texas.

OTHER COMMON NAMES.—Spanish oak, spotted oak, Texas red oak.

RANGE.—Southern Oklahoma (Arbuckle Mountains) and central Texas, including Edwards Plateau.

Quercus similis Ashe, see **Q. stellata** Wangenh.

Quercus sinuata Walt., see **Q. durandii** Buckl.

Quercus ×smallii Trel. **Smalls oak**

Quercus georgiana × *marilandica*
Quercus georgiana × *nigra* Small, Torrey Bot. Club. Bul. 22: 75, pl. 233. 1895.
Quercus ×smallii Trel., Amer. Phil. Soc. Proc. 56: 51. 1917; as *Q. georgiana* × *marilandica; nomen nudum.*
†*Quercus ×smallii* Trel., Natl. Acad. Sci. Mem. 20: 17. 1924; as *Q. georgiana* × *marilandica.*

DERIVATION.—Named for its discoverer, John Kunkel Small (1869–1938), American botanist and authority on plants of southeastern United States.

RANGE.—Georgia (Stone Mountain, DeKalb County).

***Quercus stellata Wangenh.** **†post oak**

HYBRIDS.—*Quercus ×bernardiensis* W. Wolf (*Q. prinus* × *stellata*); *Q. ×fernowii* Trel. (*Q. alba* × *stellata*); *Q. ×guadalupensis* Sarg. (*Q. macrocarpa* × *stellata*); *Q. ×harbisonii* Sarg. (*Q. stellata* × *virginiana*); *Q. ×macnabiana* Sudw. (*Q. durandii* × *stellata*); *Q. ×neo-tharpii* A. Camus (*Q. oleoides* × *stellata*); *Q. ×stelloides* Palmer (*Q. prinoides* × *stellata*); *Q. sterrettii* Trel. (*Q. lyrata* × *stellata*); *Q. ×substellata* Trel. (*Q. bicolor* × *stellata*).

Quercus stellata var. stellata **post oak (typical)**

Quercus alba minor Marsh., Arbustr. Amer. 120. 1785.
Quercus stellata Wangenh., Beytr. Teutsch. Holzger. Fortwiss. Anpflanz. Nordamer. Holz. 78, pl. 6, fig. 15. 1787.
Quercus minor (Marsh.) Sarg., Gard. and Forest 2: 471. 1889.
†*Quercus stellata* var. *attenuata* Sarg., Bot. Gaz. 65: 437. 1918.
Quercus stellata var. *paludosa* Sarg., Bot. Gaz. 65: 441. 1918.
†*Quercus stellata* var. *parviloba* Sarg., Bot. Gaz. 65: 438. 1918.
Quercus ashei Sterrett, Elisha Mitchell Sci. Soc. Jour. 37: 178. 1922.
Quercus similis Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 43. 1924.
†*Quercus stellata similis* (Ashe) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 107. 1927.

DERIVATION.—Starred, the leaves described as five-lobed and star-shaped.

OTHER COMMON NAME.—iron oak.

RANGE.—Local in southern New England from southeastern Massachusetts to southeastern New York, southeastern Pennsylvania, West Virginia, Ohio, central Illinois, and southern Iowa, south to eastern Kansas, western Oklahoma, and central Texas, and east to northern Florida.

The hybrid *Quercus havardii* × *stellata*, of southwestern Oklahoma and central and northwestern Texas, was recorded as a shrub or small tree to 10 feet high by C. H. Muller (Tex. Res. Found. Contrib. 1: 55, pl. 27. 1951). He cited as synonyms of this cross †*Q. stellata* var. *anomala* Sarg. (Bot. Gaz. 65: 438. 1918), var. *palmeri* Sarg. (Bot. Gaz. 65: 439. 1918), and var. †*rufescens* Sarg. (Bot. Gaz. 65: 439. 1918).

Quercus stellata var. margaretta (Ashe) Sarg. **sand post oak**

?*Quercus drummondii* Liebm., Danske Vidensk. Selsk. Forhandl. Overs. 1854: 170. 1854.

Quercus minor var. *margaretta* Ashe, Elisha Mitchell Sci. Soc. Jour. 11: 94. 1894.

Quercus boyntoni Beadle, Biltmore Bot. Studies 1: 47. 1901.

Quercus margaretta Ashe ex Small, Fl. Southeast. U. S. 355. 1903.

†*Quercus stellata* var. *margaretta* (Ashe) Sarg., Trees and Shrubs 2: 219, pl. 185. 1913.

†*Quercus stellata* var. *araniosa* Sarg., Bot. Gaz. 65: 441. 1918.

†*Quercus stellata* var. *boyntonii* (Beadle) Sarg., Bot. Gaz. 65: 437. 1918.

Quercus margaretta [var.] *araniosa* (Sarg.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 137. 1918.

Quercus margaretta [var.?] *stolonifera* (Sarg.) Ashe, Elisha Mitchell Sci. Soc. Jour. 34: 137. 1918.

Quercus ×*pseudomargaretta* Trel., Natl. Acad. Sci. Mem. 20: 16, 105. 1924; as *Q. margaretta* × *stellata?*

Quercus stellata var. *drummondii* (Liebm.) Trel., Natl. Acad. Sci. Mem. 20: 105. 1924; as synonym.

DERIVATION.—Named for Margaret Henry Wilcox, later Mrs. W. W. Ashe.

OTHER COMMON NAMES.—dwarf post oak (SPN), †post oak, runner oak, scrubby post oak.

RANGE.—Southeastern Virginia to Missouri and eastern Oklahoma south to central Texas and central Florida. Also locally northeast to Massachusetts.

Quercus stellata var. mississippiensis (Ashe) Little **Delta post oak**

Quercus mississippiensis Ashe, Torreya 31: 39. 1931.

Quercus stellata var. *mississippiensis* (Ashe) Little, Phytologia 4:305. 1953.

DERIVATION.—Of Mississippi.

OTHER COMMON NAMES.—Mississippi Valley oak, post oak, yellow oak.

RANGE.—Mississippi River Valley in bottom lands, western Mississippi, southeastern Arkansas, and eastern Louisiana.

This oak was described after publication of the 1927 Check List and recently has been reduced to varietal status. *Quercus mississippiensis* was included in the list of important bottom-land hardwoods of the lower Mississippi Valley by John A. Putnam (Management of bottomland hardwoods. U. S. Dept. Agr. Forest Serv., South. Forest Expt. Sta. Occas. Pap. 116, 60 pp. 1951).

Quercus stellipila (Sarg.) Parks, see **Q. gravesii** Sudw.

Quercus ×stelloides Palmer **stelloides oak**

Quercus prinoides × stellata
Quercus ×stelloides Palmer, Arnold Arboretum Jour. 18: 139. 1937.

DERIVATION.—Resembling a star, doubtless referring to its relationship with *Q. stellata* Wangenh., post oak.

RANGE.—Recorded from Massachusetts, New Jersey, Missouri, Kansas, and Oklahoma.

This hybrid usually is shrubby but rarely becomes arborescent and up to 13 feet or more in height, according to Palmer (Arnold Arboretum Jour. 29: 41. 1948).

Quercus ×sterilis Trel. **blackwater oak**

Quercus marilandica × nigra
†*Quercus ×sterilis* Trel., Amer. Phil. Soc. Proc. 56: 51. 1917; as *Q. marilandica × nigra; nomen nudum.*
Quercus ×sterilis Trel. ex Palmer, Arnold Arboretum Jour. 29: 41. 1948; as *Q. marilandica × nigra.*

DERIVATION.—Sterile, or not fruiting.

RANGE.—North Carolina, Georgia, and eastern Texas.

Quercus ×sterrettii Trel. **Sterrett oak**

Quercus lyrata × stellata
Quercus ×sterretti Trel., Natl. Acad. Sci. Mem. 20: 17, 107. 1924.

DERIVATION.—Named for its discoverer, William Dent Sterrett, forester with the United States Forest Service.

RANGE.—Arkansas.

Quercus ×subfalcata Trel., see **Q. ×ludoviciana** Sarg.

Quercus ×subintegra Trel. ———

Quercus falcata × incana
Quercus falcata var. *subintegra* Engelm., Acad. Sci. St. Louis Trans. 3: 542. 1877.
Quercus ×subintegra Trel., Amer. Phil. Soc. Proc. 56: 52. 1917; as *Q. cinerea × cuneata; nomen nudum.*
†*Quercus ×subintegra* Trel., Natl. Acad. Sci. Mem. 20: 17. 1924; as *Q. cinerea × rubra.*

DERIVATION.—Almost entire, referring to the leaves.

RANGE.—Recorded from Maryland, Virginia, South Carolina, Georgia, Florida, and Alabama.

Quercus ×sublaurifolia Trel., see **Q. ×atlantica** Ashe

Quercus submollis Rydb., see **Q. gambelii** Nutt.

Quercus subobtusifolia A. Camus, see **Q. undulata** Torr.

Quercus ×substellata Trel. **substellata oak**

Quercus bicolor × stellata

Quercus ×*substellata* Trel., Nat. Acad. Sci. Mem. 20: 17, 105. 1924; as *Q. bicolor* × *stellata.*

DERIVATION.—Somewhat like *Quercus stellata* Wangenh., post oak, one of the parental species.

RANGE.—New Jersey.

Quercus subturbinella Trel., see **Q. turbinella** Greene

Quercus succulenta Small, see **Q. virginiana** var. **maritima** (Michx.) Sarg.

Quercus ×*sudworthi* Trel., see **Q.** ×**willdenowiana** (Dippel) Zabel

Quercus tardifolia C. H. Muller, see note under **Q. gravesii** Sudw.

Quercus texana Buckl., see **Q. shumardii** var. **texana** (Buckl.) Ashe

Quercus ×tharpii C. H. Muller **Tharp oak**

Quercus emoryi × *graciliformis*

Quercus tharpii C. H. Muller, Amer. Midland Nat. 19: 586. 1938.

DERIVATION.—Named for Benjamin C. Tharp, botanist of Texas.

RANGE.—Chisos Mountains, Brewster County, Trans-Pecos Texas.

A small tree named as a species and later reduced to a hybrid by its author, C. H. Muller (Tex. Res. Found. Contrib. 1: 79, pl. 61. 1951).

Quercus tomentella Engelm. **†island live oak**

†*Quercus tomentella* Engelm., Acad. Sci. St. Louis Trans. 3: 393. 1877.

DERIVATION.—Minutely tomentose, referring to the finely hairy twigs and young leaves.

OTHER COMMON NAME.—island oak.

RANGE.—Santa Rosa, Santa Cruz, Santa Catalina, and San Clemente Islands off coast of southern California, and Guadalupe Island off Lower California, Mexico.

Quercus toumeyi Sarg. **†Toumey oak**

†*Quercus toumeyi* Sarg., Gard. and Forest 8: 92, figs. 13, 14. 1895.

DERIVATION.—Named for its discoverer, James William Toumey (1865–1932), American forester and botanist.

RANGE.—Southwestern corner of New Mexico (San Luis Mountains), southeastern Arizona, and northern Mexico (Sonora and Chihuahua).

Quercus ×townei Palmer **Towne oak**

Quercus dumosa × *lobata*

Quercus ×*townei* Palmer, Arnold Arboretum Jour. 29: 43. 1948; as *Q. dumosa* × *lobata.*

DERIVATION.—Named for Stuart S. Towne, who discovered it in 1918.

RANGE.—California (Los Angeles County).

A recently described hybrid becoming a shrub or tree to 20 feet high.

Quercus ×tridentata (A. DC.) Engelm. **St. Louis oak**

Quercus imbricaria × *marilandica*

Quercus nigra γ *tridentata* A. DC., Prodr. 16(2): 64. 1864.

†*Quercus* ×*tridentata* (A. DC.) Engelm., Acad. Sci. St. Louis Trans. 3: 539. 1877; as *Q. imbricaria* × *nigra*.

DERIVATION.—Three-toothed, referring to the leaves.

RANGE.—Recorded from Pennsylvania, Michigan, Illinois, Missouri, and Virginia.

Quercus triloba Michx., see **Q. falcata** Michx.

Quercus turbinella Greene **shrub live oak**

Quercus turbinella Greene in Kellogg & Greene, Illus. West Amer. Oaks 37. 1889; 59, pl. 27. 1890.

Quercus dumosa var. *turbinella* (Greene) Jeps., Silva Calif. 218. 1910.

Quercus subturbinella Trel., Natl. Acad. Sci. Mem. 20: 95, pl. 153. 1924.

DERIVATION.—Top-shaped, referring to the acorn cups.

OTHER COMMON NAMES.—scrub oak, encino.

RANGE.—Southern Colorado, southern Utah, and southern Nevada, south to southeastern California, Arizona, New Mexico, and Trans-Pecos Texas. Also in northern Lower California, Mexico.

A shrub or rarely a small tree to 15 feet tall, according to Kearney and Peebles (Ferns Fl. Pl. Ariz. 225. 1942), Little (Southwest. Trees 48. 1950), and Muller (Tex. Res. Found. Contrib. 1: 62. 1951).

Quercus undulata Torr. **wavyleaf oak**

†*Quercus undulata* Torr., Lyc. Nat. Hist. N. Y. Ann. 2: 248, pl. 4. 1828.

Quercus fendleri Liebm., Danske Vidensk. Selsk. Forhandl. Overs. 1854: 170. 1854.

Quercus undulata β *obtusifolia* A. DC. in DC., Prodr. 16(2): 23. 1864.

Quercus venustula Greene in Kellogg & Greene, Illus. West Amer. Oaks 69, pl. 32. 1890.

Quercus obtusifolia (A. DC.) Rydb., N. Y. Bot. Gard. Bul. 2: 213, pl. 29, figs. 3–4. 1901. Not *Q. obtusifolia* D. Don, Prodr. Fl. Nep. 56. 1825.

Quercus pauciloba Rydb., N. Y. Bot. Gard. Bul. 2: 215, pl. 30, fig. 2. 1901.

Quercus rydbergiana Cockerell, Torreya 3: 7. 1903.

Quercus media Woot. & Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 16: 116. 1913.

Quercus subobtusifolia A. Camus, Soc. Bot. de France Bul. 81: 816. 1934.

DERIVATION.—Undulate, referring to the wavy margined leaves.

OTHER COMMON NAMES.—†Rocky Mountain shin oak, scrub oak, shin oak, switch oak.

RANGE.—Colorado, southern Utah, and southern Nevada, south to Arizona, New Mexico, and Trans-Pecos Texas. Also in northern Mexico (Coahuila).

Quercus undulata var. *vaseyana* (Buckl.) Rydb., see **Q. pungens var. vaseyana** (Buckl.) C. H. Muller

Quercus utahensis (A. DC.) Rydb., see **Q. gambelii** Nutt.

Quercus vaccinifolia Kellogg, see note under **Q. chrysolepis** Liebm.

Quercus ×vaga Palmer & Steyerm. ———

Quercus palustris × *velutina*

Quercus ×vaga Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 521. 1935; as *Q. palustris* × *velutina.*

DERIVATION.—Wandering.

RANGE.—Missouri.

Quercus vaseyana Buckl., see **Q. pungens var. vaseyana** (Buckl.) C. H. Muller

***Quercus velutina** Lam. **†black oak**

†*Quercus velutina* Lam., Encycl. Méth. Bot. 1: 721. 1785.

†*Quercus velutina* var. *missouriensis* Sarg., Man. Trees No. Amer. 239. 1905.

Quercus missouriensis (Sarg.) Ashe, Charleston Mus. Bul. 13: 28. 1917.

†?*Quercus leiodermis* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 43. 1924.

DERIVATION.—Velvety, referring to the young leaves.

OTHER COMMON NAMES.—red oak (lumber), †smooth-bark oak, yellow oak, quercitron oak, quercitron, yellowbark oak.

RANGE.—Southwestern Maine to New York, extreme southern Ontario, Michigan, Wisconsin, southeastern Minnesota, and southeastern Nebraska, south to eastern Texas, northwestern Florida, and Georgia.

REFERENCE.—Fernald, M. L. Types of some American trees. Arnold Arboretum Jour. 27: 386–394, illus. 1946.

HYBRIDS.—*Quercus ×bushii* Sarg. (*Q. marilandica* × *velutina*); *Q. ×demarei* Ashe (*Q. nigra* × *velutina*); *Q. ×filialis* Little (*Q. phellos* × *velutina*); *Q. ×hawkinsiae* Sudw. (*Q. rubra* × *velutina*); *Q. ×leana* Nutt. (*Q. imbricaria* × *velutina*); *Q. ×palaeolithicola* Trel. (*Q. ellipsoidalis* × *velutina*); *Q. ×podophylla* Trel. (*Q. incana* × *velutina*); *Q. ×rehderi* Trel. (*Q. ilicifolia* × *velutina*); *Q. ×vaga* Palmer & Steyerm. (*Q. palustris* × *velutina*); *Q. ×willdenowiana* (Dippel) Zabel (*Q. falcata* × *velutina*).

Quercus venulosa Ashe, see note under **Q. arkansana** Sarg.

Quercus venustula Greene, see **Q. undulata** Torr.

***Quercus virginiana** Mill. **†live oak**

HYBRIDS.—*Quercus ×comptoniae* Sarg. (*Q. lyrata* × *virginiana*); *Q. ×harbisonii* Sarg. (*Q. stellata* × *virginiana*).

Quercus virginiana var. virginiana **live oak (typical)**

†*Quercus virginiana* Mill., Gard. Dict. Ed. 8, *Quercus* No. 16. 1768.

Quercus virens var. *dentata* Chapm., Fl. South. U. S. 421. 1860.

Quercus virginiana var. *minima* Sarg., Silva No. Amer. 8: 101, pl. 396. 1895.

Quercus minima (Sarg.) Small, Torrey Bot. Club Bul. 24: 438. 1897.

Quercus virginiana var. *dentata* (Chapm.) Chapm. ex Sarg., Bot. Gaz. 65: 449. 1918.

†*Quercus virginiana* var. *macrophylla* Sarg., Bot. Gaz. 65: 447. 1918.

Quercus virginiana var. *pygmaea* Sarg., Bot. Gaz. 65: 449. 1918.

†*Quercus virginiana* var. *virescens* Sarg., Bot. Gaz. 65: 446. 1918.

Quercus pygmea (Sarg.) Ashe, Torrey Bot. Club Bul. 55: 465. 1928.

DERIVATION.—Of Virginia.

OTHER COMMON NAMES.—Virginia live oak.

RANGE.—Coastal Plain from southeastern Virginia to southern Florida, west to eastern and southern Texas. Also in western Cuba.

Quercus virginiana var. fusiformis (Small) Sarg. ———

Quercus fusiformis Small, Torrey Bot. Club Bul. 23: 357. 1901.

Quercus virginiana var. *fusiformis* (Small) Sarg., Bot. Gaz. 65: 448. 1918.

DERIVATION.—Spindle-shaped, from the slender or switchlike branches.

COMMON NAMES.—live oak, scrub live oak.

RANGE.—Southwestern Oklahoma, and from central Texas to Edwards Plateau and southern Texas. Also in northeastern Mexico (Coahuila to Tamaulipas).

This variety, which was mentioned as a shrub in a note in the 1927 Check List, also becomes a tree to 39 feet high, according to C. H. Muller (Tex. Res. Found. Contrib. 1: 74. 1951), and is included here.

Quercus virginiana var. maritima (Michx.) Sarg. **sand live oak**

Quercus phellos [var.] *maritima* Michx., Hist. Chênes Amér. Sept., *Quercus* No. 7, pl. 13, fig. 3. 1801.

Quercus maritima (Michx.) Willd., Spec. Pl. 4(1): 424. 1805. Not *Quercus maritima* Bartr., Travels 164. 1791.

?*Quercus andromeda* Riddell, New Orleans Med. and Surg. Jour. 9: 614. 1853.

Quercus virens var. *maritima* (Michx.) Chapm., Fl. South. U. S. 421. 1860.

Quercus virginiana var. *maritima* (Michx.) Sarg., Silva No. Amer. 8: 100. 1895.

Quercus geminata Small, Torrey Bot. Club Bul. 24: 438. 1897.
Quercus rolfsii Small, N. Y. Bot. Gard. Bul. 3: 422. 1905.
Quercus succulenta Small, N. Y. Bot. Gard Bul. 3: 422. 1905.
†*Quercus virginiana* var. *eximia* Sarg., Bot. Gaz. 65: 447. 1918; as "*eximea.*"
†*Quercus virginiana* var. *geminata* (Small) Sarg., Bot. Gaz. 65: 445. 1918.
Quercus geminata var. *grandifolia* (Sarg.) Trel., Natl. Acad. Sci. Mem. 20: 115. 1924.
Quercus geminata var. *succulenta* (Small) Trel., Natl. Acad. Sci. Mem. 20: 115. 1924.

DERIVATION.—Maritime, from its habitat along shores.

OTHER COMMON NAMES.—dwarf live oak, Rolfs oak.

RANGE.—Coastal Plain from southeastern North Carolina to southern Florida, west to Mississippi and southeastern Louisiana.

This variety has generally been known as *Quercus virginiana* var. *geminata* (Small) Sarg. However, the oldest varietal epithet, var. *maritima*, is adopted here.

Quercus vreelandii Rydb., see **Q. gambelii** Nutt.

Quercus ×walteriana Ashe — **Walter oak**

Quercus laevis × *nigra*
†*Quercus ×walteriana* Ashe, Soc. Amer. Foresters Proc. 11: 89. 1916.

DERIVATION.—In honor of Thomas Walter (1740?–89), English-born planter and botanist of South Carolina.

RANGE.—North Carolina, South Carolina, Georgia, Florida, and Alabama.

Formerly referred to *Quercus sinuata* Walt., a briefly described name of uncertain identity.

Quercus wilcoxii Rydb., see **Q. chrysolepis var. palmeri (Engelm.)** Sarg.

Quercus ×willdenowiana (Dippel) Zabel — **Willdenow oak**

Quercus falcata × *velutina*
Quercus tinctoria Bartr. [Abart] a *discolor* (Willd.) Dippel a *willdenowiana* Dippel, Handb. Laubholzk. 2: 122. 1892.
Quercus ×willdenowiana (Dippel) Zabel in Beissner, Schelle, & Zabel, Handb. Laubholz-Benenn. 67. 1903.
†*Quercus ×sudworthi* Trel., Amer. Phil. Soc. Proc. 56: 52. 1917; *nomen nudum.*

DERIVATION.—Named for Karl Ludwig Willdenow (1765–1812), German botanist, who in 1805 described an oak afterwards thought to have been the same.

RANGE.—Recorded from North Carolina, Tennessee, Arkansas, and Georgia. Originally described from plants cultivated in Europe.

Quercus wislizenii A. DC. — **interior live oak**

†*Quercus wislizeni* A. DC. in DC., Prodr. 16(2): 67. 1864.

Quercus wislizeni var. *frutescens* Engelm., Acad. Sci. St. Louis Trans. 3: 396. 1877.

Quercus wislizeni var. *extima* (Jeps.) Jeps., Man. Fl. Pl. Calif. 276. 1923.

DERIVATION.—Named for its discoverer, Friedrich Adolph Wislizenus (1810–89), American physician of German birth, who collected plants in southwestern United States and northern Mexico.

OTHER COMMON NAMES.—†highland live oak, Sierra live oak.

RANGE.—California, from Shasta County southward to northern Lower California, Mexico.

HYBRID.—*Quercus* ×*moreha* Kellogg (*Q. kelloggii* × *wislizenii*).

Quercus shrevei C. H. Muller (Amer. Midland Nat. 19: 587. 1938) described as a small tree from a single collection in Monterey County, California, is closely related to *Q. wislizenii* and may be a variety or hybrid.

Rapanea Aubl. (Family Myrsinaceae) **rapanea**

†*Rapanea* Aubl., Hist. Pl. Guiane Franç. 1: 121, pl. 46. 1775.

DERIVATION.—From the native name of *Rapanea guianensis* Aubl. in Guiana.

Rapanea guianensis Aubl. **Guiana rapanea**

†*Rapanea guianensis* Aubl., Hist. Pl. Guiane Franç. 1: 121, pl. 46. 1775.

DERIVATION.—Of Guiana; described from French Guiana.

OTHER COMMON NAME.—myrsine.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies, southern Mexico (Chiapas), Central America, and South America.

Reynosia Griseb. (Family Rhamnaceae) **darling-plum**

†*Reynosia* Griseb., Cat. Pl. Cub. 33. 1866.

DERIVATION.—Dedicated to Alvaro Reynoso (1830–88), Cuban chemist and agriculturist.

Reynosia septentrionalis Urban **darling-plum**

†*Reynosia septentrionalis* Urban, Symb. Ant. 1: 356. 1899.

DERIVATION.—Northern; the northernmost representative of this West Indian genus of about nine species.

OTHER COMMON NAMES.—northern darling-plum (SPN), †red-ironwood.

RANGE.—Southern Florida, north on east coast to central Florida and including Florida Keys. Also in Bahama Islands.

At one time included in *Reynosia latifolia* Griseb. of Cuba.

Rhacoma L., see **Crossopetalum** P. Br.

Rhamnidium ferreum (Vahl) Sarg., see **Krugiodendron ferreum** (Vahl) Urban

Rhamnus L. (Family Rhamnaceae) **buckthorn**

†*Rhamnus* L., Sp. Pl. 193. 1753; Gen. Pl. Ed. 5, 89. 1754.

DERIVATION.—The ancient Greek name.

REFERENCE.—Wolf, Carl B. The North American species of Rhamnus. Rancho Santa Ana Bot. Gard. Monog., Bot. Ser. 1. 136 pp., illus. 1938.

The classical, feminine gender is adopted here to conform to the International Code and to usage, though Linnaeus assigned masculine gender to this genus.

Rhamnus anonaefolia Greene, see **R. purshiana** DC.

Rhamnus betulaefolia Greene **birchleaf buckthorn**

Rhamnus betulaefolia Greene, Pittonia 3: 16. 1896.

Rhamnus purshiana DC. var. *betulaefolia* (Greene) Cory, Rhodora 38: 407. 1936.

Rhamnus betulaefolia var. *obovata* Kearney & Peebles, Wash. Acad. Sci. Jour. 29: 486. 1939.

DERIVATION.—With leaves like *Betula*, or birchleaf.

RANGE.—Mountains from Trans-Pecos Texas to southern New Mexico, southeastern to northern Arizona, southern Utah, and southern Nevada. Also in northern Mexico (Sonora and Chihuahua to Durango and Tamaulipas).

A shrub 8 feet or less in height but found as a small tree in Jumpup Canyon west of Kaibab Plateau in northern Arizona by Leslie N. Goodding (Little, Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 9: 85–86, fig. 1950).

Rhamnus californica Eschsch. var. **ursina** (Greene) McMinn **California buckthorn**

Rhamnus ursina Greene, Leaflets 1: 63. 1904.

Rhamnus californica Eschsch. subsp. *ursina* (Greene) Wolf, Rancho Santa Ana Bot. Gard. Monog., Bot. Ser. 1: 74, figs. 5 e-f, 30. 1938.

Rhamnus californica Eschsch. var. *ursina* (Greene) McMinn, Illus. Man. Calif. Shrubs 329. 1939.

DERIVATION.—Of California; the varietal name meaning of bears is from Bear Mountain, near Silver City, N. Mex., the type locality.

OTHER COMMON NAMES.—coffeeberry, California coffeeberry, coast coffeeberry, pigeonberry.

RANGE.—Mountains from southwestern New Mexico to southeastern and central Arizona, southern Nevada, and southeastern California.

This variety is a shrub 6 feet or more in height but sometimes a small tree to 20 feet high and 6 inches in trunk diameter and included as a tree by Little (Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 9: 84–85, fig. 1950).

Rhamnus californica Eschsch. (Acad. Sci. St. Pétersb. Mém. 10: 285. 1823), California buckthorn, generally is a shrub and includes the typical shrubby variety and other shrubby varieties ranging in southwestern Oregon, California, and northern Lower California, Mexico.

Rhamnus caroliniana Walt. **Carolina buckthorn**

†*Rhamnus caroliniana* Walt., Fl. Carol. 101. 1788; as "*carolinianus*."

Rhamnus caroliniana var. *mollis* Fern., Rhodora 12: 79. 1910.

DERIVATION.—Of Carolina.

OTHER COMMON NAMES.—Indian-cherry, tree buckthorn, †yellow buckthorn.

RANGE.—Western Virginia, West Virginia, southern Ohio, southern Indiana, southern Illinois, and southeastern Nebraska, south to Missouri, eastern Oklahoma, central and eastern Texas, east to central Florida, and north to eastern North Carolina. Also in northeastern Mexico (Tamaulipas).

RHAMNUS CATHARTICA L. EUROPEAN BUCKTHORN

Rhamnus cathartica L., Sp. Pl. 193. 1753; as "*catharticus*."

DERIVATION.—Cathartic; the fruit has been used in medicine.

OTHER COMMON NAMES.—common buckthorn (SPN), European waythorn.

RANGE.—Escaped from cultivation and naturalized locally from Nova Scotia to Maine, extreme southern Quebec, southern Ontario, Ohio, southern Wisconsin, Illinois, and eastern North Dakota, south to Missouri and Virginia. Native of Europe and Asia. A shrub or small tree to 26 feet high.

Rhamnus crocea Nutt., see note under **R. crocea** var. **ilicifolia** (Kellogg) Greene

Rhamnus crocea var. **ilicifolia** (Kellogg) Greene
†hollyleaf buckthorn

Rhamnus ilicifolia Kellogg, Calif. Acad. Sci. Proc. 2: 37. 1863; as "*ilicifolius*."

†*Rhamnus crocea* var. *ilicifolia* (Kellogg) Greene, Fl. Franciscana 79. 1891.

Rhamnus crocea subsp. *ilicifolia* (Kellogg) C. B. Wolf, Rancho Santa Ana Bot. Gard. Monog., Bot. Ser., 1: 39, figs. 1 h-o, 2 g-l, 12. 1938.

DERIVATION.—With leaves like *Ilex*, or hollyleaf.

OTHER COMMON NAMES.—hollyleaf redberry buckthorn (SPN), redberry buckthorn, large-leaf redberry buckthorn, hollyleaf coffeeberry, hollyleaf redberry.

RANGE.—Mountains from southeastern to northwestern Arizona and from northern California south to northern Lower California, Mexico.

†*Rhamnus crocea* Nutt. (in Torr. & Gray, Fl. No. Amer. 1: 261. 1838), hollyleaf buckthorn (redberry buckthorn, SPN), in its typical variety var. *crocea* and †*Rhamnus crocea* var. *pilosa* Trel. are shrubs usually less than 6 feet high. However, the two varieties listed here reach tree size. *R. crocea* var. *ilicifolia* (Kellogg) Greene is generally shrubby but becomes a small tree to 15 feet in height. The range of the species embraces that of the two arborescent varieties listed here.

Rhamnus crocea var. **pirifolia** (Greene) Little
great redberry buckthorn

Rhamnus insularis Greene, Calif. Acad. Sci. Bul. 2: 392. 1887; in part.

†*Rhamnus crocea* var. *insularis* Sarg., Gard. and Forest 2: 364. 1889; in part. Not *R. insulus* Kellogg, Calif. Acad.

Sci. Proc. 2: 20. 1863. Not *R. crocea* subsp. *insula* (Kellogg) C. B. Wolf, Rancho Santa Ana Bot. Gard. Monog., Bot. Ser. 1: 36, fig. 10. 1938.

Rhamnus pirifolia Greene, Pittonia 3: 15. 1896.

Rhamnus crocea subsp. *pirifolia* (Greene) C. B. Wolf, Rancho Santa Ana Bot. Gard. Monog., Bot Ser. 1: 45, figs. 4 c, 13–16. 1938.

Rhamnus crocea var. *pirifolia* (Greene) Little, Amer. Midland Nat. 33: 496. 1945.

DERIVATION.—pear-leaved.

OTHER COMMON NAMES.—†buckthorn, island coffeeberry, island redberry.

RANGE.—Santa Rosa, Santa Cruz, Santa Catalina, and San Clemente Islands off coast of southern California, and Guadalupe Island off the west coast of Lower California, Mexico.

RHAMNUS FRANGULA L. GLOSSY BUCKTHORN

Rhamnus frangula L., Sp. Pl. 193. 1753.

DERIVATION.—An old name (and still the official drug name) for this species.

OTHER COMMON NAME.—alder buckthorn.

RANGE.—Naturalized locally from Nova Scotia and New Hampshire to southern Quebec, southern Ontario, Wisconsin, and Minnesota, south to Illinois, Indiana, Ohio, and New Jersey. Native in Europe, western Asia, and northern Africa.

A shrub or small tree to 20 feet high. Spreading very rapidly and likely to become obnoxious, according to Fernald (Gray's Man. Bot. Ed. 8, 993. 1950).

Rhamnus ilicifolia Kellogg, see **R. crocea** var. **ilicifolia** (Kellogg) Greene

Rhamnus insularis Greene, see **R. crocea** var. **pirifolia** (Greene) Little

Rhamnus pirifolia Greene, see **R. crocea** var. **pirifolia** (Greene) Little

***Rhamnus purshiana** DC. **cascara buckthorn**

Rhamnus purshiana DC., Prodr. 2: 25. 1825; as "*purshianus.*"

Rhamnus anonaefolia Greene, Pittonia 3: 16. 1896.

Rhamnus purshiana var. *anonaefolia* (Greene) Jeps., Man. Fl. Pl. Calif. 614. 1925.

DERIVATION.—In honor of Frederick Pursh (1774–1820), botanist of German parentage, who studied the plants of eastern North America and who first published a description of this species in his Flora Americae Septentrionalis (1814).

OTHER COMMON NAMES.—†cascara, cascara sagrada, bearberry, coffee-tree.

RANGE.—Southern and western British Columbia, from northwestern Montana to northern and western Idaho and western Washington, and south to western Oregon and northern California.

Rhamnus ursina Greene, see **R. californica** Eschsch. var. **ursina** (Greene) McMinn

Rhizophora L. (Family Rhizophoraceae) **mangrove**

†*Rhizophora* L., Sp. Pl. 443. 1753; Gen. Pl. Ed. 5, 202. 1754.

Rhizophora mangle var. *samoensis Hochr.*, Candollea 2: 447. 1925.

Rhizophora samoensis (Hochr.) Salvoza, Philippine Univ. Nat. and Appl. Sci. Bul. 5: 220, pl. 6. 1936.

DERIVATION.—From Greek, root-bearing, applied to various tropical plants with thickened roots.

REFERENCE.—Salvoza, Felipe M. Rhizophora. Philippine Univ. Nat. and Appl. Sci. Bul. 5: 179–255, illus. 1936.

Rhizophora mangle L. **†mangrove**

†*Rhizophora mangle* L., Sp. Pl. 443. 1753.

DERIVATION.—The Spanish common name of mangrove.

OTHER COMMON NAMES.—American mangrove (SPN), red mangrove.

RANGE.—Coasts of central and southern Florida, including Florida Keys. Also in Bermuda and West Indies. Atlantic coast from northern Mexico (Tamaulipas) south through Central America and South America to Brazil. Pacific coast from Lower California, Mexico, south through Central America and South America to northern Peru and Galapagos Islands. Also in Melanesia and Polynesia.

Rhododendron L. (Family Ericaceae) **rhododendron**

†*Rhododendron* L., Sp. Pl. 392. 1753. Gen. Pl. Ed. 5, 185. 1754; as "*Rhododendrum.*"

Hymenanthes Blume, Bijdr. Fl. Nederl. Indië 862. 1826.

DERIVATION.—From the Greek, meaning rose tree; there is some controversy as to whether the name applied to oleander, *Nerium oleander* L., or to rhododendron.

REFERENCES.—Copeland, Herbert F. A study, anatomical and taxonomic, of the genera of Rhododendroideae. Amer. Midland Nat. 30: 533–625, illus. 1943.

Rhododendron Society. The species of Rhododendron. 861 pp., illus. 1930.

Rhododendron catawbiense Michx. **†catawba rhododendron**

†*Rhododendron catawbiense* Michx., Fl. Bor.-Amer. 1: 258. 1803.

Hymenanthes catawbiensis (Michx.) Copeland f., Amer. Midland Nat. 30: 614. 1943.

DERIVATION.—From Catawba River, N. C.

OTHER COMMON NAMES.—mountain-rosebay, purple-laurel.

RANGE.—Mountains and Piedmont from Virginia, West Virginia, and southeastern Kentucky south to eastern Tennessee,

northern Alabama, northern Georgia, western South Carolina, and central North Carolina.

Rhododendron macrophyllum D. Don **Pacific rhododendron**

Rhododendron macrophyllum D. Don ex G. Don, Gen. Syst. Gard. Bot. 3: 843. 1843.
Rhododendron californicum Hook., Curtis' Bot. Mag. 81: No. 4863, pl. 4863. 1855.
Hymenanthes californica (Hook.) Copeland f., Amer. Midland Nat. 30: 614. 1943.
Hymenanthes macrophylla (G. Don) Copeland f., Leafl. West. Bot. 5: 140. 1948.

DERIVATION.—Large-leaved (literally long-leaved).

OTHER COMMON NAMES.—coast rhododendron (SPN), California rhododendron, California rosebay.

RANGE.—Pacific coast region from southwestern British Columbia and western Washington south to western Oregon and west central California.

A shrub or rarely becoming a small tree up to 26 feet tall. Mentioned in a note as a shrub, *Rhododendron californicum*, in the 1927 Check List.

Rhododendron maximum L. **rosebay rhododendron**

†*Rhododendron maximum* L., Sp. Pl. 392. 1753.
Hymenanthes maxima (L.) Copeland f., Amer. Midland Nat. 30: 614. 1943.

DERIVATION.—Largest; the largest American rhododendron, though not the largest in the genus.

OTHER COMMON NAMES.—great-laurel, †great rhododendron, white rhododendron, rosebay.

RANGE.—Southwestern Maine to Vermont, New York, extreme southern Ontario, Pennsylvania, and Ohio, south in mountains to eastern Tennessee, northern Alabama, northern Georgia, western South Carolina, and western North Carolina. Reported from Nova Scotia in 1877 but not subsequently collected there, according to A. E. Roland (Fl. Nova Scotia. Nova Scotian Inst. Sci. Proc. 21: 486, 625. 1947).

REFERENCE.—Knowlton, Clarence H. Rhododendron maximum in New England. Rhodora 52: 215–218, 279. 1950.

Rhoeidium Greene, see **Rhus** L.

Rhus L. (Family Anacardiaceae) **sumac**

†*Rhus* L., Sp. Pl. 265. 1753; Gen. Pl. Ed. 5, 129. 1754.
Schmaltzia Desv., Jour. de Bot. Appl. Agr. Pharm. Med. Arts 1: 229. 1813; *nomen illegitimum.*
Styphonia Nutt. in Torr. & Gray, Fl. No. Amer. 1: 220. 1838. Not *Styphonia* Med., Staatsw. Vorles. Churpf. Physoekon. Ges. 1: 230. 1791; Philos. Bot. 2: 70. 1791.
Schmaltzia Desv. ex Small, Fl. Southeast. U. S. 727. 1903.
Rhoeidium Greene, Leafl. 1: 143. 1905.

Neostyphonia Shafer in Britton & Shafer, No. Amer. Trees 612, fig. 613. 1908.

Malosma Nutt. ex Abrams, Fl. Los Angeles [Ed. 3] 220. 1917.

Schmaltzia Desv. emend. Barkley & Reed, Amer. Midland Nat. 24: 647, 672. 1940.

DERIVATION.—The classical Greek and Latin name of Sicilian sumac, *Rhus coriaria* L.

REFERENCES.—Barkley, Fred Alexander. A monographic study of Rhus and its immediate allies in North and Central America, including the West Indies. Mo. Bot. Gard. Ann. 24: 265–498, illus. 1937.

Barkley, Fred A. Schmaltzia. Amer. Midland Nat. 24: 647–665. 1940.

Rhus L., see also **Cotinus** Mill. and **Toxicodendron** Mill.

Rhus arguta Greene, see **R. glabra** L.

Rhus borealis Greene, see **R. glabra** L.

Rhus choriophylla Woot. & Standl. **Mearns sumac**

Rhus choriophylla Woot. & Standl., U. S. Natl. Mus., Contrib. U. S. Natl. Herbarium 16: 146. 1913.

Schmaltzia choriophylla (Woot. & Standl.) Barkley, Amer. Midland Nat. 24: 653. 1940.

DERIVATION.—Separated leaves, perhaps referring to the compound leaves.

RANGE.—Mountains of Trans-Pecos Texas, southern New Mexico and southeastern Arizona. Also in northern Mexico (Sonora and Chihuahua).

Commonly a shrub less than 7 feet high, but found by Leslie N. Goodding as a small tree rarely 15 feet high and 3 inches in trunk diameter in Santa Cruz County, Ariz. Accepted as a tree by Little (Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 78, fig. 1950).

Rhus cismontana Greene, see **R. glabra** L.

Rhus copallina L. **shining sumac**

Rhus copallina var. **copallina** **shining sumac (typical)**

†*Rhus copallina* L., Sp. Pl. 266. 1753; as "*Copallinum.*"

Rhus copallina α *latifolia* Engler in A. & C. DC., Monogr. Phaner. 4: 384. 1883.

Schmaltzia copallina (L.) Small, Fl. Southeast. U. S. 728, 1334. 1903.

Rhus copallina var. *nesophylla* House, N. Y. State Mus. Bul. 243/244: 55. 1923.

DERIVATION.—From copal, a Mexican Indian name for a white resin; it was thought that this species furnished the copal of commerce.

OTHER COMMON NAMES.—flameleaf sumac (SPN), †dwarf sumac, winged sumac, sumac.

RANGE.—Southwestern Maine to southeastern New York, Pennsylvania, Michigan, central Wisconsin, Illinois, Missouri, and eastern Kansas, south to central Oklahoma, and eastern Texas, and east to Georgia.

REFERENCES.—Dayton, William A. Rhodora 54: 79. 1952.
Fernald, M. L., and Griscom, Ludlow. Variations of Rhus copallina. Rhodora 37: 167–168. 1935.
Moldenke, Harold N. Rev. Sudamer. de Bot. 4: 42. 1937.

Rhus copallina var. leucantha (Jacq.) DC. ———

Rhus leucantha Jacq., Pl. Rar. Hort. Schoenbr. 3: 50, pl. 342. 1798.
†*Rhus copallina* var. *leucantha* (Jacq.) DC., Prodr. 2: 68. 1825.
Schmaltzia obtusifolia Small, Fl. Southeast. U. S. 729, 1334. 1903.
Rhus obtusifolia (Small) Small, Fl. Miami 112. 1913.
Rhus copallina var. *obtusifolia* (Small) Fern. & Griscom, Rhodora 37: 168. 1935.

DERIVATION.—White-flowered.

OTHER COMMON NAMES.—white flameleaf sumac (SPN), †dwarf sumac, southern sumac.

RANGE.—Coastal Plain, chiefly, from South Carolina to southern Florida and west to southern Mississippi. Local in southeastern Virginia and Long Island, N. Y. Also in western Cuba.

Rhus glabra L. **smooth sumac**

Rhus glabra L., Sp. Pl. 265. 1753.
Rhus glabra var. *occidentalis* Torr. in Wilkes U. S. Explor. Exped. 17: 257. 1874.
Rhus glabra var. *borealis* Britton, Man. Fl. North. States Canada 601. 1901.
Schmaltzia glabra (L.) Small, Fl. Southeast. U. S. 729, 1334. 1903.
Rhus occidentalis (Torr.) Blankinship, Mont. Agr. Col. Sci. Stud. Bot. 1: 86. 1905.
Rhus arguta Greene, Wash. Acad. Sci. Proc. 8: 192. 1906.
Rhus borealis Greene, Wash. Acad. Sci. Proc. 8: 188. 1906.
Rhus cismontana Greene, Wash. Acad. Sci. Proc. 8: 189. 1906.
Rhus glabra cismontana (Greene) Cockerell ex Daniels, Mo. Univ. Studies, Sci. Ser., 2(2) (Fl. Boulder, Colo.): 167. 1911.

DERIVATION.—Glabrous, or hairless.

OTHER COMMON NAME.—scarlet sumac.

RANGE.—Very widely distributed almost throughout the United States and apparently in every State. Central Maine and southern Quebec, west to Minnesota, North Dakota, and southern British Columbia, south to Washington, northern Oregon, eastern Nevada, southern California, southern Arizona, eastern Texas, and

northwestern Florida. Also in northern Mexico (Sonora, Chihuahua, and Tamaulipas).

HYBRID.—*Rhus* ×*pulvinata* Greene (*R. glabra* × *typhina*).

Commonly a large shrub but occasionally becoming a tree 16 to 23 feet high in the southern part of its range. Mentioned in a note in the 1927 Check List. Many names have been published for minor variations in different parts of the broad range.

Rhus gymnoclada Greene, see **R. ×pulvinata** Greene

Rhus hirta (L.) Sudw., see **R. typhina** Torner

Rhus hybrida Rehd., see **R. ×pulvinata** Greene

Rhus integrifolia (Nutt.) Benth. & Hook. f. **lemonade sumac**

Styphonia integrifolia Nutt. in Torr. & Gray, Fl. No. Amer. 1: 220. 1838.

Styphonia serrata Nutt. in Torr. & Gray, Fl. No. Amer. 1: 220. 1838.

†*Rhus integrifolia* (Nutt.) Benth. & Hook. f. ex Rothr. in Wheeler, Rpt. U. S. Geogr. Surv. 6: 84. 1878.

†*Rhus integrifolia β serrata* (Nutt.) Engler in A. DC. & C. DC., Monogr. Phaner. 4: 388. 1883.

Neostyphonia integrifolia (Nutt.) Shafer in Britton & Shafer, No. Amer. Trees 613, fig. 564. 1908.

Schmaltzia integrifolia (Nutt.) Barkley, Amer. Midland Nat. 24: 650. 1940.

DERIVATION.—Entire-leaved; not appropriate, but the variation with spiny-toothed leaves was originally interpreted as a different species.

OTHER COMMON NAMES.—†mahogany sumac, lemonade-berry, "mahogany."

RANGE.—Pacific coast region of southern California, including Santa Catalina Island and other islands. Also in northern Lower California, Mexico.

Rhus kearneyi Barkley **Kearney sumac**

Rhus kearneyi Barkley, Mo. Bot. Gard. Ann. 24: 363, fig. 15, pl. 19, fig. 2. 1937.

Schmaltzia kearneyi (Barkley) Barkley, Amer. Midland Nat. 24: 651. 1940.

DERIVATION.—Named for Thomas H. Kearney, botanist of the United States Department of Agriculture and co-author of Arizona Flora, who collected the type specimen in 1930.

RANGE.—Southwestern Arizona (known only from Tinajas Altas Mountains, Yuma County).

This species, described after publication of the 1927 Check List, becomes a small tree up to 15 to 18 feet high, according to Leslie N. Goodding.

Rhus lanceolata (A. Gray) Britton **prairie sumac**

†*Rhus copallina* var. *lanceolata* A. Gray, Boston Jour. Nat. Hist. 6: 158. 1850.

Schmaltzia lanceolata (A. Gray) Small, Fl. Southeast. U. S. 728, 1334. 1903.

Rhus lanceolata (A. Gray) Britton in Britton & Shafer, No. Amer. Trees 606. 1908.

DERIVATION.—Lanceolate, or lance-shaped, describing the leaflets.

OTHER COMMON NAMES.—prairie flameleaf sumac (SPN), †dwarf sumac, prairie shining sumac, Texan sumac.

RANGE.—Southern Oklahoma (Arbuckle Mountains), central to southern and Trans-Pecos Texas, and southern New Mexico. Also in northeastern Mexico (Coahuila to Tamaulipas and Puebla).

Rhus laurina Nutt. **†laurel sumac**

†*Rhus laurina* Nutt. in Torr. & Gray, Fl. No. Amer. 1: 219. 1838.

Malosma laurina Nutt. ex Abrams, Fl. Los Angeles [Ed. 3,] 220. 1917.

DERIVATION.—Like *Laurus,* laurel.

RANGE.—Pacific coast region of southern California, including Santa Catalina Island south to central Lower California, Mexico.

Rhus leucantha Jacq., see **R. copallina** var. **leucantha** (Jacq.) DC.

Rhus metopium L., see note under **Metopium toxiferum** (L.) Krug & Urban

Rhus microphylla Engelm. (*Rhoeidium microphyllum* (Engelm.) Greene; *Schmaltzia microphylla* (Engelm.) Small), littleleaf sumac, a shrub usually less than 7 feet high but sometimes to 10 feet, was reported as a shrub or small tree to 16 feet in height by Barkley (Mo. Bot. Gard. Ann. 24: 387. 1937). It ranges from southwestern Oklahoma and northwestern, central, and southern Texas to central New Mexico and southeastern Arizona, and in northern Mexico (Lower California and Sonora to Zacatecas and Nuevo León). Further information about any individuals reaching tree size in the United States is desired.

Rhus obtusifolia (Small) Small, see **R. copallina** var. **leucantha** (Jacq.) DC.

Rhus ovata S. Wats. **sugar sumac**

Rhus ovata S. Wats., Amer. Acad. Arts and Sci. Proc. 20: 358. 1885.

Neostyphonia ovata (S. Wats.) Abrams, N. Y. Bot. Gard. Bul. 6: 403. 1910.

Rhus ovata var. *traskiae* Barkley, Mo. Bot. Gard. Ann. 24: 368. 1937.

Schmaltzia ovata (S. Wats.) Barkley, Amer. Midland Nat. 24: 651. 1940.

Schmaltzia ovata var. *traskiae* (Barkley) Barkley, Amer. Midland Nat. 24: 652. 1940.

DERIVATION.—Ovate, referring to the broad leaves.

OTHER COMMON NAMES.—mountain-laurel, sugarbush, chaparral sumac.

RANGE.—Mountains of central Arizona and southern California, and Santa Catalina Island and other islands. Also in northern Lower California, Mexico.

A shrub or small tree to 15 feet in height and 5 inches in trunk diameter in Arizona, according to Little (Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 9: 78, fig. 1950).

According to Barkley (Mo. Bot. Gard. Ann. 24: 366. 1937), further study may show *Rhus ovata* var. *traskiae* Barkley, from Santa Catalina Island, Calif., to be a hybrid between *R. integrifolia* and *R. ovata.*

Rhus ×pulvinata Greene ———

Rhus glabra × *typhina*

?*Rhus americana* Dipp., Handb. Laubholzk. 2: 367. 1892; *nomen provisorium.* Not *R. americanus* (Nutt.) Sudw., Torrey Bot. Club Bul. 19: 80. 1892.

Rhus gymnoclada Greene, Repert. Spec. Novarum Regni Veg. 5: 45. 1908.

Rhus pulvinata Greene, Repert. Spec. Novarum Regni Veg. 5: 45. 1908.

†*Rhus* ×*hybrida* Rehd., Deut. Dendrol. Gesell. Mitt. 22: 256. 1913 [1914]; as *R. glabra* × *typhina.*

DERIVATION.—Cushion-shaped, referring to the soft, cushion-like leaflets.

RANGE.—Massachusetts and New York west to southern Ontario and Michigan and south to Indiana and Virginia.

REFERENCES.—Barkley, Fred A. Studies in the Anacardiaceae. III. A note concerning the status of Rhus pulvinata Greene (R. glabra × typhina Koehne). Amer. Midland Nat. 19: 598–600, illus. 1938.

Little, Elbert L., Jr. Amer. Midland Nat. 33: 498–499. 1945.

Rhus typhina L. †staghorn sumac

Datisca hirta L., Sp. Pl. 1037. 1753; *nomen illegitimum,* based upon a monstrosity.

†*Rhus typhina* L. in L. & Torner, Cent. I. Pl. 14. 1756; Amoen. Acad. 4: 311. 1759; as "*typhinum.*"

Rhus typhina var. *laciniata* Wood, Class-book Bot. Ed. 2, 284. 1877.

Rhus hirta (L.) Sudw., Torrey Bot. Club Bul. 19: 81. 1892. Not. *R. hirta* Harv. ex Engler in A. DC. & C. DC., Monogr. Phaner. 4: 425. 1883; as synonym.

Schmaltzia hirta (L.) Small, Fl. Southeast. U. S. 729, 1334. 1903.

DERIVATION.—Like *Typha,* or cattail, referring to the hairy twigs.

OTHER COMMON NAME.—velvet sumac.

RANGE.—Nova Scotia and Gaspé Peninsula of Quebec to Maine, southern Ontario, northern Michigan, Wisconsin, and Minnesota, south to northeastern Iowa, Illinois, Indiana, northern Kentucky,

West Virginia, and Maryland, and in mountains to Virginia, North Carolina, northern Georgia, and central Tennessee.

REFERENCE.—Little, Elbert L., Jr. Amer. Midland Nat. 33: 499–500. 1945.

HYBRID.—*Rhus* ×*pulvinata* Greene (*R. glabra* × *typhina*).

Rhus vernix L., see **Toxicodendron vernix** (L.) Kuntze

RICINUS L. (Family Euphorbiaceae) CASTOR-BEAN

Ricinus L., Sp. Pl. 1007. 1753; Gen. Pl. Ed. 5, 437. 1754.

DERIVATION.—The classical Latin name, the same as that of the Mediterranean sheep tick, from the resemblance of the seed.

RICINUS COMMUNIS L. CASTOR-BEAN

Ricinus communis L., Sp. Pl. 1007. 1753.

DERIVATION.—Common.

OTHER COMMON NAME.—castor-oil-plant.

RANGE.—Naturalized in subtropical parts of southern United States in Florida, southern Texas, Arizona, and southern California. Also escaped from cultivation northward. Native of Africa but widely planted and naturalized in tropical regions including West Indies and continental tropical America.

Though an annual herb in temperate regions, this species becomes a shrub or small tree in tropical regions and was recognized as a small tree or shrub in Florida by Small (Fla. Trees 59. 1913; Man. Southeast. Fl. 792. 1933). In Arizona it was accepted as a tree by Benson and Darrow (Man. Southwest. Desert Trees Shrubs 226-227. 1945) and by Little (Southwest. Trees. U. S. Dept. Agr., Agr. Handb. 9: 76-77, fig. 1950). Established in southern California, becoming a small tree, according to Abrams (Illus. Fl. Pacif. States 3: 30. 1951).

Robinia L. (Family Leguminosae) **locust**

†*Robinia* L., Sp. Pl. 722. 1753; Gen. Pl. Ed. 5, 322. 1754.

DERIVATION.—In honor of Jean Robin (1550–1629) and his son Vespasian Robin (1579–1662), herbalists to kings of France and who first cultivated locust in Europe.

REFERENCE.—Rydberg, Per Axel. Robinia. No. Amer. Fl. 24: 221–228. 1924.

Robinia hartwigii Koehne, see **R. viscosa var. hartwigii** (Koehne) Ashe

Robinia kelseyi Hutchins. **Kelsey locust**

Robinia kelseyi Cowell in Bailey, Cycl. Amer. Hort. 4: 1538. 1902; *nom. subnud.*

Robinia kelseyi Hort. ex Hutchins., Bot. Mag. 134: pl. 8213. 1908.

DERIVATION.—Named for its discoverer, Harlan P. Kelsey, American horticulturist and nurseryman, who introduced it into cultivation in 1901.

RANGE.—Mountains of western North Carolina and eastern Tennessee.

REFERENCE.—Dayton, William A. Kelsey locust, *Robinia*

kelseyi Hort. ex Hutchins. Amer. Midland Nat. 30: 504–509, illus. 1943.

This typically shrubby locust is sometimes a small tree to 15 feet in height, according to Dayton.

Robinia luxurians (Dieck) Schneid., see **R. neomexicana** A. Gray

Robinia neomexicana A. Gray **†New-Mexican locust**

†*Robinia neomexicana* A. Gray, Amer. Acad. Arts and Sci. Mem., New Ser., 5: 314. 1855; as "*Neo-Mexicana.*"

†*Robinia neo-mexicana* var. *luxurians* Dieck ex Goeze, Gard. Chron., Ser. 3, 12: 669. 1892.

?*Robinia rusbyi* Woot. & Standl., U. S. Natl. Mus., Contrib. U. S. Natl. Herbarium 16: 140. 1913.

Robinia luxurians Schneid. in Silva & Schneid., Uns. Freil.-Laubh. Ed. 2, 357, fig. 417. 1922.

Robinia subvelutina Rydb., No. Amer. Fl. 24: 227. 1924.

Robinia neomexicana var. *subvelutina* (Rydb.) Kearney & Peebles, Wash. Acad. Sci. Jour. 29: 484. 1939.

DERIVATION.—Of New Mexico, where it was first collected.

OTHER COMMON NAMES.—†southwestern locust, hojalito.

RANGE.—Mountains from Trans-Pecos Texas to New Mexico and southern Colorado, west to southern Utah, southeastern Nevada, and Arizona. Also in northern Mexico (Sonora).

***Robinia pseudoacacia** L. **†black locust**

†*Robinia pseudoacacia* L., Sp. Pl. 722. 1753; as "*Pseudo Acacia.*"

DERIVATION.—Old generic name, meaning false *Acacia.*

OTHER COMMON NAMES.—yellow locust, locust.

RANGE.—Native in Appalachian Mountains from Pennsylvania to northern Georgia and Alabama and in Ozark Mountains of southern Missouri, Arkansas, and eastern Oklahoma. Perhaps native also in southern Illinois and southern Indiana. Extensively naturalized in eastern half United States from Maine west and south and in southern Canada. Escaped in Oregon and perhaps other western States.

The original native range of this species is not accurately known because it has become thoroughly naturalized.

Many horticultural forms have been distinguished. A clon of this species, *Robinia pseudoacacia* var. *rectissima* Raber (U. S. Dept. Agr. Cir. 379: 7, pls. 1–4, 6. 1936), shipmast locust, has become established from cultivation in Massachusetts, New York, and New Jersey. It is of unknown origin and propagates by vegetative means.

Robinia rusbyi Woot. & Standl., see **R. neomexicana** A. Gray

Robinia subvelutina Rydb., see **R. neomexicana** A. Gray

Robinia viscosa Vent. **†clammy locust**

Robinia viscosa var. viscosa **clammy locust (typical)**

†*Robinia viscosa* Vent., Descr. Pl. Jard. Cels, No. 4, pl. 4. 1800.

DERIVATION.—Sticky, referring to the glandular hairs of twigs, petioles, and pods.

RANGE.—Pennsylvania and West Virginia south in mountains to North Carolina, South Carolina, Georgia, Alabama, and eastern Tennessee. Also escaped from cultivation and naturalized northward to Nova Scotia, Maine, Quebec, and elsewhere in East.

Robinia viscosa var. **hartwigii** (Koehne) Ashe **Hartwig locust**

Robinia hartwigii Koehne, Deut. Dendrol. Gesell. Mitt. 22: 1. 1913.

Robinia viscosa var. *hartwigii* (Koehne) Ashe, Elisha Mitchell Sci. Soc. Jour. 37: 175. 1922; as "*hardwegii.*"

DERIVATION.—Named for K. G. Hartwig, who discovered it in 1908 among cultivated plants in Germany.

RANGE.—Mountains and Piedmont from North Carolina to Georgia and Alabama.

This variety, formerly known as a shrub up to 10 to 13 feet high, becomes a tree with a diameter of 4 inches, according to Joseph L. Stearns.

Roystonea O. F. Cook (Family Palmae) **royalpalm**

†*Roystonea* O. F. Cook, Science, New Ser. 12: 479. 1900.

DERIVATION.—In honor of General Roy Stone, United States Army engineer who rendered outstanding service to Puerto Rico at the time of the Spanish-American War.

REFERENCES.—Bailey, L. H. The royal palms—preliminary survey. Gentes Herbarum 3: 341–387, illus. 1935.

Bailey, L. H., and Moore, H. E., Jr. Royal palms: Roystonea—new enumeration. Gentes Herbarum 8: 114–134, illus. 1949.

This genus was segregated from the older genus *Oreodoxa* Willd.

Roystonea elata (Bartr.) F. Harper **Florida royalpalm**

Palma elata Bartr., Travels No. So. Car. Ga. Fla. iv (Contents). 1791; descr. on pp. 115–116; as "Elate"; "*elata*" on pp. 90, 94, 141.

Roystonea floridana O. F. Cook, Torrey Bot. Club Bul. 28: 554. 1901.

Roystonea elata (Bartr.) F. Harper, Biol. Soc. Wash. Proc. 59: 29. 1946.

DERIVATION.—Elevated, or tall.

RANGE.—Southern Florida (Dade, Monroe, and Collier Counties but not on Florida Keys). Formerly north to central Florida but extinct northward.

At one time referred to †*Roystonea regia* (H. B. K.) O. F. Cook (*Oreodoxa regia* H. B. K.) Cuban royalpalm, of Cuba.

Rufacer Small, see **Acer** L.

Sabal Adans. (Family Palmae) **palmetto**

†*Sabal* Adans., Fam. Pl. 2: 495. 1763.

Inodes O. F. Cook, Torrey Bot. Club Bul. 28: 529. 1901.

DERIVATION.—Name unexplained by its author, possibly an American Indian name.

REFERENCES.—Bailey, L. H. American palmettoes. Gentes Herbarum 3: 273–339, illus. 1934.

Bailey, L. H. Revision of the palmettoes. Gentes Herbarum 6: 367–459, illus. 1944.

Sabal louisiana (Darby) Bomhard **Louisiana palmetto**

Chamaerops louisiana Darby, Geog. Descr. La. 194, 205, 206, 216. 1816; *nomen subnudum.*

Sabal deeringiana Small, Torreya 26: 34. 1926.

Sabal louisiana (Darby) Bomhard, Wash. Acad. Sci. Jour. 25: 44. 1935.

RANGE.—Coastal Plain from extreme northwestern Florida and southern Alabama to Louisiana, southeastern Arkansas, and southeastern Texas.

REFERENCES.—Bomhard, Miriam L. Sabal louisiana, the correct name for the polymorphic palmetto of Louisiana. Wash. Acad. Sci. Jour. 25: 25–44. 1935.

Bomhard, Miriam L. Distribution and character of *Sabal louisiana.* Wash. Acad. Sci. Jour. 33: 170–182, illus. 1943.

This species, which was overlooked by botanists for many years, occasionally becomes arborescent with a trunk 6 to 10 feet high and 1 foot in diameter. The tallest recorded, from Brazoria County, Texas, is 23 feet tall with a trunk 18 feet in height.

L. H. Bailey (Revision of the palmettoes. Gentes Herbarum 6: 367–459, illus. 1944) regarded this tree palmetto as a phase of the common trunkless species, *Sabal minor* (Jacq.) Pers., dwarf palmetto. The latter has a broader range in the Coastal Plain from northeastern North Carolina to southern Florida and eastern Texas, north to extreme southeastern Oklahoma and southern Arkansas.

***Sabal palmetto** (Walt.) Lodd. **†cabbage palmetto**

Corypha palmetto Walt., Fl. Car. 119. 1788.

†*Sabal palmetto* (Walt.) Lodd. ex Schult. & Schult., Syst. Veget. 7: 1487. 1830.

Inodes palmetto (Walt.) O. F. Cook, Torrey Bot. Club Bul. 28: 532. 1901.

Sabal jamesiana Small, N. Y. Bot. Gard. Jour. 28: 182, fig. 1. 1927.

DERIVATION.—The common name from Spanish, palmito, a small palm.

OTHER COMMON NAMES.—Carolina palmetto, common palmetto, palmetto, cabbage-palm.

RANGE.—Near coast from southeastern North Carolina (Cape Fear) to southeastern Georgia, south through Florida, including Florida Keys, and west to northwestern Florida (St. Andrews Bay in Bay County).

Sabal texana (O. F. Cook) Becc. **†Texas palmetto**

Inodes texana O. F. Cook, Torrey Bot. Club Bul. 28: 534. 1901.

†*Sabal texana* (O. F. Cook) Becc., Webbia 2: 20, 78. 1907.

Inodes exul O. F. Cook, U. S. Dept. Agr. Bur. Pl. Ind. Cir. 113: 14. 1913.

Sabal exul (O. F. Cook) Bailey, Rhodora 18: 155. 1916.

DERIVATION.—Of Texas.

OTHER COMMON NAMES.—Rio Grande palmetto, Victoria palmetto, palmetto, palma de micharo.

RANGE.—Lower Rio Grande Valley in extreme southern Texas (Hidalgo and Cameron Counties) and northeastern Mexico (Tamaulipas).

Originally not distinguished from *Sabal mexicana* Mart., of Mexico and Guatemala.

Sabina Mill., see **Juniperus** L.

Sabina utahensis (Engelm.) Rydb., see **Juniperus osteosperma** (Torr.) Little

Saccharodendron (Raf.) Nieuwl., see **Acer** L.

Salix L. (Family Salicaceae) **willow**

Salix L., Sp. Pl. 1015. 1753; Gen. Pl. Ed. 5, 447. 1754.

DERIVATION.—The classical Latin name.

OTHER COMMON NAMES.—sauce, sauz.

Salix is one of the largest genera of native woody plants in number of species and also one of the most difficult for identification. More than 100 species are distinguished in North America, but most of these are shrubs and some are low, almost prostrate shrubs of arctic regions or alpine mountain summits.

All together, 38 native species and 4 naturalized species of *Salix* are accepted here as trees. It has not seemed practicable to distinguish varieties in this genus, but the varietal names in use are cited in synonymy under their respective species. Most of the numerous named varieties are based on minor differences, such as degree of hairiness of foliage and twigs and the shape of leaves.

Carleton R. Ball, of the United States Department of Agriculture and specialist on the genus *Salix*, has examined the manuscript of *Salix* and has made many helpful suggestions. He has also contributed the ranges, based upon his detailed notes from his large herbarium of this genus. These ranges are believed to be the most accurate records available.

In *Salix* it is difficult to draw the line between a tree and a shrub. Some of the willows with several trunks from the same root system reach a large size and are regarded as trees. The species recorded as trees and having the minimum dimensions for trees have been included. Ball suggests that this list contains too many species and varieties in the "small-tree" classification, especially in the sandbar willow group. Rare individuals of additional, shrubby species may become treelike or trees also.

A few additional introduced species of *Salix* are reported in manuals as shrubs or small trees occasionally escaping from cultivation. Ball states that it is doubtful whether *Salix purpurea* L., purple-osier willow, which is cultivated for basket-work and escapes, ever attains tree size. The European tree species *Salix pentandra* L., laurel willow, has escaped from cultivation only very sparingly, according to Ball, and has not been added here.

Various supposed hybrids among the native and introduced species of *Salix* have been reported, some known from just a few herbarium specimens, while only a few have been given binomial names. A detailed list of more than fifty hybrids among the North American willows, mostly shrubby, was prepared by Schneider (Arnold Arboretum Jour. 3: 78–84. 1922).

Hybrids of *Salix* are found sparingly throughout North America, according to Ball. They occur most commonly in temperate areas, where the flowering season is long and where varying winds carry the abundant pollen widely. In Europe the recognition and naming of alleged hybrids in *Salix* has been given much attention. Ball suggests that hybrids be designated

merely by the names of the two parent species connected by the times sign (×), rather than as binomials, and with the parent most closely resembled cited first. Often the identity of one of the two parents is uncertain, and if a hybrid should possibly cross with a third species, the latter would scarcely be recognizable. A single named hybrid of two native tree species is included here, but hybrids without binomial names are omitted in this check list.

REFERENCES.—Ball, Carleton R. *Salix,* pp. 128–139. *In* Coulter, John M., and Nelson, Aven. New manual of botany of the central Rocky Mountains (vascular plants). 646 pp. 1909.

Ball, Carleton R. *Salix,* pp. 487–507, illus. *In* Abrams, Leroy. Illustrated flora of the Pacific States, v. 1, illus. 1923.

Ball, Carleton R. The willows of the southern States. Castanea 3: 1–9. 1938.

Ball, Carleton R. Canadian willows of sections Pentandrae, Nigrae and Albae. Canad. Field Nat. 40: 145–152. 1926.

Ball, Carleton R. Canadian willows of sections Longifoliae. Canad. Field Nat. 40: 171–175. 1926.

Ball, Carleton R. *Salix,* pp. 216–235. *In* Davis, Ray J. Flora of Idaho. 828 pp. 1952.

Ball, Carleton R. *Salix,* 2: 6–23, illus. *In* Gleason, Henry A. New Britton & Brown Illus. Fl. Northeast. U. S. Can. 3v., illus. 1952.

Davis, H. A., and Ball, Carleton R. The willows of West Virginia. Castanea 12: 94–100. 1947.

Fernald, M. L. Difficulties in North American Salix. Rhodora 48: 13–16, 27–40, 41–49, illus. 1946.

Fernald, Merritt Lyndon. Gray's manual of botany. Ed. 8, 1632 pp., illus. 1950. *Salix,* pp. 488–523, illus.

Massey, A. B., and Ball, Carleton R. The willows of Virginia. Va. Polytech. Inst. Bul. 37(9), 31 pp., illus. 1944.

Raup, Hugh M. The willows of the Hudson Bay region and the Labrador Peninsula. Sargentia 4: 81–127, illus. 1943.

Schneider, Camillo. Notes on American willows. IV–XII. IV. Bot. Gaz. 67: 309–346. 1919. V. Arnold Arboretum Jour. 1: 1–32. 1919. VI. Arnold Arboretum Jour. 1: 67–97. 1919. VII. Arnold Arboretum Jour. 1: 147–171. 1920. VIII. Arnold Arboretum Jour. 1: 211–232. 1920. IX. Arnold Arboretum Jour. 2: 1–25. 1920. X. Arnold Arboretum Jour. 2: 65–90. 1920. XI. Arnold Arboretum Jour. 2: 185–204. 1922. XII. Arnold Arboretum Jour. 3: 61–125. 1922.

Smith, Ernest C. The willows of Colorado. Amer. Midland Nat. 27: 217–252, illus. 1942.

Sudworth, George B. Poplars, principal tree willows, and walnuts of the Rocky Mountain region. U. S. Dept. Agr. Tech. Bul. 420, 111 pp., illus. 1934.

Salix acutidens Rydb., see **S. eriocephala** Michx.

Salix alaxensis (Anderss.) Cov. **†feltleaf willow**

Salix speciosa β alaxensis Anderss. in A. DC., Prodr. 16(2): 275. 1868.

†*Salix alaxensis* (Anderss.) Cov., Wash. Acad. Sci. Proc. 2: 280. 1900.

Salix longistylis Rydb. in Britton & Rydb., N. Y. Bot. Gard. Bul. 2: 163. 1901. Not *Salix longistyla* Gand., Fl. Eur. 21: 243. 1890.

Salix alaxensis var. *longistylis* (Rydb.) Schneid., Arnold Arboretum Jour. 1: 225. 1920.

Salix alaxensis var. *obovalifolia* Ball, Wash. Acad. Sci. Jour. 28: 443. 1938.

DERIVATION.—Of Alaska, from an old Russian spelling, Alaxa.

RANGE.—Northwest Territories from northwestern side of Hudson Bay west to Yukon and almost throughout Alaska, south to central British Columbia and Alberta. Also in eastern Asia. Not in United States.

SALIX ALBA L. WHITE WILLOW

†*Salix alba* L., Sp. Pl. 1021. 1753.

DERIVATION.—White, referring to the white-silky leaves.

OTHER COMMON NAME.—†European white willow.

RANGE.—Escaped from cultivation and naturalized in southeastern Canada from Nova Scotia to Ontario and south in eastern United States to Iowa, Missouri, Tennessee, and North Carolina. Also in Colorado. Native from Europe and northern Africa to central Asia.

HYBRID.—See under S. FRAGILIS L.

Salix amphibia Small, see **S. caroliniana** Michx.

Salix amplifolia Cov. **Yakutat willow**

†*Salix amplifolia* Cov., Wash. Acad. Sci. Proc. 2: 282, pl. 15. 1900.

DERIVATION.—Ample-leaved, or full-leaved.

OTHER COMMON NAME.—†bigleaf willow.

RANGE.—Local in Yakutat Bay area at northern end of southeastern Alaska coast. Reported also west to Prince William Sound in southern Alaska. Not in United States.

***Salix amygdaloides** Anderss. **†peachleaf willow**

†*Salix amygdaloides* Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 114. 1858. Amer. Acad. Arts and Sci. Proc. 4: 53 (Salic. Bor.-Amer. 8). 1858.

Salix wrightii Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 115. 1858. Amer. Acad. Arts and Sci. Proc. 4: 55 (Salic. Bor.-Amer. 9). 1858.

†*Salix amygdaloides* var. *wrightii* (Anderss.) Schneid., Bot. Gaz. 65: 14. 1918.

DERIVATION.—Resembling *Salix amygdalina* L., of Europe and Asia; from *Amygdalus*, peach, referring to the shape of the leaves.

OTHER COMMON NAMES.—almond willow, almondleaf willow, peach willow, southwestern peach willow, Wright willow, Wright peachleaf willow.

RANGE.—Southern Quebec and New York west to southern

Ontario, Michigan, Minnesota, southern Manitoba, southern Saskatchewan, southern Alberta, and southeastern British Columbia, south to eastern Washington, eastern Oregon, Idaho, Nevada, and Arizona, and east to New Mexico, Trans-Pecos and northwestern Texas, Kansas, Missouri, Kentucky, and Pennsylvania. Local in Massachusetts and Vermont.

HYBRID.—*Salix* ×*glatfelteri* Schneid. (*S. amygdaloides* × *nigra*).

Salix arbusculoides Anderss. **littletree willow**

Salix arbusculoides Anderss., Svenska Vetensk. Akad. Handl. 6(1): 147, pl. 8, fig. 81. 1867.

DERIVATION.—Like a little tree.

RANGE.—Northwest Territories from west side of Hudson Bay to Yukon and interior Alaska to northwestern Alaska, south to British Columbia and Saskatchewan. Also recorded from Quebec. Not in United States.

This species is an erect shrub 5 to 10 feet high or sometimes a small tree as much as 20 to 25 feet tall and 4 inches in diameter. It was recorded as a tree in Alaska by Hultén (Fl. Alaska Yukon. Lunds Univ. Årsskr. N. F. 39(1): 549–550. 1943) and by Taylor and Little (Pocket Guide to Alaska Trees. U. S. Dept. Agr., Agr. Handb. 5: 38–39, fig. 19. 1950).

Salix astatulana Murrill & Palmer, see **S. floridana** Chapm.

SALIX BABYLONICA L. WEEPING WILLOW

†*Salix babylonica* L., Sp. Pl. 1017. 1753.

DERIVATION.—Of Babylon, erroneously thought to have been the willow at Babylon where the exiled Jews sat down and wept (Psalms 137: 1–2), now known to be the willowlike Euphrates poplar, *Populus euphratica* Oliv.

OTHER COMMON NAMES.—†Babylon weeping willow (SPN), Napoleon willow.

RANGE.—Escaped from cultivation and naturalized locally in southeastern Canada and eastern United States. Native of China.

Salix bakeri Seemen, see **S. lasiolepis** Benth.

Salix balsamifera Barratt, see **S. pyrifolia** Anderss.

Salix bebbiana Sarg. **Bebb willow**

Salix rostrata Richards. in Franklin, Narr. Jour. Polar Sea 753. 1823. Not *Salix rostrata* Thuillier, Fl. Paris, Ed. 2, 516. 1799.

†*Salix bebbiana* Sarg., Gard. and Forest 8: 463. 1895.

Salix perrostrata Rydb. in Britton & Rydb., N. Y. Bot. Gard. Bul. 2: 163. 1901.

Salix rostrata Richards. var. *luxurians* Fern., Rhodora 9: 223. 1907.

Salix rostrata var. *capreifolia* Fern., Rhodora 16: 177. 1914.

Salix rostrata var. *projecta* Fern., Rhodora 16: 178. 1914.

Salix bebbiana var. *perrostrata* (Rydb.) Schneid., Arnold Arboretum Jour. 2: 71. 1920.

Salix bebbiana var. *projecta* (Fern.) Schneid., Arnold Arboretum Jour. 3: 75. 1922.
Salix bebbiana var. *capreifolia* (Fern.) Fern., Rhodora 26: 123. 1924.
Salix bebbiana var. *luxurians* (Fern.) Fern., Rhodora 26: 122. 1924.

DERIVATION.—In honor of Michael Schuck Bebb (1833–95), American specialist on willows.

OTHER COMMON NAMES.—beaked willow, long-beaked willow.

RANGE.—Widespread from Newfoundland and Labrador west to Hudson Bay and across Canada to Yukon and interior Alaska, south to northern end of southeastern Alaska, British Columbia, south in mountains of western United States from Washington to central California, Arizona, New Mexico, western Nebraska, and Montana, and south in northeastern United States from North Dakota and South Dakota to Iowa, Indiana, Ohio, Pennsylvania, Maryland, New Jersey, and New England.

Salix bigelovii Torr., see **S. lasiolepis** Benth.

Salix bolanderiana Rowlee, see **S. melanopsis** Nutt.

Salix bonplandiana H. B. K. **Bonpland willow**

Salix bonplandiana H. B. K., Nov. Gen. Sp. 2: 20, pls. 101, 102. 1817.
Salix toumeyi Britton in Britton & Shafer, No. Amer. Trees 187, fig. 145. 1908.
†*Salix bonplandiana* var. *toumeyi* (Britton) Schneid., Bot. Gaz. 65: 20. 1918.

DERIVATION.—In honor of its discoverer, Aimée Bonpland (1773–1858), French botanist who with Alexander von Humboldt made important collections of plants in Mexico and other Spanish colonies in the New World.

OTHER COMMON NAME.—Toumey willow.

RANGE.—Extreme southeastern New Mexico to southeastern and central Arizona. Also from northern Mexico (southern Lower California, Sonora, Chihuahua, and Coahuila south to Oaxaca) south to Guatemala.

Salix caroliniana Michx. **Coastal Plain willow**

Salix caroliniana Michx., Fl. Bor.-Amer. 2: 226. 1803.
Salix occidentalis Bosc ex Koch, Salic. Eur. Comm. 16. 1828. Not *Salix occidentalis* Walt., Fl. Carol. 243. 1788.
†*Salix longipes* Shuttlew. ex Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 114. 1858. Amer. Acad. Arts and Sci. Proc. 4: 53 (Salic. Bor.-Amer. 7). 1858.
Salix nigra [subsp.?] *S. longipes* [var.?] *venulosa* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 22. 1867.
Salix nigra γ *longipes* 1° *venulosa* Anderss. in DC., Prodr. 16(2): 201. 1868.

Salix nigra var. *wardi* Bebb in Ward, U. S. Natl. Mus. Bul. 22: 114. 1881.
Salix occidentalis var. *longipes* (Anderss.) Bebb, Garden and Forest 8: 363. 1895.
Salix wardi (Bebb) Bebb, Gard. and Forest 8: 363. 1895.
?*Salix marginata* Wimm. ex Small, Fl. Southeast. U. S. 341. 1903; as "Weimer." Not *Salix marginata* Wimm. ex Anderss., Svenska Vetensk. Akad. Handl. 6: 21. 1867; as synonym.
Salix amphibia Small, Fl. Miami 61, 200. 1913.
†*Salix longipes* var. *venulosa* (Anderss.) Schneid., Bot. Gaz. 65: 14. 1918.
†*Salix longipes* var. *wardii* (Bebb) Schneid., Bot. Gaz. 65: 22. 1918.
†?*Salix harbisonii* Schneid., Arnold Arboretum Jour. 1: 29. 1919; as "*harbisoni.*"

DERIVATION.—Of Carolina.

OTHER COMMON NAME.—Ward willow.

RANGE.—Maryland and southwestern Pennsylvania to West Virginia, southern Indiana, southern Illinois, Missouri, and eastern Kansas, south to eastern Oklahoma and eastern Texas, and east to southern Florida. Also in Cuba.

REFERENCE.—Fernald, M. L. Rhodora 48: 28–31. 1946.

†*Salix harbisonii* Schneid. (Arnold Arboretum Jour. 1: 29. 1919; as "*harbisoni*") was rejected as a doubtful species by Massey and Ball (Va. Polytech. Inst. Bul. 37(9): 30. 1944). They noted that most specimens so named could be referred to *S. longipes* or *S. nigra*. Schneider himself was doubtful of the status of this willow and thought it might be *S. longipes* var. *venulosa* or possibly a hybrid between that species and *S. nigra*. Coker and Totten (Trees Southeast. States, Ed. 3, 67–69, fig. 1945) retained *S. harbisonii* Schneid. as a species of the Coastal Plain from southeastern Virginia to northern and northwestern Florida. However, an older name apparently available is *S. marginata* Wimm. ("Weimer" ex Small, Fl. Southeast. U. S. 341. 1903. Not *S. marginata* Wimm. ex Anderss., Svenska Vetensk. Akad. Handl. 6: 21. 1867; as synonym).

Salix caudata (Nutt.) Heller **whiplash willow**

Salix pentandra β caudata Nutt., No. Amer. Sylva 1: 61, pl. 18. 1843.
†*Salix lasiandra* var. *caudata* (Nutt.) Sudw., Torrey Bot. Club Bul. 20: 43. 1893.
Salix caudata (Nutt.) Heller, Muhlenbergia 2: 186. 1906.
Salix caudata var. *bryantiana* Ball & Bracelin in Ball, Wash. Acad. Sci. Jour. 28: 445. 1938.

DERIVATION.—Caudate, or tailed, referring to the very long-pointed leaves.

OTHER COMMON NAMES.—caudate willow, †western black willow.

RANGE.—Southern Alberta, southern British Columbia, and Washington south to southern California, east to northern New Mexico, and north to Idaho.

Salix chapmanii Small, see **S. floridana** Chapm.

Salix columbiae A. Nels. & Macbr., see **S. pyrifolia** Anderss.

Salix cordata Mühl., see **S. eriocephala** Michx.

Salix coulteri Anderss. **Coulter willow**

Salix coulteri Anderss., Svenska Vetensk. Akad. öfversigt af . . . Förhandl. 15: 119. 1858. Amer. Acad. Arts and Sci. Proc. 4: 58 (Salic. Bor.-Amer.). 1858.
Salix sitchensis f. *parvifolia* Jeps., Silva Calif. 182. 1910.
Salix sitchensis f. *ralphiana* Jeps., Silva Calif. 182. 1910.
Salix sitchensis var. *coulteri* Jeps., Man. Fl. Pl. Calif. 265. 1923.
?*Salix sitchensis* var. *parvifolia* (Jeps.) Jeps., Man. Fl. Pl. Calif. 265. 1923.
Salix sitchensis var. *ralphiana* (Jeps.) Jeps., Man. Fl. Pl. Calif. 265. 1923.

DERIVATION.—Named for its discoverer, Thomas Coulter (1793–1843), Irish botanist and physician who collected plants in Mexico and California.

OTHER COMMON NAME.—velvet willow.

RANGE.—Northwestern Montana and northern Idaho to southern British Columbia and south to Washington and west central California.

In the 1927 Check List this species was mentioned in a note as a form of *Salix sitchensis* Sanson. A shrub to 20 feet high and 6 inches in diameter, rarely somewhat larger.

Salix discolor Mühl. **†pussy willow**

†*Salix discolor* Mühl. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 4: 234, pl. 6, fig. 1. 1803 (after May).
Salix prinoides Pursh, Fl. Amer. Sept. 2: 613. 1814.
Salix discolor [subsp.?] *S. prinoides* (Pursh) Anderss., Svenska Vetensk. Akad. Handl. 6(1): 86. 1867.
Salix discolor [var.?] *latifolia* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 84. 1867.
†*Salix discolor* β ? *prinoides* (Pursh) Anderss. in DC., Prodr. 16(2): 225. 1868.
Salix discolor var. *overi* Ball, Rhodora 26: 137. 1924.

DERIVATION.—Of different colors, referring to the leaves, which are bright green above and whitish beneath.

OTHER COMMON NAMES.—glaucous willow, silvery pussy willow.

RANGE.—Newfoundland and Labrador west to central Alberta and central British Columbia, south to Idaho, Montana, Wyoming, Black Hills of South Dakota, Nebraska, Iowa, northeastern Missouri, Indiana, Maryland, and Delaware, and south in mountains to eastern Kentucky, eastern Tennessee, and western North Carolina.

This shrub or small tree attains its maximum size of 30 feet in height and 3 to 6 inches in diameter in central Alberta.

The varietal name *Salix discolor* var. *latifolia* Anderss. has been adopted by Fernald (Gray's Man. Bot. Ed. 8, 515. 1950) and by Ball for the hairy variation formerly known as †*Salix discolor* var. *eriocephala* (Michx.)

Anderss. The latter name was based upon *S. eriocephala Michx.*, which is accepted here as a different species.

Salix eriocephala Michx. **†Missouri River willow**

Salix eriocephala Michx., Fl. Bor.-Amer. 2: 225. 1803 (March).
Salix cordata Mühl. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 4: 236, pl. 6, fig. 3. 1803 (after May). Not *Salix cordata* Michx., Fl. Bor.-Amer. 2: 225. 1803 (March).
Salix rigida Mühl. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 4: 236, pl. 6, fig. 4. 1803 (after May).
Salix cordata [subsp.?] 1 *S. rigida* (Mühl.) Anderss., Svenska Vetensk. Akad. Handl. 6(1): 158. 1867.
Salix cordata [subsp.?] 1. *S. rigida* [var.?] d *vestita* Anderss., Svenska Akad. Handl. 6: 159. 1867.
Salix discolor [subsp.?] *S. eriocephala* (Michx.) Anderss., Svenska Akad. Handl. 6(1): 85. 1867.
Salix cordata α *rigida* (Mühl.) Anderss. in DC., Prodr. 16(2): 252. 1868.
Salix cordata α *rigida* 7° *vestita* Anderss. in DC., Prodr. 16(2): 252. 1868.
Salix discolor β ? *eriocephala* (Michx.) Anderss. in DC., Prodr. 16(2): 225. 1868.
†*Salix missouriensis* Bebb, Gard. and Forest 8: 373. 1895.
Salix acutidens Rydb. in Britton, Man. Fl. North. States Canada 315. 1901.

DERIVATION.—Woolly-headed, the catkins resembling those of pussy willow.

OTHER COMMON NAMES.—cordate willow, diamond willow, heartleaf willow, Missouri willow.

RANGE.—Southern Newfoundland to Nova Scotia, Maine, Quebec, Ontario, Minnesota, North Dakota, eastern Saskatchewan, and northeastern Montana, south to northwestern Nebraska, Kansas, Missouri, Kentucky, western Tennessee, and Virginia. Also local in Arkansas, Mississippi, Alabama, Georgia, and North Carolina.

REFERENCES.—Ball, Carleton R. More plant study: fewer plant names. Arnold Arboretum Jour. 27: 371–385. 1946.
Fernald, M. L. Rhodora 48: 13–16, 27–28, pls. 995, 996. 1946.

Salix eriocephala Michx. includes variations formerly known as two distinct species, *S. cordata* Mühl. and *S. missouriensis* Bebb. Fernald (Gray's Man. Bot. Ed. 8, 511–512. 1950), after determining in the reference cited the dates of names published in 1803, maintained two species under the names *S. rigida* Muhl. and *S. eriocephala* Michx. However, when the two are united as varieties of one species, *S. eriocephala* Michx. has priority.

Salix exigua Nutt. **coyote willow**

†*Salix exigua* Nutt., No. Amer. Sylva 1: 75. 1843.
Salix fluviatilis var. *exigua* (Nutt.) Sarg., Silva No. Amer. 9, 124. 1896.
Salix nevadensis S. Wats., Amer. Nat. 7: 302. 1873.

Salix luteosericea Rydb. in Britton, Man. Fl. North. States Canada 316. 1901.
Salix stenophylla Rydb., Torrey Bot. Club Bul. 28: 271. 1901.
Salix exigua var. *stenophylla* (Rydb.) Schneid., Bot. Gaz. 65: 25. 1918.
Salix exigua var. *luteosericea* (Rydb.) Schneid., Bot. Gaz. 67: 334. 1919.
Salix exigua var. *nevadensis* (S. Wats.) Schneid., Bot. Gaz. 67: 331. 1919.

DERIVATION.—Scanty, hence small-sized.

OTHER COMMON NAMES.—acequia willow, basket willow, gray sandbar willow, narrowleaf willow, †sandbar willow, slender willow.

RANGE.—Montana, Alberta, British Columbia, and Washington, south to southern California, east to Trans-Pecos and western Texas, and north to western Kansas and western South Dakota. Also in northern Mexico (Lower California to Chihuahua).

Generally a shrub less than 12 feet high with clustered stems, becoming a tree rarely to 25 feet and only in eastern Washington, according to Sargent (Man. Trees No. Amer. Ed. 2, corr. 152. 1926).

Salix falcata Pursh, see **S. nigra** Marsh.

Salix floridana Chapm. **Florida willow**

Salix floridana Chapm., Fl. South. U. S. 430. 1860.
Salix chapmanii Small, Man. Southeast. Flora 414, 1504. 1933.
Salix astatulana Murrill & Palmer, Arnold Arboretum Jour. 22: 580, illus. 1941.

DERIVATION.—Of Florida.

RANGE.—Southern Georgia (Pulaski and Early Counties) to northwestern and central Florida (Jackson, Levy, and Lake Counties). A rare species apparently on the verge of extinction.

REFERENCE.—Ball, Carleton R. *Salix floridana* Chapman a valid species. Arnold Arboretum Jour. 24: 103–106, illus. 1943.

Salix fluviatilis Nutt. **river willow**

Salix fluviatilis Nutt., No. Amer. Sylva 1: 73. 1843.

DERIVATION.—Of rivers.

OTHER COMMON NAME.—sandbar willow.

RANGE.—Very restricted, lower Columbia River Valley in Klickitat County, southern Washington, and Wasco and Multnomah Counties, Oregon, and south in Willamette Valley of northwestern Oregon to Lane County.

Commonly shrubby but also becoming a small tree 20 to 23 feet in height, according to Carleton R. Ball.

SALIX FRAGILIS L. CRACK WILLOW

Salix fragilis L., Sp. Pl. 1017. 1753.

DERIVATION.—Fragile, referring to the brittle, easily broken twigs.

OTHER COMMON NAMES.—brittle willow (SPN), snap willow.

RANGE.—Widely planted and escaped and locally naturalized in southeastern Canada and eastern United States from Maine to Minnesota and South Dakota south to Kansas and southeastern States. Native of Eurasia.

Widely hybridized with *Salix alba* L. in Europe and America. Such hybrids have been included under varieties of that species, such as *Salix alba* var. *vitellina* (L.) Stokes.

Salix geyeriana Anderss. **Geyer willow**

Salix geyeriana Anderss., Svenska Vetensk. Akad. öfversigt af . . . Förhandl. 15: 122. 1858. Amer. Acad. Arts and Sci. Proc. 4: 63 (Salic. Bor.-Amer. 17). 1858.

Salix macrocarpa Nutt. var. *argentea* Bebb, Bot. Gaz. 16: 105. 1891.

Salix geyeriana var. *argentea* (Bebb) Schneid., Arnold Arboretum Jour. 2: 74. 1920.

Salix geyeriana var. *melina* J. K. Henry, Fl. South. Brit. Col. 98. 1915; as "meleina."

Salix melina (J. K. Henry) G. N. Jones, Madroño 6: 84. 1941; as "meleina."

DERIVATION.—Honoring Karl Andreas Geyer (1809–53), who made a botanical journey from Missouri to the Pacific in 1843–44.

OTHER COMMON NAME.—silver willow.

RANGE.—Western South Dakota and Montana to southwestern British Columbia, south to California, northern Arizona, Colorado, and western Nebraska.

Generally a shrub 3 to 15 feet tall, rarely 20 feet, but becoming a small tree to 25 feet in Montana, according to Wilfred W. White, and added here as a tree.

Salix ×glatfelteri Schneid. **Glatfelter willow**

Salix amygdaloides × *nigra*

Salix nigra × *amygdaloides* Glatfelter ex Bebb, Gard. and Forest 8: 363. 1895.

Salix ×glatfelteri Schneid., Arnold Arboretum Jour. 3: 79. 1922.

DERIVATION.—Named for its discoverer, Noah Miller Glatfelter (1837–1911), physician of St. Louis, Mo., who studied willow hybrids.

REFERENCE.—Glatfelter, N. M. A study of the relations of Salix nigra and Salix amygdaloides, together with the hybrids arising from them as these species exhibit themselves in the vicinity of St. Louis. Acad. Sci. St. Louis Trans. 6: 427–431, illus. 1894.

Salix gooddingii Ball **Goodding willow**

Salix nigra var. *vallicola* Dudley in Abrams, Fl. Los Angeles 100. 1904.

†*Salix gooddingii* Ball, Bot. Gaz. 40: 376, pl. 12, figs. 1–2. 1905; as "*gooddingi.*" Bot. Gaz. 72: 227–235, figs. 2–4. 1921.

Salix vallicola (Dudley) Britton in Britton & Shafer, No. Amer. Trees 184, fig. 141. 1908.
Salix gooddingii var. *vallicola* (Dudley) Ball ex S. S. White, Lloydia 11: 278. 1948; without basonym.
Salix gooddingii var. *vallicola* (Dudley) Ball, Wash. Acad. Sci. Jour. 40: 324. 1950; as synonym.
Salix gooddingii var. *variabilis* Ball, Wash. Acad. Sci. Jour. 40: 324. 1950.

DERIVATION.—In honor of Leslie Newton Goodding, botanist of the United States Department of Agriculture, who collected the type specimen.

OTHER COMMON NAMES.—black willow, †Dudley willow, western black willow.

RANGE.—Utah to southern Nevada and northern and southern California, east to Arizona, New Mexico, and northwestern Texas to Trans-Pecos and southern Texas. Also in northern Mexico Lower California, Sonora, Chihuahua, and Sinaloa).

REFERENCE.—Ball, Carleton R. Salix gooddingii Ball and its glabrous-capsuled variety. Wash. Acad. Sci. Jour. 40: 324–329. 1950.

Closely related to *Salix nigra* Marsh. and regarded by some authors as a variety of that species.

Salix gracilis Anderss., see **S. petiolaris** J. E. Sm.

Salix harbisonii Schneid., see **S. caroliniana** Michx.

Salix hindsiana Benth. **Hinds willow**

Salix hindsiana Benth., Pl. Hartw. 335. 1857.
Salix sessilifolia [var.?] * *hindsiana* (Benth.) Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 117. 1858. Amer. Acad. Arts and Sci. Proc. 4: 56 (Salic. Bor.-Amer. 11). 1858.
Salix macrostachya var. *leucodendroides* Rowlee, Torrey Bot. Club Bul. 27: 250, pl. 9, fig. 6. 1900.
Salix parishiana Rowlee, Torrey Bot. Club Bul. 27: 249, pl. 9, fig. 3. 1900.
Salix sessilifolia var. *leucodendroides* (Rowlee) Schneid., Bot. Gaz. 65: 26. 1918.
Salix exigua var. *parishiana* (Rowlee) Jeps., Man. Fl. Pl. Calif. 264. 1923.
Salix hindsiana [var.] *leucodendroides* (Rowlee) Schneid. ex Ball in Abrams, Illus. Fl. Pacif. States 1: 491. 1923; *nom. provisor.*
Salix hindsiana var. *leucodendroides* (Rowlee) Schneid. ex Munz, Man. South. Calif. Bot. 105. 1935; without basonym.
Salix hindsiana var. *leucodendroides* (Rowlee) Ball, Madroño 6: 232. 1942.
Salix hindsiana var. *parishiana* (Rowlee) Ball, Madroño 6: 236. 1942.

DERIVATION.—In honor of Richard Brinsley Hinds, English botanist who collected plant specimens along the western coast of America on a surveying expedition with the ship Sulphur in 1836–42.

OTHER COMMON NAMES.—sandbar willow, valley willow.

RANGE.—Southwestern Oregon, California, and northern Lower California, Mexico. A shrub or small tree to 30 feet in height.

Salix hookeriana Barratt **Hooker willow**

†*Salix hookeriana* Barratt ex Hook., Fl. Bor.-Amer. 2: 145, pl. 180. 1839.

Salix hookeriana var. *laurifolia* J. K. Henry, Fl. South. Brit. Col. 99. 1915.

Salix hookeriana var. *tomentosa* J. K. Henry ex Schneid., Arnold Arboretum Jour. 1: 220. 1920.

DERIVATION.—Honoring William Jackson Hooker (1785–1865), English botanist, in whose work, Flora Boreali-Americana, the description was published.

OTHER COMMON NAME.—coast willow.

RANGE.—Pacific coast from extreme southwestern British Columbia, Vancouver Island, and western Washington south to northwestern California.

Salix interior Rowlee **†sandbar willow**

†*Salix longifolia* Mühl. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 4: 238, pl. 6, fig. 6. 1803. Not *S. longifolia* Lam., Fl. Franç. 2: 232. 1778.

Salix longifolia angustissima Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 116. 1858.

†*Salix longifolia* var. *angustissima* Anderss., Amer. Acad. Arts and Sci. Proc. 4: 56. 1858.

Salix longifolia [subsp.?] * *pedicellata* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 55. 1867.

†*Salix longifolia β pedicellata* Anderss. in DC., Prodr. 16(2): 214. 1868. (Spelled "*pedunculata*" in the 1927 Check List.)

Salix interior Rowlee, Torrey Bot. Club Bul. 27: 253, pl. 9, figs. 12–13. 1900.

Salix interior wheeleri Rowlee, Torrey Bot. Club Bul. 27: 253, pl. 9, fig. 14. 1900.

Salix thurberi Rowlee, Torrey Bot. Club Bul. 27: 252. 1900.

Salix longifolia var. *wheeleri* (Rowlee) Schneid., Bot. Gaz. 67: 342. 1919.

Salix interior [var.] *pedicellata* (Anderss.) Ball, Canad. Field Nat. 40: 175. 1926.

Salix interior angustissima (Anderss.) Dayton in Sudw., U. S. Dept. Agr. Tech. Bul. 420: 78. 1934.

Salix interior var. *exterior* Fern., Rhodora 48: 38. 1946.

DERIVATION.—Inland, from its extensive range in the interior.

RANGE.—Eastern Quebec, New Brunswick, and Maine, west across Canada to Manitoba, Northwest Territories, Yukon, and

central interior Alaska, south to eastern Montana, Wyoming, eastern Colorado, Kansas, southeastern New Mexico, and western and southern Texas, east to Louisiana, western Tennessee, Kentucky, and Maryland. Also in northern Mexico (Chihuahua).

Commonly shrubby with clustered stems 8 to 15 feet high and rarely a small tree to 20 (or 30) feet in height. Formerly known as *Salix longifolia* Mühl., a name which must be rejected as a later homonym, and earlier referred to *S. fluviatilis* Nutt., river willow, which is a species of Washington and Oregon.

Salix jepsonii Schneid., see note under **S. sitchensis** Sanson

Salix laevigata Bebb **†red willow**

†*Salix laevigata* Bebb, Amer. Nat. 8: 202. 1874.
Salix laevigata f. *araquipa* Jeps., Fl. Calif. 1: 339. 1909.
Salix laevigata var. *araquipa* (Jeps.) Ball, Bot. Gaz. 72: 234. 1921.

DERIVATION.—Smooth, the foliage typically hairless and shining.

OTHER COMMON NAME.—polished willow (SPN).

RANGE.—Southern Utah to northwestern Nevada and northern California, south to southern California and Arizona. Also in Lower California, Mexico.

Salix lancifolia Anderss., see **S. lasiandra** Benth.

Salix lasiandra Benth. **Pacific willow**

†*Salix lasiandra* Benth., Pl. Hartw. 335. 1857.
Salix lancifolia Anderss., Svenska Vetensk. Akad. Handl. 6(1): 34, pl. 2, fig. 23. 1867. Not *Salix lancifolia* A. Braun, Neues Jahrb. Mineral Geogn. Geol. Petref. 1845: 170. 1845 (fossil, Miocene, Switzerland); A. Braun ex Unger, Gen. Sp. Foss. Pl. 419. 1850. Not *Salix lancifolia* Ludw., Palaeontographica 5: 157, pl. 35, fig. 9. 1858 (fossil, Miocene, Hesse). Not *Salix lancifolia* Doell, Fl. Grossh. Baden 512. 1859.
Salix lucida [subsp.?] * *macrophylla* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 32. 1867.
Salix lucida β *macrophylla* Anderss. in DC., Prodr. 16(2): 205. 1868.
†*Salix lasiandra* var. *lancifolia* [Anderss.] Bebb in S. Wats., Bot. Calif. 2: 84. 1879.
Salix lasiandra var. *lyallii* Sarg., Gard. and Forest 8: 463. 1895.
Salix lyallii (Sarg.) Heller, Torrey Bot. Club Bul. 25: 580. 1898.
Salix lasiandra var. *abramsi* Ball, Bot. Gaz. 72: 224. 1921.
Salix lasiandra var. *macrophylla* (Anderss.) Little, Amer. Midland Nat. 33: 496. 1945.

DERIVATION.—With shaggy-hairy stamens, the stamens pubescent at base.

OTHER COMMON NAMES.—black willow, red willow, †western black willow, yellow willow.

RANGE.—Saskatchewan and Alberta to Yukon and interior Alaska, south in southeastern Alaska and British Columbia and from Washington to southern California, east to Arizona and New Mexico, and north to Wyoming and northern Idaho.

Salix lasiandra var. *caudata* (Nutt.) Sudw., see **S. caudata** (Nutt.) Heller

Salix lasiolepis Benth. **arroyo willow**

†*Salix lasiolepis* Benth., Pl. Hartw. 335. 1857.
Salix bigelovii Torr., Rpt. Expl. Surv. Miss. Pacif. 4(5): 139. 1857.
Salix lasiolepis var. *bigelovii* Bebb in S. Wats., Bot. Calif. 2: 86. 1879.
Salix bakeri Seemen, Torrey Bot. Club Bul. 30: 635. 1903.
Salix sandbergii Rydb., Torrey Bot. Club Bul. 39: 304. 1912.
Salix lasiolepis [var.] *bakeri* (Seemen) Ball, Bot. Gaz. 71: 436. 1921.
Salix lasiolepis var. *sandbergii* (Rydb.) Ball, Wash. Acad. Sci. Jour. 28: 448. 1938.
Salix lasiolepis var. *bracelinae* Ball, Wash. Acad. Sci. Jour. 40: 331. 1950.

DERIVATION.—Shaggy-scaled, referring to the white-hairy scales of the flowers.

OTHER COMMON NAME.—†white willow.

RANGE.—Idaho to Washington, south to southern California, Utah, Arizona, New Mexico, and western Texas. Also in northern Mexico (Lower California, Sonora, Chihuahua, and Coahuila).

Salix ligulifolia (Ball) Ball **strapleaf willow**

Salix lutea var. *ligulifolia* Ball, Bot. Gaz. 71: 428. 1921.
Salix ligulifolia Ball ex Schneid., Arnold Arboretum Jour. 2: 188. 1922; *nomen subnudum.*
Salix ligulifolia (Ball) Ball ex E. C. Smith, Amer. Midland Nat. 27: 236. 1942.

DERIVATION.—With strap-shaped leaves.

RANGE.—Black Hills of South Dakota and southeastern Wyoming to southern Utah, western Nevada, and southwestern Oregon, south to central California, Arizona, and New Mexico.

REFERENCE.—Ball, Carleton R. Wash. Acad. Sci. Jour. 40: 329–331. 1950.

Commonly a shrub with clustered stems less than 10 feet high, rarely to 16 feet, acording to Ball. Closely related to *Salix lutea* Nutt. and by some authors placed as a variety of that species.

Salix longifolia Mühl., see **S. interior** Rowlee

Salix longipes Shuttlew., see **S. caroliniana** Michx.

Salix longistylis Rydb., see **S. alaxensis** (Anderss.) Cov.

Salix lucida Mühl. **shining willow**

†*Salix lucida* Mühl. in Mühl. & Willd., Gesell. Naturf. Freunde Berlin Neue Schr. 4: 239, pl. 6, fig. 7. 1803.

Salix (*pentandra*) *lucida* [var.?] *angustifolia* Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 115. 1858.

Salix (*pentandra*) *lucida* var. *angustifolia* Anderss., Amer. Acad. Arts and Sci. Proc. 4: 54 (Salic. Bor.-Amer. 8). 1858.

Salix lucida var. *angustifolia* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 32. 1867.

†*Salix lucida* var. *intonsa* Fern., Rhodora 6: 2. 1904 (preprinted Dec. 29, 1903).

DERIVATION.—Shining, referring to the leaves and twigs.

OTHER COMMON NAME.—†shiny willow.

RANGE.—Newfoundland and Labrador west to Quebec, Ontario, Manitoba, and Saskatchewan, south to North Dakota, South Dakota, Iowa, Indiana, Ohio, Maryland, and Delaware. Also local in Nebraska and Virginia.

Commonly a shrub but rarely reaching tree size, becoming a small tree up to 20 feet high, according to Ball (Canad. Field-Nat. 40: 149. 1926) and to 30 feet in height, according to Fernald (Gray's Man. Bot. Ed. 8, 505. 1950).

Salix lutea Nutt. **yellow willow**

Salix lutea Nutt., No. Amer. Sylva 1: 63, pl. 19. 1843.

Salix cordata watsoni Bebb in S. Wats., Bot. Calif. 2: 86. 1879.

Salix watsoni (Bebb) Rydb., Torrey Bot. Club Bul. 33: 137. 1906.

Salix lutea var. *famelica* Ball, Bot. Gaz. 71: 426. 1921.

Salix lutea var. *platyphylla* Ball, Bot. Gaz. 71: 430. 1921.

Salix lutea var. *watsoni* (Bebb) Jepson, Man. Fl. Pl. Calif. 266. 1923.

DERIVATION.—Yellow; the twigs yellow and the leaves yellow green.

RANGE.—Saskatchewan to northern Alberta, southwestern Northwest Territories, and British Columbia, south to Washington and Oregon east of the Cascades and to southern California, east to Arizona and New Mexico, and north to eastern Nebraska and eastern North Dakota. Also in northern Ontario. A shrub or sometimes a small tree to 20 feet high.

Salix lutea var. *ligulifolia* Ball, see **S. ligulifolia** (Ball) Ball

Salix luteosericea Rydb., see **S. exigua** Nutt.

Salix lyallii (Sarg.) Heller, see **S. lasiandra** Benth.

Salix maccalliana Rowlee (Torrey Bot. Club Bul. 34: 158. 1907) is a shrub of Canada 6 to 15 feet high and 1 to 3 inches in diameter which doubtfully may also become a small tree, according to Carleton R. Ball. Its range is from southern Mani-

toba and Saskatchewan to British Columbia and local at Lake Mistassini, Quebec.

Salix mackenzieana (Hook.) Barratt **Mackenzie willow**

Salix cordata γ *mackenzieana* Hook., Fl. Bor.-Amer. 2: 149. 1839.

Salix mackenzieana Barratt ex Hook., Fl. Bor.-Amer. 2: 149. 1839; as synonym.

†*Salix mackenzieana* (Hook.) Barratt ex Anderss., Svenska Vetensk. Akad. Handl. 6(1): 160. 1867; as "*mackenziana.*"

Salix ×*mackenzieana* Barratt ex Anderss. in DC., Prodr. 16(2): 252. 1868; as "*mackenziana*"; as *S. cordata* × *rostrata?*

Salix mackenzieana var. *macrogemma* Ball in Piper & Beattie, Fl. Northwest. Coast 116. 1915; as "*mackenziana.*"

DERIVATION.—In honor of Alexander Mackenzie (1755?–1820), Scotch fur trader and explorer in Canada; the type was collected along the Mackenzie River, which he discovered.

RANGE.—Southwestern Northwest Territories south to British Columbia, western Washington, and northern California, east to northern Nevada, northern Utah, and north to western Montana and northern Alberta.

Salix marginata Wimm., see note under **S. caroliniana** Michx.

Salix melanopsis Nutt. **dusky willow**

Salix melanopsis Nutt., No. Amer. Sylva 1: 78, pl. 21. 1843.

Salix bolanderiana Rowlee, Torrey Bot. Club Bul. 27: 257, pl. 9, fig. 9. 1900.

Salix longifolia tenerrima Henderson, Torrey Bot. Club Bul. 27: 354. 1900.

Salix melanopsis var. *bolanderiana* (Rowlee) Schneid., Bot. Gaz. 67: 338. 1919.

Salix exigua var. *tenerrima* (Henderson) Schneid., Bot. Gaz. 67: 335. 1919.

Salix melanopsis var. *tenerrima* (Henderson) Ball, Nat. Acad. Sci. Proc. 21: 182. 1935.

DERIVATION.—With dark or black appearance, the twigs brown to black.

OTHER COMMON NAME.—dark sandbar willow.

RANGE.—Southern Alberta and southern British Columbia south to Washington, Oregon, and southern California, east to Utah, western Wyoming, and western Montana. This species is a shrub or small tree to 16 feet high.

Salix melina (J. K. Henry) G. N. Jones, see **S. geyeriana** Anderss.

Salix missouriensis Bebb, see **S. eriocephala** Michx.

Salix nevadensis S. Wats., see **S. exigua** Nutt.

***Salix nigra** Marsh. **†black willow**

†*Salix nigra* Marsh., Arbustr. Amer. 139. 1785.

Salix falcata Pursh, Fl. Amer. Sept. 2: 614. 1814.
Salix nigra var. *falcata* (Pursh) Torr., Fl. N.-Y. 2: 209. 1843.
†*Salix nigra* var. *altissima* Sarg., Trees and Shrubs 2: 216. 1913.
†*Salix nigra* var. *lindheimerii* Schneid., Bot. Gaz. 65: 9. 1918.

DERIVATION.—Black, perhaps from the dark brown to blackish bark.

OTHER COMMON NAMES.—willow, swamp willow.

RANGE.—New Brunswick and southern Maine to New York, southern Ontario, Michigan, Wisconsin, southern Quebec, and eastern and southern Minnesota, south to Iowa, southeastern Nebraska, eastern and southern Kansas, Oklahoma, and central and southern Texas, and east to northern Florida. Also in northern Mexico (Chihuahua to Durango and Tamaulipas).

HYBRID.—*Salix* ×*glatfelteri* Schneid. (*S. amygdaloides* × *nigra*).

Salix nuttallii Sarg., see **S. scouleriana** Barratt

Salix padophylla Rydb. **serviceberry willow**

Salix padophylla Rydb., Torrey Bot. Club Bul. 28: 272. 1901.
Salix pseudomonticola Ball in Standl., U. S. Natl. Mus. Contrib. U. S. Natl. Herbarium 22: 321. 1921.
Salix pseudomonticola var. *padophylla* (Rydb.) Ball, Wash. Acad. Sci. Jour. 28: 450. 1938.

DERIVATION.—From *Padus*, a segregate genus of cherry, and leaf, or cherry-leaf.

OTHER COMMON NAMES.—park willow (SPN), false mountain willow.

RANGE.—Saskatchewan to northern Alberta, Northwest Territories, Yukon, and central interior Alaska, south to Oregon, Idaho, Colorado, and Black Hills of South Dakota. Commonly a shrub but becoming a small tree in Saskatchewan and Montana.

Salix parishiana Rowlee, see **Salix hindsiana** Benth.

Salix pellita Anderss. ———

Salix chlorophylla [subsp.?] * *S. pellita* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 139, pl. 7, fig. 72. 1867; in part.
Salix chlorophylla β *pellita* Anderss. in A. DC., Prodr. 16(2): 244. 1868; in part.
Salix pellita Anderss. ex Schneid., Arnold Arboretum Jour. 1: 82. 1919.

DERIVATION.—Of skins.

RANGE.—Newfoundland and Labrador to Quebec (northern Ungava), Ontario, central Manitoba, and southern Saskatchewan, south to northern Michigan, northern New England, and Nova Scotia. A large shrub or small tree 10 to 16 feet high.

Salix pentandra L., see note under **Salix** L.

Salix perrostrata Rydb., see **S. bebbiana** Sarg.

Salix petiolaris J. E. Sm. **meadow willow**

Salix petiolaris J. E. Sm., Linn. Soc. [London] Trans. 6: 122. 1802.

Salix gracilis Anderss., Svenska Vetensk. Akad. Öfversigt af . . . Förhandl. 15: 127. 1858. Amer. Acad. Arts and Sci. Proc. 4: 67 (Salic. Bor.-Amer.). 1858.

Salix gracilis var. *textoris* Fern., Rhodora 48: 46. 1946.

DERIVATION.—Petioled.

OTHER COMMON NAME.—slender willow.

RANGE.—New Brunswick, Maine, and southern Quebec west to Saskatchewan and Alberta, south to Colorado (Long's Peak), Black Hills of South Dakota, northern Nebraska, northern Iowa, Indiana, Ohio, Pennsylvania, and New Jersey. Also local in Oklahoma and Virginia.

REFERENCES.—Ball, Carleton R. Salix petiolaris J. E. Smith: American, not British. Torrey Bot. Club Bul. 75: 178–187. 1948.

Fernald, M. L. Rhodora 48: 46–48. 1946.

Fernald, M. L. Rhodora 51: 7. 1949.

Fernald (Gray's Man. Bot. Ed. 8, 516. 1950) adopted the later name *Salix gracilis* Anderss. for this species, interpreting *S. petiolaris* as a European willow. However, Ball showed that *S. petiolaris* is native of America, though originally described from plants introduced into Scotland. Should be retained.

Generally a shrub but in the northern part of its range in central Alberta occasionally a small tree and rarely 15 to 22 feet high, according to Ball (Castanea 3: 7. 1938; Torrey Bot. Club Bul. 75: 181. 1948).

Salix prinoides Pursh, see **S. discolor** Mühl.

Salix pseudomonticola Ball, see **S. padophylla** Rydb.

Salix purpurea L., see note under **Salix** L.

Salix pyrifolia Anderss. **†balsam willow**

Salix cordata β balsamifera Hook., Fl. Bor.-Amer. 2: 149. 1839.

Salix balsamifera Barratt ex Hook., Fl. Bor.-Amer. 2: 149. 1839; as synonym.

†*Salix pyrifolia* Anderss., Svenska Vetensk. Akad. Handl. 6(1): 162, pl. 8, fig. 93. 1867. Not *Salix pyrifolia* Schleicher, Cat. Pl. Helvet. Ed. 3, 26. 1815; *nomen nudum.*

Salix balsamifera Barratt ex Bebb, Bot. Gaz. 4: 190. 1879.

Salix columbiae A. Nels. & Macbr., Bot. Gaz. 56: 473. 1913.

DERIVATION.—Pear-leaved.

OTHER COMMON NAME.—bog willow.

RANGE.—Newfoundland and Labrador west to Hudson Bay, Saskatchewan, Alberta, and northeastern British Columbia, and south in northeastern States from Minnesota to Michigan, New York, and Maine.

Salix rigida Mühl., see **S. eriocephala** Michx.

Salix rostrata Richards., see **S. bebbiana** Sarg.

Salix sandbergii Rydb., see **S. lasiolepis** Benth.

Salix scouleriana Barratt **Scouler willow**

†*Salix scouleriana* Barratt ex Hook., Fl. Bor.-Amer. 2: 145. 1839.

Salix brachystachys [subsp.?]*S. scouleriana* [var.?] *crassijulis* Anderss., Svenska Vetensk. Akad. Handl. 6(1):83. 1867.

Salix nuttallii Sarg., Gard. and Forest 8: 463. 1895.

†*Salix scouleriana* var. *flavescens* (Nutt.) J. K. Henry, Fl. South. Brit. Columb. 98. 1915.

†*Salix scouleriana* var. *crassijulis* (Anderss.) Schneid., Arnold Arboretum Jour. 2: 12. 1920.

Salix scouleriana var. *poikila* Schneid., Arnold Arboretum Jour. 2: 12. 1920.

Salix scouleriana var. *coetanea* Ball, Wash. Acad. Sci. Jour. 24: 73. 1934.

Salix scouleriana var. *thompsoni* Ball, Wash. Acad. Sci. Jour. 24: 75, fig. 1. 1934.

DERIVATION.—From its discoverer, John Scouler (1804–71), Scotch naturalist and physician who made collections of plants on the northwest coast of North America in 1825–27.

OTHER COMMON NAMES.—black willow, fire willow, †mountain willow, Nuttall willow.

RANGE.—Saskatchewan to Yukon and southern Alaska to Kodiak Island, south through southeastern Alaska and British Columbia, and from Washington south in mountains to southern California, east to Arizona and New Mexico, and north to Black Hills of South Dakota and Montana.

Salix sericea Marsh. **silky willow**

Salix sericea Marsh., Arbustr. Amer. 140. 1785.

DERIVATION.—Silky, referring especially to the young leaves.

OTHER COMMON NAME.—satin willow.

RANGE.—Western Nova Scotia to Maine, southern Quebec, Michigan, Wisconsin, and eastern Iowa, south to Missouri, Tennessee, Georgia, and South Carolina.

This shrubby species occasionally becomes a small tree up to 24 feet high, according to Ball (Castanea 3: 8. 1938).

Salix sessilifolia Nutt. **northwest willow**

†*Salix sessilifolia* Nutt., No. Amer. Sylva 1: 68. 1843.

DERIVATION.—Sessile-leaved.

OTHER COMMON NAMES.—velvet willow (SPN), †sandbar willow, soft-leaved willow.

RANGE.—Southwestern British Columbia, western Washington, and western Oregon.

Salix sitchensis Sanson **Sitka willow**

†*Salix sitchensis* Sanson ex Bong., Acad. Imp. Sci. St. Pétersbourg Mém., Sér. 6, Math. Phys. Nat. 2: 162. 1832.

DERIVATION.—Of Sitka, in southeastern Alaska, where it was first collected.

OTHER COMMON NAME.—†silky willow.

RANGE.—Pacific coast region from Kodiak Island in southern Alaska southeast through southeastern Alaska and western British Columbia to Washington and northwestern California, and east in Columbia River drainage to northern Idaho and western Montana.

Salix jepsonii Schneid. (†*Salix sitchensis* var. *angustifolia* Bebb) has been omitted as a shrub not known to be arborescent.

Salix sitchensis var. *coulteri* Jeps., see **S. coulteri** Anderss.

Salix stenophylla Rydb., see **S. exigua** Nutt.

Salix taxifolia H. B. K. **†yewleaf willow**

†*Salix taxifolia* H. B. K., Nov. Gen. Sp. 2: 22. 1817.

Salix taxifolia var. *limitanea* Johnston, Arnold Arboretum Jour. 25: 432. 1944.

DERIVATION.—Yew-leaved, the leaves very small and narrow.

OTHER COMMON NAME.—yew willow.

RANGE.—Trans-Pecos Texas, extreme southwestern New Mexico, and southeastern Arizona. Also south through Mexico (Sonora, Chihuahua, and Coahuila southward) to Guatemala.

Salix toumeyi Britton, see **S. bonplandiana** H. B. K.

Salix tracyi Ball **Tracy willow**

Salix tracyi Ball, Calif. Univ. Pubs. Bot. 17: 403, pls. 69, 70. 1934.

DERIVATION.—Named for its discoverer, Joseph P. Tracy, botanist of Eureka, Calif.

RANGE.—Southwestern Oregon and northwestern California. A shrub or small tree 7 to 20 feet high, closely related to *Salix lasiolepis* Benth., arroyo willow.

SALIX VIMINALIS L. BASKET WILLOW

Salix viminalis L., Sp. Pl. 1021. 1753.

OTHER COMMON NAMES.—osier, common osier, silky osier.

DERIVATION.—Of osiers, or flexible twigs, referring to the use in basketry and wicker work.

RANGE.—Escaped from cultivation and naturalized locally from Newfoundland and Quebec to New England, other northeastern States, and Nova Scotia. Native of Eurasia.

A shrub or tree to 50 feet high widely introduced long ago for basketry and ornament and occasionally escaped.

Salix wardi (Bebb) Bebb, see **S. caroliniana** Michx.

Salix watsoni (Bebb) Rydb., see **S. lutea** Nutt.

Salix wrightii Anderss., see **S. amygdaloides** Anderss.

Sambucus L. (Family Caprifoliaceae) **elder**

†*Sambucus* L., Sp. Pl. 269. 1753; Gen. Pl. Ed. 5, 130. 1754.

DERIVATION.—The classical Latin name.

OTHER COMMON NAME.—elderberry.

REFERENCE.—Schwerin, Fritz Graf von. Revisio generis Sambucus. Deut. Dendrol. Gesell. Mitt. 29: 194–231, illus. 1930.

Sambucus callicarpa Greene **Pacific red elder**

?*Sambucus pubens* Michx. γ *arborescens* Torr. & Gray, Fl. No. Amer. 2: 13. 1841.

†*Sambucus callicarpa* Greene, Fl. Franciscana 342. 1892.

Sambucus racemosa L. var. *callicarpa* (Greene) Jeps., Fl. West Mid. Calif. 411. 1901.

?*Sambucus racemosa* var. *arborescens* (Torr. & Gray) Fosberg, Amer. Midland Nat. 27: 765. 1942.

DERIVATION.—Beautiful-fruited, from the red fruits.

OTHER COMMON NAMES.—†redberry elder, red elderberry.

RANGE.—Pacific coast region from southern and southeastern Alaska southeast to British Columbia, western Washington, western Oregon, and mountains of central and southern California.

By some authors regarded as a variety of *Sambucus pubens* Michx. (*S. racemosa* auth.), scarlet elder, of Canada and eastern United States.

Sambucus canadensis L. **American elder**

Sambucus canadensis L., Sp. Pl. 269. 1753.

Sambucus canadensis var. *submollis* Rehd., Trees and Shrubs 2: 188. 1911.

DERIVATION.—Of Canada.

OTHER COMMON NAMES.—blackberry elder, common elder.

RANGE.—Nova Scotia to Maine and west to Minnesota, south to eastern Nebraska, central Kansas, western Oklahoma, and central Texas, and east to Georgia.

Generally a shrub but reaching tree size in southern States, though not in the 1927 Check List. In Louisiana it becomes 30 feet high with a trunk 2 feet in diameter, according to Cocks (Arnold Arboretum Jour. 2: 216. 1922).

Sambucus cerulea Raf., see **S. glauca** Nutt.

Sambucus glauca Nutt. **†blueberry elder**

†*Sambucus cerulea* Raf., Alsogr. Amer. 48. 1838; *nomen subnudum.*

Sambucus glauca Nutt. in Torr. & Gray, Fl. No. Amer. 2: 13. 1841.

Sambucus neo-mexicana Woot., Torrey Bot. Club Bul. 25: 309. 1898.

Sambucus glauca neo-mexicana (Woot.) A. Nels. in Coult. & Nels., New Man. Bot. Rocky Mts. 469. 1909.

Sambucus intermedia Carr. *neomexicana* (Woot.) Schwer., Deut. Dendrol. Gesell. Mitt. 18: 38, 328. 1909.

Sambucus caerulea var. *neomexicana* (Woot.) Rehd., Deut. Dendrol. Gesell. Mitt. 24: 228. 1915.

The name *Sambucus cerulea* Raf., very briefly and inadequately described without specimens, should be rejected.

DERIVATION.—Glaucous, or covered with a bloom, describing the bluish fruits.

OTHER COMMON NAME.—blue elderberry.

RANGE.—Western Montana to southern Alberta, southern British Columbia, and Washington, south to southern California, southeastern Arizona, southern New Mexico, and Trans-Pecos Texas. Also in northern Mexico (Lower California, Sonora, and Chihuahua).

Sambucus melanocarpa A. Gray **blackbead elder**

Sambucus melanocarpa A. Gray, Amer. Acad. Arts and Sci. Proc. 19: 76. 1883.

Sambucus racemosa L. var. *melanocarpa* (A. Gray) McMinn, Illus. Man. Calif. Shrubs 529. 1939.

DERIVATION.—Black-fruited.

OTHER COMMON NAMES.—black elderberry, mountain elder.

RANGE.—Montana to Alberta, British Columbia, and Washington, south to California, Arizona, and New Mexico.

This shrubby species included here has been found rarely as a small tree to 30 feet tall in northwestern Oregon by Oliver V. Matthews (Forest Log 12(5): 4. 1942).

Sambucus mexicana Presl **†Mexican elder**

Sambucus mexicana Presl in DC., Prodr. 4: 322. 1830.

Sambucus canadensis L. var. *mexicana* (Presl) Sarg., Silva No. Amer. 5: 88, pl. 221. 1893.

†*Sambucus coerulea* var. *arizonica* Sarg., Man. Trees No. Amer. Ed. 2, 885, fig. 778. 1922.

Sambucus glauca var. *arizonica* Sarg. ex Jepson, Man. Fl. Pl. Calif. 965. 1925.

Sambucus caerulea var. *mexicana* (Presl) L. Benson, Amer. Jour. Bot. 30: 240. 1943.

DERIVATION.—Of Mexico.

OTHER COMMON NAMES.—Arizona blueberry elder (SPN), Arizona elder, desert elderberry, sauco.

RANGE.—Trans-Pecos Texas to southern New Mexico, central Arizona, and southern California, and south through Mexico to Central America.

Sambucus neo-mexicana Woot., see **S. glauca** Nutt.

Sambucus pubens Michx., see note under **S. callicarpa** Greene

Sambucus simpsonii Rehd. **†Florida elder**

Sambucus intermedia Carr. *insularis* Schwer., Deut. Dendrol. Gesell. Mitt. 18: 38. 1909.

†*Sambucus simpsonii* Rehd. in Sarg., Trees and Shrubs 2: 187, pl. 175. 1911.

DERIVATION.—In honor of J. H. Simpson, who collected the type in 1910.

OTHER COMMON NAMES.—Gulf elder, southern elder.

RANGE.—Coastal Plain from northern to southern Florida and west to southern Louisiana.

Closely related to *Sambucus canadensis* L., and perhaps not specifically distinct.

Sambucus velutina Durand & Hilgard **velvet elder**

Sambucus velutina Durand & Hilgard, Acad. Nat. Sci. Phila. Jour., Ser. 2, 3: 39. 1855 (preprinted 1854).

†*Sambucus cerulea velutina* (Durand & Hilgard) Schwer., Deut. Dendrol. Gesell. Mitt. 18: 37. 1909.

Sambucus glauca var. *velutina* (Durand & Hilgard) Johnston, Pl. World 22: 118. 1919.

DERIVATION.—Velvety, referring to the hairy leaves.

OTHER COMMON NAME.—†velvet-leaf elder.

RANGE.—Mountains of western Arizona (Hualpai Mountains) and California from Sierra Nevada to southern California and Santa Cruz Island.

Sapindus L. (Family Sapindaceae) **soapberry**

†*Sapindus* L., Sp. Pl. 367. 1753; Gen. Pl. Ed. 5, 171. 1754.

DERIVATION.—A corruption of Latin *sapo,* soap, and *indicus,* Indian, referring to the use of the saponin-rich berries by the West Indian natives as a substitute for soap.

REFERENCE.—Radlkofer, L. Sapindus. Pflanzenreich 98a (IV. 165): 630–668. 1932.

Sapindus drummondii Hook. & Arn. **†western soapberry**

†*Sapindus drummondi* Hook. & Arn., Bot. Beechey Voy. 281. [1838.]

Rhus florita M. E. Jones, Contrib. West. Bot. 18: 22. 1935; without Latin diagnosis.

Sapindus saponaria var. *drummondi* (Hook. & Arn.) L. Benson, Amer. Jour. Bot. 30: 239. 1943.

DERIVATION.—From its discoverer, Thomas Drummond (1780–1835), Scotch botanical explorer in North America.

OTHER COMMON NAMES.—wild china-tree, cherioni, jaboncillo.

RANGE.—Louisiana north to southwestern Missouri, west to Kansas, southern Colorado, eastern and southern New Mexico, and central Arizona, and through Texas to northern Mexico.

Sapindus marginatus Willd. **Florida soapberry**

†*Sapindus marginatus* Willd., Enum. Pl. Hort. Berol. 432. 1809.

DERIVATION.—Margined, the leaf rachises narrow margined or wingless.

OTHER COMMON NAMES.—†soapberry, wild china-tree.

RANGE.—Coastal Plain from South Carolina to Georgia and central Florida. Also in Cuba.

Sapindus saponaria L. **†wingleaf soapberry**

†*Sapindus saponaria* L., Sp. Pl. 367. 1753.

DERIVATION.—Of soap; the fruits contain saponin and have been used as soap in washing clothes.

OTHER COMMON NAME.—southern soapberry (SPN).

RANGE.—Southern Florida, including Florida Keys. Also in West Indies, Mexico, Central America, and South America.

Sapium P. Br. (Family Euphorbiaceae) **sapium**

†*Sapium* P. Br., Civ. Nat. Hist. Jamaica 338. 1756.

Triadica Lour., Fl. Cochinch. 610. 1790.

DERIVATION.—From the Latin name of a resinous pine or fir tree.

Sapium biloculare (S. Wats.) Pax **jumping-bean sapium**

Sebastiana (?) *bilocularis* S. Wats., Amer. Acad. Arts and Sci. Proc. 20: 374. 1885.

Sapium biloculare (S. Wats.) Pax, Pflanzenreich 52 (IV. 147. v): 221. 1912.

DERIVATION.—Two-celled, referring to the fruit capsule with two seeds.

OTHER COMMON NAME.—Mexican jumping-bean.

RANGE.—Southern Arizona (Maricopa and Pima Counties) and northwestern Mexico (Sonora and Lower California).

First reported from the United States near Gila Bend, Maricopa County, Ariz., by Kearney (Wash. Acad. Sci. Jour. 21: 72. 1931). A shrub or small tree up to 15 feet high in Arizona, according to Kearney and Peebles (U. S. Dept. Agr. Misc. Pub. 423, 534. 1942).

SAPIUM GLANDULOSUM (L.) Morong BRAZIL SAPIUM

Hippomane glandulosa L., Sp. Pl. 1191. 1753.

†*Sapium glandulosum* (L.) Morong in Morong & Britton, N. Y. Acad. Sci. Ann. 7: 227. 1893.

DERIVATION.—Glandular, perhaps from the abundant white latex.

OTHER COMMON NAMES.—†milktree, South American milktree.

RANGE.—Naturalized in northwestern Florida. Native of South America.

SAPIUM SEBIFERUM (L.) Roxb. †TALLOWTREE

Croton sebiferum L., Sp. Pl. 1004. 1753.

†*Sapium sebiferum* (L.) Roxb., Fl. Ind. 3: 693. 1832.

Triadica sebifera (L.) Small, Fla. Trees 59, 102. 1913.

DERIVATION.—Bearing wax or tallow; the waxy seed coats used in making candles.

OTHER COMMON NAME.—Chinese tallowtree (SPN).

RANGE.—Naturalized in Coastal Plain from South Carolina to Florida and Louisiana. Native of China.

Sassafras Trew (Family Lauraceae) **sassafras**

†*Sassafras* Trew, Herb. Blackw., Cent. 3, pl. 267. 1757.

DERIVATION.—A Spanish name, perhaps of American Indian

origin, and thought by some to be confused with saxifrage.

***Sassafras albidum** (Nutt.) Nees **†sassafras**

Laurus sassafras L., Sp. Pl. 371. 1753.
Laurus variifolia Salisb., Prodr. 344. 1796; *nomen illegitimum.*
Laurus albida Nutt., Gen. No. Amer. Pl. 1: 259. 1818.
Sassafras officinale Nees & Eberm., Handb. Med.-Pharm. Bot. 2: 418. 1831; as *"officinalis."*
Sassafras albidum (Nutt.) Nees, Syst. Laur. 490. 1836.
Sassafras triloba Raf., Autikon Bot. 85. 1840.
Sassafras triloba var. *mollis* Raf., Autikon Bot. 85. 1840.
Sassafras sassafras (L.) Karst., Deut. Fl. Pharm.-Med. Bot. 505. 1882.
†*Sassafras variifolium* (Salisb.) Kuntze, Revis. Gen. Pl. 2: 574. 1891.
Sassafras officinale var. *albidum* Blake, Rhodora 20: 99. 1918.
Sassafras albidum var. *molle* (Raf.) Fernald, Rhodora 38: 179. 1936.

DERIVATION.—Whitish.

OTHER COMMON NAME.—common sassafras (SPN).

RANGE.—Southwestern Maine to New York, extreme southern Ontario, central Michigan, Illinois, southeastern Iowa, and Missouri, south to extreme southeastern Kansas, eastern Oklahoma, and eastern Texas, and east to central Florida. Formerly in southeastern Wisconsin, where now extinct.

REFERENCE.—Fernald, M. L. The nomenclature of Sassafras. Rhodora 38: 178–179. 1936.

Savia Willd. (Family Euphorbiaceae) **maidenbush**

†*Savia* Willd., Sp. Pl. Ed. 4, 4: 771. 1806.

DERIVATION.—In honor of Gattano Savi (died 1844), professor at Pisa, Italy.

Savia bahamensis Britton **Bahama maidenbush**

†*Savia bahamensis* Britton, Torreya 4: 104. 1904.

DERIVATION.—Of Bahama Islands, where it was discovered.

OTHER COMMON NAME.—maidenbush.

RANGE.—Lower Florida Keys. Also in Bahama Islands.

Commonly a small shrub but also a small tree to 15 feet in height.

Schaefferia Jacq. (Family Celastraceae) **schaefferia**

†*Schaefferia* Jacq., Enum. Pl. Carib. 10. 1760.

DERIVATION.—Dedicated to Jakob Christian Schaeffer (1718–90), German naturalist.

Schaefferia frutescens Jacq. **†Florida-boxwood**

†*Schaefferia frutescens* Jacq., Enum. Pl. Carib. 33, (10). 1760; as *"Schaeferia"* on p. 33. Jacq., Select. Stirp. Amer. 259. 1763.

DERIVATION.—Shrubby, or bushy.

OTHER COMMON NAMES.—yellowwood, boxwood.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies, southern Mexico (Veracruz), and Colombia and Venezuela in northern South America.

SCHINUS L. (Family Anacardiaceae) PEPPERTREE

Schinus L., Sp. Pl. 388. 1753; Gen. Pl. Ed. 5, 184. 1754.

DERIVATION.—From the classical Greek name of the mastic-tree or lentisk pistache, *Pistacia lentiscus* L., applied to the genus because of the resin of some species.

REFERENCE.—Barkley, Fred A. Schinus L. Brittonia 5: 160–198, illus. 1944.

Schinus longifolia (Lindl.) Speg. (in Speg. & Girola, Soc. Rural Argentina An. 1910: 413. 1910), a shrub or small tree introduced into Texas as an ornamental, is reported by Barkley (in Lundell, Fl. Tex. 3: 92. 1943) as apparently naturalized.

SCHINUS MOLLE L. PEPPERTREE

Schinus molle L., Sp. Pl. 388. 1753.

DERIVATION.—From the old Peruvian name, molle or mulli.

OTHER COMMON NAMES.—California peppertree (SPN), Peruvian peppertree.

RANGE.—Naturalized in southern California, according to Munz (Man. South. Calif. Bot. 294. 1935) and Jepson (Fl. Calif. 2: 448. 1936), and well established in southern Texas, according to Barkley (in Lundell, Fl. Tex. 3: 92. 1943.). Native of South America from Peru to Argentina but widely cultivated and naturalized in the tropics.

The naturalization on the Pacific coast of this species, which also adds a naturalized genus, was predicted by Britton and Shafer (No. Amer. Trees 604. 1908). In time it may become extensively naturalized in other subtropical areas of the United States as now in Mexico.

Schmaltzia Desv., see **Rhus** L.

Schoepfia Schreb. (Family Olacaceae) **graytwig**

†*Schoepfia* Schreb., Gen. Pl. Ed. 8, 1: 129. 1789.

DERIVATION.—In honor of Johann David Schoepf (1752–1800), German physician and botanist, who traveled in North America and West Indies.

Schoepfia chrysophylloides (A. Rich.) Planch. **Gulf graytwig**

Diplocalyx chrysophylloides A. Rich. in Sagra, Hist. Fis. Pol. Nat. Cuba 11: 81. 1850.

†*Schoepfia chrysophylloides* (A. Rich.) Planch., Ann. des Sci. Nat., Bot., Sér. 4, 2: 261. 1854; as "*Schaepfia*."

DERIVATION.—Like *Chrysophyllum*, starapple.

OTHER COMMON NAME.—†whitewood.

RANGE.—Southern Florida, including Florida Keys. Also in Bahamas, Cuba, Jamaica, and Guatemala.

At one time the Florida tree was referred to *Schoepfia schreberi* J. G. Gmel., of the West Indies.

Sebesten Adans., see **Cordia** L.

Sequoia Endl. (Family Pinaceae) **sequoia**

Steinhauera Presl in Sternberg. Versuch Geogn.-Bot. Dast. Fl. Vorwelt 2: 202, pls. 49, 57. 1838; *nomen rejiciendum.*

†*Sequoia* Endl., Synops. Conif. 197. 1847; *nomen conservandum.*

Sequoiadendron Buchholz, Amer. Jour. Bot. 26: 536. 1939.

DERIVATION.—Commemorating Sequoyah (also spelled Sequoia), or George Guess (1770?-1843), American Indian inventor of the Cherokee alphabet; the name was unexplained by its author.

REFERENCES.—Buchholz, J. T. The generic segregation of the Sequoias. Amer. Jour. Bot. 26: 535–538. 1939.

Looby, W. J., and Doyle, J. Formation of gynospore, female gametophyte, and archegonia in Sequoia. Roy. Dublin Soc. Sci. Proc., New Ser. 23: 35–54, illus. 1942.

***Sequoia gigantea** (Lindl.) Decne. **giant sequoia**

Wellingtonia gigantea Lindl., Gard. Chron. 1853: 820, 823. 1853.

Sequoia gigantea (Lindl.) Decne., Soc. Bot. de France Bul. 1: 70. 1854. Not *Sequoia gigantea* Endl., Synops. Conif. 198. 1847.

Taxodium washingtonianum Winslow, Calif. Farmer 2: 58. 1854 (Aug. 24); *nomen illegitimum.*

Washingtonia californica Winslow, Calif. Farmer 2: 58. 1854 (Aug. 24); *nomen illegitimum.*

Sequoia wellingtonia Seem., Bonplandia 3: 27. 1855.

†*Sequoia washingtoniana* (Winslow) Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 61. 1897.

Sequoiadendron giganteum (Lindl.) Buchholz, Amer. Jour. Bot. 26: 536. 1939.

DERIVATION.—Giant.

OTHER COMMON NAMES.—†bigtree, Sierra redwood.

RANGE.—Central California, western slope of Sierra Nevada from Placer County to Tulare County, local in groves.

REFERENCES.—Dayton, William A. The names of the giant sequoia. Leafl. West. Bot. 3: 209–219. 1943.

Doyle, J. Naming of the redwoods. Nature 155: 254–257. 1945.

Jones, George Neville. The botanical name of the giant Sequoia. Science 98: 406–407. 1943.

Rickett, H. W. The Botanical name of the big tree. N. Y. Bot. Gard. Jour. 51: 15. 1950.

The name *Sequoia gigantea*, which is in general use for the giant sequoia, is adopted here, though *S. washingtoniana* was used in the 1927 Check List and *S. wellingtonia* has been the proper name since 1930 under the International Code of Botanical Nomenclature. A majority of the botanists in California consulted prefer to continue the illegitimate name *Sequoia gigantea*, which is so well established in many publications about these remarkable trees. In the interests of uniformity and of elimination of confusion in names, the name *S. gigantea* is accepted here by the Forest Service committee.

Buchholz (Amer. Jour. Bot. 26: 535–538. 1939) segregated this species from *Sequoia* under the new genus *Sequoiadendron* as *Sequoiadendron giganteum* (Lindl.) Buchholz. However, under conservative taxonomy, division of a long-established genus of only two living species to form two monotypic genera would not seem desirable nor necessary to emphasize the differences of the two species and would cause confusion in the identification of the many fossil species.

Winslow's two names, *Taxodium washingtonianum* and *Washingtonia californica*, have been questioned because they were provisional and alternate names and published in a newspaper. However, if not rejected for those reasons, the two names definitely are illegitimate as superfluous when published, because Winslow in citing *Wellingtonia gigantea* Lindl. did not retain the same specific epithet in the other genera.

***Sequoia sempervirens** (D. Don) Endl. **†redwood**

Taxodium sempervirens D. Don in Lamb., Descr. Genus Pinus 2: [24], pl. 7, fig. 1. 1824.

†*Sequoia sempervirens* (D. Don) Endl., Synops. Conif. 198. 1847.

DERIVATION.—Evergreen.

OTHER COMMON NAMES.—California redwood, coast redwood.

RANGE.—Pacific coast region of southwestern Oregon (three groves in Curry County) and northwestern to central California (Del Norte County to Monterey County).

Sequoiadendron Buchholz, see **Sequoia** Endl.

Serenoa Hook. f. (Family Palmae) **saw-palmetto**

Serenoa Hook. f. in Benth. & Hook. f., Gen. Pl. 3: 926, 1228. 1883; as "*Serenaea*" on p. 926 but corrected to "*Serenoa*" on p. 1228.

DERIVATION.—Dedicated to Sereno Watson (1826–1892), American botanist at Harvard University and authority on the flora of North America.

REFERENCES.—See under **Sabal** Adans.

Serenoa arborescens Sarg., see **Paurotis wrightii** (Griseb. & H. Wendl.) Britton

Serenoa repens (Bartr.) Small **saw-palmetto**

Corypha repens Bartr., Travels N. S. Car. Ga. Fla. 61. 1791.

Chamaerops serrulata Michx., Fl. Bor.-Amer. 1: 206. 1803.

Serenoa serrulata (Michx.) Nicholson, Illus. Dict. Gard. 3: 423. 1887.

Serenoa repens (Bartr.) Small, N. Y. Bot. Gard. Jour. 23: 62. 1922.

DERIVATION.—Creeping, usually shrubby with horizontal, creeping stems.

RANGE.—Coastal Plain from southeastern South Carolina to southern Florida and Florida Keys, and west to southern Mississippi and southeastern Louisiana.

Though typically prostrate and omitted from the 1927 Check List, this variable species sometimes becomes a small erect tree 20 to 25 feet high in Florida.

Sesbania Scop. (Family Leguminosae) **sesbania**

Agati Adans., Fam. Pl. 2: 326. 1763; *nomen rejiciendum.*
Sesban Adans., Fam. Pl. 2: 327. 1763; *nomen rejiciendum.*
†*Sesbania* Scop., Introd. Hist. Nat. 308. 1777; *nomen conservandum.*

DERIVATION.—Latinized from Persian *sisaban* and Arabic *saysaban* used for plants of this genus.

SESBANIA GRANDIFLORA (L.) Pers. AGATI

Robinia grandiflora L., Sp. Pl. 722. 1753.
Aeschynomene grandiflora (L.) L., Sp. Pl. Ed. 2, 1060. [1763].
Sesban grandiflorus (L.) Poir., Encycl. Méth. Bot. 7: 127. 1806.
†*Sesbania grandiflora* (L.) Pers., Synops. Pl. 2: 316. 1807.
Agati grandiflora (L.) Desv., Jour. de Bot. Appl. Agr. Pharm. Med. Arts 1: 120. 1813.

DERIVATION.—Large-flowered.

OTHER COMMON NAMES.—agati sesbania (SPN), Australian corkwood-tree.

RANGE.—Naturalized in southern Florida south to Key West, but generally shrubby. Planted and naturalized also in West Indies and from southern Mexico (Yucatán) to South America. Native of East Indies.

Shepherdia Nutt. (Family Elaeagnaceae) **buffaloberry**

Lepargyrea Raf., Amer. Monthly Mag. 2: 176. 1818 (Jan.); *nomen rejiciendum.*
Shepherdia Nutt., Gen. No. Amer. Pl. 2: 240. 1818; *nomen conservandum.*

DERIVATION.—Dedicated to John Shepherd (1764?–1836), English botanist and curator of the Liverpool Botanic Garden.

REFERENCE.—Nelson, Aven. Rocky Mountain Herbarium Studies. III. The Elaeagnaceae.—A mono-generic family. Amer. Jour. Bot. 22: 681–683. 1935.

Shepherdia argentea (Pursh) Nutt. **silver buffaloberry**

Hippophae argentea Pursh, Fl. Amer. Sept. 1: 115. 1814.
Shepherdia argentea (Pursh) Nutt., Gen. No. Amer. 2: 240. 1818.
Lepargyrea argentea (Pursh) Greene, Pittonia 2: 122. 1890.
Elaeagnus utilis A. Nels., Amer. Jour. Bot. 22: 682. 1935.
Not *Elaeagnus argenteus* Moench, Meth. Pl. 638. 1794.

DERIVATION.—Silvery, from the silvery, scurfy leaves and twigs.

RANGE.—Western Minnesota and North Dakota to Manitoba and Alberta, south to eastern Oregon, southern California, and east to central Nevada, northern Arizona, northern New Mexico, western Kansas, eastern Nebraska, and Iowa.

OTHER COMMON NAME.—buffaloberry.

Recorded by several authors as a shrub or sometimes small tree to 23 feet high, though this species, genus, and the family Elaeagnaceae were not in the 1927 Check List.

Sideroxylon L. (Family Sapotaceae) **jungle-plum**

†*Sideroxylon* L., Sp. Pl. 192. 1753. Gen. Pl. Ed. 5, 89. 1754; as "*Sideroxylum.*"

Mastichodendron Jacq. ex Lam. Rec. des Trav. Bot. Néerland. 36: 521. 1939; without Latin diagnosis.

Mastichodendron Cronquist, Lloydia 9: 245. 1946.

DERIVATION.—From Greek, iron and wood, alluding to the very hard wood.

REFERENCE.—Cronquist, Arthur. Studies in the Sapotaceae—II. Survey of the North American genera. Lloydia 9: 241–292. 1946.

Mastichodendron Cronquist has been proposed as a generic segregate for the American species of *Sideroxylon.* Under that interpretation the genus *Sideroxylon* would be limited to the African species. However, *Sideroxylon* has been universally accepted for the American species in the past, and its division seems unnecessary now.

Sideroxylon foetidissimum Jacq. **false-mastic**

†*Sideroxylon foetidissimum* Jacq., Enum. Pl. Ins. Carib. 15. 1760.

Sideroxylon mastichodendron Jacq., Coll. Bot. 2: 253, pl. 17, fig. 5. 1788.

Mastichodendron foetidissimum (Jacq.) Lam., Rec. des Trav. Bot. Néerland. 36: 521. 1939; *nom. illegit.*

Mastichodendron foetidissimum (Jacq.) Cronquist, Lloydia 9: 246. 1946.

DERIVATION.—Very ill-smelling, referring to the cheeselike odor of the numerous flowers.

OTHER COMMON NAMES.—†mastic, wild-olive.

RANGE.—Southern Florida north on eastern coast to Cape Canaveral, and Florida Keys. Also in West Indies and a variety in Yucatán peninsula of Mexico and British Honduras.

Simarouba Aubl. (Family Simaroubaceae) **simarouba**

†*Simarouba* Aubl., Hist. Pl. Guiane Franç. 2: 859, pls. 331, 332. 1775.

Simaruba DC., Paris Mus. Hist. Nat. Ann. 17: 423. 1811. *Nom. conserv. propos.* Janchen, 1944. Not *Simaruba* Boehm., 1760.

DERIVATION.—From the Carib Indian name of the type species from Guiana.

REFERENCE.—Cronquist, Arthur. Studies in the Simaroubaceae—II. The genus Simarouba. Torrey Bot. Club Bul. 71: 226–234, illus. 1944.

Sometimes spelled *Simaruba,* but Aublet's original spelling *Simarouba* should be retained, as noted by Sprague (Kew Roy. Bot. Gard. Bul. Misc. Inform. 1929: 243. 1929).

Simarouba glauca DC. **†paradise-tree**

†*Simarouba glauca* DC., Paris Mus. d'Hist. Nat. Ann. 17: 424. 1811; as "*Simaruba.*"

Simarouba medicinalis Endl., Med.-Pflanz. Osterreich. 528. 1842.

Simarouba glauca var. *latifolia* Cronquist, Torrey Bot. Club Bul. 71: 231. 1944.

RANGE.—Southern Florida, north on east coast to Cape Canaveral, including Florida Keys. Also in West Indies from Bahama Islands to Hispaniola and Jamaica, and from southern Mexico (Yucatán, Tabasco, and Oaxaca) south to Costa Rica in Central America.

DERIVATION.—Glaucous, or covered with a bloom, referring to the blue-green lower surface of the leaflets.

Simpsonia O. F. Cook, see **Thrinax** Sw.

Solanum L. (Family Solanaceae) **nightshade**

†*Solanum* L., Sp. Pl. 184. 1753; Gen. Pl. Ed. 5, 85. 1754.

DERIVATION.—The classical Latin name for nightshade, *Solanum* spp.

SOLANUM VERBASCIFOLIUM L. MULLEIN NIGHTSHADE

†*Solanum verbascifolium* L., Sp. Pl. 184. 1753.

DERIVATION.—With leaves of *Verbascum,* or mullein-leaved.

OTHER COMMON NAME.—†potato-tree.

RANGE.—Southern Florida, north on east coast to Brevard County, and Florida Keys, and southeastern Texas. Widely distributed in West Indies, nearly throughout Mexico except Lower California, Central America, South America, and Old World tropics. Probably naturalized in the United States rather than native but now thoroughly established in southern Florida.

Sophora L. (Family Leguminosae) **sophora**

†*Sophora* L., Sp. Pl. 373. 1754; Gen. Pl. Ed. 5, 175. 1754.

DERIVATION.—Latinized from Arabic *sufayra,* a tree with pea-shaped flowers and perhaps of this genus.

Sophora affinis Torr. & Gray **Texas sophora**

†*Sophora affinis* Torr. & Gray, Fl. No. Amer. 1: 390. 1840.

DERIVATION.—Related.

OTHER COMMON NAMES.—†coralbean, pink sophora.

RANGE.—Northwestern Louisiana and southwestern Arkansas west to southern Oklahoma and central and eastern Texas.

Sophora secundiflora (Ortega) Lag. **mescalbean**

Broussonetia secundiflora Ortega, Hort. Matr. Dec. 61, pl. 7. 1798.

†*Sophora secundiflora* (Ortega) Lag. ex DC., Cat. Pl. Hort. Bot. Monsp. 148. 1813.

DERIVATION.—Secund-flowering, the flowers on one side of the axis.

OTHER COMMON NAMES.—mescalbean sophora (SPN), coralbean, †frijolito, frijol-rojo.

RANGE.—Eastern and southern Texas to Trans-Pecos Texas and southeastern New Mexico. Also in northeastern Mexico (Nuevo León, Coahuila, and San Luis Potosí).

Sorbus L. (Family Rosaceae) **mountain-ash**

†*Sorbus* L., Sp. Pl. 477. 1753; Gen. Pl. Ed. 5, 213. 1754.
Pyrus L., Sp. Pl. 479. 1753; Gen. Pl. Ed. 5, 214. 1754; in part.

DERIVATION.—The classical Latin name of *Sorbus domestica* L., servicetree mountain-ash of Europe.

REFERENCE.—Jones, George Neville. A synopsis of the North American species of *Sorbus*. Arnold Arboretum Jour. 20: 1–43, illus. 1939.

Sorbus americana Marsh. **American mountain-ash**

†*Sorbus americana* Marsh., Arbustr. Amer. 145. 1785.
Pyrus americana (Marsh.) DC., Prodr. 2: 637. 1825.
Pyrus americana β microcarpa (Pursh) Torr. & Gray, Fl. No. Amer. 1: 472. 1843.

DERIVATION.—American.

OTHER COMON NAME.—†mountain-ash.

RANGE.—Newfoundland and Quebec to Ontario, northern Michigan, Minnesota, and southeastern Manitoba, south to northern Illinois, West Virginia, Pennsylvania, and New Jersey, and south in mountains to eastern Tennessee, northern Georgia, and western North Carolina.

SORBUS AUCUPARIA L. †EUROPEAN MOUNTAIN-ASH

†*Sorbus aucuparia* L., Sp. Pl. 477. 1753.
Pyrus aucuparia (L.) Gaertn., Fruct. Sem. Pl. 2: 45, pl. 87. 1791.
Sorbus subvestita Greene, Pittonia 4: 130. 1900.

DERIVATION.—Old generic name, meaning to catch birds, referring to the use of the mucilaginous fruits by fowlers in making bird lime.

OTHER COMMON NAME.—rowan-tree.

RANGE.—Naturalized from Newfoundland and Labrador west across southern Canada to British Columbia and southeastern Alaska, and south in northern United States to Washington, Minnesota, Iowa, Illinois, Ohio, Pennsylvania, and Maine. Native of Europe and Asia and spreading from cultivation.

Sorbus decora (Sarg.) Schneid. **showy mountain-ash**

Pyrus americana (Marsh.) DC. var. *decora* Sarg., Silva No. Amer. 14: 101. 1902.
Sorbus americana var. *decora* (Sarg.) Sarg., Man. Trees No. Amer. 357, fig. 281. 1905.
Sorbus decora (Sarg.) Schneid., Herb. Boissier Bul., Sér. 2, 6: 313. 1906.
Sorbus americana var. *groenlandica* Schneid., Herb. Boissier Bul., Sér. 2, 6: 314. 1906.

Sorbus decora var. *groenlandica* (Schneid.) G. N. Jones, Arnold Arboretum Jour. 20: 30. 1939.
Pyrus decora (Sarg.) Hyland, Rhodora 45: 28. 1943.
Pyrus decora var. *groenlandica* (Schneid.) Fern., Rhodora 49: 233. 1947.

DERIVATION.—Showy, or ornamental, in allusion to its handsome fruit.

OTHER COMMON NAME.—mountain-ash.

RANGE.—Southern Greenland, Labrador, and Newfoundland to Quebec, Ontario, and Minnesota, south to Iowa, northern Indiana, Ohio, New York, and Maine.

A small tree or shrub 20 to 40 feet tall, according to Jones (Arnold Arboretum Jour. 20: 25. 1939). Not distinguished from *S. americana* Marsh. in the 1927 Check List. At one time referred to *Sorbus sambucifolia* (Cham. & Schlecht.) Roem. (*Pyrus sambucifolia* Cham. & Schlecht.), a shrubby species of northeastern Asia and the western-most Aleutian Islands of Alaska.

Sorbus occidentalis (S. Wats.) Greene, western mountain-ash which was included in approved changes of the Check List in 1930, is omitted here as a shrub 3 to 10 feet high, according to Jones (Arnold Arboretum Jour. 20: 39–42. 1939).

Sorbus sitchensis Roem. **Sitka mountain-ash**

Sorbus sitchensis Roem., Fam. Nat. Reg. Veg. Syn. 3: 139. 1847.
Sorbus californica Greene, Pittonia 4: 131. 1900.
Pyrus sitchensis (Roem.) Piper, Mazama 2: 101. 1901.
Sorbus sitchensis var. *californica* (Greene) Smiley, Calif. Univ. Pub. Bot. 9: 233. 1921.
Sorbus sitchensis var. *densa* Jeps., Man. Fl. Pl. Calif. 508. 1925.
†*Sorbus americana sitchensis* (Roem.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 133. 1927.
Sorbus cascadensis G. N. Jones, Wash. Univ. Pub. Biol. 7: 174. 1938.
Sorbus sitchensis subsp. *californica* (Greene) Abrams, Illus. Fl. Pacific States 2: 470. 1944.

DERIVATION.—Of Sitka, Alaska, where it was discovered.

OTHER COMMON NAMES.—California mountain-ash, Pacific mountain-ash, †western mountain-ash.

RANGE.—Yukon to southern Alaska (Katmai region), south through southeastern Alaska and British Columbia and from western Washington south to Oregon and Sierra Nevada in central California and western Nevada, and east to northern Idaho and northwestern Montana.

Generally a shrub but in Alaska becoming a small tree 15 to 40 feet high and 5 inches in diameter, as recorded in the 1927 Check List.

Sorbus subvestita Greene, see S. AUCUPARIA L.

Staphylea L. **(Family Staphyleaceae)** **bladdernut**

†*Staphylea* L., Sp. Pl. 270. 1753. Gen. Pl. Ed. 5, 130. 1754; as "*Staphylaea.*"

DERIVATION.—From Greek, cluster of grapes, referring to the clustered flowers.

Staphylea bolanderi A. Gray **Sierra bladdernut**

Staphylea bolanderi A. Gray, Amer. Acad. Arts and Sci. Proc. 10: 69. 1874.

DERIVATION.—In honor of its discoverer Henry Nicholas Bolander (1831–97), State botanist of California.

OTHER COMMON NAMES.—Bolander bladdernut, California bladdernut.

RANGE.—Northern to central California (Sierra Nevada).

This species is a shrub 6 to 10 feet high or a slender tree up to 20 feet high, according to Jepson (Man. Fl. Pl. Calif. 611. 1925).

Staphylea trifolia L. **American bladdernut**

†*Staphylea trifolia* L., Sp. Pl. 270. 1753.

DERIVATION.—Three-leaved, referring to the three leaflets.

OTHER COMMON NAME.—†bladdernut.

RANGE.—Massachusetts to southern Quebec, Ontario, northern Michigan, and southern Minnesota, south to southeastern Nebraska, eastern Kansas, and southeastern Oklahoma, and east to Arkansas, Alabama, and Georgia.

Sterculia platanifolia L. f., see **Firmiana platanifolia** (L. f.) Schott & Endl.

Stewartia L. (Family Theaceae) **stewartia**

Stewartia L., Sp. Pl. 698. 1753; Gen. Pl. Ed. 5, 311. 1754.
Malachodendron Cav., Monadelph. Class. Diss. 5: 302. 1788.
Stuartia L'Hér., Stirp. Nov. 153. [1791.]

DERIVATION.—In honor of John Stuart (1713–92), Earl of Bute and a patron of botany.

This genus has two native species of shrubs or small trees, which were accepted as trees by Coker and Totten (Trees Southeast. States 322–325, fig. 1934).

REFERENCE.—Sprague, T. A. Kew Roy. Bot. Gard. Bul. Misc. Inform. 1928: 362–363. 1928.

Stewartia malacodendron L. **Virginia stewartia**

Stewartia malacodendron L., Sp. Pl. 698. 1753.
Stuartia malacodendron (L.) L'Hér., Stirp. Nov. 153, pl. 73. [1791.]

DERIVATION.—An older generic name used by John Mitchell (1680?–1768), Virginia physician and botanist; it, in turn, derives from Greek *malakos,* soft, and *dendron,* tree, referring to the silky pubescence.

OTHER COMMON NAMES.—silky-camellia, round-fruited stewartia.

RANGE.—Coastal Plain from eastern Virginia south to Georgia and western Florida and west to northern Alabama and Mississippi.

A shrub or small tree up to 20 feet in height, according to Coker and Totten (p. 325).

Stewartia ovata (Cav.) Weatherby **mountain stewartia**

Malachodendron ovatum Cav., Monadelph. Class. Diss. 5: 302, pl. 158, fig. 2. 1788.
Stewartia montana Bartr., Travels N. S. Car. Ga. Fla. 334. 1791.
Stuartia pentagyna L'Hér., Stirp. Nov. 155, pl. 74. [1791.]
Malachodendron pentagynum (L'Hér.) Dum.-Cours., Bot. Cult. Ed. 2, 5: 107. 1811.
Stewartia pentagyna var. *grandiflora* Bean, Trees Shrubs Brit. Isles 2: 555. 1914.
Malachodendron pentagynum grandiflorum (Bean) E. J. Alexander, Addisonia 19: 1, pl. 609. 1935.
Stewartia ovata (Cav.) Weatherby, Rhodora 41: 198. 1939.
Stewartia ovata var. *grandiflora* (Bean) Weatherby, Rhodora 41: 198. 1939.

DERIVATION.—Ovate, referring to the leaves.

OTHER COMMON NAMES.—mountain-camellia, angle-fruited stewartia.

RANGE.—Mountains, chiefly, from Virginia to southeastern Kentucky, south to eastern Tennessee, northern Alabama, northern Georgia, and central North Carolina.

Coker and Totten (p. 324) cited a tree in Rabun County, Ga., 24 feet high and 3⅓ inches in diameter.

Strobus (Sweet) Opiz, see **Pinus** L.

Strombocarpa (Benth.) A. Gray, see **Prosopis** L.

Stuartia L'Hér., see **Stewartia** L.

Styrax L. (Family Styracaceae) **snowbell**

†*Styrax* L., Sp. Pl. 444. 1753; Gen. Pl. Ed. 5, 203. 1754.

DERIVATION.—The ancient Greek name of *Styrax officinalis* L., drug snowbell, which produces the resin storax.

Styrax grandifolia Ait. **bigleaf snowbell**

†*Styrax grandifolia* Ait., Hort. Kew. 2: 75. 1789; as "*grandifolium.*"

DERIVATION.—Large-leaved.

OTHER COMMON NAMES.—†snowbell, storax.

RANGE.—Coastal Plain from southern Virginia to Florida and Louisiana, and north to Arkansas and western Tennessee. Reported from southern Ohio (Athens County).

Suriana L. (Family Simaroubaceae) **baycedar**

†*Suriana* L., Sp. Pl. 284. 1753; Gen. Pl. Ed. 5, 137. 1754.

DERIVATION.—Named in honor of Joseph Donat Surian, a French artist.

By some authors and in the 1927 Check List placed in a separate family, Surianaceae, with a single species.

Suriana maritima L. **†baycedar**

†*Suriana maritima* L., Sp. Pl. 284. 1753.

RANGE.—Shores of central and southern Florida, including Florida Keys. Widely distributed on tropical shores in Bermuda, West Indies, and from southeastern Mexico (Yucatán), south to Central America and northern South America from Colombia to Brazil. Also in Old World tropics.

DERIVATION.—Maritime, from the habitat of sea shores.

OTHER COMMON NAME.—thatch-leaf.

Svida Opiz, see **Cornus** L.

Swietenia Jacq. (Family Meliaceae) **mahogany**

Swietenia Jacq., Enum. Pl. Carib. 4. 1760.

DERIVATION.—Dedicated to Baron Gerald von Swieten (1700–72), Dutch physician and founder of the botanical garden at Vienna.

REFERENCE.—Blake, S. F. Revision of the true mahoganies (Swietenia). Wash. Acad. Sci. Jour. 10: 286–297, illus. 1920.

***Swietenia mahagoni** Jacq. **West Indies mahogany**

Cedrela mahagoni L., Syst. Nat. Ed. 10, 2: 940. 1759; as "*Mahag.*"

†*Swietenia mahagoni* Jacq., Enum. Pl. Carib. 20. 1760.

DERIVATION.—From the vernacular name.

OTHER COMMON NAMES.—madeira-tree, †mahogany.

RANGE.—Extreme southern Florida (extinct northward) and Florida Keys. Also native in Bahamas, Cuba, Jamaica, and Hispaniola. Cultivated and naturalized elsewhere in tropical regions.

REFERENCE.—Rice, C. Hagler. The northern outpost of mahogany. Amer. Forests 42: 266–267, 293, illus. 1936.

Symplocos Jacq. (Family Symplocaceae) **sweetleaf**

†*Symplocos* Jacq., Enum. Pl. Ins. Carib. 5. 1760.

DERIVATION.—From Greek, connected, referring to the stamens united at the base.

Symplocos tinctoria (L.) L'Hér. **common sweetleaf**

Hopea tinctoria L., Mant. Pl. 1: 105. 1767.

†*Symplocos tinctoria* (L.) L'Hér., Linn. Soc. [London] Trans. 1: 176. 1791.

Symplocos tinctoria var. *ashei* Harbison, Elisha Mitchell Sci. Soc. Jour. 46: 219. 1931.

DERIVATION.—Of dyes; the leaves and bark being the source of a yellow dye.

OTHER COMMON NAMES.—horse-sugar, †sweetleaf, yellowwood.

RANGE.—Coastal Plain, chiefly, from Delaware south to northern Florida, west to eastern Texas, and north to southeastern Oklahoma, southern Arkansas, southeastern Tennessee, and mountains of North Carolina.

†*Talisia pedicellaris* Radlk. (K. Bayer. Akad. Wiss. München Math.-Phys. Cl. Sitzber. 8: 342. 1878; family Sapindaceae), Guiana talisia (Florida talisia, SPN) was recorded from Brickell Hammock, Miami, Fla., as a small tree by Small (Man. Southeast. Fl. 828, fig. 1933). In the 1927

Check List this species native of French Guiana was mentioned as established on a hammock near Miami, Fla., on authority of Small. However, if introduced, it apparently is too rare to be classed as naturalized.

Tamala Raf., see **Persea** Gaertn. f.

TAMARINDUS L. (Family Leguminosae) TAMARIND

†*Tamarindus* L., Sp. Pl. 34. 1753; Gen. Pl. Ed. 5, 20. 1754.

DERIVATION.—From Arabic *tamr hindi,* Indian dried date, through Spanish and Italian *tamarindo.*

TAMARINDUS INDICA L. †TAMARIND

†*Tamarindus indica* L., Sp. Pl. 34. 1753.

DERIVATION.—Of India.

RANGE.—Naturalized in southern Florida, including Florida Keys. Native of Old World tropics. Naturalized also in West Indies, Mexico, Central America, and South America.

TAMARIX L. (Family Tamaricaceae) TAMARISK

†*Tamarix* L., Sp. Pl. 270. 1753; Gen. Pl. Ed. 5, 131. 1754.

DERIVATION.—The classical Latin name, perhaps from Tamaris, a river in Spain, according to some authors.

REFERENCE.—McClintock, Elizabeth. Studies in California Plants 3. The tamarisks. Calif. Hort. Soc. Jour. 12: 76–83. 1951.

TAMARIX PARVIFLORA DC. SMALLFLOWER TAMARISK

Tamarix parviflora DC., Prodr. 3: 97. 1828.

DERIVATION.—Small-flowered.

RANGE.—Escaped from cultivation and naturalized in southern California, according to McMinn (Illus. Man. California Shrubs 358. 1939), Robbins (Calif. Agr. Expt. Sta. Bul. 637: 71. 1940), and Abrams (Illus. Fl. Pacif. States 3: 120, fig. 3246. 1951). Native of southeastern Europe and central Asia. A shrub or small tree up to 18 feet high.

TAMARIX PENTANDRA Pall. FIVE-STAMEN TAMARISK

Tamarix pentandra Pall., Fl. Ross. 1(2): 72, pl. 19. 1788.

Formerly and in the 1927 Check List referred to †*Tamarix gallica* L., French tamarisk (†tamarisk), of the Mediterranean region.

DERIVATION.—Five stamens, alluding to the characteristic stamen number in this species.

OTHER COMMON NAME.—salt-cedar.

RANGE.—Widely naturalized in southern and western United States from North Carolina to Missouri, Kansas, Colorado, Nevada, southeastern Oregon, and California, south to Arizona, Texas, and Florida. Also escaped from cultivation northward to Massachusetts. Native of southeastern Europe and western Asia.

Taxodium Rich. (Family Pinaceae) **baldcypress**

†*Taxodium* Rich., Paris Mus. d'Hist. Nat. Ann. 16: 298. 1810.

DERIVATION.—From *Taxus,* yew, and a suffix meaning like, referring to the yewlike leaves.

REFERENCE.—Henry, Augustine, and McIntyre, Marion. The swamp cypresses, Glyptostrobus of China and Taxodium of America, with notes on allied genera. Roy. Irish Acad. Proc. Sect. B: Taxonomy 37: 90–116, illus. 1926.

***Taxodium distichum** (L.) Rich. **baldcypress**

Taxodium distichum var. distichum **baldcypress (typical)**

Cupressus disticha L., Sp. Pl. 1003. 1753.
†*Taxodium distichum* (L.) Rich., Paris Mus. d'Hist. Nat. Ann. 16: 298. 1810.

DERIVATION.—Two-ranked, the leaves being in two rows.

OTHER COMMON NAMES.—common baldcypress (SPN), gulf cypress, red cypress (lumber), †southern cypress, tidewater red cypress, white cypress (lumber), yellow cypress (lumber), cypress.

RANGE.—Coastal Plain from southern Delaware to southern Florida, west to eastern and southeastern Texas, and north in Mississippi Valley to southeastern Oklahoma, southeastern Missouri, southern Illinois, southwestern Indiana, western Kentucky, and western Tennessee. Rare in southern New Jersey. Also along Hudson River, N. Y., rare and perhaps introduced, according to Small (Man. Southeast. Fl. 9. 1933).

Taxodium distichum var. nutans (Ait.) Sweet **†pondcypress**

Cupressus disticha β nutans Ait., Hort. Kew. 3: 372. 1789.
Cupeussus disticha β imbricaria Nutt., Gen. No. Amer. Pl. 2: 224. 1818.
Taxodium distichum β nutans Sweet, Hort. Brit. 372. 1827.
†*Taxodium ascendens* Brongn., Ann. des Sci. Nat. 30: 182. 1833.
Taxodium microphyllum Brongn., Ann. des Sci. Nat. 30. 182. 1833.
Taxodium distichum var. *imbricarium* (Nutt.) Croom, Cat. Pl. New Bern N. C. 3048. 1837.
Taxodium imbricarium (Nutt.) R. M. Harper, Torrey Bot. Club Bul. 29: 383. 1902.
Taxodium ascendens var. *nutans* (Ait.) Rehd., Man. Cult. Trees 25. 1927.

DERIVATION.—Nodding, described from a cultivated variation with drooping branches.

OTHER COMMON NAMES.—pond baldcypress (SPN), cypress.

RANGE.—Coastal Plain from southeastern Virginia to southern Florida and southeastern Louisiana.

Pondcypress, which was accepted as a species in the 1927 Check List, is perhaps better regarded as a variety of *Taxodium distichum* (L.) Rich., since the differences seem minor and inconstant. The typical variety has a more extensive range than does pondcypress.

Taxodium mucronatum Ten. **Montezuma baldcypress**

Taxodium mucronatum Ten., Ann. des Sci. Nat., Bot., Sér. 3, 19: 355. 1853.

DERIVATION.—Mucronate, or with a short, sharp point.
OTHER COMMON NAME.—sabino.
RANGE.—Southern and southwestern Texas. Also from northeastern Mexico (Coahuila southward) south to Guatemala, but formerly not known to occur in the United States.

Closely related to *Taxodium distichum* (L.) Rich., baldcypress, to which the trees from southern Texas formerly were referred. First distinguished in the United States by Britton (N. Y. Bot. Gard. Jour. 27: 205–207. 1926) and by Cory and Parks (Tex. Agr. Expt. Sta. Bul. 550: 13. 1937).

Taxus L. (Family Taxaceae) **yew**

†*Taxus* L., Sp. Pl. 1040. 1753; Gen. Pl. Ed. 5, 462. 1754.
DERIVATION.—The classical Latin name (Greek, *taxos*).

***Taxus brevifolia Nutt.** **†Pacific yew**

†*Taxus brevifolia* Nutt., No. Amer. Sylva 3: 86, pl. 108. 1849.
Taxus baccata L. var. α *brevifolia* (Nutt.) Koehne, Deuts. Dendrol. 6. 1893.
DERIVATION.—Short-leaved; that is, in comparison with *Taxus baccata* L., English yew.
OTHER COMMON NAMES.—western yew, yew.
RANGE.—Pacific coast region from extreme southeastern Alaska south in western British Columbia, western Washington, western Oregon, and northern California and in Sierra Nevada to central California. Also in Rocky Mountain region from southeastern British Columbia south to western Montana, northern Idaho, eastern Washington, and northeastern Oregon.

Taxus floridana Nutt. **†Florida yew**

Taxus floridana Nutt., No. Amer. Sylva 3: 92. 1849; as synonym.
†*Taxus floridana* Nutt. ex Chapm., Fl. South. U. S. 436. 1860.
DERIVATION.—Of Florida.
RANGE.—Northwestern Florida (Gadsden and Liberty Counties). Very rare and local.
REFERENCE.—Kurz, Herman. A new and remarkable habitat for the endemic Florida yew. Torreya 27: 90–92. 1927.

TERMINALIA L. (Family Combretaceae) TERMINALIA

Adamaram Adans., Fam. Pl. 2: 447. 1763; *nomen rejiciendum.*
Panel Adans., Fam. Pl. 2: 447. 1763; *nomen rejiciendum.*
Terminalia L., Mant. Pl. 1: 21. 1767; *nomen conservandum.*
DERIVATION.—Referring to the clustered terminal leaves at ends of branches.

TERMINALIA CATAPPA L. INDIAN-ALMOND

Phytolacca ? javanica Osbeck, Dagbok Ostind. Resa 276. 1757. Not *Terminalia javanica* Miq., Fl. Ind. Bat. 1: 602. 1855.
Terminalia catappa L., Mant. Pl. 1: 128. 1767.

DERIVATION.—Aboriginal East Indian name.

OTHER COMMON NAMES.—tropical-almond terminalia (SPN), West Indian almond.

RANGE.—Naturalized from cultivation in southern Florida including Florida Keys, according to Small (Fl. Southeast. U. S. 830. 1903; Man. Southeast. Fl. 933. 1933) and Britton and Shafer (No. Amer. Trees 717. 1908). Also in West Indies and continental tropical America. Native of East Indies and Oceania and widely planted in tropical regions.

This genus and species were mentioned in a note in the 1927 Check List.

Tetrazygia L. C. Rich. (Family Melastomataceae) **tetrazygia**

†*Tetrazygia* L. C. Rich. ex DC., Prodr. 3: 172. 1828.

DERIVATION.—From Greek, four yokes, referring to the four-parted flowers of the type species.

Tetrazygia bicolor (Mill.) Cogn. **Florida tetrazygia**

Melastoma bicolor Mill., Gard. Dict. Ed. 8, *Melastoma* No. 6. 1768.

†*Tetrazygia bicolor* (Mill.) Cogn. in A. DC. & C. DC., Monogr. Phan. v. 7 (Melastomaceae): 724. 1891.

DERIVATION.—Two-colored, referring to the leaves, which are dark green on the upper surface and silvery white beneath.

RANGE.—Southern Florida (Dade County). Also in Bahamas and Cuba.

THESPESIA Soland. (Family Malvaceae) THESPESIA

Thespesia Soland. ex Correa, Paris Mus. d'Hist. Nat. Ann. 9: 290, pl. 25, fig. 1. 1807.

DERIVATION.—From Greek, divine, or marvelous, presumably because of the ornamental and other values of these trees.

THESPESIA POPULNEA (L.) Soland. PORTIATREE

Hibiscus populneus L., Sp. Pl. 694. 1753.

†*Thespesia populnea* (L.) Soland. ex Correa, Paris Mus. d'Hist. Nat. Ann. 9: 290, pl. 25, fig. 1. 1807.

DERIVATION.—Like *Populus,* or poplar, referring to the shape of the leaves.

OTHER COMMON NAME.—†seaside mahoe.

RANGE.—Naturalized in southern Florida, including Florida Keys. Also in West Indies and widely distributed in tropical America. Probably native in the Old World tropics.

Thrinax Sw. (Family Palmae) **thatchpalm**

†*Thrinax* Sw., Nov. Gen. Sp. Prodr. 57. 1788.

Simpsonia O. F. Cook, Science 85: 333. 1937; *nomen illegitimum* without Latin diagnosis.

DERIVATION.—From the Greek word for trident, or three-pronged fork, under the apparent misapprehension that the word means fan and is apropos for a plant with fan-shaped leaves.

OTHER COMMON NAME.—peaberry-palm.

REFERENCE.—Bailey, L. H. Thrinax—the peaberry palms. Gentes Herbarum 4: 129–149, illus. 1938.

Thrinax microcarpa Sarg. **brittle thatchpalm**

†*Thrinax microcarpa* Sarg., Gard. and Forest 9: 162. 1896.
†*Thrinax keyensis* Sarg., Bot. Gaz. 27: 86. 1899.
Simpsonia microcarpa (Sarg.) O. F. Cook, Science 85: 333. 1937; *nomen illegitimum.*

DERIVATION.—Small-fruited, the fruits being only one-eighth inch in diameter.

OTHER COMMON NAMES.—†silvertop palmetto, brittle thatch, †thatchpalm.

RANGE.—Southern Florida, including Florida Keys. Also in Bahamas, Cuba, Jamaica, Hispaniola, and Puerto Rico. Reported also from Mexico (Yucatán) and British Honduras.

REFERENCE.—Small, John K. The brittle-thatch—Thrinax microcarpa. N. Y. Bot. Gard. Jour. 32: 1–6, illus. 1931.

Thrinax parviflora Sw. **Jamaica thatchpalm**

Thrinax parviflora Sw., Nov. Gen. Sp. Prodr. 57. 1788.
†*Thrinax floridana* Sarg., Bot. Gaz. 27: 84. 1899.
†*Thrinax wendlandiana* Becc., Webbia 2: 265. 1907.

DERIVATION.—Small-flowered.

OTHER COMMON NAMES.—silktop palmetto, silktop thatch, †thatchpalm, silktop thatchpalm.

RANGE.—Southern Florida, including Florida Keys. Also in North Cat Cay of Bahamas, Cuba, Jamaica, and Haiti. Reported also from Mexico (Yucatán) and British Honduras.

REFERENCE.—Small, John K. Silk-top thatch—Thrinax parviflora. N. Y. Bot. Gard. Jour. 26: 49–54, illus. 1925.

The Florida palms, which were considered as two distinct species, were united with *Thrinax parviflora* Sw., of the West Indies, by Small in the reference cited above.

Thuja L. (Family Pinaceae) **thuja**

†*Thuja* L., Sp. Pl. 1002. 1753; Gen. Pl. Ed. 5, 435. 1754 (as "*Thuya*").
Thuja sect. *Biota* D. Don in Lamb., Descr. Genus Pinus. Ed. 2, 2: 129. 1828 (not seen).
Biota (D. Don) Endl., Synops. Conif. 47. 1847.

DERIVATION.—From Greek *thuia,* an aromatic wood highly prized in ancient times for choice, durable furniture and probably a juniper.

OTHER COMMON NAME.—arborvitae (SPN).

***Thuja occidentalis** L. **†northern white-cedar**

†*Thuja occidentalis* L., Sp. Pl. 1002. 1753.

DERIVATION.—Western, meaning of the Western Hemisphere.

OTHER COMMON NAMES.—eastern arborvitae (SPN), arborvitae, swamp-cedar, eastern white-cedar, white-cedar.

RANGE.—Nova Scotia and Gaspé Peninsula of Quebec to Maine, northern Ontario and southern Manitoba, south to northern and eastern Minnesota, Wisconsin, northern Illinois, Michigan, south-

ern New York, and Connecticut. Also local in northwestern Indiana and southern Ohio and south locally in Appalachian Mountains in western Pennsylvania, eastern West Virginia, western Virginia, northwestern North Carolina, and northeastern Tennessee.

THUJA ORIENTALIS L. ORIENTAL ARBORVITAE

Thuja orientalis L., Sp. Pl. 1002. 1753.
Biota orientalis (L.) Endl., Synops. Conif. 47. 1847.
DERIVATION.—Eastern, referring to the Orient.
OTHER COMMON NAME.—Chinese arborvitae.
RANGE.—Persistent about abandoned gardens and occasionally spontaneous on the coast of Florida, though not extensively naturalized, according to Small (Man. Southeast. Fl. 10. 1933). A cultivated ornamental in eastern United States but native of China and Korea.

***Thuja plicata Donn** **†western redcedar**

Thuja plicata Donn, Hort. Cantab. Ed. 4, 211. 1807; *nomen nudum.*
†*Thuja plicata* Donn ex D. Don in Lamb., Descr. Genus Pinus 2: [19]. 1824 (not seen; seen in Ed. 2, 2: 114. 1828).
Thuja gigantea Nutt., Acad. Nat. Sci. Phila. Jour. 7: 52. 1834.
DERIVATION.—Plicate, folded into plaits, perhaps suggested by the flattened twigs with regularly arranged scalelike leaves.
OTHER COMMON NAMES.—giant arborvitae (SPN), arborvitae, canoe-cedar, giant-cedar, Pacific redcedar, shinglewood.
RANGE.—Pacific coast region from southern half of southeastern Alaska southeast to western British Columbia, western Washington, western Oregon, and northwestern California. Also eastward in Rocky Mountains from eastern Washington, northern Idaho, and western Montana, north to southeastern British Columbia.
REFERENCE.—Little, Elbert L., Jr. Amer. Jour. Bot. 31: 595. 1944.

Tilia L. (Family Tiliaceae) **basswood**

†*Tilia* L., Sp. Pl. 514. 1753; Gen. Pl. Ed. 5, 230. 1754.
DERIVATION.—The classical Latin name.
OTHER COMMON NAMES.—linden (SPN), linn.

Much detailed field and experimental study of the genus *Tilia*, particularly of progeny tests, is needed. In 1891 Sargent (Silva No. Amer. 1: 49–58, illus. 1891) accepted only 3 native species, *Tilia americana* L., *T. pubescens* Ait., and *T. heterophylla* Vent. By 1922 Sargent (Man. Trees No. Amer. Ed. 2, 732–749, illus. 1922) distinguished 15 native species and illustrated 3 of 12 named varieties. The main differences between these numerous additional species and varieties are in hairiness of leaves and twigs, characters which vary among leaves on the same tree as well as according to season. Besides being inconstant, these characters would not be of specific rank in other genera of trees.

Authors of regional and State publications differ widely in their interpretations of *Tilia*. For example, Clair A. Brown (La. Trees Shrubs 180–183, illus. 1945) recognized only 1 species in Louisiana. Fernald (Gray's Man. Bot. Ed. 8. 999. 1950) in a tentative treatment distinguished 4 species

for the northeastern States, including 1 perhaps better united with another. However, Benjamin Franklin Bush (in Small, Man. Southeast. Fl. 842–846, illus. 1933) accepted 14 species for southeastern United States, while Coker and Totten (Trees Southeast. States Ed. 3, 311–337, illus. 1945) described and illustrated 13 species for a slightly smaller region.

In this tentative compilation four species are accepted and no varieties are distinguished. The remaining names are grouped in synonymy, though with some uncertainty. Perhaps a few more species may merit recognition, though most trees and specimens probably can be placed satisfactorily in one of these four species until a detailed study of the genus is made.

REFERENCES.—Ashe, W. W. Notes on Tilia. Torrey Bot. Club Bul. 53: 27–33. 1926.

Bush, Benjamin Franklin. The glabrate species of Tilia. Torrey Bot. Club Bul. 54: 231–248. 1927.

Bush, Benjamin Franklin. *Tilia* L., pp. 842–846. *In* Small, John Kunkel. Manual of the Southeastern Flora. 1554 pp., illus. 1933.

Coker, William Chambers, and Totten, Henry Roland. Trees of the southeastern States. Ed. 3, 419 pp., illus. 1945. *Tilia,* pp. 310–337, illus.

Fernald, Merritt Lyndon. Gray's Manual of Botany. Ed. 8. 1613 pp., illus. 1950. *Tilia,* p. 999.

Gleason, Henry A. New Britton & Brown Illus. Fl. Northeast. U. S. Can. 3 v., illus. 1952. *Tilia,* 2: 523, illus.

Harrar, Ellwood S., and Harrar, J. George. Guide to southern trees. 712 pp., illus. 1946. *Tilia,* pp. 507–517, illus.

Sargent, C. S. Notes on North American trees. III. Tilia. Bot. Gaz. 66: 421–438, 494–511. 1918.

Tilia alabamensis Ashe, see **T. floridana** Small

***Tilia americana L.** **American basswood**

Tilia americana L., Sp. Pl. 514. 1753.

†?*Tilia neglecta* Spach, Ann. des Sci. Nat., Bot., Sér. 2, 2: 341, pl. 15, fig. 4. 1834.

†*Tilia glabra* Vent., An. Hist. Nat. [Madrid] 2: 62. 1800.

†*Tilia venulosa* Sarg., Bot. Gaz. 66: 428. 1918.

†*Tilia venulosa* var. *multinervis* Sarg., Bot. Gaz. 66: 429. 1918.

?*Tilia glabra neglecta* (Spach) Bush, Torrey Bot. Club Bul. 54: 238. 1927.

?*Tilia palmeri* Bush ex F. C. Gates, Kans. Acad. Sci. Trans. 41: 100. 1938; *nomen nudum.*

?*Tilia palmeri* Bush ex F. C. Gates, Kans. Acad. Sci. Trans. 42: 135. 1939 [1940]; as "F. C. Gates ex Bush."

DERIVATION.—American.

OTHER COMMON NAMES.—American linden (SPN), †basswood.

RANGE.—New Brunswick and Maine to southern Quebec, Ontario, northern Michigan, Minnesota, eastern North Dakota, and southern Manitoba, south to northern and eastern Nebraska and eastern Kansas, and east to Missouri, Kentucky, Tennessee, and North Carolina.

REFERENCES.—Croizat, Leon. Is Tilia americana L. valid? Torreya 37: 55–57. 1937.

Rehder, Alfred. Arnold Arboretum Jour. 20: 421. 1939.

Tilia apposita Ashe, see **T. heterophylla** Vent.

Tilia ashei Bush, see **T. floridana** Small

Tilia australis Small, see **T. floridana** Small

***Tilia caroliniana** Mill. **Carolina basswood**

†*Tilia caroliniana* Mill., Gard. Dict. Ed. 8, *Tilia* No. 4. 1768.
Tilia pubescens Ait., Hort. Kew. 2: 229. 1789.
†*Tilia caroliniana* var. *rhoophila* Sarg., Bot. Gaz. 66: 498. 1918.
†?*Tilia georgiana* Sarg., Bot. Gaz. 66: 510. 1918.
†?*Tilia georgiana* var. *crinita* Sarg., Bot. Gaz. 66: 511. 1918.
†?*Tilia phanera* Sarg., Bot. Gaz. 66: 501. 1918.
†?*Tilia phanera* var. *scabrida* Sarg., Bot. Gaz. 66: 502. 1918.
†?*Tilia texana* Sarg., Bot. Gaz. 66: 500. 1918.
†*Tilia lata* Ashe, Torrey Bot. Club Bul. 53: 20. 1926.
Tilia caroliniana var. *lata* (Ashe) Ashe, Torreya 31: 39. 1931.

DERIVATION.—Of Carolina.

OTHER COMMON NAMES.—Carolina linden (SPN), †basswood.

RANGE.—Coastal Plain from North Carolina to Georgia and central Florida, and west to southwestern Arkansas, western Louisiana, and eastern and central Texas.

Tilia cocksii Sarg., see **T. floridana** Small

Tilia creno-serrata Sarg., see **T. floridana** Small

Tilia eburnea Ashe, see **T. heterophylla** Vent.

***Tilia floridana** Small **Florida basswood**

†*Tilia australis* Small, Fl. Southeast. U. S. 761, 1335. 1903.
†*Tilia floridana* Small, Fl. Southeast. U. S. 761, 1335. 1903.
Tilia alabamensis Ashe, Charleston Mus. Bul. 14: 31. 1918.
†*Tilia leucocarpa* Ashe, Charleston Mus. Bul. 14: 32. 1918 (Oct. 24).
†*Tilia cocksii* Sarg., Bot. Gaz. 66: 437. 1918.
†*Tilia creno-serrata* Sarg., Bot. Gaz. 66: 430. 1918.
Tilia floridana var. *australis* (Small) Sarg., Bot. Gaz. 66: 435. 1918.
Tilia floridana var. *oblongifolia* Sarg., Bot. Gaz. 66: 435. 1918.
†*Tilia floridana* var. *hypoleuca* Sarg., Bot. Gaz. 66: 436. 1918.
†?*Tilia littoralis* Sarg., Bot. Gaz. 66: 430. 1918.
†?*Tilia littoralis* var. *discolor* Sarg., Bot. Gaz. 66: 430. 1918.
Tilia nuda Sarg., Bot. Gaz. 66: 425. 1918 (Nov. 15).
Tilia nuda var. *brevipedunculata* Sarg., Bot. Gaz. 66: 427. 1918.
Tilia nuda var. *glaucescens* Sarg., Bot. Gaz. 66: 427. 1918.

†*Tilia floridana alabamensis* (Ashe) Ashe, Charleston Mus. Quart. 1(2): 32. 1925.
Tilia hypoleuca Ashe, Charleston Mus. Quart 1(2): 31. 1925.
†*Tilia porracea* Ashe, Charleston Mus. Quart. 1(2): 31. 1925.
†*Tilia leucocarpa brevipedunculata* (Sarg.) Sudw., U. S. Dept. Agr. Misc. Cir. 92: 202. 1927.
†*Tilia leucocarpa glaucescens* (Sarg.), Sudw., U. S. Dept. Agr. Misc. Cir. 92: 201. 1927.
?*Tilia ashei* Bush, Torrey Bot. Club Bul. 54: 241. 1927.
Tilia alabamensis oblongifolia (Sarg.) Ashe, Torrey Bot. Club Bul. 54: 248. 1927.
Tilia creno-serrata var. *acuminata* Ashe, Torrey Bot. Club Bul. 55: 465. 1928.
Tilia leucocarpa var. *cocksii* (Sarg.) Ashe, Torreya 31: 39. 1931.
Tilia floridana var. *porracea* (Ashe) Coker & Totten, Trees Southeast. States 331. 1937.

DERIVATION.—Of Florida.

OTHER COMMON NAMES.—Florida linden (SPN), †basswood.

RANGE.—Southeastern Virginia and North Carolina to central Florida, west to central Texas, and north to eastern Oklahoma and Missouri. Doubtfully recorded from Kentucky. Also in northeastern Mexico (Nuevo León, Coahuila, and Chihuahua).

Tilia georgiana Sarg., see **T. caroliniana** Mill.

Tilia glabra Vent., see **T. americana** L.

***Tilia heterophylla** Vent. **†white basswood**

†*Tilia heterophylla* Vent., An. Hist. Nat. [Madrid] 2: 68. 1800.
Tilia truncata Spach, Ann. des Sci. Nat., Bot., Sér. 2, 2: 342. 1834.
Tilia michauxii Nutt., No. Amer. Sylva 1: 92. 1843.
†*Tilia eburnea* Ashe, Bot. Gaz. 33: 231. 1902.
?*Tilia apposita* Ashe, Charleston Mus. Bul. 13: 27. 1917.
Tilia tenera Ashe, Charleston Mus. Bul. 13: 27. 1917.
†*Tilia heterophylla* var. *amphiloba* Sarg., Bot. Gaz. 66: 507. 1918.
†*Tilia heterophylla* var. *michauxii* (Nutt.) Sarg., Bot. Gaz. 66: 506. 1918.
†*Tilia heterophylla* var. *nivea* Sarg., Bot. Gaz. 66: 507. 1918.
?*Tilia lasioclada* Sarg., Bot. Gaz. 66: 502. 1918.
?*Tilia eburnea lasioclada* (Sarg.) Ashe, Torrey Bot. Club Bul. 53: 31. 1926.
†*Tilia monticola* Sarg., Bot. Gaz. 66: 508. 1918.
Tilia heterophylla tenera Ashe, Torrey Bot. Club Bul. 53: 30. 1926.

DERIVATION.—Various-leaved.

OTHER COMMON NAME.—beetree linden (SPN).

RANGE.—New York and Pennsylvania to West Virginia, southwestern Ohio, southern Indiana, southern Illinois, and Missouri, south to northern Arkansas, northeastern Mississippi, Alabama, northwestern Florida, and Georgia.

Tilia hypoleuca Ashe, see **T. floridana** Small

Tilia lasioclada Sarg., see **T. heterophylla** Vent.

Tilia lata Ashe, see **T. caroliniana** Mill.

Tilia leucocarpa Ashe, see **T. floridana** Small

Tilia littoralis Sarg., see **T. floridana** Small

Tilia michauxii Nutt., see **T. heterophylla** Vent.

Tilia monticola Sarg., see **T. heterophylla** Vent.

Tilia neglecta Spach, see **T. americana** L.

Tilia nuda Sarg., see **T. floridana** Small

Tilia palmeri Bush, see **T. americana** L.

Tilia phanera Sarg., see **T. caroliniana** Mill.

Tilia porracea Ashe, see **T. floridana** Small

Tilia pubescens Ait., see **T. caroliniana** Mill.

Tilia tenera Ashe, see **T. heterophylla** Vent.

Tilia texana Sarg., see **T. caroliniana** Mill.

Tilia truncata Spach, see **T. heterophylla** Vent.

Tilia venulosa Sarg., see **T. americana** L.

Torreya Arn. (Family Taxaceae) **torreya**

Torreya Arn. ex Torr. in Croom, Cat. Pl. New Bern N. C. v. 1837; *nomen provisorium.*

Torreya Arn., Ann. Nat. Hist. 1: 130. 1838; *nomen conservandum.* Not *Torreya* Raf., Amer. Monthly Mag. 3: 356. 1818. Not *Torreya* Raf., Jour. de Phys. Chim. Hist. Nat. Arts 89: 105. 1819. Not *Torreya* Spreng., Neue Entd. 2: 121. 1821. Not *Torreya* Eaton, Eaton, Man. Bot. N. Amer. Ed. 5, 420. 1829. Not *Torreya* Croom ex Meissn., Gen. 2: 340. 1843.

†*Tumion* Raf., Amen. Nat. 63. 1840; *nomen rejiciendum.*

DERIVATION.—In honor of John Torrey (1796–1873), American botanist of Columbia University who first sent specimens of this genus to its author.

Torreya californica Torr. **California torreya**

Torreya californica Torr., N. Y. Jour. Pharm. 3: 51. 1854 (Feb. 3?).

Torreya myristica Hook., Curtis' Bot. Mag. 80: No. 4780, pl. 4780. 1854 (May 1).
†*Tumion californicum* (Torr.) Greene, Pittonia 2: 195. 1891.
DERIVATION.—Of California.
OTHER COMMON NAME.—†California-nutmeg.
RANGE.—Central California, rare in mountains.

Torreya taxifolia Arn. **Florida torreya**

Torreya taxifolia Arn., Ann. Nat. Hist. 1: 130. 1838.
†*Tumion taxifolium* (Arn.) Greene, Pittonia 2: 194. 1891.
DERIVATION.—With leaves like *Taxus,* or yew-leaved.
OTHER COMMON NAME.—†stinking-cedar.
RANGE.—Southwestern Georgia (Decatur County) and northwestern Florida (Gadsden, Liberty, and Jackson Counties). Rare and local.

Torrubia Vell. (Family Nyctaginaceae) **blolly**

†*Torrubia* Vell., Fl. Flum. 139. 1825.
DERIVATION.—In honor of José Torrubia, Spanish naturalist of the eighteenth century.

Torrubia bracei Britton **Brace blolly**

Torrubia bracei Britton, Torrey Bot. Club. Bul. 31: 614. 1904.
DERIVATION.—Named for Lewis Jones Knight Brace, who collected the type with N. L. Britton in 1904.
RANGE.—Southern Florida including Florida Keys. Also in Bahama Islands.

This species, a shrub or small tree of the Bahamas, was recorded also in Florida by Small (Man. Southeast. Fl. 490. 1933).

Torrubia globosa Small **roundleaf blolly**

Torrubia globosa Small, Man. Southeast. Fl. 490, 1504. 1933.
DERIVATION.—Round, from the nearly spherical fruit.
RANGE.—Southern Florida, including Florida Keys.

A species of small trees described after publication of the 1927 Check List.

Torrubia longifolia (Heimerl) Britton **longleaf blolly**

Pisonia discolor γ *longifolia* Heimerl in Urban, Bot. Jahrb. 21: 627. 1896.
†*Torrubia longifolia* (Heimerl) Britton, Torrey Bot. Club Bul. 31: 614. 1904.
Pisonia longifolia Sarg., Man. Trees No. Amer. 314, fig. 251. 1905.
DERIVATION.—Longleaf.
OTHER COMMON NAME.—†blolly.
RANGE.—Coasts of southern Florida north to Cape Canaveral, and Florida Keys. Also in Bermuda and West Indies.

At one time this species was referred to *Pisonia obtusata* Jacq., of the West Indies.

Toxicodendron Mill. (Family Anacardiaceae) **poison-sumac**

†*Rhus* L., Sp. Pl. 265. 1753; Gen. Pl. Ed. 5, 129. 1754; in part.

Toxicodendron Mill., Gard. Dict. Abridged. Ed. 4, v. 3. 1754.

DERIVATION.—From Greek, poison tree, referring to the toxic secretion which produces irritation to the skin when touched.

REFERENCE.—See under **Rhus** L.

Toxicodendron Mill. was not segregated from *Rhus* L. in the 1927 Check List. To this genus belong three other native poisonous species: *T. radicans* (L.) Kuntze, poison-ivy; *T. quercifolium* (Michx.) Greene, poison-oak; and *T. diversilobum* (Torr. & Gray) Greene, Pacific poison-oak.

Toxicodendron vernix (L.) Kuntze **†poison-sumac**

†*Rhus vernix* L., Sp. Pl. 265. 1753.

Rhus venenata DC., Prodr. 2: 68. 1825.

Toxicodendron vernix (L.) Kuntze, Rev. Gen. Pl. 1: 153. 1891.

DERIVATION.—Varnish; erroneously thought to be the Japanese lacquer-tree, *T. verniciflua* (Stokes) Barkley.

OTHER COMMON NAMES.—poison-dogwood, poison-elder.

RANGE.—Southern Maine to New York, extreme southern Quebec, southern Ontario, southern Michigan, southern Wisconsin, and southeastern Minnesota, south to Indiana, Ohio, West Virginia, and chiefly in Coastal Plain to Georgia and northwestern Florida, and west to eastern Texas. Also local in eastern Tennessee.

Toxylon Raf., see **Maclura** Nutt.

Trema Lour. (Family Ulmaceae) **trema**

†*Trema* Lour., Fl. Cochinch. 2: 562. 1790.

DERIVATION.—From Greek, hole, in reference to the pitted drupe fruit.

Trema lamarckiana (Roem. & Schult.) Blume **West Indies trema**

Celtis lima Lam., Encycl. Méth. Bot. 4: 140. 1797. Not *Celtis lima* Sw., Nov. Gen. Sp. Pl. Prodr. 53. 1788.

Celtis lamarckiana Roem. & Schult., Syst. Veget. 6: 311. 1820.

Trema lamarckiana (Roem. & Schult.) Blume, Mus. Bot. Lugd. Bat. 2: 58. 1853.

DERIVATION.—In honor of Jean Baptiste de Lamarck (1744–1829), French naturalist who first described this species.

RANGE.—Southern Florida, including Florida Keys. Also in Bermuda and West Indies.

Mentioned in a note in the 1927 Check List.

Trema micrantha (L.) Blume **Florida trema**

Rhamnus micranthus L., Syst. Nat. Ed. 10, 937. 1759.

Celtis mollis Humb. & Bonpl. ex Willd., Sp. Pl. Ed. 4, 4: 996. [1806.]

Trema micrantha (L.) Blume, Mus. Bot. Lugd. Bat. 2: 58. 1853.

†*Trema mollis* (Humb. & Bonpl.) Blume, Mus. Bot. Lugd. Bat. 2: 58. 1853.

Trema floridana Britton in Small, Fl. Southeast. U. S. 366, 1329. 1903.

Trema micrantha (L.) Blume var. *floridana* (Britton) Standl. & Steyerm., Field Mus. Pub. Bot. 23: 40. 1944.

DERIVATION.—Small-flowered.

RANGE.—Central and southern Florida, including Florida Keys. Also in West Indies, and from central Mexico (Veracruz to Sinaloa southward) south to Central America and South America.

Triadica Lour., see **Sapium** P. Br.

Tsuga (Endl.) Carr. (Family Pinaceae) **hemlock**

Pinus sect. *Tsuga* Endl., Synops. Conif. 83. 1847.

†*Tsuga* (Endl.) Carr., Traité Gén. Conif. 185. 1855.

Tsuga [sect.] *Hesperopeuce* Engelm. in S. Wats., Bot. Calif. 2: 121. 1879.

Hesperopeuce (Engelm.) Lemm., Calif. State Bd. Forestry Rpt. 3: 111, 126, 128. 1890.

DERIVATION.—The Japanese name for the native hemlocks of Japan.

REFERENCES.—Van Campo-Duplan, M., and Gaussen, H. Sur quatre hybrides de genres chez les Abiétinées. Soc. d'Hist. Nat. Toulouse Bul. 84: 95–109, illus. 1949.

Flous, F. Révision du genre *Tsuga*. Soc. d'Hist. Nat. Toulouse Bul. 71: 315–450, illus. 1937. Preprinted as Lab. Forest. Toulouse Trav. tome 2, v. 4, art. 3, 136 pp., illus. 1936.

Wyman, Donald. Simple foliage key to the hemlocks and spruces. Arnoldia 3: 57–64. illus. 1943.

Tsuga ×*jeffreyi* (Henry) Henry (*T. heterophylla* × *mertensiana*), Jeffrey hemlock, is a cultivated hybrid.

Van Campo-Duplan and Gaussen, in the reference cited above, made new combinations for the three new supposed intergeneric hybrids listed here. Their ranges, if wild, were not stated. Unless these supposed hybrids have been produced experimentally, their parentages would remain in doubt.

×*Tsugo-Picea hookeriana* (A. Murr.) Van Campo & Gauss. (*Tsuga hookeriana* (A. Murr.) Carr.; *Tsuga heterophylla* × *Picea sitchensis* (Bong.) Carr.), page 103.

×*Tsugo-Piceo-Picea crassifolia* (Flous) Van Campo & Gauss. (*Tsuga crassifolia* Flous; ×*Tsugo-Picea hookeriana* (A. Murr.) Van Campo & Gauss. × *Picea engelmannii* Parry), page 104.

×*Tsugo-Piceo-Tsuga jeffreyi* (Henry) Van Campo & Gauss. (*Tsuga jeffreyi* (Henry) Henry; ×*Tsugo-Picea hookeriana* (A. Murr.) Van Campo & Gauss. × *Tsuga heterophylla* (Raf.) Sarg.), page 106.

***Tsuga canadensis** (L.) Carr. **†eastern hemlock**

Pinus canadensis L., Sp. Pl. Ed. 2, 1421. 1763.

†*Tsuga canadensis* (L.) Carr., Traité Gén. Conif. 189. 1855.

DERIVATION.—Of Canada.

OTHER COMMON NAMES.—Canada hemlock (SPN), hemlock, hemlock spruce.

RANGE.—Nova Scotia to Maine, southern Quebec, southern Ontario, northern Michigan, Wisconsin, and eastern Minnesota, south to Indiana, Ohio, Kentucky, and Maryland, and in mountains to northern Georgia and northern Alabama.

REFERENCE.—Rehder, Alfred. The name of the hemlock spruce. Rhodora 17: 59–62. 1915.

Tsuga crassifolia Flous, see **T. mertensiana** (Bong.) Carr.

Tsuga caroliniana Engelm. **†Carolina hemlock**

†*Tsuga caroliniana* Engelm., Bot. Gaz. 6: 223. 1881.

DERIVATION.—Of Carolina.

RANGE.—Appalachian Mountains in southwestern Virginia, western North Carolina, eastern Tennessee, western South Carolina, northern Georgia.

***Tsuga heterophylla** (Raf.) Sarg. **†western hemlock**

Abies heterophylla Raf., Atl. Jour. 1: 119. 1832.

†*Tsuga heterophylla* (Raf.) Sarg., Silva No. Amer. 12: 73, pl. 605. 1898.

DERIVATION.—Various-leaved.

OTHER COMMON NAMES.—Pacific hemlock (SPN), west coast hemlock (lumber).

RANGE.—Pacific coast region from southern Alaska (Kenai Peninsula) southeast through southeastern Alaska and western British Columbia, and from western Washington south to northwestern California. Also east to mountains of southeastern British Columbia, western Montana, and northern Idaho.

Formerly known as *Tsuga mertensiana*, a name which belongs instead to mountain hemlock.

Tsuga hookeriana (A. Murr.) Carr., see **T. mertensiana** (Bong.) Carr.

***Tsuga mertensiana** (Bong.) Carr. **†mountain hemlock**

Pinus mertensiana Bong., Acad. Imp. Sci. St. Pétersbourg Mém., Sér. 6, Sci. Math. Phys. Nat. 2: 163. 1832.

Abies hookeriana A. Murr., Edinb. New Phil. Jour., New Ser. 1: 289, pl. 9, figs. 11–17. 1855.

Tsuga hookeriana (A. Murr.) Carr., Traité Gén. Conif. Ed. 2, 252. 1867.

†*Tsuga mertensiana* (Bong.) Carr., Traité Gén. Conif. Ed. 2, 250. 1867; as to name but not as to description.

Hesperopeuce mertensiana (Bong.) Rydb., Torrey Bot. Club. Bul. 39: 100. 1912.

Tsuga crassifolia Flous, Soc. d'Hist. Nat. Toulouse Bul. 69: 412, pl. 1936. Lab. Forest. Toulouse Trav. tome 2, v. 2, art. 15: 4, pl. 1936.

×*Tsugo-Picea hookeriana* (A. Murr.) Van Campo & Gauss., Soc. d'Hist. Nat. Toulouse Bul. 84: 103. 1949; as *Tsuga heterophylla* × *Picea sitchensis* (Bong.) Carr.

×*Tsugo-Piceo-Picea crassifolia* (Flous) Van Campo & Gauss., Soc. d'Hist. Nat. Toulouse Bul. 84: 104. 1949; as

Tsugo-Picea hookeriana (A. Murr.) Van Campo & Gauss. × *Picea engelmannii* Parry.

DERIVATION.—Named for Karl Heinrich Mertens (1796–1830), German naturalist and physician, who discovered it at Sitka, Alaska.

OTHER COMMON NAME.—black hemlock.

RANGE.—Pacific coast region from southern Alaska (Cook Inlet) southeast through southeastern Alaska and western British Columbia, and from western Washington to northern California and in Sierra Nevada to central California and western Nevada. Also east to mountains of southeastern British Columbia, western Montana, northern Idaho, and northeastern Oregon.

Tulipastrum Spach, see **Magnolia** L.

Tumion Raf., see **Torreya** Arn.

Ulmus L. (Family Ulmaceae) **elm**

†*Ulmus* L., Sp. Pl. 225. 1753; Gen. Pl. Ed. 5, 106. 1754.

DERIVATION.—The classical Latin name.

REFERENCE.—Wyman, Donald. Elms grown in America. Arnoldia 11: 79–93, illus. 1951.

***Ulmus alata** Michx. **†winged elm**

†*Ulmus alata* Michx., Fl. Bor.-Amer. 1: 173. 1803.

DERIVATION.—Winged, from the corky wings on the twigs.

OTHER COMMON NAMES.—cork elm, wahoo.

RANGE.—Virginia to Kentucky, southern Indiana, southern Illinois, and Missouri, and south to central Oklahoma, and eastern and southeastern Texas, and east to central Florida.

***Ulmus americana** L. **†American elm**

Ulmus americana var. **americana** **American elm (typical)**

†*Ulmus americana* L., Sp. Pl. 226. 1753.

DERIVATION.—American.

OTHER COMMON NAMES.—soft elm (lumber), water elm, white elm (lumber).

RANGE.—Newfoundland and Gaspé Peninsula of Quebec west to Ontario, southern Manitoba, and eastern Saskatchewan, south to North Dakota, southeastern Montana, western Nebraska, western Oklahoma, and central Texas, and east to central Florida.

Ulmus americana var. **floridana** (Chapm.) Little **Florida elm**

Ulmus floridana Chapm., Fl. Southeast. U. S. 416. 1860.

Ulmus americana var. *floridana* (Chapm.) Little, Phytologia 4:306. 1953.

DERIVATION.—Of Florida.

RANGE.—Coastal Plain from eastern North Carolina to central Florida.

Florida elm, which has been accepted as a species by some authors and regarded as a synonym of *Ulmus americana* L. in the 1927 Check List and by other authors, is here placed as a variety of the latter.

***Ulmus crassifolia** Nutt. **†cedar elm**

†*Ulmus crassifolia* Nutt., Amer. Phil. Soc. Trans., New Ser. 5: 169. 1837.

DERIVATION.—Thick-leaved.

OTHER COMMON NAMES.—basket elm, red elm, southern rock elm.

RANGE.—Southwestern Tennessee, Arkansas, and southern Oklahoma, south to central and southern Texas, Louisiana, and western Mississippi. Also in northeastern Mexico (Nuevo León).

Ulmus floridana Chapm., see **U. americana** var. **floridana** (Chapm.) Little

Ulmus fulva Michx., see **U. rubra** Mühl.

Ulmus parvifolia Jacq., see note under **U. pumila** L.

Ulmus pubescens Walt., see **U. rubra** Mühl.

ULMUS PUMILA L. SIBERIAN ELM

Ulmus pumila L., Sp. Pl. 226. 1753.

DERIVATION.—Dwarf.

OTHER COMMON NAMES.—Asiatic elm, dwarf elm, dwarf Asiatic elm, Pekin elm.

RANGE.—Naturalized from Minnesota to Kansas, according to Fernald (Gray's Man. Bot. Ed. 8, 552. 1950). Native from Turkestan to eastern Siberia and northern China.

This species is widely grown in central and western United States for shelterbelts and shade. It is erroneously called Chinese elm, which is the common name of *Ulmus parvifolia* Jacq., an autumn-flowering species.

Ulmus racemosa Thomas, see **U. thomasii** Sarg.

***Ulmus rubra** Mühl. **†slippery elm**

Ulmus americana Marsh., Arbustr. Amer. 156. 1785. Not *Ulmus americana* L., Sp. Pl. 226. 1753.

?*Ulmus pubescens* Walt., Fl. Carol. 112. 1788.

Ulmus rubra Mühl., Amer. Phil. Soc. Trans. 3: 165. 1793.

†*Ulmus fulva* Michx., Fl. Bor.-Amer. 1: 172. 1803.

DERIVATION.—Red, referring to the rusty or reddish brown buds.

OTHER COMMON NAMES.—gray elm, red elm, soft elm (lumber).

RANGE.—Southwestern Maine (formerly?) and New Hampshire to southern Quebec, Ontario, northern Michigan, Wisconsin, central Minnesota, and eastern North Dakota, south to central Nebraska, western Oklahoma, and central and southeastern Texas, and east to central Georgia. Also local in northwestern Florida.

REFERENCE.—Fernald, M. L. Rhodora 47: 132, 203–204. 1945.

This species was generally known as *Ulmus fulva* Michx. until an obscure, unused, older name was revived by Fernald in 1945.

Ulmus serotina Sarg. **September elm**

Ulmus serotina Sarg., Bot. Gaz. 27: 92. 1899.

DERIVATION.—Late, referring to the autumnal flowers in contrast to the spring flowers of most species of the genus.

OTHER COMMON NAME.—red elm.

RANGE.—Kentucky and southern Illinois, south to Tennessee northern Alabama, and northwestern Georgia. Also in Arkansas and eastern Oklahoma.

***Ulmus thomasii** Sarg. **†rock elm**

†*Ulmus racemosa* Thomas, Amer. Jour. Sci. and Arts 19: 170, figs. 1–5. 1831. Not *U. racemosa* Borkh., Theor.-prakt. Handb. Forstbot. 1: 851. 1800.

Ulmus thomasi Sarg., Silva No. Amer. 14: 102. 1902.

DERIVATION.—For its discoverer, who first named it, David Thomas (1776–1859), American civil engineer and horticulturist.

OTHER COMMON NAME.—cork elm.

RANGE.—Western Vermont to extreme southern Quebec, southern Ontario, central Michigan, Wisconsin, central Minnesota, and southeastern South Dakota, south to northern and eastern Nebraska and eastern Kansas, east to Missouri and Tennessee, and northeast to Ohio and New York. Local in northwestern Arkansas.

Umbellularia (Nees) Nutt. (Family Lauraceae) **California-laurel**

Oreodaphne Subg. *Umbellularia* Nees, Syst. Laur. 381, 462. 1836; as "*Umbellaria*" on p. 381.

†*Umbellularia* (Nees) Nutt., No. Amer. Sylva 1: 87. 1843.

DERIVATION.—From Latin *umbellula,* a small umbrella, or small umbel, describing the inflorescence.

***Umbellularia californica** (Hook. & Arn.) Nutt. **California-laurel**

Tetranthera ? *californica* Hook. & Arn., Bot. Beech. Voy. 159. 1833.

†*Umbellularia californica* (Hook. & Arn.) Nutt., No. Amer. Sylva 1: 87. 1843.

Umbellularia californica var. *fresnensis* Eastwood, Leafl. West. Bot. 4: 166. 1945.

DERIVATION.—Of California, where it was discovered.

OTHER COMMON NAMES.—†Oregon-myrtle, Pacific-myrtle, pepperwood, spice-tree.

RANGE.—Southwestern Oregon and south in Coast Ranges and Sierra Nevada to southern California.

Ungnadia Endl. (Family Sapindaceae) **Mexican-buckeye**

†*Ungnadia* Endl., Atakta Bot. pl. 36. 1833; plate without description. Endl., Nov. Stirp. Dec. 75. 1839.

Ungnadia Endl. ex Torr. & Gray, Fl. No. Amer. 1: 253. 1838; as "*Ungnodia,*" corrected to "*Ungnadia*" on p. 684 (1840).

DERIVATION.—In commemoration of Baron Ferdinand von Ungnad, Austrian ambassador at Constantinople, who introduced horsechestnut into western Europe in 1576 by sending seeds to Vienna.

Ungnadia speciosa Endl. **Mexican-buckeye**

†*Ungnadia speciosa* Endl., Atakta Bot. pl. 36. 1833; plate without description. Endl., Nov. Stirp. Dec. 75. 1839.

DERIVATION.—Showy, referring to the flowers.

OTHER COMMON NAMES.—New-Mexican-buckeye, †Spanish-buckeye.

RANGE.—Southeastern and southern Texas to Edwards Plateau and Trans-Pecos Texas and southern New Mexico. Also in northern Mexico (Nuevo León, Coahuila, and Chihuahua).

Vaccinium L. (Family Ericaceae) **blueberry**

†*Vaccinium* L., Sp. Pl. 349. 1753; Gen. Pl. Ed. 5, 166. 1754.

Batodendron Nutt., Amer. Phil. Soc. Trans., Ser. 2, 8: 261. 1843.

DERIVATION.—The classical Latin name of one of the Old World species, possibly the cowberry, *Vaccinium vitis-idaea* L., alluding to the fondness of the domestic cow (*vacca*) for the fruit.

REFERENCE.—Camp, W. H. The North American blueberries with notes on other groups of Vacciniaceae. Brittonia 5: 203–275, illus. 1945.

Vaccinium arboreum Marsh. **tree sparkleberry**

†*Vaccinium arboreum* Marsh., Arbustr. Amer. 157. 1785.

Batodendron arboreum (Marsh.) Nutt., Amer. Phil. Soc. Trans., Ser. 2, 8: 261. 1843.

Batodendron glaucescens Greene, Pittonia 3: 326. 1898.

Batodendron andrachneforme Small, Fl. Southeast. U. S. 893, 1336. 1903.

Vaccinium arborescens var. *glaucescens* (Greene) Sarg., Arnold Arboretum Jour. 2: 167. 1921; by error for "*arboreum*."

†*Vaccinium arboreum* var. *glaucescens* (Greene) Sarg., Man. Trees No. Amer. Ed. 2, 803. 1922.

DERIVATION.—Treelike; the only native species of the genus reaching tree size.

OTHER COMMON NAMES.—farkleberry (SPN), sparkleberry, †tree-huckleberry, winter-huckleberry.

RANGE.—Southeastern Virginia west to Kentucky, southern Indiana, southern Illinois, Missouri, and extreme southeastern Kansas, south to eastern Oklahoma, Edwards Plateau of Texas, and central Florida.

Vauquelinia Correa (Family Rosaceae) **vauquelinia**

†*Vauquelinia* Correa ex Humb. & Bonpl., Pl. Aequin. 1: 140, pl. 40. 1808.

DERIVATION.—In honor of Louis Nicholas Vauquelin (1763–1829), French chemist.

Vauquelinia californica (Torr.) Sarg. **Torrey vauquelinia**

Spiraea californica Torr. in Emory, Notes Mil. Reconn. Ft. Leav. Calif. 139. 1848.

†*Vauquelinia californica* (Torr.) Sarg., Gard. and For. 2: 400. 1889.

DERIVATION.—Of California, named when boundaries were indefinite; however, this species was discovered in Arizona and is not native in California.

OTHER COMMON NAME.—Arizona-rosewood.

RANGE.—Mountains of southern Arizona, including Guadalupe Mountains in southeastern corner. Also in Sonora and Lower California, Mexico. A report from extreme southwestern New Mexico has been found to refer to a locality across the State line in Arizona.

Viburnum L. (Family Caprifoliaceae) **viburnum**

†*Viburnum* L., Sp. Pl. 267. 1753; Gen. Pl. Ed. 5, 129. 1754.

DERIVATION.—The classical Latin name of the wayfaringtree, *Viburnum lantana* L., of Eurasia, a shrub or tree long cultivated in southeastern Canada and northeastern United States and occasionally escaped.

The hybrid †*Viburnum* ×*jackii* Rehd. (*V. lentago* × *prunifolium*) is omitted here, because it is a shrub known only in cultivation.

Viburnum bushii Ashe, see **V. prunifolium** L.

Viburnum corymbosum (Mill.) Rehd., see note under **V. obovatum** Walt.

Viburnum ×*jackii* Rehd., see note under **Viburnum** L.

Viburnum lantana L., see note under **Viburnum** L.

Viburnum lentago L. **†nannyberry**

†*Viburnum lentago* L., Sp. Pl. 268. 1753.

DERIVATION.—An obscure old plant name for some species of *Viburnum,* probably the laurestinus, *V. tinus* L.

OTHER COMMON NAMES.—nannyberry viburnum (SPN), blackhaw, sheepberry, sweet viburnum.

RANGE.—Western Quebec to Manitoba, south to North Dakota, Iowa, northeastern Missouri, Illinois, Ohio, Pennsylvania, and New Jersey, and south in mountains to Virginia, North Carolina, and Georgia. Also in Black Hills of South Dakota and local in Wyoming and Colorado.

Viburnum nashii Small, see **V. obovatum** Walt.

Viburnum nudum L. **possumhaw viburnum**

Viburnum nudum L., Sp. Pl. 268. 1753.

Viburnum nudum β angustifolium Torr. & Gray, Fl. No. Amer. 2: 14. 1841.

DERIVATION.—Naked, from the stalked, leafless inflorescence.

OTHER COMMON NAME.—possumhaw.

RANGE.—Coastal Plain, chiefly, from Connecticut south to central Florida and eastern Texas, and north in Mississippi Valley to Arkansas, Tennessee, and Kentucky.

Usually a shrub. Rarely a tree up to 20 feet high and 8 inches in diameter, according to Sargent (Man. Trees No. Amer. Ed. 2, 888. 1922), and other authors.

Viburnum obovatum Walt. **Walter viburnum**

†*Viburnum obovatum* Walt., Fl. Carol. 116. 1788.

Viburnum nashii Small, Fl. Southeast. U. S. 1123, 1338. 1903.

DERIVATION.—Obovate, referring to the shape of the leaves.

OTHER COMMON NAMES.—blackhaw, small-leaved viburnum.

RANGE.—Coastal Plain from South Carolina south to southern and northwestern Florida. Also reported from southeastern Virginia.

REFERENCE.—Duncan, Wilbur H. Synonymy in Viburnum obovatum and V. cassinoides. Rhodora 52: 179–183. 1950.

Duncan has shown that *Viburnum corymbosum* (Mill.) Rehd. (Arnold Arboretum Jour. 3: 214. 1922; Dec. 28), taken up by Rehder for this species, is a later homonym of *V. corymbosum* Urban (Repert. Spec. Novarum Regni Veg. 18: 121. 1922; Aug. 15 [Oct.?]) of Cuba and also a synonym of *V. cassinoides* L., witherod viburnum, a shrubby species of eastern United States and Canada.

Viburnum prunifolium L. **†blackhaw**

†*Viburnum prunifolium* L., Sp. Pl. 268. 1753.

Viburnum bushii Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 48. 1924.

Viburnum prunifolium var. *bushii* (Ashe) Palmer & Steyerm., Mo. Bot. Gard. Ann. 22: 651. 1935.

DERIVATION.—With leaves like *Prunus*, or plum.

OTHER COMMON NAMES.—blackhaw viburnum (SPN), stagbush, sweethaw.

RANGE.—Connecticut and New York to Ohio, southern Michigan, Illinois, Iowa, and eastern Kansas, south to northeastern Oklahoma, Arkansas, Tennessee, Georgia, and South Carolina.

Viburnum rufidulum Raf. **†rusty blackhaw**

†*Viburnum rufidulum* Raf., Alsogr. Amer. 56. 1838.

Viburnum rufotomentosum Small, Torrey Bot. Club Bul. 23: 410. 1896.

Viburnum rufidulum var. *floridanum* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 47. 1924.

Viburnum rufidulum var. *margarettae* Ashe, Elisha Mitchell Sci. Soc. Jour. 40: 47. 1924.

DERIVATION.—Reddish, because of the rusty colored hairy covering of young leaves and twigs.

OTHER COMMON NAMES.—rusty blackhaw viburnum (SPN), blackhaw, southern blackhaw, rusty nannyberry, southern nannyberry.

RANGE.—Virginia to Kentucky, southern Ohio, southern Illinois, Missouri, and southeastern Kansas, south to southwestern Oklahoma and central Texas, and east to central Florida.

Viburnum rufotomentosum Small, see **V. rufidulum** Raf.

Wallia Alef., see **Juglans** L.

Washingtonia H. Wendl. (Family Palmae) **washingtonia**

†*Washingtonia* H. Wendl., Bot. Ztg. 37: 68, 148. 1879; *nomen conservandum.* Not *Washingtonia* Raf., Amer. Monthly Mag. 2: 176. 1818. Not *Washingtonia* Winslow, Calif. Farmer 2: 58. 1854; *nom. provisor.*

Neowashingtonia Sudw., U. S. Dept. Agr. Div. Forestry Bul. 14: 105. 1897; *nomen rejiciendum.*

DERIVATION.—Dedicated to President George Washington (1732–99).

OTHER COMMON NAMES.—Washington-palm (SPN), California-palm.

REFERENCES.—Bailey, L. H. Washingtonia. Gentes Herbarum 4: 51–82, illus. 1936.

Benson, Lyman. Washingtonia. Amer. Jour. Bot. 30: 233–234. 1943.

Washingtonia filifera (Linden) H. Wendl. **California washingtonia**

Pritchardia filifera Linden ex André, Illus. Hort. 21: 27, 28. 1874; 24: 32–34, fig., 105–107, fig. 1877; *nomen subnudum?*

Pritchardia filamentosa Fenzi, R. Soc. Toscana Ort. Bul. 1: 116, fig. 1876 (*nomen subnudum*?; not seen).

Pritchardia filifera (Linden) H. Wendl., Bot. Ztg. 37: 65. 1879.

Washingtonia filifera H. Wendl. ex S. Wats., Bot. Calif. 2: 211. 1880.

†*Washingtonia filamentosa* (H. Wendl.) Kuntze, Rev. Gen. Pl. 737. 1891.

Washingtonia arizonica O. F. Cook, Yuma (Ariz.) Morning Sun, Dec. 5, 1923; *nom. provisor.* (not seen).

Washingtonia arizonica O. F. Cook ex M. E. Jones, Contrib. West. Bot. 15: 49, 50. 1929; as synonym.

DERIVATION.—Thread-bearing, referring to the threadlike fibers of the frayed leaf edges.

OTHER COMMON NAMES.—California Washington-palm (SPN), †California-palm, desert-palm, fan-palm, California fan-palm.

RANGE.—Canyons of desert mountains in southwestern Arizona (Kofa Mountains, Yuma County), southeastern California (San Bernardino, Riverside, San Diego, and Imperial Counties), and northern Lower California, Mexico.

Xanthoxylum Mill., see **Zanthoxylum** L.

Ximenia L. **(Family Olacaceae)** **tallowwood**

†*Ximenia* L., Sp. Pl. 1193. 1753; Gen. Pl. Ed. 5, 500. 1754.

DERIVATION.—In commemoration of Francisco Ximénez, Spanish-born missionary and naturalist of Mexico who published a book on the plants and animals of Mexico in 1615.

Ximenia americana L. **†tallowwood**

†*Ximenia americana* L., Sp. Pl. 1193. 1753.

RANGE.—Northern to southern Florida and Florida Keys. Widely distributed on shores of tropical and subtropical regions in West Indies, from central Mexico (Veracruz and Colima southward) south to Central America and South America, and in Africa, Asia, Australia, and islands of south Pacific Ocean.

DERIVATION.—American.

OTHER COMMON NAME.—hog-plum.

Xolisma Raf., see **Lyonia** Nutt.

Yucca L. (Family Liliaceae) **yucca**

Yucca L., Sp. Pl. 319. 1753; Gen. Pl. Ed. 5, 150. 1754.

Clistoyucca (Engelm.) Trel., Mo. Bot. Gard. Rpt. 13. 41. 1902.

Samuela Trel., Mo. Bot. Gard. Rpt. 13: 116. 1902.

DERIVATION.—From yuca, the Carib Indian name of the root of *Manihot*, cassava, misapplied to this genus.

REFERENCE.—McKelvey, Susan D. Yuccas of the southwestern United States, pt. 1, 150 pp., illus. 1938; pt. 2, 192 pp., illus. 1947.

Yucca aloifolia L. **aloe yucca**

†*Yucca aloifolia* L., Sp. Pl. 319. 1753.

DERIVATION.—Aloe-leaved, the leaves resembling those of the genus *Aloe*.

OTHER COMMON NAME.—†Spanish bayonet.

RANGE.—Coastal Plain, chiefly in coastal dunes and mounds, from North Carolina to northern Florida and eastern Louisiana. Also in West Indies and southeastern Mexico (Veracruz to Yucatán).

Yucca arborescens (Torr.) Trel., see **Y. brevifolia** Engelm.

Yucca brevifolia Engelm. **†Joshua-tree**

Yucca draconis L. var. *arborescens* Torr., U. S. Rpt. Expl. Surv. Miss. Pacif. 4(5): 147. 1857.

†*Yucca brevifolia* Engelm. in S. Wats., King Rpt. U. S. Geol. Expl. 40th Par. 5: 496. 1871.

Yucca arborescens (Torr.) Trel., Mo. Bot. Gard. Rpt. 3: 163, pls. 5, 49. 1892; *nomen provisorium.*

Yucca arborescens (Torr.) Cov. in Merriam, No. Amer. Fauna 7: 353, pl. 13. 1893 (May 31).

Clistoyucca brevifolia (Engelm.) Rydb., Fl. Rocky Mts. 170, 1061. 1917.

Yucca brevifolia var. *jaegeriana* McKelvey, Arnold Arboretum Jour. 16: 269, pl. 139. 1935 (April 24).

Yucca brevifolia var. *wolfei* M. E. Jones, Contrib. West. Bot. 18: 125. 1935 (April); without Latin diagnosis.

DERIVATION.—Short-leaved, the leaves being shorter than in other species of *Yucca*.

OTHER COMMON NAME.—Joshua-tree yucca (SPN).

RANGE.—Mohave Desert in southwestern Utah, southern Nevada, southern California, and western Arizona.

Yucca carnerosana (Trel.) McKelvey **Carneros yucca**

Samuela carnerosana Trel., Mo. Bot. Gard. Ann. Rpt. 13: 118, pls. 76–81, 85 fig. 12, pl. 87, fig. 2. 1902.

Yucca carnerosana (Trel.) McKelvey, Yuccas Southwest. U. S. 1: 24, pls. 6–7. 1938.

DERIVATION.—From Carneros, Coahuila, Mexico, where this species is well displayed.

RANGE.—Trans-Pecos Texas (Brewster County) and northeastern Mexico (Coahuila and Chihuahua, south to Durango and San Luis Potosí).

This Mexican species has been recorded from Brewster County, southwestern Texas, by Cory (West Tex. Hist. Soc. Bul. 33: 34. 1930), Cory and Parks (Tex. Agr. Expt. Sta. Bul. 550: 32. 1938), McKelvey (Yuccas Southwest. U. S. 24–27, pls. 6, 7. 1938), and others. It becomes a small tree 10 to 16 feet or more in height, but usually is smaller. Very closely related to *Yucca faxoniana* Sarg.

Yucca constricta Buckley, see note under **Y. elata** Engelm.

Yucca elata Engelm. **soaptree yucca**

Yucca angustifolia var. *β radiosa* Engelm. in S. Wats., King Rpt. Geol. Expl. 40th Par. 5: 497. 1871.

Yucca angustifolia var. *β elata* Engelm., Acad. Sci. St. Louis Trans. 3: 50. 1873.

†*Yucca elata* Engelm., Bot. Gaz. 7: 17. 1882.

Yucca radiosa (Engelm.) Trel., Mo. Bot. Gard. Rpt. 3: 163. 1892; *nom. provis.*

Yucca verdiensis McKelvey, Yuccas Southwest. U. S. 2: 98, pl. 35. 1947.

DERIVATION.—Elevated, or tall.

OTHER COMMON NAMES.—palmilla, †soapweed, amole, jabonilla.

RANGE.—Trans-Pecos Texas, northwest to central New Mexico and central and western Arizona. Also in northern Mexico (Sonora, Coahuila, and Chihuahua).

At one time this species was referred to *Yucca constricta* Buckley, of Texas.

Yucca faxoniana Sarg. **Faxon yucca**

Samuela faxoniana Trel., Mo. Bot. Gard. Ann. Rpt. 13: 117, pls. 73–75, 82, 85, fig. 11. 1902.

†*Yucca faxoniana* Sarg., Man. Trees No. Amer. 121, fig. 106. 1905.

DERIVATION.—In honor of Charles Edward Faxon (1846–1918),

artist of Sargent's Silva of North America, who made excellent drawings of it under the name *Yucca macrocarpa.*

OTHER COMMON NAMES.—†Spanish bayonet, Spanish dagger.

RANGE.—Western Trans-Pecos Texas. Probably also in northern Mexico (Chihuahua).

Yucca gloriosa L. **moundlily yucca**

†*Yucca gloriosa* L., Sp. Pl. 319. 1753.

DERIVATION.—Glorious.

OTHER COMMON NAMES.—Spanish bayonet, †Spanish dagger.

RANGE.—Coastal Plain in coastal dunes and beaches from North Carolina to Florida.

Yucca macrocarpa Cov., see **Y. torreyi** Shafer

Yucca mohavensis Sarg. **†Mohave yucca**

Yucca schidigera Roezl ex Ortgies, Gartenflora 20: 110. 1871; *nomen subnudum.*

†*Yucca mohavensis* Sarg., Gard. and Forest 9: 104. 1896.

DERIVATION.—From Mohave Desert, Calif., the type locality.

OTHER COMMON NAME.—Spanish dagger.

RANGE.—Mohave desert in northwestern Arizona, southeastern Nevada, southern California, and northern Lower California, Mexico.

Yucca radiosa (Engelm.) Trel., see **Y. elata** Engelm.

Yucca rostrata Engelm. **beaked yucca**

Yucca rostrata Engelm. ex Trel., Mo. Bot. Gard. Ann. Rpt. 13: 68, pls. 36, 40–42, 84. 1902.

DERIVATION.—Beaked, referring to the long pointed apex of the fruit.

RANGE.—Trans-Pecos Texas (Brewster County) and northeastern Mexico (Coahuila).

This species of northern Mexico was recorded from Texas by Cory and Parks (Tex. Agr. Expt. Sta. Bul. 550: 32. 1938). It becomes a small tree with a trunk as much as 10 to 12 feet high, though the usual height is less.

Yucca schidigera Roelz, see **Y. mohavensis** Sarg.

Yucca schottii Engelm. **Schotts yucca**

†*Yucca schottii* Engelm., Acad Sci. St. Louis Trans. 3: 46. 1873.

DERIVATION.—Named for Arthur Carl Victor Schott (1814–75), German-born naturalist with the United States and Mexican Boundary Survey, who discovered the species in 1855.

OTHER COMMON NAMES.—†Spanish bayonet, Spanish dagger, yuca, hoary yucca, mountain yucca.

RANGE.—Extreme southwestern New Mexico (Hidalgo County), southeastern Arizona, and northern Mexico (Sonora).

Yucca torreyi Shafer **Torrey yucca**

Yucca baccata Torr. var. *macrocarpa* Torr., U. S. Mex. Bound. Surv. Bot. 222. 1859.

Yucca macrocarpa Cov. in Merriam, No. Amer. Fauna 7: 358, pl. 14. 1893 (May 31). Not *Y. macrocarpa* Engelm., Bot. Gaz. 6: 224. 1881.

†*Yucca torreyi* Shafer in Britton & Shafer, No. Amer. Trees 157, fig. 117. 1908.

DERIVATION.—Named for John Torrey (1796–1873), American botanist who in 1859 distinguished this species as a new variety.

OTHER COMMON NAMES.—†Spanish bayonet, Spanish dagger, palma.

RANGE.—Southwestern Texas including Trans-Pecos Texas to southeastern New Mexico, and northern Mexico (Chihuahua and Coahuila south to Zacatecas and Durango).

Yucca treculeana Carr. **Trecul yucca**

†*Yucca treculeana* Carr., Rev. Hort. [Paris] Sér. 4, 7: 580. 1858.

Yucca treculeana var. *succulenta* McKelvey, Yuccas Southwest. U. S. 1: 80, pls. 37–39. 1938.

DERIVATION.—Named for Auguste Adolph Lucien Trécul (1818–96), French botanist who collected the type in 1850 on a visit to North America on behalf of the French Government.

OTHER COMMON NAMES.—†Spanish bayonet, Spanish dagger.

RANGE.—South central and southern Texas and northeastern Mexico (Nuevo León and Tamaulipas).

Yucca verdiensis McKelvey, see **Y. elata** Engelm.

Zanthoxylum L. (Family Rutaceae) **prickly-ash**

Zanthoxylum L., Sp. Pl. 270. 1753; Gen. Pl. Ed. 5, 130. 1754.

Fagara Duhamel, Traité Arb. Arbust. 1: 229, pl. 97. 1755.

Pterota P. Br., Civ. Nat. Hist. Jamaica 146, pl. 5, fig. 1. 1756.

Fagara L., Syst. Nat. Ed. 10, 2: 897. 1759. *Nom. conserv. propos.*, Reeder & Cowan, 1950.

†*Xanthoxylum* Mill., Gard. Dict. Ed. 8. 1768. *Nom. conserv. propos.*, Reeder & Cowan, 1950.

DERIVATION.—From Greek, yellow and wood, referring to the color of the wood.

REFERENCES.—Reeder, John R., and Cheo, Shuh-yuen. Arnold Arboretum Jour. 32: 67. 1951.

Rehder, Alfred. Arnold Arboretum Jour. 26: 71–73. 1945.

The orthographically correct, variant spelling *Xanthoxylum*, used in the 1927 Check List and other references is here replaced by Linnaeus' original spelling, as required under the International Code.

Zanthoxylum americanum Mill. **common prickly-ash**

Zanthoxylum americanum Mill., Gard. Dict. Ed. 8, *Zanthoxylum* No. 2. 1768; as "*Xanthoxylum.*"

DERIVATION.—American.

OTHER COMMON NAMES.—northern prickly-ash, toothache-tree.

RANGE.—Southwestern Quebec and Ontario west to Minnesota and eastern North Dakota, south to eastern Kansas and northeastern Oklahoma, and east to Alabama, Georgia, and southwestern Virginia.

Usually a shrub but sometimes a small tree up to 25 feet high, according to Britton and Brown (Illus. Fl. North. States. Ed. 2, 2: 444, fig. 2691. 1913) and other authors.

Zanthoxylum carolinianum var. *fruticosum* A. Gray, see **Z. clava-herculis** var. **fruticosum** (A. Gray) S. Wats.

Zanthoxylum clava-herculis L. **†Hercules-club**

Zanthoxylum clava-herculis var. **clava-herculis** **Hercules-club (typical)**

Zanthoxylum clava-herculis L., Sp. Pl. 270. 1753; as "*Clava herculis.*"

Zanthoxylum macrophyllum Nutt., No. Amer. Sylva 3: 10. 1849.

Fagara clava-herculis (L.) Small, Fl. Southeast. U. S. 675, 1333. 1903.

DERIVATION.—Hercules club, from the spiny branches.

OTHER COMMON NAMES.—Hercules-club prickly-ash (SPN), southern prickly-ash, toothache-tree.
prickly-ash, toothache-tree.

RANGE.—Coastal Plain from southeastern Virginia to southern Florida and eastern Texas, and north to southeastern Oklahoma and southern Arkansas.

Zanthoxylum clava-herculis var. **fruticosum** (A. Gray) S. Wats.

Zanthoxylum carolinianum "var. fruticosum" A. Gray, Pl. Wright 1: 30. 1852.

Zanthoxylum carolinianum var. *fruticosum* A. Gray in Chapm., Fl. South. U. S. 66. 1860.

†*Zanthoxylum clava-herculis* var. *fruticosum* (A. Gray) S. Wats., Bibl. Index No. Amer. Bot. 1: 156. 1878.

Fagara fruticosa (A. Gray) Small, Fl. Southeast. U. S. 675, 1333. 1903.

DERIVATION.—Shrubby.

COMMON NAME.—Texas Hercules-club prickly-ash (SPN).

RANGE.—Western Texas.

Zanthoxylum coriaceum A. Rich. **Biscayne prickly-ash**

†*Zanthoxylum coriaceum* A. Rich. in Sagra, Hist. Phys. Pol. Nat. Cuba [v. 12] Bot. Pl. Vasc. (Ess. Fl. Cub.) 326, pl. 34. 1842 [1843?]; later homonym (?). Not *Zanthoxylum coriaceum* (Desv.) Walp., Repert. Bot. Syst. 1: 521. 1842.

Fagara coriacea (A. Rich.) Krug & Urban in Urban, Bot. Jahrb. 21: 591. 1896.

DERIVATION.—Leathery, referring to the thick, evergreen leaflets.

OTHER COMMON NAME.—†Hercules-club.

RANGE.—Southern Florida, including Florida Keys. Also in West Indies.

Zanthoxylum fagara (L.) Sarg. **lime prickly-ash**

Schinus fagara L., Sp. Pl. 389. 1753.
Fagara pterota L., Syst. Nat. Ed. 10, 2: 897. 1759.
Zanthoxylum pterota (L.) H. B. K., Nov. Gen. Sp. 6: 3. 1823.
†*Zanthoxylum fagara* (L.) Sarg., Gard. and Forest 3: 186. 1890; as "*Xanthoxylum.*"
Fagara fagara (L.) Small, Fl. Southeast. U. S. 675, 1333. 1903.

DERIVATION.—The old generic name.

OTHER COMMON NAMES.—†wild lime-tree, wild-lime.

RANGE.—Central and southern Florida, including Florida Keys, and southern and southwestern Texas. Also in West Indies and from northern Mexico (Tamaulipas to Sonora and Lower California southward) south to Central America and South America.

Zanthoxylum flavum Vahl **yellowheart**

†*Zanthoxylum flavum* Vahl, Eclog. Amer. 3: 48. 1807.
Xanthoxylon cribrosum Spreng., Syst. Veg. 1: 946. 1825.
Zanthoxylum floridanum Nutt., No. Amer. Sylva 3: 14, 85. 1849.
Fagara flava (Vahl) Krug & Urban in Urban, Bot. Jahrb. 21: 571. 1896.

DERIVATION.—Yellow, from the color of the wood.

OTHER COMMON NAMES.—yellowheart prickly-ash (SPN), †satinwood, yellowwood.

RANGE.—Lower Florida Keys. Also in Bermuda and West Indies.

Zanthoxylum macrophyllum Nutt., see **Z. clava-herculis** L.

Zanthoxylum pterota (L.) H. B. K., see **Z. fagara** (L.) Sarg.

ZIZIPHUS Mill. (Family Rhamnaceae) JUJUBE

Ziziphus Mill., Gard. Dict. Abridged. Ed. 4, v. 3. 1754.

DERIVATION.—The ancient Greek name derived from the Persian *zizafun,* jujube.

The original spelling, *Ziziphus,* is adopted here over *Zizyphus,* the common spelling in use, to conform to the International Code. Sprague (Kew Roy. Bot. Gard. Bul. Misc. Inform. 1929: 52. 1929) noted that Miller's choice should be final.

ZIZIPHUS JUJUBE Mill. COMMON JUJUBE

Rhamnus zizyphus L., Sp. Pl. 194. 1753.
Ziziphus jujuba Mill., Gard. Dict. Ed. 8, *Ziziphus* No. 1. 1768.

Zizyphus sativa Gaertn., Fruct. Sem. Pl. 1: 202. 1788.
Zizyphus vulgaris Lam., Encycl. Méth. Bot. 3: 316. 1789.
Zizyphus zizyphus (L.) Karst., Deut. Fl. Pharm.-Med. Bot. 870. 1880–83.

DERIVATION.—From jujube, the French common name, derived from the Arabic.

RANGE.—Escaped from cultivation and naturalized from Alabama to Louisiana, according to Small (Man. Southeast. Fl. 831. 1933). Native of southeastern Europe and southern and eastern Asia. A shrub or small tree up to about 30 feet high.

Zygia P. Br., see **Pithecellobium** Mart.

COMMERCIAL NAMES FOR LUMBER

The following list comprises the most commonly used commercial names for lumber and the corresponding names for the trees from which it is cut. The list, prepared by Lawrence W. Smith, has been adapted from Standard Nomenclature of Domestic Hardwoods and Softwoods issued in 1952 by the American Society for Testing Materials.

HARDWOODS

Commercial name for lumber[1]	*Official common tree name*	*Botanical name*
Alder:		
Red alder	red alder	*Alnus rubra*
Ash:		
Black ash[2]	black ash	*Fraxinus nigra*
Oregon ash	Oregon ash	*F. latifolia*
Pumpkin ash	pumpkin ash	*F. profunda*
White ash	blue ash	*F. quadrangulata*
	green ash	*F. pennsylvanica*
	white ash	*F. americana*
Aspen[3]	bigtooth aspen	*Populus grandidentata*
	quaking aspen	*P. tremuloides*
Basswood[4]	American basswood	*Tilia americana*
	white basswood	*T. heterophylla*
Beech	beech	*Fagus grandifolia*
Birch[5]	gray birch	*Betula populifolia*
	paper birch	*B. papyrifera*
	river birch	*B. nigra*
	sweet birch	*B. lenta*
	yellow birch	*B. alleghaniensis*
Box elder	boxelder	*Acer negundo*
Buckeye	Ohio buckeye	*Aesculus glabra*
	yellow buckeye	*A. octandra*
Butternut	butternut	*Juglans cinerea*
Cherry	black cherry	*Prunus serotina*
Chestnut	chestnut	*Castanea dentata*
Cottonwood	balsam poplar	*Populus balsamifera*
	eastern cottonwood	*P. deltoides*
	plains cottonwood	*P. sargentii*
	swamp cottonwood	*P. heterophylla*
Cucumber	cucumbertree	*Magnolia acuminata*
Dogwood	flowering dogwood	*Cornus florida*
	Pacific dogwood	*C. nuttallii*

Elder, see Box elder

[1] The commercial names for lumber are those recommended for use in commercial practice.

[2] Black ash is known commercially in some consuming centers as brown ash, and is also sometimes designated as such in specifications.

[3] Aspen lumber is sometimes designated as popple.

[4] For some commercial uses where a white appearance is a requirement, the sapwood of American basswood (*Tilia americana*) is specified under the designation "white basswood." This commercial use designation should not be confused with the species (*T. heterophylla*) having the common name white basswood.

[5] Usually designated either as red birch or as sap (white) birch, as the case may be, or as birch if unselected for color.

HARDWOODS—Continued

Commercial name for lumber[1]	*Official common tree name*	*Botanical name*
Elm:		
Rock elm	cedar elm	*Ulmus crassifolia*
	rock elm	*U. thomasii*
	September elm	*U. serotina*
	winged elm	*U. alata*
Soft elm[6]	American elm	*U. americana*
	slippery elm	*U. rubra*
Gum[7]	sweetgum	*Liquidambar styraciflua*
Hackberry	hackberry	*Celtis occidentalis*
Hickory[8]	sugarberry	*C. laevigata*
	mockernut hickory	*Carya tomentosa*
	pignut hickory	*C. glabra*
	shagbark hickory	*C. ovata*
	shellbark hickory	*C. laciniosa*
Holly	American holly	*Ilex opaca*
Ironwood	eastern hophornbeam	*Ostrya virginiana*
Locust	black locust	*Robinia pseudoacacia*
	honeylocust	*Gleditsia triacanthos*
Madrone	Pacific madrone	*Arbutus menziesii*
Magnolia	southern magnolia	*Magnolia grandiflora*
	sweetbay	*M. virginiana*
Maple:		
Hard maple[9]	black maple	*Acer nigrum*
	sugar maple	*A. saccharum*
Oregon maple	bigleaf maple	*A. macrophyllum*
Soft maple[9]	red maple	*A. rubrum*
	silver maple	*A. saccharinum*
Mulberry	red mulberry	*Morus rubra*
Myrtle, see Oregon myrtle		
Oak:		
Red oak	black oak	*Quercus velutina*
	blackjack oak	*Q. marilandica*
	California black oak	*Q. kelloggii*
	cherrybark oak	*Q. falcata* var. *pagodaefolia*
	laurel oak	*Q. laurifolia*
	northern pin oak	*Q. ellipsoidalis*
	northern red oak	*Q. rubra*
	Nuttall oak	*Q. nuttallii*
	pin oak	*Q. palustris*
	scarlet oak	*Q. coccinea*
	Shumard oak	*Q. shumardii*
	southern red oak	*Q. falcata*
	turkey oak	*Q. laevis*
	willow oak	*Q. phellos*

[6] Soft elm lumber is sometimes designated as white elm.

[7] Usually designated either as red gum or as sap gum, as the case may be, or as gum or sweetgum when not selected for color. (For black gum, see tupelo, footnote 11).

[8] The impossibility of distinguishing between hickory and pecan lumber for accurate species identification is recognized.

[9] When hard maple or soft maple is specified to be white, the specification is interpreted as being a requirement for sapwood.

HARDWOODS—Continued

Commercial name for lumber [1]	*Official common tree name*	*Botanical name*
White oak	Arizona white oak	*Quercus arizonica*
	blue oak	*Q. douglasii*
	bur oak	*Q. macrocarpa*
	California white oak	*Q. lobata*
	chestnut oak	*Q. prinus*
	chinkapin oak	*Q. muehlenbergii*
	Emory oak	*Q. emoryi*
	Gambel oak	*Q. gambelii*
	Mexican blue oak	*Q. oblongifolia*
	live oak	*Q. virginiana*
	Oregon white oak	*Q. garryana*
	overcup oak	*Q. lyrata*
	post oak	*Q. stellata*
	swamp chestnut oak	*Q. michauxii*
	swamp white oak	*Q. bicolor*
	white oak	*Q. alba*
Oregon myrtle	California-laurel	*Umbellularia californica*
Osage orange [10]	Osage-orange	*Maclura pomifera*
Pecan [8]	bitternut hickory	*Carya cordiformis*
	nutmeg hickory	*C. myristicaeformis*
	water hickory	*C. aquatica*
	pecan	*C. illinoensis*
Persimmon	Common persimmon	*Diospyros virginiana*
Poplar	yellow-poplar	*Liriodendron tulipifera*
Sassafras	sassafras	*Sassafras albidum*
Silverbell	Carolina silverbell	*Halesia carolina*
Sycamore	American sycamore	*Platanus occidentalis*
Tupelo [11]	black tupelo	*Nyssa sylvatica*
	Ogeechee tupelo	*N. ogeche*
	water tupelo	*N. aquatica*
Walnut	black walnut	*Juglans nigra*
Willow	black willow	*Salix nigra*
	peachleaf willow	*S. amygdaloides*

SOFTWOODS

Cedar:		
Alaska cedar	Alaska-cedar	*Chamaecyparis nootkatensis*
Incense cedar	incense-cedar	*Libocedrus decurrens*
Port Orford cedar	Port-Orford-cedar	*Chamaecyparis lawsoniana*
Eastern red cedar	eastern redcedar	*Juniperus virginiana*
	southern redcedar	*J. silicicola*
Western red cedar	western redcedar	*Thuja plicata*
Northern white cedar	northern white-cedar	*T. occidentalis*
Southern white cedar	Atlantic white-cedar	*Chamaecyparis thyoides*
Cypress [12]	baldcypress	*Taxodium distichum*
	pondcypress	*T. distichum* var. *nutans*

[10] Osage orange is sometimes designated either as bodark or as bois d'arc.

[11] The impossibility of distinguishing between black tupelo (black gum) lumber and water tupelo lumber for accurate species identification is recognized.

[12] Cypress includes types designated as red cypress, white cypress, and yellow cypress. Red cypress is frequently classified and sold separately from the other types.

SOFTWOODS—Continued

Commercial name for lumber[1]	*Official common tree name*	*Botanical name*
Fir:		
Balsam fir [13]	balsam fir	*Abies balsamea*
	Fraser fir	*A. fraseri*
Douglas fir [14]	Douglas-fir	*Pseudotsuga menziesii*
Noble fir	noble fir	*Abies procera*
White fir	subalpine fir	*A. lasiocarpa*
	California red fir	*A. magnifica*
	grand fir	*A. grandis*
	noble fir	*A. procera*
	Pacific silver fir	*A. amabilis*
	white fir	*A. concolor*
Hemlock:		
Eastern hemlock	Carolina hemlock	*Tsuga caroliniana*
	eastern hemlock	*T. canadensis*
Mountain hemlock	mountain hemlock	*T. mertensiana*
West coast hemlock	western hemlock	*T. heterophylla*
Juniper:		
Western juniper	alligator juniper	*Juniperus deppeana*
	Rocky Mountain juniper	*J. scopulorum*
	Utah juniper	*J. osteosperma*
	western juniper	*J. occidentalis*
Larch:		
Western larch	western larch	*Larix occidentalis*
Pine:		
Jack pine	jack pine	*Pinus banksiana*
Lodgepole pine	lodgepole pine	*P. contorta*
Norway pine	red pine	*P. resinosa*
Ponderosa pine	ponderosa pine	*P. ponderosa*
Sugar pine	sugar pine	*P. lambertiana*
Idaho white pine	western white pine	*P. monticola*
Northern white pine	eastern white pine	*P. strobus*
Longleaf yellow pine [15]	longleaf pine	*P. palustris*
	slash pine	*P. elliottii*
Southern yellow pine	loblolly pine	*P. taeda*
	longleaf pine	*P. palustris*
	pitch pine	*P. rigida*
	shortleaf pine	*P. echinata*
	slash pine	*P. elliottii*
	Virginia pine	*P. virginiana*
Redwood	redwood	*Sequoia sempervirens*
Spruce:		
Eastern spruce	black spruce	*Picea mariana*
	red spruce	*P. rubens*
	white spruce	*P. glauca*
Engelmann spruce	blue spruce	*P. pungens*
	Engelmann spruce	*P. engelmannii*
Sitka spruce	Sitka spruce	*P. sitchensis*
Tamarack	tamarack	*Larix laricina*
Yew: Pacific yew	Pacific yew	*Taxus brevifolia*

[13] Balsam fir lumber is sometimes designated either as eastern fir or as balsam.

[14] Douglas fir may be specified either as Coast Region Douglas fir or as Inland Region Douglas fir, but if the particular type is not so specified or is not otherwise indicated through the grade specifications, either or both types will be allowed.

[15] The commercial requirements for longleaf yellow pine lumber are that not only must it be produced from trees of the botanical species of *Pinus elliottii* and *P. palustris*, but each piece in addition must average either on one end or the other not less than six annual rings per inch and not less than one-third summerwood. Longleaf yellow pine lumber is sometimes designated as pitch pine in the export trade.

BOTANICAL INDEX OF PLANT FAMILIES AND GENERA

This botanical index shows the position and relationships of the genera of native and naturalized trees of the United States (including Alaska) in plant families according to the botanical classification. Alphabetically arranged by genera and species, the check list itself does not show which genera are related, though it cites the family name in parentheses after each accepted generic name.

The botanical classification adopted here is the standard one by Dalla Torre and Harms,[1] in which both the families and genera of seed plants are numbered and which has been widely adopted by large herbaria in filing specimens. Obviously the grouping of plant families and genera in a natural system according to relationships in order of development from simple to complex is somewhat controversial. However, the Dalla Torre and Harms arrangement following the Englerian system is the best known, most detailed, and most convenient to follow.

Preceding the botanical index is the alphabetical list of plant families, with Dalla Torre and Harms family number after each. Like a table of contents, the botanical index contains in natural, botanical arrangement the plant families according to Dalla Torre and Harms family numbers, and with common names. Under each family are listed the genera (with widely used synonyms), together with Dalla Torre and Harms genus number, generic common name, and page number of the genus with species and notes in the check list.

The botanical index can be used to find where a genus is classified and also the names of its related genera. *Abies*, or fir, will serve as an example. As listed on page 27, the family is Pinaceae. In the alphabetical list of plant families below, we note that Pinaceae is family number 6. Turning in the botanical index to family number 6, Pinaceae, or pine family, we find that *Abies* is one of 14 named genera, which are listed according to relationships and with check list page numbers for ready reference.

Another use of botanical index is to list the genera of native and naturalized trees belonging to each plant family. For example, to obtain the names of the tree genera of the family Leguminosae, first we get the family number, 128, from the alphabetical list of plant families. Then under family number 128 in the botanical index we find 26 genera placed according to their relationships. Thus, the botanical index preserves the useful features of the natural arrangement adopted in previous check lists and in botanical references, while the check list itself has the advantages of the new, alphabetical order.

ALPHABETICAL LIST OF PLANT FAMILIES

The native and naturalized trees of the United States (including Alaska) are classified under 77 plant families. Of these, 71 are

[1] Dalla Torre, C. G. de, and Harms, H. Genera Siphonogamarum ad systema Englerianum conscripta. 921 pp. 1900–07.

native and 6 (designated by small capitals) are introduced and have no native species. With very few exceptions, family names end in -aceae and are easily recognized. The Dalla Torre and Harms numbers after each family name can be used to refer to genera in the botanical index of plant families and genera which follows.

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Simaroubaceae, 138
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Staphyleaceae, 161
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TAMARICACEAE, 191
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Ulmaceae, 63
Verbenaceae, 253
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BOTANICAL INDEX

The 77 families and 252 genera of native and naturalized trees of the United States (including Alaska) are arranged numerically by the Dalla Torre and Harms numbers on the left with check list page numbers of genera at right. The 6 introduced families and 31 naturalized genera without any native species are in small capitals. Dalla Torre and Harms numbers here are not consecutive because many families and genera in that reference to the seed plants of the world are not represented among the trees of the United States.

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   17. Torreya (*Tumion*), torreya 421
   18. Taxus, yew 414
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   29. Abies, fir 27
   32. Sequoia, sequoia 402
   35. Taxodium, baldcypress 412
   38. CALLITRIS, CYPRESS-PINE 77
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   42. Thuja, thuja; arborvitae (SPN) 416

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21.	**Palmae, palm family**	
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	543. **Washingtonia, washingtonia**	432
	547. **Sabal, palmetto**	374
	548. **Serenoa, saw-palmetto**	403
	549a. **Paurotis (*Acoelorraphe*), paurotis**	251
	599. **Pseudophoenix, cherrypalm**	304
	613. **Roystonea, royalpalm**	374
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51.	CASUARINACEAE, casuarina (beefwood) family	
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59.	**Leitneriaceae, corkwood family**	
	1876. **Leitneria, corkwood**	224
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	1881. **Juglans, walnut**	213
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	1885. **Ostrya, hophornbeam**	249
	1886. **Corylus, hazel**	123
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	1890. **Fagus, beech**	183
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63.	**Ulmaceae, elm family**	
	1896. **Ulmus, elm**	426
	1897. **Planera, planertree**	277
	1898. **Celtis, hackberry**	97
	1902. **Trema, trema**	423
64.	**Moraceae, mulberry family**	
	1913. **Morus, mulberry**	240
	1918. **Maclura (*Toxylon*), Osage-orange**	230
	1923. BROUSSONETIA (*Papyrius*), PAPER-MULBERRY	71
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126. **Rosaceae, rose family**
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