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Number 6

International Checklist of Cultivated *Ilex*

Part 2, *Ilex crenata* Thunberg ex J.A. Murray

Abstract

Dudley, T.R., and G.K. Eisenbeiss. 1992. International Checklist of Cultivated ***Ilex:*** Part 2, ***Ilex crenata*** Thunberg ex J.A. Murray. U.S. Department of Agriculture, U.S. National Arboretum Contribution No. 6, 91 pp.

Ilex crenata is one of the most important landscape and nursery plants in the United States. This comprehensive international checklist is the first publication to document all of the cultivars and wild-origin variants of ***Ilex crenata***. Introductory sections contain the following: a detailed morphological description of the species; an evaluation of its current status; cultural, nomenclatural, and taxonomic histories; an explanation of the format; and the technical bases for validation of cultivar names in accordance with the "International Code of Nomenclature for Cultivated Plants—1980." The section entitled "Alphabetical List of Documented Epithets" provides full documentation for 436 garden and wild-origin germplasm entities (170 are legitimate, 266 are illegitimate or controversial), including origins, sources, descriptions, histories, international registrations, original and other pertinent references, and synonyms. Eighteen new cultivar names are validly published for the first time, and a simple list of 112 illegitimate names (which have no documentation previously discovered) is provided. This publication is particularly useful for botanical historians, systematists and nomenclaturalists, plant experts of various trades, and consumers.

Keywords: Cultivar names, documentation, illegitimate, international registration, Japanese holly, legitimate, nomenclature, synonyms, taxonomy, validation.

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March 1992

International Checklist of Cultivated *Ilex*

Part 2, *Ilex crenata* Thunberg ex J.A. Murray

T.R. Dudley and G.K. Eisenbeiss

Foreword

A primary objective of scientific research studies at the U.S. National Arboretum is to clarify the origins, descriptions, and often confusing classification and nomenclature of cultivated plants. There is also an obligation to publish and disseminate the information obtained from such studies.

The hollies (***Ilex***) comprise one of the most popular and distinctive groups of woody plants that are highly significant commercially and cultivated in large areas of the United States. In cooperation with the Holly Society of America, Inc., Arboretum staff members have been assembling data and compiling the authoritative "International Checklist of Cultivated ***Ilex***" since 1964. The first compilation, "Part 1, ***Ilex opaca***," by Eisenbeiss and Dudley was published in 1973 as U.S. National Arboretum Contribution No. 3. Part 2, on ***Ilex crenata***, represents the second installment of a projected complete survey of this large genus.

The "Alphabetical List of Documented Epithets of Cultivated ***Ilex crenata***," following the comprehensive introduction, contains 436 entries whose legitimacy and validity have been determined and documented. The 170 valid and legitimate cultivar names are provided with full documentation, including their bibliographic citations, essential additional references, data on origins and introductions, detailed descriptions (when available), and cross-referenced synonymy. Precise reasons are given for the 548 names that are illegitimate or invalid. Controversial names are discussed in depth, particularly those in Latin format with botanical ranks of *forma* (f.) or *varietas* (var.), which originated prior to 1959 and the publication of the first "International Code of Nomenclature for Cultivated Plants—1953." That code mandated, for the first time, the universal usage of the word "cultivar" for garden-origin selections, clones, and "cultivated

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varieties." Extensive pertinent literature is cited, and solutions are proposed for nomenclatural problems. For classification clarity, four hybrid groups (enclosed in parentheses) are utilized.

By authority vested in them by the International Registration Authority for cultivar names in the genus ***Ilex***, the authors legitimized and validated the names of 26 cultivars that had previously been published illegitimately. These illegitimacies were due to the lack of descriptions or incorrect orthography. Herein, the authors provide original descriptions and the correct orthography of these names. The authors also named 18 new cultivars and present them here for the first time.

In time, this checklist will prove to be a benchmark of the achievements of our generation. We must document and look forward to the new creations in woody plants.

Gordon C. Marten
Acting Director, U.S. National Arboretum

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Acknowledgments

This checklist series on cultivated ***Ilex*** is a direct outgrowth of the "Preliminary Holly Check List," Holly Society of America Bulletin No. 6, prepared by Wister et al. (1953). This present work utilized many references that were cited in that publication. Notable among many additional sources of information were the Nursery and Seed Trade Catalog Collection of the National Agricultural Library, Beltsville, Maryland, and international registrations by the Holly Society of America, Inc. Other sources were massive numbers of volumes of precursor and current horticultural and botanical literature, and published and unpublished collections lists obtained from arboreta, botanic gardens, and private gardens. The Holly Society of America, Inc., is to be credited for having published many of these lists.

The task at hand was to evaluate these materials through study and analysis of accumulated, previously unpublished data, and living plants and herbarium specimens. Accomplishment of the task was greatly enhanced by the cooperation of many other individuals investigating ***Ilex***; including Susyn Andrews of the Royal Botanic Gardens, Kew, England; Fred Galle, Hamilton, Georgia; and Tom Dodd Nurseries, Semmes, Alabama.

We also acknowledge the contributions of the following from the U.S. National Arboretum: H.M. Cathey, former director; J.L. Creech, former director; the late F. deVos, former assistant director; the late H.T. Skinner, former director; F.S. Santamour Jr., research geneticist; A.M. Townsend, research leader; and especially, the late W.F. Kosar, former research horticulturist, who started ***Ilex*** research at the National Arboretum.

Fred Galle, well-known author and horticultural consultant, made significant contributions from his personal observations of living plants and personal contact with many originators and growers.

The cover illustration of ***Ilex crenata*** was provided by Judith Ho of the National Agricultural Library, Special Collections. The illustration was taken from Vol. 2, "Iconographie Des Essences Forestieres Du Japon," written by Homi Shirasawa and published in 1900.

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International Checklist of Cultivated *Ilex*
Part 2, *Ilex crenata* Thunberg ex J.A. Murray

T.R. Dudley and G.K. Eisenbeiss

Introduction

In 1953, the Holly Society of America, Inc., published Bulletin No. 6, "Preliminary Holly Check List," by Wister et al. At that time it was the most comprehensive checklist of cultivated ***Ilex***, although the authors were aware that revision and updating would be necessary. In 1958, the Society was appointed the "International Registration Authority" for cultivar names in the genus ***Ilex***. In accordance with its mandate to produce new and updated checklists and registers, the Society, with the cooperation of the U.S. National Arboretum, began compiling the "International Checklist of Cultivated ***Ilex***." When completed in its entirety of several parts, the checklist will include all names in cultivated ***Ilex***, with explanations of their legitimacy and synonymy, and with descriptions, sex determinations, origins, sources, and occasionally, hardiness ratings. "Part 1, ***Ilex opaca***" has already been published (Eisenbeiss and Dudley 1973).

The present publication, part 2, presents 548 entries for ***Ilex crenata***. The cultivars originally came from many different areas of the world, and some are described in the English language for the first time. Although this checklist is primarily based on literature resources, authentic living and herbarium materials were examined extensively when available.

The nomenclature in part 2 agrees with the "International Code of Nomenclature for Cultivated Plants—1980" (Brickell et al. 1980), also known as the "Cultivated Code," and with the "International Code of Botanical Nomenclature" (Greuter et al. 1988). Common names have been excluded to avoid nomenclatural confusion. The need for common names is questionable when cultivar names are available. There are no accepted national or international rules, guidelines, or codes governing origin, precedence, formulation or usage of common or colloquial names in horticultural plants.

Research botanist and horticulturist, respectively, U.S. Department of Agriculture, Agricultural Research Service, U.S. National Arboretum, 3501 New York Avenue, NE., Washington, DC 20002.

Part 2 of the "International Checklist of Cultivated ***Ilex***" provides the nursery industry, horticulturists, botanists, students, and professional and amateur gardeners with the names, documentation, and correct nomenclatural status of selected clones and wild-origin botanical taxa of ***Ilex crenata***.

For a more detailed history of the concepts, implementation, and utilization of the international checklist, refer to the preface and introduction of the "International Checklist of Cultivated ***Ilex***: Part 1, ***Ilex opaca***" (Eisenbeiss and Dudley 1973).

We encourage users to communicate errors or omissions to the attention of Holly Society of America, Inc., Registration Committee, Mr. G.K. Eisenbeiss, U.S. National Arboretum, 3501 New York Avenue, NE., Washington, DC 20002.

Description and Status of *Ilex crenata*

Ilex crenata Thunberg ex J.A. Murray was named by Carl Peter Thunberg (1743-1828), a Swedish physician who worked for the Dutch East India Co. in Japan from 1776-1777, in his "Flora Japonica: Sistens Plantas Insularum Japonicarum," p. 78. 1784. J.A. Murray (1784), however, while using Thunberg's manuscripts was the first authority to publish Thunberg's species name. Murray's "Systema Vegetabilium," edition 14 of 1784, was published in May or June and therefore has priority over Thunberg's "Flora Japonica," which was published in August of 1784. Thunberg and Murray were the first botanists from the Western World to name and describe many Japanese plants that were collected by Thunberg and that are widely cultivated today, including ***I. crenata, I. integra***, and ***I. latifolia***.

Thunberg's original Latin description of ***I. crenata*** from his "Flora Japonica" follows:

> *I. foliis ovatis crenatis, pedunculis rameis sparsis subtrifloris. Caulis fruticosus erectus. Rami et ramuli subtretes, nodulosis patuli. Folia sparsa petiolata, ovata obtusa, crenata margine reflexo, supra viridia, subtus pallida, unguicularia. Petioli brevissima. Flores sparsi in ramulis, pedunculati. Pedunculi simplices, bifida et trifida, cernui, vix unguiculares pedicellis brevissimis.*

Our English translation (brackets [ ] in the English translation indicate authors' clarifications of the Latin):

> Leaves ovate-crenate, peduncles and branches sparsely subtriflorous, inflorescence having 3 flowers more or less together. Stems shrubby, erect. Branches and branchlets subterete [nearly round], nodulose [nodes small], spreading. Leaves sparse, few [widely distant], petiolate, ovate, obtuse, with reflexed [revolute], crenate margins, upper surfaces green, lower surfaces paler, unguiculate [meaning "clawed," in this case, abruptly narrowing into the petiole]. Petiole very short. Flowers sparse and pedunculate on branchlets. Peduncles [actually inflorescences] simple, 2-3 forked [with 2-3 branches = pedicels], nodding, scarcely pedicellate, pedicels very short.

A more detailed description that offers a wider range of character options and correlations based on study of a great many living plants, herbarium specimens, and references follows.

Ilex crenata: dense, evergreen, multiple-branched shrub or small tree to 6 m; habit very variable from fastigiate, narrowly conical to low spreading, or low, compact dwarf shrub; branchlets densely pubescent, often with foliage apically crowded. Buds broad-conical or poorly developed with loose scales. Leaves alternate, simple, coriaceous to thin-coriaceous, glabrous, glossy or dull, mostly dark green to olive-green above, rarely variegated, plicate and rugulose, dull and punctate below; obovate, to ovate, or oblong-elliptic, rarely ovate or orbicular, (0.3-) 1.5-4 (-5) cm long, (0.3-) 0.5-2 (-3) cm wide; margins mostly flat or occasionally convex-bullate and wide revolute; bases obtuse, acute, or cuneate; apices obtuse-rounded to subacute, mucronulate primarily; margins crenate or serrate with (2-) 6-10 pairs of usually blunt, appressed teeth, sometimes subentire; midveins often puberulent above, 2-3 pairs of lateral veins; stipules 0.5-1 mm long; petioles persistent, subulate, (1-) 2-3 (-5) mm long, canaliculate, and puberulent. Male inflorescences cymose or subumbellate, 1-7 flowered, usually 3, solitary and axillary on current year's branchlets or, rarely, pseudofasciculate on second-year wood; peduncles (3-) 4-8 (-10) mm long, bearing white, 4-merous, rotate flowers, (3-) 4-6 mm in diameter; corolla lobes broadly elliptic, 2-3 mm long, often ascending then spreading; stamens 1-2 mm long; pistillodes conical, somewhat apiculate; calyces 1.5-2 mm diameter, glabrous, with broad-deltoid, erose lobes. Female inflorescences solitary or rarely 2-3-flowered, cymose, axillary on current year's branchlets; pedicels (1-) 4-6 mm long, clavate, ridged, with 1-2 submedial prophylls; corollas same as in males except lobes ovate, 3-4 mm long; staminodes 1.5-2 mm long; ovaries ovoid-conical, 1.5-2.5 mm long with evident styles and discoid, 4-lobed stigmas; calyces 2-3 mm diameter with obtuse-rounded lobes. Fruit globose, black or very rarely yellow-green, 5-8 (-12) mm diameter; calyces explanate, persistent, 3-3.5 mm diameter; stigmas minute, thinly discoid, 1-1.5 mm diameter, distinctly 4-lobed; pyrenes (2-) 4-5 (-16), usually 4, oblong-ellipsoid, 5-6 mm long, 3-3.5 mm wide, smooth, and esculcate.

This species is native to Japan, Korea, People's Republic of China, Sakhalin, Kuril Islands, Taiwan, the Philippines, and the Himalayas and is extraordinarily polymorphic with respect to plant habit, leaf size, leaf shape and texture, marginal crenations, and variegation. Numerous wild-occurring botanical varieties and forms have been discovered and named, as have been hundreds of cultivars.

Ilex crenata grows in the wild from sea level to 1000 m in Honshu and Kyushu, Japan, and shows tremendous variability within local populations. In Hokkaido, Japan, ***I. crenata*** is found as a low-growing shrub in deep forests at elevations below the snowline. At the highest elevations, plants are stunted because of climate and not necessarily because of genetic influences. Convex-leaved forms appear to be less common in the wild than other leaf variations. Plants with distinct leaf types and habits of growth are not restricted as colonies but occur randomly within local populations. Seedling populations from cultivated selections also exhibit these characteristics.

The botanical classification of ***I. crenata*** as a species is reasonably clear. However, there are botanical classification problems in some closely related elements. For example, two or more botanical names may have been given to the same plant. ***Ilex maximowicziana*** var. ***kanehirae*** (Yamamoto) Yamazaki and ***I. crenata*** var. *mutchagara* (Makino) Hara apply to the same plant, which had been known previously as ***I.*** *mutchagara* Makino. Although this taxon has been studied in Japan, it has received minimal attention in its other natural locations, such as the Ryukyu Islands. In this checklist ***I. maximowicziana*** var. ***kanehirae*** is accepted. Another problem concerns the taxonomy and nomenclature of ***I. crenata*** var. ***thomsonii*** (Hooker f.) Loesener, which was originally described as ***I.*** *thomsonii* Hooker f. This taxon, a native of the Bengal Himalayas and Sikkim, has not received adequate study in the wild, and there are very few herbarium specimens. It is accepted in this checklist as ***I. crenata*** var. ***thomsonii***. Some of the numerous infraspecific taxa described from the wild have undergone many rank changes from distinct species to *formae*, and then to cultivars; in some cases, rank changes have proceeded in the opposite direction.

In this work, numerous questions and long-standing problems of botanical and cultivar synonymy have been resolved. While some problems remain and may never be solved, full documentation is always presented.

Cultural History

Carl Maximowicz (1827-1891) first introduced ***I. crenata*** into the Western World in 1864, bringing it from Japan to the Czar's garden in St. Petersburg (Leningrad), Russia. Although Maximowicz's (1881) own writings were not clear on the subject of his introductions, Bretschneider (1898) credited Maximowicz with the introduction of ***I. crenata*** into the West. From this initial introduction into Russia, ***I. crenata*** became available to other European countries, probably initially to France. Since ***I. crenata*** is not well adapted in European climates, only a few European selections have been identified and named. For this reason, the species has never gained the popularity in Europe that it has in the United States. While introduction into the West is dated at 1864, ***I. crenata*** was cultivated in Japan at much earlier dates. Maximowicz (1881) observed and made collections from plants in cultivation in Japan but made no mention of the extent of local use.

In the Western World there has been a distinct neglect of examining and citing early Japanese horticultural art and literature. Ancient Japanese literature relating to the cultivation and selection of ***Ilex*** exists but is scarcely known. Kato (1975) listed seven early Japanese references, dated between 1652 and 1847, that mention or illustrate ***Ilex*** selections, including ***I. crenata***. Two references are of considerable interest since facsimiles with annotations have been published. Iinuma (1832) illustrated four variegated selections of ***I. crenata***. In another publication, Kinata (1813) illustrated six variegated selections. None of the annotations can be interpreted with cultivar names except **'NUMMULARIA'**, which was applied by Kitamura (1976) (see Iinuma 1832) in his annotation of an illustration in Iinuma. The name **'NUMMULARIA'** did not appear in the original script associated with the illustration. Since many plants of Japanese origin are now widely grown in the United States and other countries, it would be desirable and enlightening if more ancient gardening literature from Eastern Asia were published in facsimile and the facsimile annotated and translated.

Ilex crenata has been introduced from Japan many times since 1864 as seeds and plants from the wild and from cultivation. Some of the early known introductions into the United States directly from Japan were made for the Arnold Arboretum by C.S. Sargent in 1898 and by E.H. Wilson in 1900. Numerous private, commercial, and government collections continue to this day. During the 1950's and 1960's, J. L. Creech (former Director of the U.S. National Arboretum) made numerous collections from the wild in Japan for the U.S. Department of Agriculture (USDA). Plants from these collections were widely distributed from the USDA's Plant Introduction Station (now known as the National Plant Germplasm

Quarantine Laboratory), Glenn Dale, Maryland, and the U.S. National Arboretum, Washington, DC.

Japan has been the primary source of germplasm introduction. It is unfortunate that introductions from other areas of the natural range of *I. crenata* have been essentially neglected. Wild-origin material from Sakhalin, Kamchatka, Korea, and the People's Republic of China could possibly have increased hardiness and increased resistance to environmental stresses. New germplasm has been recently introduced (1985) from the Republic of Korea and is now being evaluated in the United States and Canada.

In the 1930's, a successful effort of promotion and distribution by the Arnold Arboretum resulted in the widespread production and sales of *I. crenata* by the American nursery trade. By the late 1930's a great expansion of single-family suburban dwellings had begun in the United States; concomitantly, affluence and interest in horticulture and landscaping increased, resulting in an equally expanding nursery industry. Foundation plantings and hedges became fashionable, for which *I. crenata* is eminently suitable. The nursery industry found *I. crenata* and its many cultivars easy to propagate, and adaptable and useful as landscape plants. Plants may reach saleable size in 2-3 years, and because they grow slowly, they will remain saleable and not become overgrown for 1-2 years. Transplanting is easy, and the species is tolerant of full sun or shade, exposed sites, and a wide range of soil conditions. It is also highly tolerant of salt and air pollution. As container production became popular in the nursery industry, *I. crenata* was found to be well adapted to this production technique. It is now thought that *I. crenata* is the leading broad-leaved evergreen grown by the U.S. nursery industry in both quantities produced and dollar volume. At this time, most plants are container grown. With the national housing boom, market demand continues to be high; and higher prices can be obtained for the evergreen *I. crenata* than for many deciduous shrubs.

This species is grown to a limited extent in western Europe and on the west coast of the United States, but it is most adaptable from Massachusetts to the Middle Atlantic and Southeastern States west to Kentucky, Oklahoma, and Texas. The cold hardiness range is generally 0 to 10°F, or USDA zone 7 of the "Plant Hardiness Zone Map" (U.S. Department of Agriculture 1965), but can extend to -20°F, or USDA zones 6 and 5, for some cultivars.

The major cultural problem of *I. crenata* is its susceptibility to spider mites. Damage from spider mites is more serious in the southern region of its growing range, particularly in the Deep South. *Ilex vomitoria*, a native

U.S. species, is sometimes preferred in the Deep South over ***I. crenata*** because it is less susceptible to spider mites.

Before the 1930's only a few selections (= cultivars) of ***I. crenata*** were known. Now more than 500 cultivars have been named and introduced. Most cultivars have been obtained as seedling selections by the nursery industry, but some have been from mutation propagations. Only a few have been selected directly from wild habitats. This selection process differs from that of ***I. opaca***, whose cultivars were mostly discovered originally as wild-occurring plants and were subsequently named, propagated, and distributed.

Nursery professionals have discovered that seedling populations of ***I. crenata*** vary extensively in size and shape of leaves, in growth habits, and in growth rates. Such variations have led to choosing selections with improved landscape utility and nursery productivity. Most cultivars in commerce today represent the finest selections from among literally hundreds of thousands of seedlings. By far, **'CONVEXA'** has been the most popular cultivar, and as a seed parent, it has yielded progeny with an outstanding array of shapes and textures. A limited number of dwarf, small-leaved, and variegated clones have arisen as chance mutations.

Because of its wide use and ease of culture (including ease of propagation), ***I. crenata*** is one of the most popular test plants for research on the production of container-grown nursery crops. From this research, more is known about the response of ***I. crenata*** to soil mixes, mineral nutrition, and pesticides than for any other container-grown nursery crop in the United States.

Despite the popularity of ***I. crenata*** as a landscape plant, the nongardening public does not often recognize it as a holly. It is generally seen as a shrub having small, nonspiny leaves and small black fruits. In contrast, holly is traditionally envisioned in western culture as a tree or shrub that has spiny leaves and red fruit. Plant hybridizers have attempted to develop an ***I. crenata*** with red fruit. Such fruit would greatly enhance the public image and broaden the versatility of this species. Many attempts have been made and some interspecific hybrid combinations have been achieved between ***I. crenata*** and red-fruited species of ***Ilex***; but to date, satisfactory red-fruited hybrids have not been produced.

Nomenclatural History

The cultivar and botanical taxa enumerations reflect the many problems of correctly identifying cultivars, applying the legitimate names to the correct plant, sorting cultivars from botanical taxa, and determining synonymy.

The genus ***Ilex*** has been in cultivation for centuries, and now more than 125 species are cultivated. These species are, in turn, represented by several thousand named cultivars. The genus also has many types of cultivar nomenclature complexities and confusions. Inadequate descriptions, poor documentation, and inappropriate, incorrect or unstable cultivar names are all major causes of nomenclatural, taxonomic, and identification instabilities and inaccuracies. The longer the confusions exist (while the named cultivars continue to be cultivated and the number of named cultivars proliferate) the more difficult the problems of nomenclature and identification become.

Formal International Registration of new cultivar names is promoted by the Commission for Horticultural Nomenclature and Registration of the International Society for Horticultural Science. International Registration provides by far the best means for ensuring the adequacy and accuracy of descriptions, the legitimacy of cultivar names, and the accessibility of accurate documentation. The Council of the International Society for Horticultural Science appoints International Registration Authorities for many cultivated plant genera. These authorities are able to respond to questions concerning the formulation and documentation of new cultivar names. The Holly Society of America, Inc., by appointment as the authority for cultivated ***Ilex*** and through its appointed registration committee and registrar, has been registering ***Ilex*** cultivars since 1958. This registration system, while nonstatutory, is international in scope; and all potential selectors, namers, and introducers of new cultivars are strongly urged to use this system by contacting the International Registrar for cultivar names in the genus ***Ilex***: G.K. Eisenbeiss, U.S. National Arboretum, 3501 New York Avenue, NE., Washington, DC 20002.

While analyzing the literature published prior to the "International Code of Nomenclature for Cultivated Plants—1953" (Stearn et al. 1953), we found it difficult to separate some botanical ranks, especially *formae*, from cultivated varieties (cultivars). The sorting of these categories was one of our objectives, since a suitable nomenclature for cultivated varieties, distinct from botanical ranks, was not available before 1953. The "International Code of Botanical Nomenclature" (Greuter et al. 1988 and earlier editions) did not address the nomenclature of cultivated plants. While the term "cultivated variety" was widely understood for many years, it was not directly attached to a plant name. Sometimes the term

"Hort." or "Hortur." was applied as an author citation to mean "of garden origin" or "of gardeners," e.g., ***I.*** *fortunei* Hort. In these cases, the meanings were clear regardless of the rank indicated or the lack of a rank. The names of plants we now recognize as cultivars were sometimes originally published as f. (botanical *forma*) or as trinomials without any rank indicated. Often cultivated varieties were designated as "var.," which is the identical abbreviation to botanical *varietas*, implying that cultivated varieties have the same nomenclatural significance and weight as botanical varieties. Botanical varieties (vars.) and cultivated varieties (now cultivars or cvs.) are entirely different in concept and origin and cannot be used interchangeably.

A botanical variety is an infraspecific botanical entity or category referring to a population of individuals occurring in the wild with certain characters differing in a minor way from other plants of their species. A horticultural or cultivated variety (cultivar) refers strictly to a plant (in the case of ***Ilex***, a single, named clone in cultivation) that has generally originated in cultivation. Names of plants that were prior to 1953 and were clearly considered to be cultivated varieties by their authors are now recognized as cultivar names. For these names, sometimes botanical ranks were clearly cited in references. When necessary to clarify and justify rank changes, the ranks are cited and the reasons for their change are given in detail.

Format

The format of this checklist is similar to but deviates somewhat from that of the ***I. opaca*** checklist (Eisenbeiss and Dudley 1973). References to documented nomenclature of infraspecific botanical taxa, which are more numerous within ***I. crenata*** than within ***I. opaca***, have been added. These references are cited first, the dates indicating the first publication of the names; but the publication dates may not represent the dates the plants were introduced into cultivation. The objective is to establish the first use of the basionym. Also, the reasons for names being regarded as illegitimate are usually stated. However, illegitimacy because the name lacks a plant description or is in Latin form (for those names published on or after January 1, 1959) or because of names in synonymy is so frequent that these causes are not always stated. Names that are illegitimate because of one of these causes are easily recognized by their publication date.

A cultivar can have only one legitimate name, and a legitimate name can apply to only one cultivar (clone).

Information for each name entry is given according to the following format:

- All names, regardless of rank, are enumerated in alphabetical order.
- Homonyms are listed in alphabetical order by the personal name of the publishing authority or by the name of the nursery.
- The earliest published reference found for a name is given first and placed in parentheses. Within the parentheses, those references lacking a plant description are identified.
- Additional references are included when they provide important supplemental information.
- Information from included references is preceded by a dash after the reference. Information and comments derived from the authors of this checklist and previously unpublished sources is contained in brackets or stands alone in separate sentences.
- Descriptive information is presented in the following order: habit, leaf characters, and fruit characters, and miscellaneous data such as origin and hardiness. When available, the sources, discoverers, selectors, and introducers, with pertinent dates, are also included.

- The status of all names is indicated by the following type styles:

  - Legitimate cultivar names are shown in boldface capitals, e.g., **ALLEN SEAY**.
  - Illegitimate cultivar names are shown in regular face capitals, e.g., ALBO-MARGINATA.
  - Valid botanical names are shown in boldface italics, e.g., var. ***paludosa***.
  - Invalid botanical names are shown in regular face italics, e.g., var. *aureo-variegata*.

- When synonyms are listed, they are preceded by an equal sign (=) and then by the legitimate name if there is one. Synonyms that are illegitimate are listed in alphabetical order. Dubious, suspect, and unconfirmed synonyms are preceded by a question mark. Some synonyms occur as previously unpublished names and do not have entries of their own in the Alphabetical List of Documented Epithets. These are listed in Appendix C.

- Duplicate cultivar names (later homonyms) that have been proposed for different clones (selections) are listed as separate entries. Typically, the earliest published use of a name has priority, e.g., **FASTIGIATA** of S.-y. Hu (1970) has priority over FASTIGIATA of Sugimoto (1972). Occasionally, a question mark (?) precedes a name in the list of synonyms that follow the equal sign (=) at the end of an entry. The question mark (?) indicates that the name immediately following is a synonym for which there is not enough evidence to positively and irrevocably equate with the listed name. However, for the most part, the authors have deduced that the name following a question mark is a likely synonym.

- Separate entries are made for names that have been published at more than one botanical and cultivar rank. Such an entry system is of particular importance if any of these botanical ranks have been used for plants in cultivation.

- Cultivar names noted as new are published with a description and accordingly are made legitimate in this work for the first time. These names are summarized in Appendix A.

- Names previously published but made legitimate here for the first time by adding a description or reformulating the name are noted in the text and summarized in Appendix B.

- Appendix C is a list of dubious and illegitimate names previously unpublished but known to exist. The purpose of publishing these

illegitimate names is to prevent their application to new and different plants. Some of these names could be made legitimate if adequate descriptions could be found and published or if originators of these names or cultivars communicated with the International Registrar for the genus ***Ilex***.

Author citations to cultivar names are uncommon in the literature and are not addressed by any edition of the "Cultivated Code." This checklist includes such citations when duplicate names (homonyms) are synonyms representing different plants, e.g., see BUXIFOLIA entries in this checklist. The style of author citations used here is to precede the name of the author or other source with the word "of." This citation may be a personal name or an organization or business, such as a nursery.

Many names originally published at botanical rank have been reduced to cultivar rank, e.g., ***I.*** *nummularia* Franchet & Savatier = **NUMMULARIA**, and ***I. crenata*** var. *luteo-variegata* Regel = **LUTEO-VARIEGATA**. Some of these changes originated from the taxonomic and nomenclatural judgment of the authors of this checklist and some from other cited sources.

Several cultivars, e.g., LATIFOLIA, MICROPHYLLA, and ROTUNDIFOLIA are of major commercial importance, but their names are not legitimate, since conflicts and inadequacies are found in their descriptions and synonymy. Cultivar names cannot be legitimized without accurate reference to original or authentic plants. There are cases when the original and type plant (clonotype) or authentic plants propagated from the clonotype could not be determined. Occasionally it is questionable whether there really ever was a single original or authentic plant. In such cases the lack of published data prevents these names from becoming legitimate. In this checklist the legitimacy of each name was determined on a case-by-case basis. There are hundreds of commercially available clones (cultivars) that are sold under illegitimate names.

The use of group names is not new in ***Ilex***. Loudon (1838) used group names for yellow- and white-blotched variegated leaf "forms" of ***I. aquifolium***, which he called subvarieties. Group names were also used in the ***I. opaca*** cultivar checklist. Most group names used for ***Ilex crenata*** are published here for the first time. They are always distinguished by the word "Group" and are enclosed in parentheses to keep them clearly distinct from cultivar names, e.g., (Watanabeana Group). While having no taxonomic status, group names are convenient for grouping some cultivars. Group names used in this checklist are not to be confused with cultivar classes. The International Registration Authority and Registrar for cultivated ***Ilex*** does not recognize any cultivar classes.

In the cultivar enumerations, reference is frequently made to T. Loesener, Monog. Aquif., Pt. 1, 1901. Since the full citation for this reference is so long, it is given only one time, here, in full—T. Loesener, 1901. Monographia Aquifolicearum, Pt. 1. Nova Acta Academiae Caesareae Leopoldino-Carolinae Germanicae Naturae Curiosorum 78:1-567.

Abbreviations

Abbreviations and symbols used in enumerations of cultivars.

access. - accession
alt. - altitude
advert. - advertisement
Amer. - America, American
Arb. - arboretum
approx. - approximately
ARS - Agricultural Research Service, U.S. Department of Agriculture
bot. - botanical
Bul. - bulletin
°C - degrees Celsius
cat. - catalog, catalogue
cf. - compare, confer
cm - centimeter or centimeters
coll. - collected, collection
cult. - cultivated, cultivation
cv. (cvs.) - cultivar (cultivars)
descr. - description, descriptions, described
diam. - diameter
discov. - discovered, discovery
distrib. - distributed, distribution
ed. - edition, edited, editor
e.g. - for example
elev. - elevation
et al. - and others
f. - *forma, formae*
°F - degrees Fahrenheit
ft - foot, feet
F_1 - first filial generation
F_2 - second filial generation
fr. - fruit, fruits
gdn. (gdns.) - garden (gardens)
grad. nov. - *gradus novus* (change to another category without change of the combination itself; abbreviation taken from A. Rehder's usage in 1949).
handb. - handbook, handbuch
hort. - horticulture, horticultural (of garden origin)
idem - same author as immediately cited above
ibid. - in the same place
intern. - international
introd. - introduced, introduction
I. - ***Ilex***

Let. - letter as in Holly Letter
lf. (lvs.) - leaf (leaves)
m - meters
mm - millimeters
NA - U.S. National Arboretum, 3501 New York Avenue NE., Washington, DC 20002
NA # - U.S. National Arboretum accession number
no. - number, numeral
Nurs. (nurs.) - nursery (nurseries)
orig. - originated, origin
p. (pp.) - page (pages)
pat. - patent as in plant patent
PI - U.S. Department of Agriculture Plant Introduction Accession
plt. (plts.) - plant (plants)
poll. - pollinated, pollinate
Proc. - Proceedings
propag. - propagators, propagation
pt. - part
rec. - received
ref. (refs.) - reference (references)
reg. - registration
rev. - revised, revision
sdlg. (sdlgs.) - seedling (seedlings)
sel. - selected, selection, selections
Soc. - Society
sp. - spring
sta. - station
subsp. - botanical rank of subspecies
syn. (syns.) - synonym (synonyms), synonymy
unkn. - unknown
U.S. - United States of America
USDA - U.S. Department of Agriculture
var. (vars.) - variety, varieties, varietas, varietates
vs. - versus, contrasted with, against
'...' - single quotation marks used only to designate cultivar names
"..." - direct quotation
" - inch or inches
× - multiplication sign, signifying hybridity

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Alphabetical List of Documented Epithets of Cultivated *Ilex crenata*

ALBO-MARGINATA (J. Conder, Landscape Gardening in Japan, 2d ed. p. 112. 1912, without descr., as *albo-marginata* with the Romanji common name "Shiro-kukurin-tsuge"). (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **ALBO-MARGINATA** has priority. = **SNOWFLAKE**, SHIROFUKURIN.

ALBO-MARGINATA (M. Rolland, Jour. New York Bot. Gdn. 16(6):222. 1966, without descr.). Probably not the same as ALBO-MARGINATA of Conder. (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **ALBO-MARGINATA** has priority.

ALLEN SEAY (Greenbrier Farms, Chesapeake, Virginia, cat. p. 38. 1971-72) - upright; lvs. flat, similar to those of MICROPHYLLA. Ibid., cat. p. 39. 1973 - pyramidal; lvs. darkest green winter color of all Bennett Hybrids, very similar to but not as round as leaves of ROTUNDIFOLIA; male; Greenbrier Control No. 4909; sel. and introd. on or before 1970 by Greenbrier Farms. (Bennett Hybrid Group). = NIGRA.

ANGELICA (Angelica Nurs., Mohnton, Pennsylvania, cat. p. 31. fall 1968-sp. 1969) - low, spreading; lvs. narrow; very hardy. Ibid., Kennedyville, Maryland, cat. p. 24. fall 1971-sp. 1972 - lvs. long; new sel. Ibid., cat. p. 49. fall 1975-sp. 1976 - new sel. so popular it was sold out when first introd. Illegitimate, since the name ***I. opaca*** **ANGELICA**, published in 1956, has priority.

ANGYO New name. Erected to replace the name KIIRO-FUKURIN. Branches spreading, height about equal to spread, growth rate moderate; lvs. narrowly elliptic, pointed at both ends, to 2.9 cm long, 1 cm wide, 3-8 minute forward-pointing crenations on each margin, more commonly larger near the tip; petioles to 0.4 cm long; yellow variegations from all yellow to irregular shaped patches of variable size in any portions of the blade, but more often at the tip; male; hardy USDA zone 7. This is a renaming of KIIRO-FUKURIN, PI 236021, NA 25700, coll. by J. Creech at Nakada Nurs., Angyo, Japan 1956. KIIRO-FUKURIN is a common Japanese name, in Romanji, meaning yellow margin. It cannot be recognized as a legitimate cultivar name. This new name commemorates the city of Angyo, Japan, the location of Nakada Nursery, where the plant was first obtained. The plant has been in cultivation in Japan for possibly more than 100 years. (Variegated Group). = KIIRO-FUKURIN. The new name **ANGYO** is published and documented here for the first time.

ANNA FEILE (Atlantic Nurs., Dix Hills, New York, advert. in Composite Stock List, Long Island, New York, p. 32. 1986, without descr.).

ARGENTEA VARIEGATA (Kissena Nurs., Parsons & Sons, Flushing, New York, cat. p. 85. 1887) - "Suffused with bright golden color." Name dubious when compared to description. W. Goldring, Garden

(London) 30:129. 1887 - mentioned a variegated form with silver markings, but did not name it. (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **ARGENTEA VARIEGATA** has priority.

AUREA (H.J. Weber & Sons Nurs., Nursery, Missouri, cat. p. 62. 1912) - as *folis aureis*; lvs. golden variegated; obtained from Holland. (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **AUREA** published in 1856 has priority. = ? ROTUNDIFOLIA AUREA.

var. *aureo-variegata* (W. Goldring, Garden (London) 31:129. 1887) - "lvs. mottled with bright golden yellow which with the green makes an extremely bright little shrub, especially in winter." L. Dippel, Handb. Laub., p. 509. 1892 - gold colored; with syn. ***I. fortunei aureo-variegata***. A. Rehder, Mitt. Deut. Dendr. Gesel. 17:161. 1908 - in syn. of *f. luteo-variegata* (Regel) Rehder; additional syns. listed were var. *luteo-variegata* Regel, "f." *variegata* Nicholson, and ***I. fortunei*** f. *aureo-variegata* Schelle. Idem, Man. Cult. Trees & Shrubs, p. 545. 1927 - with syn. var. *variegata* Bean. Idem, Biblio. Trees & Shrubs, p. 402. 1949 - with syn. var. *variegata* Nicholson. S.-y. Hu, Jour. Arnold Arb. 49:325. 1949 - follows Rehder's syn. with the additional syn. of var. *variegata* Dallimore. B. Boom, Nederl. Dendr., 3d ed., p. 310. 1949 - in syn. of var. *luteo-variegata* Regel, additional syn. of var. *fortunei* Hort. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960 - as AUREO-VARIEGATA based on Goldring's var. *aureo-variegata*. Invalid as a bot. var., since it was based on a cultivated plant. = AUREO-VARIEGATA, f. *aureo-variegata* of Schelle, VARIEGATA of Hillier, not **LUTEO-VARIEGATA** of Boom.

f. *aureo-variegata* (L. Beissner, E. Schelle, and H. Zabel, Handb. Laub.-Ben., p. 291. 1903, as ***I. crenata*** f. *aureo-variegata* or ***I. fortunei*** f. *aureo-variegata*, without descr.). = AUREO-VARIEGATA, var. *aureo-variegata* Goldring, VARIEGATA of Hillier.

AUREO-VARIEGATA (B. Boom, Nederl. Dendr., 4th ed., p. 337. 1959) - like LATIFOLIA but lvs. spotted or marbled yellow; cult. 1887. Ibid., p. 323. 1965 and 1972 - lvs. large and rounded like those of ROTUNDIFOLIA and LATIFOLIA. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. 1960 - lvs. 2-4 cm long, gold spotted or marbled; cult. in England, 1887. Based on Goldring's var. *aureo-variegata*, which has been variously placed in syn. of several other names. Descriptions by Boom and Krüssmann indicate that AUREO-VARIEGATA is a different clone from **LUTEO-VARIEGATA**. Although more descriptive information would be helpful, the leaves of AUREO-VARIEGATA are said by Boom to be larger than those of **LUTEO-VARIEGATA**. The leaves of AUREO-VARIEGATA are also said to be mottled or blotched as well as spotted, while the leaves of LUTEO-VARIEGATA are described only as being spotted. We have observed that both leaf size and spotted variegations in leaves of ***I. crenata*** may be unstable and may vary with climate and culture on

the same plant and may vary between plants of the same clone. (Variegated Group). Illegitimate, since the name ***I. aquifolium AUREO-VARIEGATA*** has priority. = var. *aureo-variegata* Goldring, f. *aureo-variegata* Schelle, ? MICROPHYLLA AUREO-VARIEGATA, ROTUNDIFOLIA AUREO-VARIEGATA, VARIEGATA of Hillier, not **LUTEO-VARIEGATA**.

BEEHIVE (G. Eisenbeiss and T. Dudley, Jour. Holly Soc. Amer. 3(1):32. 1985) - Holly Soc. Amer. Reg. No. 11-84 by E. Orton, Jr. E. Orton, Jr., Chicago Bot. Gdn. Res. Symp., p. 5. March 22-23. 1982 - dense, compact; lvs. very small, light green; male; orig. from a cross made 1965 at Rutgers—The State University, New Brunswick, New Jersey, by E. Orton, Jr., of **CONVEXA × STOKES**; the only plant sel. for introd. from among 21,000 sdlgs. Idem, p. 6. - refers to GREEN CLOUD, which is the original but only tentative name for BEEHIVE.

(Bennett Hybrid Group) C. Tuley in H. Dengler, Amer. Nurseryman 121(10):9. 1965, and C. Tuley, Proc. 38th Meet. Holly Soc. Amer., p. 1-3. 1965 - orig. from a cross made by interplanting of **CONVEXA** × ROTUNDIFOLIA in 1945 by E. Bennett at Greenbrier Farms Nurs., Chesapeake, Virginia. **ALLEN SEAY**, BENNETTII, COLUMNARIS, **BENNETT'S COMPACT**, COMPACTA of Tingle, CONVEXA MALE, FASTIGIATA, HADLOCK, HOWARD, HOWARD COMPACTA, MAJOR, **MAXWELL**, NIGRA, **OLEAFERA**, RECURVIFOLIA, SELENE, **VASEYI**, and WILLOW LEAF were named from an original sdlg. population of 250,000-300,000. Some of these have been extremely successful in the nursery trade.

BENNETTII (Greenbrier Farms, Chesapeake, Virginia, cat. p. 37. 1985) - semiupright; lvs. dark green. (Bennett Hybrid Group). Illegitimate, since the name is in Latin form.

BENNETT'S COMPACT (E. Dubose Nurs., Huntsville, Alabama, advert. in Amer. Nurseryman 152(12):83. 1980, without descr., as BENNETT'S COMPACTA). C. Parkerson in Combined Proc. Intern. Plt. Propag. Soc. 80:483. 1980, without descr., as BENNETT'S COMPACTUM. Tingle Nurs., Pittsville, Maryland, cat. p. 19. fall 1956-sp. 1957, as COMPACTA, with descr. - broad, glove-shaped, compact, needs no trimming; lvs. very dark green. H. Dengler, Amer. Nurseryman 121(10):9. 1965 - upright, lvs. slightly convex; male. Probably the most important commercial cultivar of all ***Ilex*** at this time. (Bennett Hybrid Group). Legitimately published here by choosing the most acceptable name, correcting the orthography, and accepting the descr. of the earliest published but illegitimate commercial synonym COMPACTA of Tingle Nurs. = COMPACTA (Bennett Hybrid Group), CONVEXA COMPACTA of Lovett and Cartwright; not CONVEXA COMPACTA of Wayside.

BILOXI (Cartwright Nurs., Collierville, Tennessee, advert. in Amer. Nurseryman 104(7):18. 1956, without descr.). Robbins Nurs., Willard,

North Carolina, cat. p. 2. 1963-64 - upright, bushy, medium growth; lvs. excellent dark green; hardy; "new."

BIM (Piney Ridge Nurs., Bostic, North Carolina, cat. p. 2. August 1984, without descr.). = ? BIMI.

BIMI (Magnolia Gdns. Nurs., Charleston, South Carolina, cat. p. 9. 1976, without descr.). = ? BIM.

BIR (Piney Ridge Nurs., Bostic, North Carolina, cat. p. 2. August 1983, without descr.). = ? **BIRMINGHAM**.

BIRMINGHAM (G. Eisenbeiss and T. Dudley, Jour. Holly Soc. Amer. 2(2):10. 1984) - sel. from among 1,000 sdlgs. purchased by Styer Nurs., Concordville, Pennsylvania and introd. 1980; low growing, mound shape; lvs. lanceolate to broadly lanceolate; female; Holly Soc. Amer. Reg. No. 3-84 by J. Franklin Styer, West Chester, Pennsylvania. = ? BIR.

BLACK BEAUTY (Girard Nurs., Geneva, Ohio, cat. fall 1968) - lvs. dark green, glossy. Ibid., cat. p. 26. 1969 - compact, low growing; very hardy; a Girard sel.; male. Ibid., cat. p. 26. 1972 - sel. most of all for hardiness. Illegitimate, since the name ***I. opaca*** **BLACK BEAUTY** has priority.

BORDER GEM (Girard Nurs., Geneva, Ohio, cat. fall 1968) - low growing. Ibid., cat. p. 26. 1969 - dense; very hardy; a Girard sel. J. McDaniel, Holly Soc. Amer. Let. 66:12. 1980 - male; hardy in Urbana, Illinois; orig. at Girard Nurs.

BRADDOCK (Southside Nurs., Richmond, Virginia, cat. p. 2. fall 1960-sp. 1961, without descr.). = **BRADDOCK HEIGHTS**.

BRADDOCK HEIGHTS (Wister et al., Holly Soc. Amer. Bul. 6:23. 1953, without descr.) - sel. at Braddock Heights, Maryland, 1935, by H. Hohman, Kingsville Nurs., Kingsville, Maryland. Valuable in landscape as a tall, narrow screening plt. = BRADDOCK.

BRUNS (J. Bruns, Baumschulen, Bad Zwischenahn, West Germany, cat. p. 130. 1959-60) - broad compact; winter hardy form; recommended for specimen planting and hedges.

(Bullata Group) (Hortus Third, p. 591. 1976) - "best considered a large group of clones generally characterized by bullate, convex lvs." Rejected here as a group name on the basis that the cultivar names included in this group are not listed in Hortus Third. While there are many cultivars with convex and bullate leaves, this characteristic is not always clear-cut. Leaf variations from strongly convex to flat occur between the cultivars. Furthermore, the group name Bullata is derived from f. *bullata* Rehder, which was invalidated many years ago [cf. A. Rehder, Jour. Arnold Arb. 12:(errata and addenda) 1931]. To avoid confusion the word "bullata" in any form should not be used in the cultivar nomenclature of ***I. crenata***, except in syn.

f. *bullata* (A. Rehder, Jour. Arnold Arb. 12(1):73. 1931, and 12(4):309. 1931) - upright shrub with spreading branchlets; lvs. oval or obovate to

oblong-oval, obtuse at the tip, convex and very shiny; fr. black, sometimes 3 in a cyme; cult. in Arnold Arb. (Acces. no. 20069) from a plant sent from Japan in 1919 by E.H. Wilson as ***I. mariesii***; distributed by Arnold Arb. as ***I. mariesii*** and ***I. nummularia*** [this plant does not represent cultivars **MARIESII** or **NUMMULARIA**]. At the Arnold Arb. it proved hardier than typical ***I. crenata*** and hardier than ***I. crenata*** var. *microphylla* Maximowicz. Idem, Jour. Arnold Arb. 12(4):309, and in the errata and addenda, 1931 - Rehder changed his f. *bullata* back to f. *convexa* (Makino) Rehder. = **CONVEXA**, BULLATA, BULLATA CONVEXA of Gresham, BUXIFOLIA of Tingle, var. *convexa* Makino, f. *convexa* (Makino) Rehder.

BULLATA (K. Yashiroda, Ltd., Tonosho, Kyoku, Kanagawa-Ken, Japan, cat. p. 5. 1931-32) - dwarf; lvs. convex, dark green. This name is still frequently seen in U.S. nurseries. It seems very likely that Yashiroda's (1931-32) *bullata* is the same plant that Rehder (1931) named as f. *bullata*. = **CONVEXA**, f. *bullata* Rehder, BULLATA CONVEXA of Gresham, BUXIFOLIA of Tingle, var. *convexa* Makino, f. *convexa* (Makino) Rehder.

BULLATA CONVEXA (Gresham's Nurs., Richmond, Virginia, advert. in Amer. Nurseryman 125(7):41. 1967, without descr.). This name is listed twice in the Gresham advert.; one listing noted it as male (= CONVEXA MALE - Bennett Hybrid Group and BULLATA CONVEXA MALE of Gresham). The other listing noted it as female (= **CONVEXA**, f. *bullata* Rehder, BUXIFOLIA of Tingle, var. *convexa* Makino, f. *convexa* (Makino) Rehder).

BULLATA CONVEXA COMPACTA (Gresham's Nurs., Richmond, Virginia, advert. in Amer. Nurseryman 235(37):37, 41. 1967, without descr.). = **BENNETT'S COMPACT**, BENNETT'S COMPACTA, COMPACTA (Bennett Hybrid Group), CONVEXA COMPACTA of Lovett.

BULLATA CONVEXA MALE (Gresham's Nurs., Richmond, Virginia, advert. in Amer. Nurseryman 125(7):37. 1967, without descr.). = BULLATA CONVEXA of Gresham when noted as male, CONVEXA MALE (Bennett Hybrid Group).

BULLATA GREEN CONE (Holly Creek Nurs., Keller, Virginia, advert. in Amer. Nurseryman 128(5):66. 1968) - strictly upright; mutation of **CONVEXA**, not a sdlg. Illegitimate, since the name is in Latin form. = **GREEN CONE**.

BULLATA NO. 151 (J. Vestal & Son, Little Rock, Arkansas, cat. p. 3. 1963, without descr.). = 151.

BULLATA SUPREME (Jackson & Perkins Co., Perkins - deWilde Div., Shiloh, New Jersey, cat. p. 26. 1965-66) - low, spreading; lvs. broadly oval, convex, very glossy, dark green. Illegitimate, since the name is in Latin form.

BUNTING (Bunting's Nurs., Selbyville, Delaware, cat. p. 25. sp. 1961, without descr.).

BUTLER (Butler Nurs., Fayetteville, North Carolina, cat. p. 8. 1967-68, without descr., as one of their introd.). Idem, cat. p. 12. sp. 1991, as BUTLERI - discovered by Gorden Butler; upright, habit similar to STEED'S with a "loose fullness"; lvs. lustrous; fr. yellow; hardy to southern Pennsylvania. (Watanabeana Group).

BUTTERBALL (Cannon Plants, Greenwood, Delaware, advert. in Amer. Nurseryman 139(6):82. 1974, without descr.). Ibid., Price list, fall 1977 - yellow fr., orig. from sdlgs. distrib. by USDA Plt. Intro. Sta., Glenn Dale, Maryland; named by Cannon; sister sdlg. of **FORTY NINER**, **HONEYCOMB**, **IVORY HALL**, **IVORY TOWER**, SIR ECHO, **STARGLOW**. Illegitimate, since descr. is inadequate. (Watanabeana Group).

BUXIFOLIA (Andorra Nurs., Conshohocken, Pennsylvania, cat. p. 17. 1912, without descr.). Thought to be Andorra's own sel. Illegitimate, since the name ***I. aquifolium*** **BUXIFOLIA** has priority.

BUXIFOLIA (Cottage Gdns., Queens Village, New York, cat. p. 11. 1931) - dwarf, irregular branched; lvs. small, boxlike. Illegitimate, since the name ***I. aquifolium*** **BUXIFOLIA** has priority.

BUXIFOLIA (Tingle Nurs., Pittsville, Maryland, cat. p. 32. sp. 1935, without descr.) - in syn. of **CONVEXA**. Ibid., cat. p. 42. fall 1935 - BULLATA and BUXIFOLIA in syn. of **CONVEXA**. = **CONVEXA**, f. *bullata* Rehder, var. *convexa* Makino, f. *convexa* (Makino) Rehder.

BUXIFOLIA (Tom Dodd Nurs., Semmes, Alabama, cat. p. 16. 1954-55) - columnar, very hardy; male. Orig. as sdlg. of **CONVEXA** about 1946; sel. 1950; named and introd. by Tom Dodd Nurs. 1954. D. Wyman, Arnoldia 20(7):46. 1960, and Amer. Nurseryman 112(9):23. 1960 - of Tom Dodd Nurs.; "name which in its varietal form has been determined as a syn. of *convexa*" [= **CONVEXA**]. It is unclear whether Wyman intended "his" var. to be ranked a botanical variety or cultivar. There is no valid published botanical rank of ***I. crenata*** var. *buxifolia*. The bot. var. *convexa* Makino (1928) was reduced to f. *convexa* (Makino) Rehder in 1931 and is now interpreted as cultivar **CONVEXA**. Cultivar BUXIFOLIA of Dodd is a different clone that does not fit the description of **CONVEXA** and is not synonymous. Further, ***I. crenata*** BUXIFOLIA is illegitimate at the cultivar rank, since the name ***I. aquifolium*** **BUXIFOLIA** has priority. ***I. crenata*** BUXIFOLIA of Dodd, of Andorra, of Cottage Gardens, and of Towson are all different plants of independent origin. Only ***I. crenata*** BUXIFOLIA of Tingle can be equated to **CONVEXA**.

BUXIFOLIA (Towson Nurs., Towson, Maryland, cat. p. 37. 1930) - columnar; lvs. broad, dark green; female. Orig. as sdlg. in Towson Nurs. Named and introd. 1924-25 by Towson Nurs. Illegitimate, since the name ***I. aquifolium*** **BUXIFOLIA** has priority.

CANTON (Wister et al., Holly Soc. Amer. Bul. 6:24. 1953, without descr.) - introd. about 1947 by Styer's Nurs. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - irregular, medium, conical; lvs. small, light green. Sdlg. orig. about 1932; sel. and named by Styer's Nurs., Concordville, Pennsylvania.

CAPE FEAR (Robbins Nurs., Willard, North Carolina, cat. sp. 1972, without descr.). Ibid., cat. p. 2. sp. 1978 - upright, medium bulk; lvs. dark green; broadly elliptic; male.

CAREFREE (G. Eisenbeiss and T. Dudley, Holly Soc. Amer. Let. 72:6. 1982) - sdlg. sel. from PI 275853 (1961) as ***I. crenata*** subsp. *radicans*; dwarf, mound shape, open branched; female; Holly Soc. Amer. Reg. 4-82 by D. Bradshaw and L. Schmid, Clemson University, Clemson, South Carolina. This is a selection of ***I. crenata*** var. ***paludosa***.

CAROLINA UPRIGHT (Robbins Nurs., Willard, North Carolina, cat. p. 3. sp. 1978, without descr.). Holly Soc. Amer. Let. 75:12. 1983, without descr. Male. Upright pyramidal; lvs. dark green, broadly elliptic, glossy. Margins crenulate. By providing a descr., the authors are the first to legitimately publish the name **CAROLINA UPRIGHT**.

CENTENNIAL (C. Orndorff, Nurserymen's News, Coop. Extension Service, University of Maryland, p. 12, Nov.-Dec. 1987) - upright, suitable for tall, narrow to medium width screening or hedges.

CHANGSHA (Wister et al., Holly Soc. Amer. Bul. 6:24. 1953, without descr.) - introd. about 1947 by Styer's Nurs. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - upright, irregular, slow growing; lvs. quite small, dark green; female. Sdlg. orig. about 1932. Sel. and named by Styer's Nurs., Concordville, Pennsylvania.

CHENGTU (Wister et al., Holly Soc. Amer. Bul. 6:24. 1953, without descr.) - introd. about 1947 by Styer's Nurs., Concordville, Pennsylvania. Clarendon Gardens Nurs., Pinehurst, North Carolina, cat. 1957, without descr., as CHANGTU. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - irregular, slow growing; lvs. small, dark green; female. Sdlg. orig. about 1932. Sel. and named by Styer's Nurs.

CHEROKEE (Tennessee Valley Nurs., Winchester, Tennessee, cat. p. 10. fall 1963) - new; upright; good foliage. Commercial Nurs., Dechard, Tennessee, cat. p. 6. 1975 - lvs. small; no fruit. Presumably male. A very marginal descr. = UPRIGHT CHEROKEE.

CHESAPEAKE (Chesapeake Nurs., Salisbury, Maryland, cat. fall 1977-sp. 1978) - new; upright, pyramidal; lvs. glossy, deep green, convex.

COLE'S HARDY (Cole Nurs., Painesville, Ohio, cat. p. 44. 1956, as COLE'S HARDY TYPE) - upright; very hardy.

COLUMNARIS (Greenbrier Farms Nurs., Norfolk, Virginia, cat. p. 39. 1971-72, without descr.) - columnar; lvs. dark green; female. Sel. and introd. by Greenbrier Farms, Greenbrier's Control No. 4923. (Bennett Hybrid Group). Illegitimate, since the name is in Latin form and the name ***I. opaca*** COLUMNARIS (= ***I. opaca*** **OLD FAITHFUL**) has priority.

COMPACT GREEN GEM (R. Self, Proc. South. Nurs. Assn. Res. Conf. Ann. Rpt. 23:186-87. 1978, without descr.).

COMPACTA (Anonymous, Proc. 3d Meet. Holly Soc. Amer., p. 8. 1948, without descr.) - list of ***Ilex*** at Rutgers—The State University, New Brunswick, New Jersey. Possibly a sel. by Stokes Nurs., Butler, Pennsylvania. Illegitimate, since the name ***I. aquifolium*** **COMPACTA** has priority. Not a Bennett hybrid.

COMPACTA (E. Orton, Jr., Holly Soc. Amer. Let. 25:16. 1965, without descr.) - rec. from deWilde's Rhodo-Lake Nurs. by Rutgers—The State University, New Brunswick, New Jersey. = **SCHWOEBEL'S COMPACT**, SCHWOEBELI, SCHWOEBEL'S COMPACTA.

COMPACTA (E. Orton, Jr., Holly Soc. Amer. Let. 25:16. 1965, without descr.) - rec. from John Vermeulen and Son Nurs. by Rutgers—The State University, New Brunswick, New Jersey. = **HOOGENDORN**, COMPACTA HOOGENDORN.

COMPACTA (Tingle Nurs., Pittsville, Maryland, cat. p. 19. fall 1956-57) - broad, glove-shape, compact, needs no trimming; lvs. very dark green; Bennett Hybrid. H. Dengler, Amer. Nurseryman 121(10):9. 1965 - upright; lvs. slightly convex; male. Commercially, probably the most important cultivar of ***Ilex*** at this time. (Bennett Hybrid Group). Illegitimate, since the name ***I. aquifolium*** **COMPACTA** has priority. This entry provides the earliest published reference and description on which the name **BENNETT'S COMPACT** was based. = **BENNETT'S COMPACT**, BENNETT'S COMPACTA, BULLATA CONVEXA COMPACTA, CONVEXA COMPACTA of Cartwright and of Lovett, ? SPREADING COMPACTA.

COMPACTA (Wister et al., Holly Soc. Amer. Bul. 6:25. 1953, without descr.) - orig. Holland 1917; then reported about 1920 at Boulevard Nurs., Newport, Rhode Island. Illegitimate, since the name ***I. aquifolium*** **COMPACTA** has priority.

COMPACTA HOOGENDORN (John Vermeulen Nurs., Neshanic Sta., New Jersey, cat. p. 2. 1961) - habit low, compact; lvs. bright. Illegitimate, since the name is in Latin form. = **HOOGENDORN**, COMPACTA of Vermuelen.

COMPACTA NANA #1 (John Vermeulen & Son Nurs., Neshanic Sta., New Jersey, cat. p. 11. fall 1958-sp. 1959) - compact; lvs. small, bright green. Renamed **GLORY** in 1962 by J. Vermeulen. = **GLORY**, COMPACTA NO. 2, COMPACTA #2, GREEN GLORY.

COMPACTA NO. 2 (John Vermeulen & Son, Neshanic Sta., New Jersey, cat. fall 1958-sp. 1959, without descr.). H. Flint and C. Hubbuch, Amer. Nurseryman 169(3):154. 1989, as syn. of **GLORY**. = **GLORY**, COMPACTA NANA #1, COMPACTA #2, GREEN GLORY.

COMPACTA #2 (John Vermeulen & Son Nurs., Neshanic Sta., New Jersey, cat. p. 11. sp. 1960) - like ***Cotoneaster horizontalis*** but more upright; lvs. small. Illegitimate, since the name is in Latin form. =

GLORY, COMPACTA NANA #1, COMPACTA NO. 2, GREEN GLORY.

CONNERS (E. Orton, Jr., Holly Soc. Amer. Let. 25:16. 1965) - upright, compact; lvs. roundish; young stems reddish winter color. Volunteer sdlg. sel. made about 1946 at J. Schmit's Nurs., Millburn, New Jersey, by C. Conners of Rutgers—The State University, New Brunswick, New Jersey. Grown at Rutgers as ***crenata*** #1, and by E. Wyckoff, Bedminster, New Jersey, who offered it for sale sometime before 1954. Narrow, upright, columnar, about 3 times taller than wide, rounded top. Thought to be hardy to -5°F.

var. *convexa* (T. Makino, Jour. Jap. Bot. 5:27. 1928) - lvs. small, dense, elliptical, obtuse at apex, shortly obtuse-cuneate at base, depressed, serrate toward the apex, "concavoconvex" toward the upper surface, petiole short; habitat Setsu Province, Arima, Japan; coll. 1928 from a garden. Although it was reduced to the rank of botanical forma by Rehder, Makino's plant should not be recognized at any botanical rank, since it was from cult. origin and, therefore, is a cultivar. = **CONVEXA**, BULLATA, f. *bullata* Rehder, BUXIFOLIA of Tingle, f. *convexa* (Makino) Rehder.

f. *convexa* (Makino) Rehder (A. Rehder, Jour. Arnold Arb. 12(4):Errata and Addenda 309. 1931) - Rehder corrected his previous entry [Idem, Jour. Arnold Arb. 12(1):73. 1931], which described f. *bullata* Rehder as new. Rehder recognized, in the "Errata and Addenda," that his f. *bullata* was synonymous with ***I. crenata*** var. *convexa* Makino [= **CONVEXA**]. However, he complicated the issue in 1931 (p. 309) by incorrectly citing var. *convexa* Makino as f. *convexa* Makino. By reducing var. *convexa* Makino to *forma* rank, the 1931 p. 309 Rehder entry should have been listed as ***I. crenata*** f. *convexa* (Makino) Rehder. Later [in Biblio. Trees & Shrubs p. 402. 1949], A. Rehder recognized the error in his 1931 "Errata" and indicated f. *convexa* (Makino) Rehder was "*grad. nov.*" [= new change in rank]. See f. *bullata* for descr. = ***CONVEXA***, BULLATA, f. *bullata* Rehder, BUXIFOLIA of Tingle, var. *convexa* Makino.

CONVEXA (T. Makino, Jour. Jap. Bot. 5:27. 1928, as var. *convexa*) - named from a plt. in cult. A. Rehder, Jour. Arnold Arb. 12(1):73. 1931, and idem, Jour. Arnold Arb. 12(4):309. 1931, as f. *convexa*. See var. *convexa* Makino and f. *convexa* (Makino) Rehder for descr. and convoluted nomenclatural history of this female clone. Since it orig. in cult., f. *convexa* is interpreted by the authors of this checklist as a cultivar. At the Arnold Arboretum **CONVEXA** proved hardier than ***I. crenata*** f. ***crenata*** and f. ***microphylla.*** D. Wyman, Amer. Nurseryman 27(9):116. 1960, and idem, Arnoldia 20(7):41. 1960, as *convexa* - original plt. introd. 1919 into American Gardens by Arnold Arb.; through distrib. by Arnold Arboretum **CONVEXA** became popular in the nursery trade. The earliest U.S. nursery cat. entries of this name, at any rank, are as follows: Bay State Nurs., North Abington,

Massachusetts, cat. 1934; and Tingle Nurs., Pittsville, Maryland, cat. fall 1934. The names **CONVEXA** and BULLATA have been confused with each other and are thought by some to be two distinct cultivars, although in fact they are the same clone. The name BULLATA originated from f. *bullata* Rehder, and although corrected by Rehder to f. *convexa* in the same publication in the same year, the name BULLATA became so entrenched that it is still seen in nursery catalogs. = BULLATA, f. *bullata* Rehder, BUXIFOLIA of Tingle, var. *convexa* Makino, f. *convexa* (Makino) Rehder.

CONVEXA AUREA (Collins Reid Nurs., Aldergrove, British Columbia, Canada, in T.Y. Cole, Woody Plant Source List, Ornamentals Section, Ottawa Research Station, Agriculture Canada, p. 29. 1982, without descr.).

CONVEXA COMPACTA (Lovett's Nurs., Colts Neck, New Jersey, cat. p. 25. 1966-sp. 1967, without descr.). Cartwright Nurs., Collierville, Tennessee, advert. in Amer. Nurseryman 124(12):6. 1966, without descr. Illegitimate, since the name is in Latin form and is a later synonym of COMPACTA. = COMPACTA (Bennett Hybrid Group), not CONVEXA COMPACTA of Wayside.

CONVEXA COMPACTA (Wayside Gardens, Mentor, Ohio, cat. p. 150. 1966) - dwarf, compact, and hardiest form of **CONVEXA**. Illegitimate, since the name is in Latin form. Not **CONVEXA**, not COMPACTA of (Bennett Hybrid Group), and not CONVEXA COMPACTA of Lovett.

CONVEXA HORIZONTALIS (John Dieckmann & Sons, Wheeling, West Virginia, cat. p. 8. 1980) - horizontal branching; lvs. like **CONVEXA**. Illegitimate, since the name is in Latin form.

CONVEXA MALE (Robbin's Nurs., Willard, North Carolina, cat. p. 3. 1963-64) - growth and appearance exactly like those of **CONVEXA**; without fruit. C. Tuley in H. Dengler, Amer. Nurseryman 121(1):88. 1965 and C. Tuley, Proc. 38th Meet. Holly Soc. Amer. p. 2. 1965, as CONVEXA (male) - similar to **CONVEXA** and as good in every way, but without objectionable heavy fruiting; male; (Bennett Hybrid Group). Illegitimate, since the name is in Latin form.

CONVEXA NANA (Strander Évergreen Nurs., Seattle, Washington. cat. p. 11. 1951) - dwarf, moundlike growth.

CONVEXA TORULOSA (Bobtown Nurs., Melfa, Virginia, cat. p. 3. sp. 1991, without descr.). = **ROCKY CREEK**.

CONVEXA UPRIGHT (J. Dickerson & Assoc., advert. in Amer. Nurseryman 144(5):48. 1976, without descr.) - listed in auction of Millcreek Landscape Div., Newark, Delaware. Pyramidal; lvs. shiny, convex. Did not orig. from Millcreek but was named there from a plant reputedly obtained from Greenbrier Farms Nurs., Norfolk, Virginia, about 1956. Thought to have been a USDA plant that Greenbrier was testing as one of the Glass selections. Does not fit the descr. of **GLASS**. More likely, it was the early Bennett Hybrid called FASTIGIATA.

Illegitimate, since the name is in Latin form. (Bennett Hybrid Group). = FASTIGIATA of (Bennett Hybrid Group).

CONVEXA XANTHOCARPA (J. Dickerson & Assoc., advert. in Amer. Nurseryman 144(5):48. 1976, without descr.) - listed in auction of Millcreek Landscape Div., Newark, Delaware. Illegitimate, since the name is in Latin form and a descr. is lacking. (? Watanabeana Group).

COULTERI (Mitsch Nurs., Aurora, Oregon, cat. p. 17. fall 1978-sp. 1979, as new listing, without descr.). Illegitimate by lack of descr. and name in Latin form.

var. ***crenata*** The automatic type or typical botanical variety. It is used in current plant taxonomy and nomenclature as a standard by which newly proposed botanical varieties are compared. For definition of a botanical variety see section on Nomenclatural History in this book. The descr. for var. ***crenata*** is identical to that provided for ***I. crenata*** on p. 4 of the section entitled "Description and Status of ***Ilex crenata***." = var. *typica*.

f. ***crenata*** (S.-y. Hu, Amer. Hort. Mag. 49(4):198. 1970) - the typical wild form with globose habit, obovate-oblong lvs., plain on both surfaces, 3/4"-1" long, 1/2" wide. This name as a *forma* is included only because it appears in many horticultural publications. By current botanical nomenclature, there must be a type *forma* for each species with which to compare other botanical *formae* erected within the same species. ***Ilex crenata*** is quite variable in habit and leaf form in the wild, and considerable variations can occur among sdlg. populations from any parent plant. Most cultivars have originated as sdlg. selections and a few by mutations. However, modern usage does not require the use of an authority for a "typical" forma, varietas, etc. = var. ***crenata***, var. *typica*.

CRESCENT (G. Eisenbeiss and T. Dudley, Holly Soc. Amer. Let. 72:6. 1982) - sdlg. sel. from PI 276112, (1961) as ***I. crenata*** subsp. *radicans*; dwarf, mound-shaped, compact, fastigiate branching, fine texture; male; Holly Soc. Amer. Reg. No. 5-82 by D. Bradshaw and L. Schmid, Clemson University, Clemson, South Carolina. This is a selection of ***I. crenata*** var. ***paludosa***.

CURTIS ASKEW (Tom Dodd Nurs., Semmes, Alabama, cat. p. 11. 1967-68, without descr.). Sel., named, and introd. by Tom Dodd, Jr.

DAN'S GOLD New name. Spreading, vigorous; lvs. elliptic with pointed tips, irregularly and prominently yellow spotted and blotched; discov. as a mutation of MICROPHYLLA and introd. about 1980 by Dan Fenton, American Holly Products, Milville, New Jersey. Since the earliest published name VARIEGATED MICROPHYLLA for this plant is illegitimate, this later but previously unpublished syn. **DAN'S GOLD** is erected as the legitimate name. Published here for the first time. = GOLDEN MICROPHYLLA, VARIEGATED MICROPHYLLA.

DAUBER COMPACTA (Dauber Nurs., York, Pennsylvania, cat. p. 10. sp. 1959, without descr.). Illegitimate, since the name is in Latin form

and descr. is lacking.

DELAWARE DIAMOND New Name. Sdlg. sel. and distrib. in late 1970's by Norman Cannon, Greenwood, Delaware, under the unpublished named ELFIN. Not to be confused with the name ***I. opaca*** **ELFIN**, which was published in 1952. Grown commercially by Environmentals, Cutchogue, New York, as ELFIN. Renamed **DELAWARE DIAMOND** by Cannon, since the name ELFIN is preoccupied by ***I. opaca*** **ELFIN**. Very dwarf, mound shape with spreading branches; lvs. elliptic, very small; male; excellent for rock gardens. Published here for the first time. = ***I. crenata*** ELFIN, NYMPH of CANNON.

DENSE (Gerard Klyn, Mentor, Ohio, cat. p. 4. 1958, without descr.) - "Watch for 1959-60 introd." = **MENTOR DENSE**, ? DENSA.

DIVARICATA (Tom Dodd Nurs., Semmes, Alabama, cat. p. 4. 1955-56) - spreading like Pfitzer juniper; not as hardy as BUXIFOLIA of Dodd. Sel. 1950, introd. 1955 by Tom Dodd Nurs.

DODD (Robbins Nurs., Willard, North Carolina, cat. p. 2. sp. 1978) - similar to **CONVEXA**, but more upright; rapid, heavy growth; lvs. convex.

DODD'S SPREADER (E. Orton, Jr., Holly Soc. Amer. Let. 25: 17. 1965, without descr.) - grown at Rutgers—The State University, New Brunswick, New Jersey. It was grown before 1965 by Kingsville Nurs., Kingsville, Maryland.

DUNCAN New name. Originated by C. Rowland, Evergreen Landscape Service, Athens, Georgia, before 1962; semispreading, but not quite as spreading as **REPANDENS**; lvs. very small but larger than **HELLERI** lvs.; male. The authors are the first to publish the name **DUNCAN**; documentation is provided.

DWARF CONE (Cannon Plants, Greenwood, Delaware, cat. p. 1. fall 1974, without descr.). Ibid., cat. p. 2. sp. 1975 - new; male. G. Eisenbeiss and T. Dudley, Proc. 57th Meet. Holly Soc. Amer., p. 13. 1980 - Holly Soc. Amer. Reg. No. 3-80 by N. Cannon; upright, slow growing; lvs. glossy, black green, tip recurved on new growth; male; sel. 1964 from an F_2 cross of **CONVEXA** × MICROPHYLLA made by Cannon (Cannon #664); named and introd. by Cannon.

DWARF PAGODA (E. Orton, Jr., Proc. 47th Meet. Holly Soc. Amer., p. 4. 1970) - extremely dwarf; orig. sel from a population of 800 sdlgs. from a cross of **MARIESII** × **JOHN NOSAL** made in 1965 by E. Orton, Jr., at Rutgers—The State University, New Brunswick, New Jersey; less than 14" tall at 5 yrs. old even under high nutrition and intensive care; recommended for bonsai and rock gardens. H. Dengler, Amer. Nurseryman 132(12):83. 1970, without descr. - parentage given erroneously as **CONVEXA** × **STOKES**. G. Eisenbeiss and T. Dudley, Proc. 49th Meet. Holly Soc. Amer., p. 23. 1972 - Holly Soc. Amer. Reg. No. 10-72, 1972 by E. Orton, Jr.; habit irregular but essentially fastigiate,

internodes short, giving a heavy foliage effect; lvs. orbicular like **MARIESII** lvs. but much smaller; female; hardy in USDA zone 6b; sister sdlg. to GREEN DRAGON. (Nummularia Group).

EDWIN DOZIER (E. Orton, Jr., Holly Soc. Amer. Let. 25: 17. 1965, as EDWARD B. DOZIER, without descr.) - grown by W. Frierson, Danmark, South Carolina. Tom Dodd Nurs., Semmes, Alabama, cat. p. 12. 1966-67, as EDWIN B. DOZIER, without descr.). Ibid., cat. p. 7. 1969-70, as **EDWIN DOZIER**, without descr. Compact, spreading with distinct horizontal branching, growing wider than tall; growth rate moderate but faster than that of **LOYCE NELSON**; lvs. small but larger than **LOYCE NELSON** lvs.; male. Sel. 1956 and circulated for testing as TD 56-342 by Tom Dodd. Named for a Baptist Missionary and introd. 1966 by Tom Dodd. Legitimately published here for the first time with a description.

ELEGANS MACULATA (Louis de Smet Nurs., Ledeberg-Lez-Gand, Belgium, cat. p. 59. 1877, as ***I. fortunei elegans maculatis***) - lvs. extremely small, spotted yellow. (Variegated Group).

ELLIPTA Compact, densely branched; lvs. narrow elliptic, glossy, dark green; discov. 1979 in Ernst Stuehrenberg Nurs., Weismoor, West Germany. Illegitimate by questionable Latin form of name.

ELLIPTA CONVEX Mutation of ELLIPTA; compact, densely branched; lvs. yellowish green in full sun, narrowly elliptic, convex, finely serrate; very hardy; discov. in Ernst Stuehrenberg Nurs., Weismoor, West Germany. Illegitimate by questionable Latin form of part of name.

ELLIPTA GOLD Mutation of and similar to ELLIPTA but with irregular yellow mottled lvs.; very hardy; discov. in Ernst Stuehrenberg Nurs., Weismoor, West Germany. Illegitimate by questionable Latin form of part of name.

var. *elliptica* Hort. (A. Rehder, Mitt. Deut. Dendr. Gesel. 1908:161. 1908) - as an English garden form; in syn. of var. *typica* Loesener and with syn. var. *major*., var. *latifolia*, and ***I. fortunei***, based on material examined by Rehder from Kew Herbarium. B. Boom, Nederl. Dendr., 3d ed., p. 310. 1949 - in syn. of var. *latifolia* Goldring and with var. *major* Hort.; ibid., 4th ed., p. 337. 1959 - syn. of LATIFOLIA along with var. *major* Hort. and ***I. fortunei*** Hort. Rehder, Man. Cult. Trees and Shrubs, p. 544. 1927 - in syn. of var. *latifolia* Goldring, the typical form, with var. *typica* Loesener, and var. *major* Hort. in syn. The name var. *major* Hort. is used as a synonym of numerous clones. However, the primary current application of var. *major* Hort. seems to be as a synonym of LATIFOLIA. Certainly, ***I. elliptica*** Siebold ex Miquel and probably var. *elliptica* Hort. are synonyms of ***I. crenata*** var. ***crenata***, the typical wild variety expression.

ELMWOOD SELECT (Foxborough Nurs., Street, Maryland, cat. p. 8. fall 1988, without descr.).

ERECTA (Robbins Nurs., Willard, North Carolina, cat. p. 3. 1963-64) -

upright, full, and fairly rapid growing; lvs. rich dark green. = **SCHWOEBEL'S UPRIGHT**, EXCELSA, EXCELSA SCHWOEBEL, EXCELSA UPRIGHT.

EXCELSA (LaBar's Rhododendron Nurs., Stroudsburg, Pennsylvania, cat. p. 2. sp. 1958) - dense, slow growing[!] Illegitimate, since the name ***I. aquifolium* EXCELSA** has priority. = **SCHWOEBEL'S UPRIGHT**, ERECTA, EXCELSA SCHWOEBEL, EXCELSA UPRIGHT.

EXCELSA SCHWOEBEL (Chesapeake Nurs., Salisbury, Maryland, cat. fall 1978-sp. 1979) - pyramidal; extremely hardy. = **SCHWOEBEL'S UPRIGHT**, ERECTA, EXCELSA, EXCELSA UPRIGHT.

EXCELSA UPRIGHT (Millcreek Nurs., Newark, Delaware, cat. 1958, without descr.). = **SCHWOEBEL'S UPRIGHT**, ERECTA, EXCELSA, EXCELSA SCHWOEBEL.

var. *fastigiata* (T. Makino, Bot. Mag. (Tokyo) 27:252. 1913) - tall branches, dense, erect, fastigiate; lvs. similar to type; discovered 1911 in cult., Kuroki-machi, Chikugo Prov., Japan; garden variety, very rare. = **FASTIGIATA** of S.-y. Hu, f. *fastigiata* (Makino) Hara; not FASTIGIATA of Wada or the Bennett Hybrid.

f. *fastigiata* (Makino) Hara (H. Hara, Enumeration Spermatophytarum Japonicarum. Pt. 3:69. 1954) - changed botanical rank of var. *fastigiata* Makino to *forma*. S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957 - a horticultural form probably not yet intro. [to U.S.]. = **FASTIGIATA** of S.-y. Hu, var. *fastigiata* Makino, not FASTIGIATA of Wada, or the Bennett Hybrid.

FASTIGIATA (Greenbrier Farms Nurs., Norfolk, Virginia, cat. p. 45. 1965) - narrow, fastigiate; lvs. thick, convex, dark green. C. Tuley in H. Dengler, Amer. Nurseryman 121(10):88. 1965, and C. Tuley in Proc. 38th Meet. Holly Soc. Amer., p. 2. 1965 - female; (Bennett Hybrid Group). Illegitimate, since the name is in Latin form and since the name FASTIGIATA of S.Y. Hu has priority. This clone is different from FASTIGIATA of S.-y. Hu and of Wada. = CONVEXA UPRIGHT.

FASTIGIATA (S.-y. Hu, Amer. Hort. Mag. 49(4):198. 1970) - from Japan; probably not yet introd. to U.S.; changed the rank from f. *fastigiata* (Makino) Hara to cultivar status. = var. *fastigiata* Makino, f. *fastigiata* (Makino) Hara.

FASTIGIATA (J. Sugimoto, New Keys to Woody Plts. Jap., p. 277. 1972) - erect branches grow in clusters which resemble a broom. Illegitimate cultivar name, since the name is in Latin form. Data insufficient to equate to var. *fastigiata* Makino or with **FASTIGIATA** of Hu, which may refer to a wild occurring plant.

FASTIGIATA (K. Wada, Hakoneya Nurs., Numazu-Shi, Japan, cat. p. 39. 1937, as ***crenata fastigiata***) - another pygmy form with more rounded, beautiful lvs. Wada's sel. appears to be a different clone from Makino's, which S.-y. Hu treated as a cultivar. Makino's name *fastigiata*, although transferred from bot. var. to *forma* and to cv. rank (see f. *fastigiata*

(Makino) Hara and other FASTIGIATA entries) at a later date, has priority at cv. rank, invalidating Wada's use of the name FASTIGIATA at any rank.

FIEL'S UPRIGHT (Roslyn Nurs., Dix Hills, New York, cat. p. 71. 1989, without descr.).

FIREFLY (Cannon Plants, Greenwood, Delaware, cat. sp. 1973) - spreading, close breaking, fast growing, without need for much shearing; lvs. pointed, medium sized, recurved on new growth; new growth tinted yellow; male; Cannon #2066. G. Eisenbeiss and T. Dudley, Proc. 57th Meet. Holly Soc. Amer., p. 13. 1980 - Holly Soc. Amer. Reg. No. 4-80 by N. Cannon; male; orig. 1954 from an F_3 population that was from a cross of **CONVEXA** × MICROPHYLLA; sel., named and introd. by Cannon.

FLUSHING (J. Vermeulen & Son, Neshanic Sta., New Jersey, cat. p. 11. sp. 1960) - compact, medium height, upright; lvs. large, light green. Male.

var. *fortunei* (Kingsville Nurs., Kingsville, Maryland, cat. p. 6. 1932, without descr.). Ibid., cat. p. 32. 1951 - strong grower; lvs. small, pointed, very shiny, dark green. Distinct upright; lvs. to 1 3/4" long, 1/2" wide; female. Appears to be different clone from Nicholson. = ? FORTUNEI.

var. *fortunei* (T. Loesener, Monog. Aquif., Pt. 1, p. 201. 1901) - of gardeners, not Lindley. = var. *typica* Loesener. Leaf sizes not given by Loesener for "his" var. *typica*.

var. *fortunei* (G. Nicholson, Illus. Dict. Gard. 2:174. 1884) - rounder lvs. and stronger growth than those of type. L. Spaeth Nurs., Berlin, Germany, cat. p. 90. 1901-02 - low, graceful; small, oval, dark green lvs. = FORTUNEI.

f. *fortunei* (S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957) - a horticultural var. with large lvs. 3/4"-1 3/4" long, obtuse at apex; = LATIFOLIA, var. *latifolia* Goldring, f. *latifolia* (Goldring) Rehder, f. *major*, f. *rotundifolia*.

FORTUNEI (Hortus Third, p. 591. 1976) - lvs. oblong-elliptic, 3/4"-1 1/4" long, to 5/8" wide, serrate; with LATIFOLIA in syn. Descriptions from different sources vary. At various ranks within ***I. crenata***, the name *fortunei*, originating with ***I.*** *fortunei* Miquel, is confusing and difficult to identify to a single clone. Some authors have assigned the name *fortunei* in synonymy to various other cultivar names, therefore confusing the syn. = ***I.*** *fortunei* Hort. ex Miquel, var. *fortunei* Nicholson, LATIFOLIA, f. *latifolia* (Goldring) Rehder, var. *typica* Loesener.

FORTY NINER (Cannon Plants, Greenwood, Delaware, cat. p. 2. sp. 1975) - upright; fruit yellow. Sister sdlg. to BUTTERBALL, **HONEYCOMB**, **IVORY HALL**, **IVORY TOWER**, SIR ECHO, **STARGLOW**. (Watanabeana Group).

FOSTER NO. 1 (T. Owen & Son, Columbus, Mississippi, advert. in Amer. Nurseryman 107(2):90. 1958, as FOSTERI NO. 1 or FOSTER #1) - new; compact, spreading; lvs. small, serrate, not convex, more pointed than **CONVEXA**. Cottage Hill Nurs., Mobile, Alabama, cat. p. 5. 1958-59 - descr. identical to that given by T. Owen. D. Wyman, Arnoldia 20(7):44. 1960 - very low, compact, spreading; a sel. by E. Foster, Bessemer, Alabama. Sandhills Community College, Holly Soc. Amer. Let. 75:12. 1983 - male. Introd. early 1950's by E. Foster. Illegitimate, since the name ***I.*** × ***attenuata*** **FOSTER #1**, which was also originated by E. Foster, has priority.

FOSTER NO. 2 (Calvin Harman Nurs., Stoval, Georgia, advert. in Amer. Nurseryman 123(2):97. 1966, without descr.). F. Galle, Proc. 40th Meet. Holly Soc. Amer., p. 12. 1966, as FOSTER'S SELECTION NO. 2 - spreading. Sel. and introd. early 1950's by E. Foster, Bessemer, Alabama, who also orig. ***I.*** × ***attenuata*** **FOSTER #2**. Often listed as FOSTER #2. Illegitimate, since there is no description, and the name ***I.*** × ***attenuata*** **FOSTER #2** has priority.

FRIERSON New name. Upright; lvs. 3.8 cm long, 1.3 cm wide but usually smaller, dullish green. Probably sel. by W. Frierson, Danmark, South Carolina, before 1963. Grown at Callaway Gdns., Pine Mountain, Georgia; and Rutgers—The State University, New Brunswick, New Jersey. ? Female. Sometimes known as FRIERSON SPECIAL. The authors are the first to publish the name **FRIERSON**; documentation is provided. = FRIERSON SPECIAL.

f. *fructo-alba* (Aritaki Arboretum, Seed Exchange List, Saitama-Ken, Japan. p. 3. 1975, without descr.) - seed from cult. plts. No author citation or other ref. has been found for this name. Female plants grown at the National Arboretum from this seed produced pale yellow fruit (not white) and were similar in fruit color and foliage to f. ***watanabeana*** Makino. (Watanabeana Group).

subsp. ***fukasawana*** (Makino) Murata (G. Murata in Kitamura, S. & G. Murata, Acta Phytotax. Geobot. 25(2-3):41. 1972, as change of rank). The basionym is var. *fukasawana* Makino (1913). = f. *longipedunculata*.

var. *fukasawana* Makino (T. Makino, Bot. Mag. (Tokyo) 27(315): 77. 1913, as a new var.) - differs from the ***I. crenata*** type by having thinner and irregularly more crenate lvs. and somewhat 3-sided young drupes. Especially found in southern Kyushu, Japan. H. Hyland, USDA Plant Inventory No. 168, p. 242. 1967 - seed from Tochigi Prefecture, Japan, presented 1960 by P. Kubota; PI 269255; ibid., No. 169, p. 150. 1967 - seed coll. in the wild 1961 by J. Creech at 900 m elev. on Mount Takakuma, Osumi Peninsula, Kyushu, Japan; PI 274539. = subsp. ***fukasawana*** (Makino) Murata, f. *longipedunculata*.

FUKASAWANA (D. Huttleston, Plants Growing in Conservatories and Gdns., Longwood Gdns., Kennett Square, Pennsylvania, p. 5. 1970, without descr.). Erroneously listed as a cv. = subsp. ***fukasawana*** (Makino) Murata.

FULVO-MARGINATA (J. Conder, Landscape Gardening in Japan, 2d ed., p. 112. 1912, without descr., as *fulvo-marginata*) - with common name in Romanji "Cha-fukurin-tsuge." The common name in English means tea-green margins while the Latin name means brownish-yellowish green margins. (Variegated Group).

GABLE DWARF (Watnong Nurs., Morris Plains, New Jersey, cat. p. 3. 1972-73) - really dwarf; tiny deep green lvs. = ? GABLE NO. 1, ? GABLE'S.

GABLE NO. 1 (J. Ford, Holly Soc. Amer. Let. 60:8. 1978, without descr.). = ? GABLE DWARF, ? GABLE'S.

GABLE'S (J. Oppe, Proc. 51st Meet. Holly Soc. Amer., p. 13. 1974, without descr.). Upright rounded; lvs. broadly elliptic to elliptic obovate, margins remotely serrate, tips acute, bases cuneate; male. Illegitimate, since ***I.*** × ***aquipernyi*** **GABLE** 1953 has priority. = ? GABLE DWARF, ? GABLE NO. 1.

GAYLE (G. Eisenbeiss and T. Dudley, Holly Soc. Amer. Let. 72:6. 1982) - sdlg. sel. from USDA PI 276080, 1961 as ***I. crenata*** subsp. *radicans*; low, mound-shaped, fastigiate branching, compact, slow growing; female; Holly Soc. Amer. Reg. No. 2-82 by D. Bradshaw and L. Schmid, Clemson University, Clemson, South Carolina. A selection of ***I. crenata*** var. ***paludosa***.

GLASS (Le-Mac Nurs., Hampton, Virginia, cat. p. 4. sp. 1944) - upright; lvs. small. Wister et al., Holly Soc. Amer. Bul. 6: 21. 1953, male, without descr. - introd. 1947 or earlier by P. Glass and H. Hohman. S.-y. Hu, Nat'l Hort. Mag. 36(1):62. 1957 - compact upright; lvs. very small; a staminate clone of f. ***microphylla***. = ? GLASS UPRIGHT.

GLASS UPRIGHT (M. Baron and G. Parmalee, New Rare Plants on Campus, Michigan State University List No. 15:4. 1964, without descr.). = ? **GLASS**.

var. *globosa* Maximowicz (Wister et al., Holly Soc. Amer. Bul. 6:32. 1953, as syn. of ? var. *latifolia* Goldring, without descr.). We can find no trace in the literature of a var. *globosa* Maximowicz.

GLOBOSA (Lindley Nurs., Greensboro, North Carolina, cat. p. 21. 1939) - dwarfish compact; dark green foliage. Female. Illegitimate because of priority of ***I. opaca*** **GLOBOSA**.

GLOBOSA ROTUNDIFOLIA (Gilmore Plt. and Bulb Co., Julian, North Carolina, cat. p. 12. fall 1987-sp. 1988, without descr). = **HETZII**, GLOBOSA ROTUNDIFOLIA HETZII, REFLEXA SUPREME.

GLOBOSA ROTUNDIFOLIA HETZII (Gilmore Plant and Bulb Co., Julian, North Carolina, cat. p. 12. fall 1977-sp. 1978, without descr.). Ibid., cat. p. 12. fall 1978, without descr. A nomenclatural aberration apparently suggesting that GLOBOSA ROTUNDIFOLIA may be a syn. of **HETZII**. (Rovex Hybrid Group). = **HETZII**, GLOBOSA ROTUNDIFOLIA, REFLEXA SUPREME.

GLORY (J. Vermeulen & Son Nurs., Neshanic Sta., New Jersey, cat. p. 4.

sp. 1961) - dense, compact globe, twiggy; lvs. small, thick, glossy. Tankard Nurs., Exmore, Virginia, cat. p. 10. 1969-70 - dwarf, good mound form, similar to **HELLERI** but more vigorous. Flint, H. and Hubbuch, C., Amer. Nurseryman 169(3):154. 1989 - CONVEXA sdlg.; introd. by Vermeulen & Son Nurs. cat. fall 1958-sp. 1959 as COMPACTA NO. 2, and first listed as GLORY in cat. sp. 1961; hardier than CONVEXA; hardy Zone 6A, USDA Hardiness Zone Map 1965; has survived -23°F with minimal injury. Hubbuch says, hardier than any *I. crenata* grown at Bernheim Forest, Louisville, Kentucky. Male named by J. Vermeulen & Son, who changed COMPACTA NANA #1 to **GLORY**. = COMPACTA NANA #1, COMPACTA NO. 2, COMPACTA #2, GREEN GLORY.

GLOSSY (Gerard K. Klyn Nurs., Mentor, Ohio, cat. p. 4. fall 1958, without descr.) - will be introd. 1959 [was introd. 1960]. L. Lipp, Amer. Nurseryman 110(5):44. 1959 - sdlg. of **CONVEXA**; can develop faster than **CONVEXA**; lvs. slightly larger than parent, very waxy. Gerard K. Klyn Nurs., Mentor, Ohio, and A. Shammarello & Son Nurs., South Euclid, Ohio, joint advert. in Amer. Nurseryman 121(3):64. 1960 - introducing a slightly faster and more compact form than **CONVEXA**; lvs. glossy, dark green, convex; extremely hardy. = ? GLOSSY LEAF.

GLOSSY LEAF (G. Klingaman, Amer. Nurseryman 154(11):117. 1981, without descr.). Tankard Nurs., Exmore, Virginia, cat. p. 11. summer-fall 1985 - cone-shaped; lvs. dark green, glossy. = ? **GLOSSY**.

GOLDEN GEM (H. Eddie and Sons Nurs., Vancouver, British Columbia, Canada, cat. p. 26. fall 1962-sp. 1963) - dense, similar to **CONVEXA** in habit; lvs. bright yellow year round; very hardy. D. van Gelderen, Dendroflora No. 33. 1971 - sdlg. sel. from seed; introd. to the trade some years ago by L. Konijn & Co., Reenwijk, Netherlands. Briggs Nurs., Olympia, Washington, cat. p. 11. 1980 - **CONVEXA** with a gold blush. Low spreading habit; lvs. golden yellow, turning green later; female. (Variegated Group).

GOLDEN HELLER (J. Raulston, Inventory North Carolina State University Landscape Plants, p. 9. Dec. 1979, as GOLDEN HELLERI, without descr.). Lancaster Farms Nurs., Suffolk, Virginia, cat. 1981, without descr. Mutation from HELLERI with yellow cast to lvs. Discovered by R. Bock 1967; sold by Lancaster Farms Nurs. since 1972. (Variegated Group). Female. By correcting the orthography, the authors are the first to legitimately publish the name **GOLDEN HELLER**. = LANCASTER YELLOW.

GOLDEN QUEEN (Jour. Royal Hort. Soc. 94(2):463. 1969) - low growing; lvs. glossy, yellow; very hardy; exhibited at R. H. S. Fl. Show, London, England, Sept. 1969, by Burkwood & Skipwith of Elstead, England. (Variegated Group). Illegitimate, since the name of *I. aquifolium* **GOLDEN QUEEN** has priority.

GOLDEN VARIEGATED (S.-y. Hu, Nat'l Hort. Mag. 36(1):62. 1957) -

"a clone of f. *luteo-variegata*"; low growth; lvs. elliptic, acute at both ends, thickly coriaceous, shiny, some blotchy and spotted yellow, some entirely green; grown at Tingle Nurs., Pittsville, Maryland. Idem, Amer. Hort. Mag. 49(4):198-99. 1970 - but not as a clone of f. *luteo-variegata*. This later publication also listed **LUTEO-VARIEGATA** by Hu, distinct from **GOLDEN VARIEGATED.** (Variegated Group).

GOLDRUSH (Monroe Nurs., Crossville, Alabama, advert. in Amer. Nurseryman 115(4):62. 1962, without descr.).

GOULD (Stock Nurs., Rockville, Maryland, cat. p. 4. fall 1968-sp. 1969, without descr.).

GRANDIFOLIA (J. Vermeulen & Son, Neshanic Sta., New Jersey, cat. p. 4. sp. 1949) - lvs. dark green, comparable to lvs. of California privet. S. Meehan, Florists Exchange 118(16):25. 1952 - shears readily; lvs. large; quite hardy; introd. by Vermeulen. Kingsville Nurs., Kingsville, Maryland, cat. p. 32. undated (prob. 1960's) - lvs. rounded, good size, bright shiny green. Female. Wister et al., Holly Soc. Amer. Bul. 6: 29. 1953, without descr. - introd. 1948 by Vermeulen. D. Wyman, Arnoldia 20(7):46. 1960 - prob. syn. of LATIFOLIA. Illegitimate, since the name ***I. aquifolium*** **GRANDIFOLIA** has priority.

GREEN CLOUD (E. Orton, Jr., Chicago Bot. Gdn. Res. Symp., p. 6. March 22-23, 1982) - a tentative name of **BEEHIVE.** = **BEEHIVE.**

GREEN CONE New name. Reformulation of the name BULLATA GREEN CONE, based on advert. by Holly Creek Nurs., Keller, Virginia, in Amer. Nurseryman 128(5):66. 1968; strictly upright, beautiful mate for BULLATA [**CONVEXA**]. Male. The name **GREEN CONE** without the word BULLATA is currently correct. The authors are the first to publish the name **GREEN CONE.** = BULLATA GREEN CONE.

GREEN CUSHION (Wister et al., Holly Soc. Amer. Bul. 6:29. 1953, without descr.) - "Hohman orig. [Kingsville Nurs., Kingsville, Maryland]; Mclean sel. [Mclean Nurs., Towson, Maryland] about 1949; to be introd. 1953-54." Tom Dodd Nurs., Semmes, Alabama, cat. p. 12. 1958-59, without descr. = **KINGSVILLE GREEN CUSHION**, KINGWOOD GREEN CUSHION.

GREEN DRAGON (E. Orton, Jr., Proc. 47th Meet. Holly Soc. Amer., p. 4. 1970) - extremely dwarf, less than 14" tall at 5 yr. even when provided high nutrition and intensive care; recommended for bonsai and rock gdns.; orig. from a cross of **MARIESII × JOHN NOSAL** made in 1965 at Rutgers—The State University, New Brunswick, New Jersey, by E. Orton, Jr., from an initial population of 800 sdlgs.; hardy at New Brunswick. H. Dengler, Amer. Nurseryman 132(12):83. 1970, without descr. - parentage erroneously given as **CONVEXA × STOKES.** G. Eisenbeiss and T. Dudley, Proc. 49th Meet. Holly Soc. Amer., p. 23. 1972 - irregular but essentially horizontal; internodes short, giving a heavy foliaged effect; lvs. orbicular like those of **MARIESII** but much

smaller; male; brother sdlg. to **DWARF PAGODA;** USDA Hardiness Zone 6b; sel., named, introd. by E. Orton; Holly Soc. Amer. Reg. No. 10-72, by E. Orton, Jr. (Nummularia Group).

GREEN ISLAND (U.S. Plt. Pat. No. 817, Dec. 28, 1948) - to J. Styer; low, spreading, rapid growing, free branching, retains form without clipping; lvs. smaller than ordinary, good year-round color; male; hardy to Boston, Albany, northern New York; orig. from seed in Styer's Nurs., Concordville, Pennsylvania. Wister et al., Holly Soc. Amer. Bul. 6:29. 1953 - sel. 1935 and introd. by Styer 1949. Proc. 75th Ann. Conv. Amer. Nurserymen's Assoc., p. 138. 1949 - Plt. Reg. No. 150 by Styer's Nurs. - tolerant of wetness; hardy St. Louis, Pittsburgh, New York.

GREEN LUSTER COMPACTA (Pallack Bros. Nurs., Harmony, Pennsylvania, cat. 1981) - medium growing; lvs. glossy. Presumably not the same plant as **GREEN LUSTRE**, since both names are also listed in the cat. Illegitimate, since part of the name is in Latin form. = ? LUSTER.

GREEN LUSTRE (Orlando Pride Nurs., Butler, Pennsylvania, cat. p. 5. 1963-64, without descr.) - very hardy; sdlg. of **STOKES**. O. Pride, Proc. Holly Symp., Ann. Meet. Missouri State Nurs. Assoc., p. 11. 1963 - orig. about 1953 as a sdlg. of **STOKES** given to O. Pride by Warren Stokes, Butler, Pennsylvania; sel., named, and introd. by O. Pride; hardy as **STOKES**. Low, very compact, dwarf but faster growing than STOKES or TINY TIM, more upright than **STOKES**; lvs. slightly less than 2.54 cm long, very dark and shiny; female.

GREEN MOUNTAIN (H. Losely and Son Nurs., Perry, Ohio, cat. p. 7. sp. 1981, without descr.). G. Klingaman, Amer. Nurseryman 154(12):117. 1981, without descr.

GREEN PYGMY (R. Clark, Proc. 28th Meet. Holly Soc. Amer., p. 11. 1960) - Holly Soc. Amer. Reg. No. 3-60, 1961 by A. Shammarello; compact, dwarf; lvs. glossy, convex; female; orig. 1953 at Shammarello Nurs., South Euclid, Ohio, as sdlg. of **CONVEXA** and as sister sdlg. to **MENTOR DENSE**. U.S. Plt. Pat. No. 2069, July 4, 1961, by A. Shammarello; uniform growing, requiring a minimum of trimming; lvs. smaller than **CONVEXA**, slightly convex; female. = PYGMY.

GREEN SPLENDOR (G. Klingaman, Amer. Nurseryman 154(12):109. 1981, without descr.). Angelica Nurs., Kennedyville, Maryland, cat. p. 35. fall 1985-86 - introd. by Angelica Nurs.; broad pyramidal; lvs. glossy, slightly larger than MICROPHYLLA.

GREEN THUMB (John Vermeulen & Son Nurs., Neshanic Sta., New Jersey, cat. p. 15. fall 1955) - low, spreading, compact, self-branching, grows rapidly while young; lvs. light, bright green; hardy. D. Wyman, Arnoldia 20(4):44. 1960 - dwarf; female; introd. by Vermeulen 1956. R. Clark, Proc. 31st Meet. Holly Soc. Amer., p. 11. 1961 - Holly Soc. Amer. Reg. No. 2-61 by Vermeulen; orig. 1945 from sdlg. obtained 1945 and sel. 1955 by Vermeulen.

GREEN VELVET (Sheridan Nurs., Etobicoke, Ontario, Canada, cat. p. 14. 1972) - small leaved holly sel. at Sheridan Nurs. for hardiness: "In slightly protected locations retains its beautiful foliage all year. Berries black."

GREENPOINT (J. Oppe, Proc. 51st Meet. Holly Soc. Amer., p. 13. 1974, without descr.). Orig. unknown; in J. Frorer private holly coll. Wilmington, Delaware, which was moved 1974 to the Scott Arboretum, Swarthmore College, Swarthmore, Pennsylvania. Broad upright, spreading; lvs. elliptic, tips acute, bases cuneate, margins crenulate near tip, dark green; male. Legitimately published here for first time by providing a descr.

GREER (O. Pride Nurs., Butler, Pennsylvania, cat. p. 4. 1963-64, without descr.).

GRIER (Mobjack Nurs., Mobjack, Virginia, cat. p. 6. sp. 1986, without descr.). Cult. in Tidewater Arboretum, Norfolk, Virginia, 1984. Habit coarse, dense; leaves convex; female. By providing a descr., the authors are the first to legitimately publish the name **GRIER**.

GRUBY (K. Jarantowski, Holly Soc. Amer. Let. 70:3. 1981, without descr.) - survived -11°F winter 1979-80, 1980-81 in Chicago Bot. Gard. without injury.

HADLOCK (Tankard Nurs., Exmore, Virginia, cat. p. 8. sp. 1961) - broadly upright, informal; lvs. slightly convex, small, olive green, resembles **CONVEXA** and **HETZII**; hybrid. Ibid., cat. p. 10. sp. 1968, as **MAXWELLI** - formerly called HADLOCK by Tankard Nurs. = **MAXWELL**.

HALLIANA (Tankard Nurs., Exmore, Virginia, cat. sp. 1961) - upright, resembles **CONVEXA** and **HETZII**; lvs. somewhat convex, small. Howell Nurs., Knoxville, Tennessee, cat. p. 4. fall 1961-sp. 1962, without descr. - "Spreading Howell Hybrid"; new. Boyd Nurs. Co., Knoxville, Tennessee, cat. p. 4. fall 1961-sp. 1962, without descr. - "Spreading Howell Hybrid." Illegitimate, since the name is in Latin form. "Spreading Howell Hybrid" (orig. 1961), a syn. of HALLIANA, is of different origin than SPREADING of Howell (orig. 1939) and should not be confused with it.

HAMILTON HOUSE (Millcreek Nurs., Newark, Delaware, cat. 1960, without descr.). Millcreek Nurs., originator, discontinued production, since the plant was inferior.

HATFIELD (Wister et al., Holly Soc. Amer. Bul. 6:30. 1953, without descr.) - as ***I. crenata*** × ***glabra***; orig. by T. Hatfield, Wellesley, Massachusetts; orig. plt. was named HATFIELDI. Wyman's Gdn. Center, Framingham, Massachusetts, cat. p. 12. 1956, as ***I.*** *hatfieldi* - upright; lvs. glossy. G. Eisenbeiss, Amer. Hort. Mag. 49(4):324. 1970, without descr. - W. Kosar determined it to be a cv. of ***I. crenata*** and not an interspecific hybrid. Introd. as ***I.*** *hatfieldi* by Framingham Nurs., Framingham, Massachusetts, 1940-41.

HAYDEN (J. Floyd, Jr., Holly Evaluation at the Hort. Gdn. of Clemson University, South Carolina Agr. Exp. Sta. Bul. 1050:14. Feb. 1974, as HAYDENI) - pyramidal, upright; grows 4-6 ft tall; good durable holly; good green foliage; withstands pruning well; female. Sdlg. sel. by P. Hayden, Athens Nurs., Athens, Georgia. By correcting the orthography, the authors are the first to legitimately publish the name **HAYDEN**.

HEASLEYI (Heasley's Nurs., Butler, Pennsylvania, cat. p. 6. fall 1960-sp. 1961) - dwarf. Illegitimate, since the name is in Latin form.

HELLER GREEN CUSHION (Alfred Teufel Nurs., Portland, Oregon, cat. p. 7. 1966-67) - an improved form of **HELLERI**, said to be even more attractive in habit and foliage. Named after **HELLERI** and **KINGSVILLE GREEN CUSHION**, the name HELLER GREEN CUSHION is illegitimate, since it would create confusion with the two preceding names. = ? **KINGSVILLE GREEN CUSHION**, ? KINGWOOD GREEN CUSHION.

f. *helleri* (A. Rehder, Jour. Arnold Arb. 20(4):417. 1939). Obviously this plant of gdn. origin is a clone and accordingly is reduced in rank to cv. = **HELLERI**.

HELLERI (Bay State Nurs., North Abington, Massachusetts, cat. p. 20. 1934) - dwarf, dense, spreading; lvs. grayish green; hardy. A. Rehder, Jour. Arnold Arb. 20(4):417. 1939, as f. *helleri* - lvs. small, elliptic; found in 1925 among sdlgs. of ***I. crenata*** by Joseph Heller, manager of Newport Nurs., Newport, Rhode Island. Idem, Bibl. Trees and Shrubs, p. 402. 1949, cited the following nurs. as sources of **HELLERI**: Verkade's Nurs., Wayne, New Jersey, cat. p. 13. 1936; W. Craig [location undetermined], price-list, p. 31. 1937, F. & F. Nurs., [New Jersey], cat. p. 17. 1937; and Bay State Nurs., [North Abington, Massachusetts], cat. p. 21. 1937. G. Graves, Amer. Nurseryman 88(5):22. 1948 - introd. about 1936 by W. Craig. D. van Gelderen, Dendroflora 8:33. 1971 - unsupported claim of orig. 1943. Since its introd. this female cv. has achieved great acclaim for its dwarf, formal, mound shape habit, and it is often used as the standard for comparing other dwarf clones of ***I. crenata***. Young plants apparently do not flower. = f. *helleri* Rehder.

HELLERI MUTATION (Tom Dodd Nurs., Semmes, Alabama, cat. p. 7. 1970-71, without descr.). Illegitimate, since the name is in Latin form. = **TEE DEE**.

HETA (H. van de Werken et al., Proc. Southern Nurs. Assoc. Res. Conf., 13th Annual Rpt., p. 78. 1985, without descr). This name may be a misspelling of **HETZII**.

HETZII (B. Boom, Benaming, Geschiedenis en Kenmerken Van Een Aatal Hootehtige Planten II:127. 1959 and idem., Nedrl. Dendr., 4th ed., p. 337. 1959) - plant obtained from Fairview Evergreen Nurs., Fairview, Pennsylvania, cat. 1946; similar to **CONVEXA**; orig. 1943 by Fairview Nurs. Wister et al., Holly Soc. Amer. Bul. 6:30. 1953, without descr. -

sel. 1943 and introd. 1951 by C. Hetz. T. Dilatush, Holly Soc. Amer. Let. 4:2. 1954 - fast growing; lvs. convex, larger than **CONVEXA**; putative hybrid of **CONVEXA** × ROTUNDIFOLIA; sel. about 1940 by C. Hetz, Fairview Nurs.; noted for good hardiness. Upright spreading; female. (Rovex Hybrid Group). = ? CONVEXA MICROPHYLLUS, GLOBOSA ROTUNDIFOLIA, GLOBOSA ROTUNDIFOLIA HETZII, REFLEXA SUPREME.

HIGH LIGHT (J. Feucht, Proc. 37th Meet. Holly Soc. Amer., p. 5. 1964) - conical-columnar; lvs. small elliptic, strongly crenate, with short internodes giving a texture like boxwood, and with distinct difference in color between new and old lvs. for which the cultivar was named; discov. at the National Arb. 1956 by W. Kosar as a branch mutation on MICROPHYLLA; Holly Soc. Amer. Reg. No. 2-64 by W. Kosar. H. Hyland, USDA Plant Inventory 174:243. 1969 - NA 16476, PI 316588. Male; habit conical-columnar; discovered, named, and introd. 1966 by W. Kosar.

HIGHLANDER (R. Clark et al., Proc. 29th Meet. Holly Soc. Amer., p. 4. 1960) - upright, rapid grower; lvs. dark green, very hardy; male; orig. from a block of **CONVEXA** sdlgs. at Norman H. Cole Nurs., Bluefield, West Virginia; Holly Soc. Amer. Reg. No. 16. 1960 by W. Frierson. U.S. Plt. Pat. No. 2272 issued to N. Cole on Aug. 6, 1963 - broadly pyramidal; more upright than **CONVEXA**; lvs. similar to MICROPHYLLA but darker green and not as pointed; requires little or no trimming to maintain habit; cold and wind resistant at -20°F. Discov. by N. Cole as a mutation of **CONVEXA** in his nursery at Springville, Tazwell County, Virginia. Date of orig. unkn. but patent application dated 1961.

HILLIER (Wister et al., Holly Soc. Amer. Bul. 6:31. 1953, without descr.) - orig. 1917 in The Netherlands, introd. into U.S. about 1920 by Boulevard Nurs., Newport, Rhode Island; orig. spelling may have been HILLERI or HILLIERI.

HISTORYLAND UPRIGHT (Historyland Nurs., Montrose, Virginia, cat. p. 9. June 1, 1988 to June 1989, without descr.).

HONEYCOMB (Cannon Plants, Greenwood, Delaware, cat. p. 2. fall 1975, without descr.). Sel. and named by N. Cannon, Greenwood, Delaware, from 400 sdlgs. grown from seed distrib. 1965 by USDA Plt. Introd. Sta., Glenn Dale, Maryland. Lvs. light green broad elliptic to broad elliptic ovate, crenate near apex, petioles 6 mm long; fr. yellow. Sister sdlg. to BUTTERBALL, **FORTY NINER**, IVORY, **IVORY HALL**, **IVORY TOWER**, SIR ECHO, **STARGLOW**. (Watanabeana Group). Legitimately published here for the first time by providing a description.

HOOGENDORN (J. Vermeulen & Sons, Neshanic Sta., New Jersey, cat. Sept. 1967) - low bushy, compact. = COMPACTA of Vermeulen, COMPACTA HOOGENDORN of Vermeulen.

HORIZONTALIS (A. Shammarello & Son Nurs., South Euclid, Ohio, cat.

1964) - dwarf, compact, prostrate, branches to ground, slow growing; lvs. smooth, dark green; introd. by Shammarello. Illegitimate, since name is in Latin form.

HOWARD (Tingle Nurs., Pittsville, Maryland, cat. p. 20. fall 1956-sp. 1957) - branches slightly ascending; lvs. obovate-oblong, slightly convex, very dark green. Male. (Bennett Hybrid Group). Misspelled as HOWARDI. Illegitimate, since the name ***I. opaca*** **HOWARD** has priority. = HOWARD COMPACTA, **HOWARD'S COMPACT**.

HOWARD COMPACTA (Robbins Nurs., Willard, North Carolina, cat. p. 4. 1966-67) - medium heavy growth rate, dense, branches slightly ascending; lvs. convex, very dark green. Illegitimate, since part of the name, HOWARD, has already been used as a cv. name and since part of the name is in Latin form. (Bennett Hybrid Group). = HOWARD, **HOWARD'S COMPACT**.

HOWARD'S COMPACT Both HOWARD of Tingle and HOWARD COMPACTA of Robbins are considered to be the same plant. HOWARD of Tingle is illegitimate by priority of ***I.*** × ***opaca*** **HOWARD**. HOWARD COMPACTA of Robbins is illegitimate because part of the name is in Latin form. To arrive at a legitimate name for this plant, the orthography of the Robbins' name HOWARD COMPACTA was changed to **HOWARD'S COMPACT**. = HOWARD, HOWARD COMPACT, HOWARDI.

HUNT SELECTION New name. Vigorous upright spreading; stems light yellowish green; lvs. dark green, elliptic; orig. as sdlg. sel. late 1920's from Le-Mac Nurs., Hampton, Virginia; sel. by Jacque LeJendre and again by W. L. Hunt. Published here for the first time.

IMPERIAL (Atlantic Nurs., Dix Hills, New York, advert. in 1988 Composite Stock List, Long Island Growers Guide, Riverhead, New York. p. 70. 1988, without descr.).

INNA (Peter Vendergissen, Cottage Hill Nurs., Semmes, Alabama, cat. 1989) - more compact form of BENNETT'S COMPACTA [= **BENNETT'S COMPACT**]. Illegitimate because of inadequate descr.

INTEGRIFOLIA (Kibble and Clare Nurs., Ascot, Berkshire, England, cat. p. 35. 1956) - very dwarf and slow growing. Female. Illegitimate, since the name ***I. aquifolium*** **INTEGRIFOLIA** has priority.

IRENE PETERS (J. Feucht, Proc. 37th Meet. Holly Soc. Amer., p. 6. 1964) - mound-shaped; lvs. with medium-fine texture; male; sdlg. discov. 1959 at Arie Peters Nurs., Skilman, New Jersey; Holly Soc. Amer. Reg. No. 5-64 by Arie Peters.

IVORY (E. Hemming, Amer. Nurseryman 150(11):50. 1979, without descr., as another yellow-berried cultivar). = ? **IVORY HALL** or ? **IVORY TOWER**.

IVORY HALL (Cannon Plants, Greenwood, Delaware, cat. sp. 1973, without descr.). G. Eisenbeiss & T. Dudley, Holly Soc. Amer. Let. 48:8. 1974 - fast growing, compact, spreading; lvs. typical; fr. ivory color,

late ripening; sdlg. sel. from an F_2 sibling population of PI 231984, ***I. crenata*** f. ***watanabeana***; sel., named, and introd. by N. Cannon; Holly Soc. Amer. Reg. No. 3-74 by N. Cannon. Sister sdlg. to BUTTERBALL, **FORTY NINER**, **HONEYCOMB**, ? IVORY, **IVORY TOWER**, SIR ECHO, **STARGLOW**. (Watanabeana Group). = ? IVORY.

IVORY TOWER (Cannon Plants, Greenwood, Delaware, cat. sp. 1973, without descr.). G. Eisenbeiss & T. Dudley, Holly Soc. Amer. Holly Let. 48:8. 1974 - fast growing upright; lvs. typical; fr. ivory color, late ripening; sdlg. sel. from F_2 sibling population of ***I. crenata*** f. ***watanabeana*** and designated as USDA PI 231984; sel., named, and introd. by N. Cannon; Holly Soc. Amer. Reg. No. 4-74 by N. Cannon. Sister sdlg. to BUTTERBALL, **FORTY NINER**, **HONEYCOMB**, **IVORY HALL**, SIR ECHO, **STARGLOW**. (Watanabeana Group). = ? IVORY, ? IVORY UPRIGHT.

IVORY UPRIGHT (F. Galle, Ortho Lawn & Garden Book, p. 6. 1978) - yellow fr. Probably a sel. by Cannon. Illegitimate, since descr. inadequate. (Watanabeana Group). = ? **IVORY TOWER**.

J. E. T. (Tankard Nurs., Exmore, Virginia, cat. p. 2. summer 1966) - broad columnar, dense, shapes easily with minimum of pruning; lvs. roundish, good size; discov. at Tankard Nurs. by J. Tankard, Jr., and named for him.

JAPONICA (W. Duff & Son, West Craig Nurs., Forfar, Scotland, cat. p. 11. 1960, without descr.) - dwarf. Illegitimate, since the name is in Latin form.

JERSEY PINNACLE (G. Eisenbeiss and T. Dudley, Jour. Holly Soc. Amer. 3(1):32. 1985) - upright, compact, vigorous; lvs. dark green, glossy, elliptic; male; has survived -13°F; hybrid of **GREEN LUSTRE** × **JOHN NOSAL** produced at Rutgers—The State University, New Brunswick, New Jersey, by E. Orton, Jr.; Holly Soc. Amer. Reg. No. 12-84 by E. Orton, Jr.

JOHN NOSAL (E. Orton, Jr., Holly Soc. Amer. Holly Let. 25:17. 1965, without descr. growing at Rutgers—The State University, New Brunswick, New Jersey). G. Eisenbeiss and T. Dudley, Proc. 47th Meet. Holly Soc. Amer. p. 23. 1970 - dwarf, columnar, fastigiate branching; lvs. very small, elliptic to oval, entire or with 1-3 fine crenations on each side; male; discov. 1939 as a chance sdlg. by J. Nosal at Nosal's Holly Nurs., Little Neck, Long Island, New York; introd. 1957; Holly Soc. Amer. Reg. No. 7-70 by M. Nosal, Calverton, New York. Male parent of **DWARF PAGODA** and **GREEN DRAGON**. = JOHN NASH.

var. *kanehirae* Yamamoto (Y. Yamamoto, Suppl. Icon. Plant. Formosana 1, p. 31, fig. 1. 1925) - described as being similar to ***I. crenata*** [var. ***crenata***] but differs from it by having larger spathulate lvs. that are minutely crenate-serrate. In 1987 T. Yamazaki (Jour. Japanese Bot.

62(6):191) concluded that ***I. crenata*** var. *mutchagara* (Makino) Ohwi (Bull. Sci. Mus. Tokyo 33:78. 1953), based on *I. mutchagara* Makino (Bot. Mag. Tokyo 27:75, fig. 2A, 1913), was convarietal with ***I. crenata*** var. *kanehirae* Yamamoto. However, Yamazaki indicated that his infraspecific taxon was not a var. of ***I. crenata***, but rather, based on morphology and geographical distribution (Islands of Amami Oshima, Ryukyus and Taiwan) of var. ***kanehirae*** (including var. *mutchagara*), should be included in ***I. maximowicziana*** Loesener as ***I. maximowicziana*** var. ***kanehirae*** (Yamamoto) Yamazaki. This view is accepted here. Some of the pertinent synonyms of ***I. maximowicziana*** var. ***kanehirae*** (Yamamoto) Yamazaki are: *I. mutchagara* Makino (1913), ***I. crenata*** var. *kanehirae* Yamamoto (1925), *I. kanehirae* (Yamamoto) Koidzumi (Bot. Mag. Tokyo 43:389. 1929), ***I. triflora*** var. *kanehirae* (Yamamoto) Hu (Jour. Arnold Arb. 34:151. 1953), *I. mutchagara* (Makino) Masamune (Transact. Nat. Hist. Soc. Formosa 25:253. 1935), ***I. crenata*** var. *mutchagara* (Makino) Ohwi (1953), and ***I. maximowicziana*** var. *mutchagara* (Makino) Hatusima (Flora Ryukyus, 2d ed., p. 884. 1975). There is no need to question the assignment, in this case the recombination of var. ***kanehirae*** to ***I. maximowicziana***, as it is a taxonomic judgment made by a Japanese specialist. The question does arise, however, about why ***I. maximowicziana*** var. ***kanehirae*** (Yamamoto) Yamazaki (1987) has nomenclatural priority over ***I. maximowicziana*** var. *mutchagara* (Makino) Hatusima (1975). The "International Code of Botanical Nomenclature" (1988) rules that a name (published at any given rank) has priority when it is validly published at the earliest date. At the rank of variety, (var.) ***kanehirae*** was first validly published by Yamamoto in 1925. It does not matter that it was assigned to ***I. crenata*** at that time. At the rank of variety, *mutchagara* was first used by Ohwi in 1953. Again, it does not matter that Ohwi's application was as a variety of ***I. crenata***. Accordingly, var. ***kanehirae*** (1925) has undeniable priority over var. *mutchagara* (1953). = ***I. maximowicziana*** var. ***kanehirae***, *I. crenata* var. *mutchagara* (Makino) Ohwi, *I. mutchagara* Makino.

KIIRO-FUKURIN (E. Griffith and H. Hyland, USDA Plant Inventory 164:22. 1966, without descr.) - coll. 1956 by J. Creech from Nakada Nurs., Angyo, Japan; PI 236021, NA 25700; distributed to the nursery trade from the USDA Plt. Introd. Sta., Glenn Dale, Maryland, in 1960. The Romanji common name KIIRO-FUKURIN, though rendered by Griffith and Hyland as a cv. name, is not recognized here as a legitimate cultivar name, since it is a common name. This name translates to "yellow margin," which is not descriptive of this plant, since this plant has yellow spotted and streaked leaves. = **ANGYO**.

KINGSVALE (A. Bartels, Gardening with Dwarf Trees and Shrubs. English ed. 1:161-162. 1986) - flattened, globe shaped; original plt. 4 ft tall and 7 ft wide; lvs. less than 3/8" long; introd. 1926 by Kingsville Nurs.,

Kingsville, Maryland. = **KINGSVILLE DWARF**, KINGSVILLE.

KINGSVILLE (Finding List, Breeze Hill Gdns., Harrisburg, Pennsylvania, 10th ed., p. 28. 1940, without descr.) - rec. from Kingsville Nurs., Kingsville, Maryland. Kingsville Nurs., Kingsville, Maryland, cat. p. 1. 1941 - dwarf, compact, extremely hardy. H. Hume, Hollies, p. 105. 1953 - grown from seed of MICROPHYLLA by W. Appleby in Baltimore, Maryland, about 1912; intro. by Kingsville Nurs. 1940. D. Wyman, Shrubs and Vines for Amer. Gdns., rev. ed., p. 225. 1969 - original plt. purchased by Hohman 1926. Illegitimate, since the originator subsequently changed the name of the clone to **KINGSVILLE DWARF**, a different clone from **KINGSVILLE GREEN CUSHION**. = **KINGSVILLE DWARF**, KINGSVALE, not ***I. cornuta*** KINGSVILLE.

KINGSVILLE DWARF (Anonymous, Proc. 74th Ann. Conv. Amer. Assoc. Nurserymen, p. 16. 1949) - very dwarf, compact, very twiggy, slightly faster growing than HELLERI; lvs. slightly larger than **HELLERI** lvs.; discov. 1912 by W. Appleby at his residence in Baltimore, Maryland; named and introd. 1940 by H. Hohman, Kingsville, Maryland; Amer. Assoc. Nurserymen Plt. Reg. No. 45 by H. Hohman 1948. Mound-shaped, similar to **HELLERI** but less formal branching habit; female. = KINGSVALE, KINGSVILLE.

KINGSVILLE GREEN CUSHION (Anonymous, Proc. 77th Ann. Conv. Amer. Assoc. Nurserymen, 1952) - very low spreading; extremely compact, very twiggy, and dense; lvs. small, very dark green; hardy to -6°F; orig. Kingsville Nurs., Kingsville, Maryland; Amer. Assoc. Nurserymen Plt. Reg. No. 364 by H. Hohman 1952. Male. Thought by some to have orig. at McLean Nurs., Towson, Maryland. = GREEN CUSHION, ? HELLER GREEN CUSHION, KINGWOOD GREEN CUSHION.

KINGWOOD GREEN CUSHION (A. Bartels, Gardening with Dwarf Trees and Shrubs, English ed. 1:162. 1986, without descr.). = **KINGSVILLE GREEN CUSHION**, GREEN CUSHION, ? HELLER GREEN CUSHION.

KOHL'S FASTIGIATA (Hess Nurs., Wayne, New Jersey, cat. p. 2. fall 1961-sp. 1962, without descr.).

KUNMING (Wister et al., Holly Soc. Amer. Bul. 6:32. 1953, without descr.) - introd. about 1947 by Styer's Nurs. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - open, rapid growing; young stems red; female. Globe shaped; lvs. dark green, medium size, but larger than MICROPHYLLA lvs.; sdlg. orig. about 1932; sel. and named by Styer's Nurs., Concordville, Pennsylvania.

var. *latifolia* (W. Goldring, Garden (London) 31:129. 1887) - distinct from var. *aureo-variegata* and var. *longifolia*; lvs. almost twice as broad as the typical form. Goldring is the usual reference cited for var. *latifolia*, but not the earliest. A. Lavelle, Arb. Segrezianum, p. 44. 1877, without

descr. St. John's Nurs., Worcester, England, cat. p. 48. 1893, without descr. Andorra Nurs., Conshohocken, Pennsylvania, cat. p. 27. 1903 - more upright growth than type; lvs. oblong, glossy green. Ibid., cat. p. 17. 1910 - broad leaved, with var. *fortunei* as separate entry. A. Rehder, Man. Cult. Trees & Shrubs, p. 544. 1927 - lvs. elliptic or obovate to oblong-obovate; with syns. of var. *elliptica* Hort. and var. *major* Hort. Hillier & Sons, Winchester, England, cat. 1940 - of stronger growth; lvs. a little wider; with syns. of var. *elliptica* and var. *major*. B. Boom, Nederl. Dendr., 3d ed., p. 310. 1949 - lvs. large; with var. *elliptica* Hort. and var. *major* Hort. in syn. Wister et al., Holly Soc. Amer. Bul. 6:32. 1953, without descr.; with syns. of var. *elliptica* Siebold, var. *fortunei* Hort. ex Miquel, ? var. *globosa*, and var. *rotundifolia* Maximowicz. H. Hume, Hollies, p. 106. 1953 - compact shrub; lvs. curved, elliptic to elliptic-oblong, base and tip obtuse; male; frequently sold as ROTUNDIFOLIA [in U.S. nurseries]. If all the synonyms reported above were originally intended at the clonal level, now considered cultivar rank, they might all equate to LATIFOLIA. But descriptive data are inadequate or absent, and authentic material for comparison is lacking. Considering the diverse sources, the time periods, and the confusion with ROTUNDIFOLIA, it seems dubious and foolhardy to equate all of the above synonymy to LATIFOLIA at the cultivar rank. There are many different clones that have been named LATIFOLIA. Since all of the material cited by the refs. is of cult. orig., the name var. *latifolia* is not acceptable at bot. rank. See entries of f. *latifolia*, LATIFOLIA, var. *rotundifolia*, ROTUNDIFOLIA, var. *major*, and **MAJOR**. Because of the lack of acceptable data to the contrary, var. *latifolia* Goldring = LATIFOLIA of some authors, f. *latifolia* (Goldring) Rehder, ***I. elliptica*** Siebold, var. *elliptica* Hort., ***I. fortunei*** (cf. G. Nicholson).

f. *latifolia* (Goldring) Rehder (A. Rehder, Biblio. Trees & Shrubs, p. 402. 1949, as a change in rank from var. *latifolia* (Goldring)) - syn. with var. *latifolia* Goldring, var. *major* Nicholson, ? var. *rotundifolia* Maximowicz, ***I. fortunei*** Hort. ex Miquel, ***I. elliptica*** Siebold ex Miquel. S.-y. Hu, Jour. Arnold Arb. 30:323. 1949 - broad-leaved form; lvs. oblong or elliptic, mature lvs. 13/16"-1 3/16" long, 3/8"-5/8" wide, apex obtuse or subacute. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960, as a cv. - shrub to 1.5 m tall, very compact, upright; lvs. flat, elliptic to longish, 2-3.8 cm long, narrow obtuse tip, with syn. of ***I. fortunei*** Miquel. W.J. Bean, Trees & Shrubs Hardy Brit. Isles, 8th ed., 2:440. 1973 - small tree, occasionally to 20 ft; lvs. oval, boxlike, 1/2"-1 1/4" long, 1/4"-5/8" wide, teeth minute, rounded; fr. 1/4" in dia. on pedicels that are 1/4" or less in length; introd. by R. Fortune from cult. This descr. is somewhat dubious, since it is identical to the descr. used for ***I. crenata*** var. *major* in W.J. Bean, Trees & Shrubs Hardy Brit. Isles, 4th ed., 1:645. 1925. In Bean's 8th ed., no reference or citation is made to his 4th ed.; and var. *major* is not listed as a syn. of or a different clone

from f. *latifolia*, nor are other synonyms given. While Rehder's *forma* created a convenient grouping for many names, it is dubious at botanical rank, since it is based on diverse cultivated material. = ***I. elliptica*** Siebold, var. *elliptica* Hort., ***I. fortunei*** Hort., LATIFOLIA, var. *latifolia* Goldring.

LATIFOLIA (B. Boom, Nederl. Dendr., 4th ed., p. 337. 1959, as a cv. distinct from ROTUNDIFOLIA) - lvs. 2-4 cm long, larger and more rounded than MICROPHYLLA and **CONVEXA**; origin Japan; introd. 1865 to Netherlands by Siebold; with *elliptica* Hort. and *major* Hort. in syn. S.-y. Hu, Amer. Hort. Mag. 49(4):199. 1970, as a cultivar - lvs. larger, 3/4"-1 1/2" long, obtuse at apex; much cult. in Europe and U.S. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960 as a cv., ibid., 2d ed., 2:183. 1977 - Krüssmann changed back to f. *latifolia* (Goldring) Rehder. D. Wyman, Amer. Nurseryman 112(9):117. 1960, and idem, Arnoldia 20(7):46. 1960 - vigorous, upright to 20 ft tall; lvs. large, glossy, 1 1/2" long, 1/2"-5/8" wide; with syn. of *fortunei, grandifolia, macrophylla, major, rotundifolia.* D. van Gelderen, Dendroflora 1971(8):33. 1971 - as cv., with ROTUNDIFOLIA in syn. H. Hume, Hollies, p. 106. 1953 - frequently cataloged by [U.S.] nurseries as ROTUNDIFOLIA. R. Clark, Hortus Third, p. 591. 1973 - with FORTUNEI in syn. From the above references and from observations of plants labeled LATIFOLIA in the U.S. Nurseries, it is apparent that many more than one clone have been named LATIFOLIA. Many descriptions are missing or inadequate, origins are unknown, and authentic materials are not extant. Some of the reported synonymy is dubious and contradictory. Until a type specimen or authentic material is determined or designated for this cultivar, the identity of LATIFOLIA must remain confused. At cultivar rank the name LATIFOLIA is illegitimate, since the name ***I. aquifolium*** **LATIFOLIA** has priority. = ***I. elliptica*** Siebold ex Miquel, ? var. *elliptica* Hort. from Boom, ? ***I. fortunei*** Hort. ex Miquel, FORTUNEI, var. *fortunei* Hort., var. *globosa* Wister, ? GRANDIFOLIA, ? var. *latifolia* Goldring, ? f. *latifolia* (Goldring) Rehder, ? MACROPHYLLA, ? **MAJOR**, ? var. *major* Nicholson, ? ROTUNDIFOLIA, ? var. *rotundifolia* Maximowicz.

LAUREL LAKE (Laurel Lake Gdns. and Nurs., Salemburg, North Carolina, cat. p. 13. 1964, without descr.). Introd. by Laurel Lake Nurs.; upright, broad pyramidal; lvs. dark green, tips obtuse to rounded, bases obtuse; female. Legitimately published here for the first time by providing a descr.

LAURIFOLIA (E. Orton, Jr., Holly Soc. Amer. Let. 25:17. 1964, without descr.) - rec. from Kingsville Nurs., Kingsville, Maryland, by Rutgers—The State University, New Brunswick, New Jersey. E. Orton, Jr., in Holly Soc. Amer. Let. 60:28. 1978, without descr. - as "Deverman's" LAURIFOLIA.

LINDLEYANA (Lindley Nurs., Greensboro, North Carolina, cat. p. 12.

fall 1946-sp. 1947) - broader than regular type. D. Wyman, Arnoldia 20(7):46. 1960 - dense; but differs little from other good sel. Male.

LISA New name. Sdlg. orig. named by Athens Nurs., Athens, Georgia. Dense, rounded; lvs. dark green, ovate to broadly elliptic, tips obtuse, bases cuneate. Published here for the first time.

LITTLE GEM (Tingle Nurs., Pittsville, Maryland, cat. p. 22. fall 1961-sp. 1962) - broader than tall, good for low positions. Male.

LITTLE LEAF (Millcreek Nurs., Newark, Delaware, cat. p. 2. 1958, without descr.). J. Floyd, Jr., Ornamental Plt. Coll., Hort. Gdn. Clemson University, Clemson Agr. Exp. Sta., Clemson, South Carolina, Miscel. Pub. 9. 1973, as LITTLELEAF, without descr.

LOEB (Medford Nurs., Medford, New Jersey, cat. p. 6. fall 1971- sp. 1972, as LOEBI) - extremely compact, spreading; hardy. By correcting the orthography, the authors are the first to legitimately publish the name **LOEB**.

LONGBOY New Name. Sel. and named late 1950's by Dr. W. Frierson; vigorous upright spreading; lvs. dark green, elliptic, tips acute, bases cuneate; male. By adding a descr., the authors are the first to legitimately publish the name **LONGBOY**.

LONGFELLOW (Boulevard Nurs., Newport, Rhode Island, cat. p. 11. 1940) - compact; lvs. "cleaner" and glossier; sdlg. sel. many years ago; all stock from original plt. This was a combined descr. with **TENNYSON**. Descriptions sorted out by D. Wyman, Arnoldia 20(7):46. 1960 - described **LONGFELLOW** as a poor grower, closely resembling ***I. crenata microphylla***; lvs. rather large. D. Wyman, Amer. Nurseryman 122(9):123. 1960 - not as hardy as some others [in Boston]. Wister et al., Holly Soc. Amer. Bul. 6:33. 1953, without descr. - orig. Holland 1917, Boulevard Nurs., Newport, Rhode Island, about 1920. Upright, spreading; male.

var. *longifolia* (A. Lavallee, Arb. Segrezianum, p. 44. 1877 - without descr.). W. Goldring, Garden (London) 31:129. 1887 - lvs. longer and narrower than type; described from cultivation. S.-y. Hu, Jour. Arnold Arb. 30:325. 1949, based on Goldring (1887) - mature lvs. lanceolate or oblong-elliptic 1-3 cm long, 4-11 mm wide, normal length 4 times or more the width, apex acute; cultivated Germany, Great Britain, U.S.; with f. ***longifolia*** (Goldring) Rehder in syn. A. Rehder, Mitt. Deut. Dendr. Gesel. (17):161. 1908 and idem, Biblio. Trees & Shrubs, p. 402. 1949 - in syn. to f. ***longifolia*** (Goldring) Rehder. The authors consider Goldring's plant a cultivar, since it was from cultivation. Later, with confusing and conflicting interpretations, S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957 - accepted f. ***longifolia*** (Goldring) Rehder but also called it a "horticultural variety"; then on p. 62 in the entry for KINGSVILLE [**KINGSVILLE DWARF**] - "a clone of f. ***longifolia***" and on p. 64 in the entry for MICROPHYLLA - "a clone of var. *longifolia* f. *rehderiana*" and in the entry for WILLOW LEAF - "a

clone of f. ***longifolia***." Finally, idem., Amer. Hort. Mag. 49(4)199. 1970, as a cultivar, without mention of syn. of her earlier interpretations. = LONGIFOLIA, f. *longifolia* in part.

f. ***longifolia*** (Goldring) Rehder (A. Rehder, Mitt. Deut. Dendr. Gesel. 1908(17):161. 1908.) - the following quotation was translated from German:

> lvs. narrow elliptic to lanceolate, pointed and mucronate tipped, sharply serrate, 1.3-3.5 cm long. According to the somewhat uncertain description in Garden, [Goldring (Garden 120:129. 1887)], var. *longifolia* Goldring can be separated from the type [typical expression of ***I. crenata***] by its narrower and longer lvs. I also include [in f. ***longifolia***] a Japanese specimen Faurie 6894 and specimens at Kew like the typical cultivation form, having very small lvs. I saw a Japanese specimen of f. ***longifolia*** from Faurie's No. 6894. I place here those specimens of Kew #1 like the typical cultivated form, having very small lvs. scarcely 2.5 cm. long, with the Japanese forms that are up to 3.5 cm. long.

Obviously, Rehder was not naming a single clone, which we would call a cultivar; he was grouping a particular range of leaf lengths of taxa that can be considered as a valid botanical *forma*. Since Rehder included elements of wild origin in his *forma*, this further vindicates his *forma* at botanical rank. From our observations of numerous populations of open-pollinated seedling populations, we found that many named cultivars, and some somatic mutations, such as **HIGH LIGHT**, indicate that the narrow, pointed, sharply serrated leaf described by Rehder may occur randomly and in expressions fully graduated from narrowly elliptic to broadly lanceolate. Similar leaf patterns also occur randomly in wild populations. S.-y. Hu (1957) made three confusing interpretations of this name (see var. *longifolia* in this checklist). = *longifolia* Goldring in part.

LONGIFOLIA (W. Goldring, Garden (London) 31:19. 1887, as var. *longifolia*) - lvs. longer and narrower than type; descr. from cult. A. Rehder, Mitt. Deut. Dendr. Gesel. 1908(17):161. 1908 - [his] f. ***longifolia*** was based in part on var. *longifolia* Goldring but included other elements. A. Rehder, in Bailey's Standard Cyclopedia Hort. 2:1640. 1915, listed var. *longifolia* Hort. - lvs. elliptic-oblong to lanceolate. A. Rehder, Man. Cult. Trees & Shrubs, 1st ed., p. 545. 1927, and idem, 2d ed., p. 551. 1940 - cited var. *longifolia* Goldring. A. Rehder, Biblio. Trees & Shrubs, p. 402. 1949 - cited f. ***longifolia*** (Goldring) Rehder, which he accepted as a valid botanical forma. However this change of rank from var. to *forma* does not prevent Goldring's plant from being recognized as a cultivar. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960, as cv. - lvs. narrowly lanceolate, 3-5 cm long, 0.9 cm wide; twigs dark reddish brown. ? Male. S.-y. Hu made various interpretations (see var. *longifolia* in this checklist) but her last was as a cultivar. According to the literature

a valid **LONGIFOLIA** cultivar is conceivable, but it is exceedingly difficult to authenticate. = var. *longifolia* Goldring, var. *longifolia* of Lavallee, f. ***longifolia*** in part.

f. *longipedunculata* S.-y. Hu (S.-y. Hu, Jour. Arnold Arb. 30:324. 1949, as a new *forma*) - lvs. broad; staminate cymes with peduncles 10 mm long, pedicels 2-3 mm long, fruiting pedicels 10-12 mm long. S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957 - elongate peduncles; a var. probably not introd. to U.S. = subsp. ***fukasawana*** (Makino) Murata, var. *fukasawana* Makino.

LOYCE NELSON (Plants Growing in Conservatories and Gdns., Longwood Gdns., Kennett Square, Pennsylvania, p. 90. May 1965, without descr.). Tom Dodd Nurs., Semmes, Alabama, cat. p. 13. 1966-67, without descr. Distinct horizontal branching, low growing, twice as wide as tall, not as low as **REPANDENS** of Dodd, but lower growing than **EDWIN DOZIER**; lvs. ovate, smaller than **EDWIN DOZIER**; male. Named for a Baptist Missionary and introd. by T. Dodd, Jr. By providing a descr., the authors are the first to legitimately publish the name **LOYCE NELSON**.

LUSTGARTEN New name. (Bair Lustgarten Nurs., Middle Island, Long Island, New York, cat. p. 43. fall 1976-sp. 1977, as LATIFOLIA Lustgarten strain) - upright; lvs. deep green, elegant; best evergreen hedge; developed at Bair Lustgarten Nurs. about 1946; "the hardiest of any ***Ilex***." The authors are the first to publish the name **LUSTGARTEN**, a reformulation of the originator's designation "LATIFOLIA Lustgarten strain."

LUTEA (Foxborough Nurs., Street, Maryland, cat. p. 8. fall 1986, without descr.).

var. *luteo-variegata* Regel (E. Regel, Gartenflora 13:37, 39. 1886) - lvs. small, curved, obovate-oval, crenate, golden yellow-speckled; cult. in the Czar's Garden, St. Petersburg [Leningrad], Russia, from plants sent from Japan by C. Maximowicz in 1863. C. Maximowicz, Mem. Acad. Sci. St. Petersbourgh 29(3):35. 1881 - the only record found indicated that plants of ***I. crenata*** with yellow or white variegated-leaves were cultivated in Japanese gardens [which he probably saw during his visit to Japan 1861-63]. Apparently Maximowicz did not name any of these plants. A. Rehder in L. Bailey, Stand. Cyclop. Hort. 2:1640. 1915 - lvs. spotted yellow, obovate; with var. *aureo-variegata* Hort. in syn. Idem, Man. Cult. Trees and Shrubs, 1st ed., p. 544. 1927 - lvs. spotted yellow; with var. *aureo-variegata* Goldring and var. *variegata* Bean in syn. Idem, Man. Cult. Trees and Shrubs, 2d ed., p. 550. 1940 - same as 1st ed., except Nicholson is listed instead of Bean as author citation for *variegata*. We note that Rehder published a rank change of Regel's var. *luteo-variegata* to f. *luteo-variegata* in 1908 (see f. *luteo-variegata* (Regel) Rehder in this checklist). Rehder cited *luteo-variegata* as a var. in Bailey's Stand. Cyclop. Hort. 2:(1915) and in the 1st (1927) and 2d

(1940) editions of his Man. Cult. Trees and Shrubs. Rehder later changed var. *luteo-variegata* back to forma in his Biblio. Trees and Shrubs, 1949. B. Boom, Nederl. Dendr., 3d ed., p. 310. 1949 - lvs. golden flecked; with syns. of var. *aureo-variegata* Goldring and var. *fortunei* Hort. Wister et al., Holly Soc. Amer. Bul. 6:33. 1953, without descr. - with syn. of var. *variegata* Nicholson. Illegitimate as a botanical var., since the plant orig. from cult. = **LUTEO-VARIEGATA**. See **LUTEO-VARIEGATA** for full syn.

f. *luteo-variegata* (Regel) Rehder (A. Rehder, Mitt. Deut. Dendr. Gesel. 1908(17):161. 1908 - reduced var. *luteo-variegata* Regel in rank to bot. *forma*; lvs. rounded, oval; a mutation from var. *typica*, not from f. *variegata* G. Nicholson, Kew Hand-List 1894. C. Schneider, Illus. Handb. Laubholzkunde, Suppl. 2:1023. 1912 - hardly different from f. *microphylla* except gold variegated (from Rehder); listed by H. Hesse Nurs., Werner, Germany; with var. *aureo-variegata* Hort. in syn. T. Loesener, Mitt. Deut. Dendr. Gesel. 1919(28):1919, without descr. - cultivated form from Japan. A. Rehder, Biblio. Trees & Shrubs, p. 402. 1949, with the following in syn.: var. *luteo-variegata* Regel, var. *aureo-variegata* Goldring, var. *variegata* Nicholson, ***I. fortunei*** f. *aureo-variegata* Hort. ex Schelle. S.-y. Hu, Jour. Arnold Arb. 30:325. 1949 - listed the same syn. as Rehder did in 1949. Idem, Nat'l Hort. Mag. 36(1):49, 62. 1957 - a "horticultural form" with elliptic or lanceolate lvs., variegated with yellow. Apparently Hu (1957) did not consider f. *luteo-variegata* to be a cultivar, since she indicated **GOLDEN VARIEGATED** was a clone of f. *luteo-variegata*. B. Boom, Nederl. Dendr., p. 310. 1949 - lvs. golden flecked; with var. *aureo-variegata* Goldring and var. *fortunei* Hort. in syn. Dubious as a bot. *forma*, since the plant orig. from cult. = **LUTEO-VARIEGATA**. See **LUTEO-VARIEGATA** for complete list of syn.

LUTEO-VARIEGATA (B. Boom, Nederl. Dendr., 4th ed., p. 337. 1959, as cv.) - dwarf; lvs. less than 2 cm long, like LATIFOLIA but yellow spotted; orig. Russia 1864. E. Regel, in Gartenflora 13:37, 39. 1886, named this plt. var. *luteo-variegata* and stated that this plant was sent from Japan to Russia by Maximowicz in 1863. Boom was the first to publish the name **LUTEO-VARIEGATA** at cv. rank, which he based on var. *luteo-variegata* Regel. He also changed var. *aureo-variegata* Goldring in 1959 from a syn. of *luteo-variegata*, as it is indicated in his 1949 ed., and gave it a cv. rank, separating these two cvs. by leaf size, stating that **LUTEO-VARIEGATA** has lvs. less than 2 cm and AUREO-VARIEGATA has lvs. more than 2 cm long. F. Meyer, Plt. Expl. Ornamentals, USDA ARS 34-9, p. 144. 1959 - lvs. small, narrowly elliptic, some occasionally blotched yellowish; PI 242998, obtained from Royal Bot. Gard. Kew 1958. S.-y. Hu, Amer. Hort. Mag. 49(4):199. 1970 - lvs. elliptic or lanceolate, variegated or blotched with yellow; introd. to U.S. from Royal Bot. Gard. Kew in 1957 by F.

Meyer. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. 1960 - lvs. 2 cm long, gold spotted; found in Russia 1869 [obviously Regel's plant]; AUREO-VARIEGATA based on Goldring's var. was given as a separate cultivar. R. Clark in Hortus Third, p. 591. 1976 - lvs. mottled yellow; with syn. of VARIEGATA. It appears reasonable that **LUTEO-VARIEGATA** as a cultivar is Maximowicz's plant from Japan which Regel named var. *luteo-variegata*. **LUTEO-VARIEGATA** (Maximowicz's introd.) did exist and was probably a single clone easily identified in Regel's time. Many different names have been published (see syn.) involving the name *luteo-variegata* but with inadequate descr., and its variable ranks and syn. resulted in confusion. This confusion, along with the absence of authentic plants, makes current possible identification of LUTEO-VARIEGATA and the other involved names dubious. However, **LUTEO-VARIEGATA** as a clone unquestionably did exist. (Variegated Group). = var. *luteo-variegata* Regal, ? f. *luteo-variegata* (Regel) Rehder, var. *major* of Schelle, ? MICROPHYLLA AUREO-VARIEGATA, VARIEGATA Bean, var. *variegata* Bean, var. *variegata* Dallimore, var. *variegata* Nicholson, not AUREO-VARIEGATA of Boom.

LUTHER COPELAND New name. Sel. and named and introd. 1985 by Tom Dodd, Tom Dodd Nurs., Semmes, Alabama. Compact, globose, slow growing; lvs. broadly elliptic; male. Published here for the first time.

MACROPHYLLA (J. Conder, Landscape Gardening in Japan, 2d ed., p. 112. 1912, without descr., as *macrophylla*) - published with Romanji name "Oba-tsuge." Illegitimate, since the name ***I. aquifolium* MACROPHYLLA** (orig. 1889) has priority. Unable to equate to MACROPHYLLA of Moon.

MACROPHYLLA (Lindley Nurs., Greensboro, North Carolina, cat. p. 12. fall 1946-sp. 1947) - medium growth; more spreading, and with lvs. larger and broader [than typical for the species]; female. Possibly equivalent to MACROPHYLLA of Wister and Wyman. Unable to equate to MACROPHYLLA of Conder. Illegitimate by priority of ***I. aquifolium* MACROPHYLLA**.

MACROPHYLLA (William Moon Nurs., Morrisville, Pennsylvania, cat. 1910) - lvs. a little larger than typical for ***I. crenata***. Illegitimate, since the name ***I. aquifolium* MACROPHYLLA** (orig. 1889) has priority. Unable to equate to MACROPHYLLA of Conder.

MACROPHYLLA (Wister et al., Holly Soc. Amer. Bul. 6:34. 1953, without descr.) - said to be grown at Brownell Farms, Milwaukie, Oregon, and The Morris Arb., Philadelphia, Pennsylvania. D. Wyman, Arnoldia 20(7):46. 1960, without descr. - as *macrophylla*; it is probably a syn. of var. *latifolia*. Wyman's suggestion that *macrophylla* is a syn. of var. *latifolia* is speculative, since the identification of his var. *latifolia* is questionable. MACROPHYLLA of Wister possibly equates to

MACROPHYLLA of Moon, but not to MACROPHYLLA of Conder or Lindley. Illegitimate, since the name ***I. aquifolium*** **MACROPHYLLA** has priority.

MAGDA (Cartwright Nurs., Collierville, Tennessee, advert. in Amer. Nurseryman 119(2):25. 1964, without descr.). Sdlg. orig., named, and introd. late 1950's by Cartwright Nurs., Collierville, Tennessee; dense upright rounded; lvs. dark green broadly elliptic to obovate; male. The authors are the first to legitimately publish the name **MAGDA** by providing a description.

var. *major* (G. Nicholson, Kew Hand-List Trees & Shrubs 1:61. 1894, without descr.). L. Spaeth, Baumschule, Berlin, Germany, cat. p. 90. 1901 - larger lvs. than var. *fortunei*. W. Dallimore, Kew Hand-List Trees & Shrubs, 2d ed., p. 89. 1902, without descr. - syn. with ***I. fortunei*** Hort., not ***I. fortunei*** Lindley. Idem, Holly Yew & Box, p. 121. 1908 - very wide lvs.; has been called ***I. fortunei***; photo of *major* in fig. 6 in Dallimore does not represent *major* as described on p. 121; probably the wrong plant was photographed. W.J. Bean, Trees & Shrubs Hardy Brit. Isles., 1st ed., 1:645. 1914, and 7th ed., 2:645. 1951 - occasionally to 20 ft; lvs. 1/2"-1 1/2" long, 1/4"-5/8" wide, oval, box-like, minutely round toothed; fr. black; regarded by some as Thunberg's type of the species; with syn. of ***I. elliptica Hort.*** Idem, Trees & Shrubs Hardy Brit. Isles, 8th ed., 2:440. 1973 - as syn. under f. *latifolia* (Goldring) Rehder with the identical description as given for var. *major* in 1st and 7th eds., with only var. *latifolia* Goldring listed as a syn. An herbarium collection labeled MAJOR in the National Arboretum and Arnold Arboretum Herbaria is noted as "cult. Kew No. 98, rec. 1908 from Veitch, coll. by Bean." These specimens have round, minutely spinulose lvs. lacking crenation and have female flowers. A. Hill, Kew Hand-List Trees & Shrubs, 3d ed., p. 40. 1924, without descr. - with ***I. fortunei*** Hort. in syn. A. Rehder, Man. Cult. Trees & Shrubs, 1st ed., p. 544. 1927 and idem, 2d ed., Man. Cult. Trees & Shrubs, p. 550. 1940 - lvs. elliptic or obovate to oblong; in syn. to var. *latifolia* Goldring. B. Boom, Nederl. Dendr., 3d ed., p. 310. 1949, without descr. - syn. of var. *latifolia* Goldring and with ***I. elliptica*** Hort.; also a syn. of var. *latifolia*; idem, 2d ed., Nederl. Dendr.; idem, 4th ed.; idem, 3d ed.; and idem, 5th ed. - [descr. of LATIFOLIA] lvs. to 4 cm long, oval but widest above the middle; introd. 1865 by Siebold from Japan; with var. *major* as a syn. of LATIFOLIA and with var. *latifolia* Goldring and var. *elliptica* Hort. also as syn. of LATIFOLIA. A. Rehder, Biblio. Trees & Shrubs, p. 412. 1949, as var. *major* Nicholson, without descr. - syn. of f. *latifolia* (Goldring) Rehder; with var. *latifolia* Goldring, var. *rotundifolia* Maximowicz, ***I. elliptica*** Hort., and ***I. fortunei*** Hort. also as syn. of f. *latifolia*. P. Synge in Chittenden, Royal Hort. Soc. Dict. Gdn. 2d ed., 2:1045. 1956 - lvs. larger than typical; fr. 1/4" wide. D. Wyman, Arnoldia 20(7):42. 1960 - lvs. large, 1 1/2" long, 1/2"-5/8" wide,

vigorous; in syn. of *latifolia*; with var. *fortunei* and var. *rotundifolia* also in syn. of var. *latifolia*. While agreement in description and synonymy is not consistent and descriptions are far from adequate, it appears possible that all the above authors were considering the same clone, which is listed in this checklist as **MAJOR** of Nicholson. In addition to the opinions of the various authors, their reporting also reflects popular usages of synonyms in their time. = **MAJOR** of Nicholson, ? f. *major* Schelle.

f. *major* (E. Schelle in L. Beissner, E. Schelle, and H. Zabel, Hand. Laub-Benennung, p. 291. 1901, without descr.) - as *major*. = ? **MAJOR** of Nicholson.

MAJOR (F. Meyer, USDA Plt. Expl. Ornamentals, ARS 34-9:144. 1959) - as cv. MAJOR; shrub 8-10 ft; lvs. elliptic to obovate, 1" long; known for relatively large lvs.; garden origin; PI 242179 coll. by F. Meyer at Royal Bot. Gdn., Edinburgh. H. Hyland, USDA Plt. Inventory 168. 1960, without descr. - PI 276276; plt. rec. as *f. latifolia* MAJOR from Royal Bot. Gdn., Edinburgh 1960. The following description of PI 276276 is provided as observed from living specimens: lvs. 2.5 cm long, 4.0 cm wide, obovate, with very rounded tips and acuminate bases, margins with large rounded crenations; male. That this plant is male and has different leaf characters separates it as a clone distinct from, and it is not a syn. of, **MAJOR** of Nicholson, var. *major* of Bean, or MAJOR of Tingle. Illegitimate by being later homonym of **MAJOR** of Nicholson.

MAJOR (G. Nicholson, Kew Hand-List Trees & Shrubs 1:61. 1894, as var., without descr.). W.J. Bean, Trees & Shrubs Brit. Isles, 1st ed., 1:645. 1914 - occasionally to 20 ft, box like oval lvs. 1/2"-1 1/2" long, 1/2"-5/8" wide, minutely round toothed; fr. black. Using var. *major* Nicholson as the basionym of the name and the description above from Bean, the authors determined that this plant is, or at least was, a clone called **MAJOR** that should be recognized as a legitimate cultivar name, in spite of much synonymy to the contrary. It should be noted that the following synonymy is not entirely in agreement with those of the references cited under var. *major*. = ***I. elliptica*** Hort., ? ***I. fortunei*** Hort., ? LATIFOLIA MAJOR, var. *major* Bean, var. *major* Boom, var. *major* Dallimore, var. *major* Hill, var. *major* Nicholson, ? f. *major* Schelle, not MAJOR of Royal Botanic Garden Edinburgh or (Bennett Hybrid Group).

MAJOR (Tingle Nurs., Pittsville, Maryland, cat. p. 20. fall 1956-sp. 1957) - slightly ascending; lvs. flat, good color; similar to ROTUNDIFOLIA but branches better; Bennett Hybrid. S.-y. Hu, Nat'l Hort. Mag. 36(1):62. 1957 - lvs. obovate, 3/8"-7/8" long, 1/4"-1/2" wide, base acute, apex round, rarely obtuse, 7-13 teeth each side; available at Tingle Nurs. C. Tuley, Proc. 38th Meet. Holly Soc. Amer., p. 2. 1965 - lvs. similar to ROTUNDIFOLIA lvs. but branches better with age.

Male. Illegitimate, since this name is a later homonym of **MAJOR** of Nicholson. It is not a synonym of **MAJOR** of Nicholson or of Meyer, or of var. *major* of Bean, or var. *major* of Dallimore, or var. *major* of Hill. (Bennett Hybrid Group).

MAMMOUTH (G. Klingaman, Holly Soc. Amer. Let. 72:8. 1982, without descr.). = **MONMOUTH**.

MARGINATA (K. Sugimoto, New Keys Woody Plts., Japan, p. 22, 277. 1972) - lvs. white margined. Illegitimate, since the name is in Latin form. Description inadequate to relate this selection to any other white-margined clone. (Variegated Group).

var. *mariesii* (Veitch ex Dallimore, Hand-List Trees and Shrubs Kew, 2d ed., p. 89. 1902, without descr.). W. Dallimore, Holly, Yew, & Box, p. 122. 1908 - very stiff, low growing; lvs. roundish, crowded. = **MARIESII**, ***I.*** *mariesii* Veitch ex Dallimore, f. *mariesii* (Bean ex Dallimore) Hu, ***I.*** *nummularioides* and var. *nummularioides* of Bean, 8th ed.

f. *mariesii* (S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957, as f. *mariesii* Bean ex Dallimore) - "A horticultural variety"; lvs. crowded at ends of twigs; often used for dwarfing by Japanese artists; also known as var. *nummularia* Franchet & Savatier. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960, in syn. of NUMMULARIA. = **MARIESII**; ***I.*** *mariesii* Veitch ex Dallimore; ***I.*** *nummularioides* and var. *nummularioides* of Bean, 8th ed.; NUMMULARIA; var. *nummularia* in all ref. citing cult. in Europe and U.S.; not ***I.*** *nummularia* Franchet & Savatier and not var. *nummularia* (Franchet & Savatier) Yatabe, which equate to **NUMMULARIA**.

MARIESII (F. Meyer, USDA ARS 34-9. p. 144. 1959, without descr., as MAIRESII) - in syn. of var. *nummularia*. Although this is the first ref. found for the name **MARIESII** at cultivar rank, the plant was recognized by W. Dallimore, Holly Yew & Box, p. 122. 1908, as a "horticultural variety." T. Dudley and G. Eisenbeiss, Mitt. Deut. Dendr. Gesel. 70:115-131. 1978, and idem, Holly Soc. Amer. Bul. 16. 1978 - stiff, upright, dwarf; lvs. orbicular, obscurely crenate at the tip with 1-4 mucronate teeth on each margin; female; the clonotype is a W.J. Bean specimen in Kew Herbarium collected at Veitch Nurs., England (Veitch No. 580, 1897); Charles Maries coll. and sent this plt. to Veitch Nurs. about 1890 from Japan; this plant in western gardens is frequently misidentified as ***I.*** *nummularia* Franchet & Savatier and is misidentified at various infra-specific ranks including **NUMMULARIA**; the name *nummularia* at all ranks has been erroneously placed in syn. to **MARIESII**, a member of the Nummularia Group. The above Dudley and Eisenbeiss references contain the complex nomenclatural history. = ***I.*** *mariesii* Veitch ex Dallimore; var. *mariesii* Veitch ex Dallimore; f. *mariesii* (Bean ex Dallimore) Hu; ***I.*** *nummularioides* and var. *nummularioides* in Bean, 8th ed., not ***I.*** *nummularia* Franchet & Savatier or **NUMMULARIA**.

MARIGOLD GLITTERS (Clarendon Gdns. Nurs., Pinehurst, North Carolina, cat. 1957, without descr.). Thought to be female with yellow fr.

MAXWELL (Tingle Nurs., Pittsville, Maryland, cat. p. 21. fall 1956-sp. 1957) - spreading, slightly more ascending in habit than **CONVEXA**; lvs. light olive green, slightly convex; Bennett Hybrid. C. Tuley, Proc. 38th Meet. Holly Soc. Amer. p. 2. 1965 - similar to **CONVEXA** in form but faster growing; lvs. like **CONVEXA**, but larger and less glossy. Male. (Bennett Hybrid Group). = HADLOCK.

MENTOR DENSE (R. Clark, Proc. 28th Meet. Holly Soc. Amer., p. 11. 1960) - sister sdlg. to **GREEN PIGMY**; Holly Soc. Amer. Reg. No. 4-60 by A. Shammarello & Son Nurs. A. Shammarello & Son Nurs., South Euclid, Ohio, cat. p. 4. sp. 1961 - semi-dwarf, compact, numerous short upright branches of uniform growth; introd. for first time. Female. = ? DENSA, DENSE.

MENTOR GLOSSY (R. Clark, Proc. 28th Meet. Holly Soc. Amer., p. 11. 1960) - informal, bushy; lvs. glossy dark green, slightly larger than parent type; male; sdlg. orig. in 1945 at Shammarello Nurs., Holly Soc. Amer. Reg. No. 5-60 by A. Shammarello & Son Nurs. A. Shammarello & Son Nurs., South Euclid, Ohio, cat. p. 4. sp. 1961 - thickly branched at center, vigorous; lvs. convex; sdlg. of **CONVEXA**; very hardy; "our recent introd."

METER BOY (E. Hemming, Amer. Nurseryman 150(11):50. 1979) - round lvs. Illegitimate, since descr. inadequate.

MICRO SPECIAL (Phyto Ecology, Ridgely, Maryland, cat. p. 5. fall 1976-sp. 1977) - dwarf, semiupright; lvs. small, shiny, convex. Illegitimate, since part of the name is in Latin form.

var. *microphylla* (C. Maximowicz ex J. Matsumura, Shokubutsu Mei-i, p. 149. 1895, 1897, 1900, without descr.). These appear to be the earliest references to the name ***I. crenata*** *microphylla*. No ref. by Maximowicz has been found. A. Rehder, Mitt. Deut. Dendr. Gesel. 17:160. 1908, as f. *microphylla* - Rehder considered Matsumura's reference to var. *microphylla* Maximowicz dubious. A. Rehder felt that it was unlikely that Maximowicz would publish a new taxon for the first time without a description in a publication like Matsumura's. Still, Rehder did not want to ignore Matsumura's publication of the name var. *microphylla* Maximowicz. Later, Rehder used the rank of var. in L.H. Bailey, Stand. Cyclopedia Hort. 3:1640. 1915 - lvs. 1/3"-1/2" long, elliptic or elliptic-oblong; somewhat hardier than the type [of ***I. crenata***]. Again, Rehder used the rank of var. in Man. Cult. Trees & Shrubs, 1st ed., p. 545. 1927 and in ibid., 2d ed., p. 551. 1940. However, in Biblio. Trees & Shrubs, p. 402. 1949, Rehder used the *forma* rank again. The descriptions in all of Rehder's references listed above are very similar. Andorra Nurs., Philadelphia, Pennsylvania, cat. p. 28. 1903, as var. *microphylla* - "Has been widely disseminated; we have specimens up to 7 ft tall and though we have watched it closely since 1882, we have never seen the foliage

discolored." Shortly after its introduction into the U.S. by C.S. Sargent, the plant was sent from the Arnold Arb. to Andorra Nurs. = f. ***microphylla.***

f. ***microphylla*** Rehder (A. Rehder, Mitt. Deut. Gesel. 17:160. 1908, as *forma nova*) - differs in part from the type [of ***I. crenata***] in that it is dense, robust, low growing, lvs. 0.8- 1.2 cm long, 0.3-0.6 cm wide, ovate-elliptic or narrowly elliptic, mucronate tipped, margin crenate-serrulate; fr. 6-7 mm in diam.; very frost hardy; grown in Arnold Arb. from seed coll. in Metake, Hokkaido, Japan, by C.S. Sargent 1892. Rehder chose to cite the Maximowicz var. name presumably from the Matsumura reference when changing the rank from var. to *forma* and adding a description based on Sargent's sdlgs. No other reference to or by Maximowicz other than Matsumura (see var. *microphylla* Maximowicz) could be found to this name (still cannot be found!). As discussed under var. *microphylla*, Rehder reluctantly used the var. name of Maximowicz for his new *forma* even though it was without a description. However, since he erected a new *forma* with a description of a new plant it was not merely a change in rank. Therefore "Maximowicz ex Matsumura" is not part of the author citation of f. ***microphylla***. S.-y. Hu, Jour. Arnold Arb. 30:323. 1949 - described Rehder's f. ***microphylla*** [= Sargent's introductions] as native to Japan and Korea, as a dwarf, which does not fit Andorra's comments. Rehder did not comment on dwarfness. The fact that Hu (1949) associated f. ***microphylla*** with dwarfness may explain why she listed the dwarf plants **GLASS** and **MORRIS DWARF** as cultivars of f. ***microphylla*** and listed MICROPHYLLA, a low-growing plant, as a cultivar of var. *longifolia* f. *rehderiana*. S.-y. Hu, Amer. Hort. Mag. 49(4):199. 1970 - again cited f. ***microphylla*** as a wild dwarf form, but this time she listed MICROPHYLLA as a cultivar of f. ***microphylla***. While f. ***microphylla*** may or may not be dwarf, it is considered as an authentic botanical *forma* and not a synonym of MICROPHYLLA as accepted by other authors. See MICROPHYLLA, var. *microphylla*.

MICROPHYLLA (Angelica Nurs., Kennedyville, Maryland, cat. p. 36. fall 1974-sp. 75) - upright; lvs. glossy; extremely hardy; our sel. This is a different clone from all other MICROPHYLLA in this checklist. Illegitimate, since the name is in Latin form.

MICROPHYLLA (S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957, as a clone of var. *longifolia* f. *rehderiana*) - low compact; lvs. small, shiny, elliptic, acute at both ends, 1/3"-7/8" long, 1/5"-3/8" wide, 3-4 minute teeth on each side. Idem, Amer. Hort. Mag. 49(4):199. 1970 - listed as a cultivar of f. *microphylla*. B. Boom, Nederl. Dendr., p. 323. 1959 - lvs. 1-1.5 cm long, smaller than LATIFOLIA and ROTUNDIFOLIA lvs., narrowly oval, entire margin is crenate; introd. 1868 to Netherlands by Siebold with var. *microphylla* Maximowicz in syn. L. Chadwick, Amer. Nurseryman 98(12):23. 1953 - 4-7 ft tall, upright in smaller sizes, stiffly

spreading with age; lvs. 1/2"-3/4" long, half as wide; female. It is not clear if a clone is being described in this reference. G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960, as a cultivar - low, densely branched; twigs dark brown; lvs. crowded, elliptic, very narrow, 0.7-1.3 cm long, 0.4-0.7 cm wide, somewhat convex at the tip, dark green. The descriptions provided by these authors are not reliable or adequate enough to separate a single clone from among many sold as MICROPHYLLA. Probably most of the MICROPHYLLA clones in the U.S. nursery trade are from the 1892 Arnold Arboretum seed, which represented many clones, and are not of the Siebold 1868 origin via Netherlands, which also probably represented several clones. In the U.S. nurseries, clones are usually female and vary in leaf size, vigor, and compactness. The orthography of cultivar names was not formalized until 1953, and for this reason it is impossible to accurately determine when the name MICROPHYLLA was first applied to a vegetatively propagated clone. However, clonal propagation of ***I. crenata*** has been extensive in the U.S. since at least the 1930's. While B. Boom applied the cultivar name MICROPHYLLA to a plant introduced in 1868, presumably referring to the Siebold introduction, Boom did not say if MICROPHYLLA or any other name was earlier applied to Siebold's plant. The first record found of the name MICROPHYLLA at any rank was in 1874 when ***I. aquifolium*** **MICROPHYLLA**, now recognized as a cultivar, was named. Therefore, the name ***I. crenata*** MICROPHYLLA is illegitimate as a cultivar name in ***I. crenata***, since ***I. aquifolium*** **MICROPHYLLA** has priority. Furthermore, it is difficult to accept MICROPHYLLA as a cultivar name in ***I. crenata***, since the name has been used for such an ill-defined, confused, and proliferating assemblage of clones. In the U.S. nursery trade, there are many more different and undocumented clones with the name MICROPHYLLA than are discussed in this checklist.

MICROPHYLLA AUREO-VARIEGATA (Herman Hesse, Weener, West Germany, cat. p. 143. 1959-60) - beautiful yellow variegated lvs.; very elegant. Amer. Wholesale Nurs., Dix Hills, New York, advert. in 1990 Composite Stocklist, Long Island Growers Guide, Riverhead, New York, p. 72. 1990, without descr. - with common name "Variegated Upright Japanese Holly." Illegitimate, since the name is in Latin form, and moreover all elements of the name have been previously used individually as cv. names for different clones in ***I. crenata*** and ***I. aquifolium***. Probably not the original name. Variegated clones have been long known in cultivation in European and Japanese gardens. = ? **LUTEO-VARIEGATA**, ? AUREO-VARIEGATA. See **LUTEO-VARIEGATA** and AUREO-VARIEGATA for complete syn.

MICROPHYLLA COLUMNARIS (Tankard Nurs., Exmore, Virginia, cat. p. 11. sp. 1973) - narrow, columnar; lvs. small. Illegitimate, since the

name is in Latin form. = MICROPHYLLA ERECTA.

MICROPHYLLA COMPACTA (Laurel Lake Gdns. and Nurs., Salemburg, North Carolina, cat. p. 13. 1964, without descr.). Illegitimate, since the name is in Latin form.

MICROPHYLLA ERECTA (Gresham's Nurs., Richmond, Virginia, advert. in Amer. Nurseryman 125(7):37. 1967, without descr.). Tankard Nurs., Exmore, Virginia, cat. p. 3. 1970-71 - narrow columnar; lvs. little. Illegitimate, since the name is in Latin form. = MICROPHYLLA COLUMNARIS, ? MICROPHYLLA PYRAMIDALIS.

MICROPHYLLA MACULATA (H. Copeland, Amer. Hort. Mag. 49(4):98. 1970, without descr.). Lvs. oval to obovate, golden yellow blotched; female; said to have been introd. by E.H. Wilson. Illegitimate, since the name is in Latin form.

MICROPHYLLA NANA (Gresham's Nurs., Richmond, Virginia, advert. in Amer. Nurseryman 125(7):37. 1967, without descr.). Illegitimate, since the name is in Latin form.

MICROPHYLLA PROSTRATA (E. Orton, Jr., Holly Soc. Amer. Let. 25:17. 1965, without descr.). Illegitimate, since the name is in Latin form.

MICROPHYLLA PYRAMIDALIS (Gresham's Nurs., Richmond, Virginia, cat. p. 20. sp. 1969, without descr.). Illegitimate, since the name is in Latin form. = ? MICROPHYLLA ERECTA.

MICROPHYLLA SUPREME (Robbins Nurs., Willard, North Carolina, cat. p. 4. 1963-64) - dense, compact, a little more globular than **CONVEXA**; lvs. very glossy, dark green; female. Illegitimate, since the name is in Latin form.

MIDAS TOUCH (G. Eisenbeiss and T. Dudley, Jour. Holly Soc. Amer. 2(1):32. 1985) - slow growing, compact, spreading; lvs. narrow elliptic; broadly and variably variegated in different shades of yellow; male; hardy USDA zone 6b; branch mutation discovered by E. Orton, Jr., in hybrid sdlg. population from a cross made at Rutgers—The State University, New Brunswick, New Jersey, by Orton in 1968 of f. ***watanabeana*** × MICROPHYLLA; Holly Soc. Amer. Reg. No. 10-84 by E. Orton, Jr.

MINOR (H. van de Laar, Jaarbook Proefstation voor de Booakuekerij, Boskoop, Netherlands, p. 213. 1970, without descr.).

MISS MUFFET (G. Eisenbeiss and T. Dudley, Proc. 47th Meet. Holly Soc. Amer., p. 22. 1970) - low, compact, twiggy, dwarf, mound-like; lvs. small, elliptic, flat; female; orig. 1955 as an open poll. sdlg. of **CONVEXA**; sister sdlg. to **SENTINEL**; Holly Soc. Amer. Reg. No. 4-70 by N. Cannon.

MOBJACK (Mobjack Nurs., Mobjack, Virginia, cat. p. 7. sp. 1986, without descr.). = ? MOBJACK SUPREME.

MOBJACK SUPREME (R. Lambe and W. Wills in Proc. South. Nurs. Assoc. Res. Conf. 23d Ann. Rpt., p. 116. 1978, without descr.). = ? MOBJACK.

MONMOUTH (Bobbink Nurs., Freehold, New Jersey, cat. p. 13. sp. 1979) - compact, spreading, slow growing; hardy. May have orig. many years before 1979. = MAMMOUTH.

MORRIS DWARF (Tingle Nurs., Pittsville, Maryland, cat. p. 20. fall 1956-sp. 1957) - very dwarf; lvs. small; tested at Tingle Nurs. for several years. S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957 - clone of ***I. crenata*** f. ***microphylla***; lvs. small, apex generally acute, sometimes obtuse. Orig. Morris Nurs., West Chester, Pennsylvania, before 1953. Male.

MORRISON (H. Hopkins, Holly Soc. Amer. Let. 75:12. 1983, without descr.) - holly collection at Sandhills Community College, Southern Pines, North Carolina.

MOUNT AMAGI (Arnold Teese & Sons, Yamina Rare Plants, 25 Moores Road, Monbulk, Victoria 3793, Australia, retail price list, p. 6. January 1988, as "Mt. Amagi form," without descr.). Orig. from seed coll. in the wild by Arnold Teese on Mount Amagi, Honshu, Japan. Grown, sel., and named by Arnold Teese. Upright, very dense, and compact; lvs. dark green, oval, 7.0-12.7 mm long, 3.6-4.8 mm wide, bases cuneate to obtuse, apices obtuse with minute acumens, margins crenate on upper 1/2; petioles 0.8-1.6 mm long; female. Descr. of the original plant was provided by Fred Galle during an autumn 1988 tour of Australia. By correcting the orthography and providing a descr., the authors are the first to legitimately publish the name **MOUNT AMAGI**.

MOUNT HALLA New name. Sel. from the wild on Mount Halla, Cheju Island, Republic of Korea about 1977 by C. Miller; named and introd. by C. Miller. This selection has been distributed as HALLA and MT. HALLA. Moderate growth rate, exceptionally wide-angle branching; one-year-old branchlets are very thick, rigid, and uniquely taper to a spurlike tip; lvs. very small, lanceolate; female. By providing a descr., the authors are the first to legitimately publish the name **MOUNT HALLA**. = HALLA, MT. HALLA.

MR. C (Cartwright Nurs., Collierville, Tennessee, advert. in Amer. Nurseryman 130(4):34. 1969) - compact, low, horizontal grower; lvs. dark green. Male.

MUFFIN (G. Eisenbeiss and T. Dudley, Proc. 54th Meet. Holly Soc. Amer. p. 13. 1977) - low, mound shape with irregular horizontal growth, slow growing; branchlets with very short internodes; lvs. narrow, oblong, convex, glossy; male; sel. by Polly Hill from seed rec. from Japan 1965; named and introd. by Polly Hill; Holly Soc. Amer. Reg. No. 7-77 by Polly Hill.

var. *mutchagara* (Makino) Ohwi (J. Ohwi, Fl. Jap., p. 733. 1953; idem, Bull. Sci. Mus. Tokyo. 30:78. 1953, new combination from Makino's rank of species, without descr.). J. Ohwi, Fl. Jap., English ed., p. 600. 1965 - larger shrub than ***I. crenata***, angled branches; lvs. thinner, broadly lanceolate to obovate-oblong, base cuneate; native of Kyushu and Yakushima, and Ryukyu Isles, Japan, Formosa. J. Creech, USDA Plt.

Expl. Southern Jap., ARS 34-1, p. 43. 1957, as ***I. mutchagara*** Makino - seed coll. 1956 by J. Creech (Creech coll. No. 659) from the wild at 4,500 ft elev., Yakushima, Japan; tree to 15 ft; lvs. crenate; fr. black, 2-3 in a cluster; PI 237878. This is the same plant cited in E. Griffith and H. Hyland, USDA Plt. Inventory 165:76. 1966, as var. *mutchagara*. Some other authors (cf. Hu, Hara & Yamazaki) do not accept Ohwi's reduction of ***I. mutchagara*** Makino to a var. of ***I. crenata***. We accept a more recent assignment of ***I. crenata*** var. *mutchagara* as a syn of ***I. maximowicziana*** var. ***kanehirae***. = ***I. maximowicziana*** var. ***kanehirae*** (Yamamato) Yamazaki, *I. mutchagara* Makino.

MYRTIFOLIA (G. Malmborg, Amer. Nurseryman 135(11):11. 1947) - compact; lvs. small. Illegitimate, since the name ***I. aquifolium*** **MYRTIFOLIA** has priority.

MYRTIFOLIA AUREO-MACULATA (Louis de Smet Nurs., Ledeberg - Lez-Gand, Belgium, cat. p. 59. 1887, without descr.). Illegitimate, since the name ***I. aquifolium*** **MYRTIFOLIA AUREO-MACULATA** has priority.

NAKADA (T. Dudley and G. Eisenbeiss, Holly Soc. Amer. Bul. 16: 14-17. 1977; idem, Mitt. Deut. Dendr. Gesel. 70:127. 1978; idem, HortSci. 13(6):709. 1978 - resembles the female clone **MARIESII** in habit and leaf, but **NAKADA** is slightly faster growing and has slightly larger lvs.; male; (Nummularia Group). Named by Dudley and Eisenbeiss for Nakada Nurs. Originally distributed by USDA Plt. Introd. Service, Glenn Dale, Maryland, as var. *nummularia*, PI 236233. It was redistributed in 1978 by the U.S. National Arb. as **NAKADA**, NA #25701. J. Creech, Plt. Exploration Ornamentals in Southern Japan, USDA, ARS 34-1:39. 1957, as var. *nummularia* - plt. purchased by J. Creech from Nakada Nurs., Angyo, Japan, 1956; PI 236233. G. Eisenbeiss & T. Dudley, Proc. 54th Meet. Holly Soc. Amer., p. 12. 1977 - Holly Soc. Amer. Reg. No. 5-77 by T. Dudley and G. Eisenbeiss.

NANA (Daisey Hill Nurs., Newry, Ireland, cat. p. 53. 1922, without descr.). Illegitimate, since the name ***I. aquifolium*** **NANA** has priority.

NANA COMPACTA (T.H. Everett, ed., cat. Hardy Trees & Shrubs New York Botanic Gdn., p. 54. 1942, without descr.). Illegitimate, since individual words of the name have been published previously as cultivar names of ***I. crenata***.

NANKING (Wister et al., Holly Soc. Amer. Bul. 6:35. 1953, without descr.) - introd. about 1947 by Styer's Nurs. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - upright, dense, rapid growing, soft texture; some resemblance to ***I. glabra***; lvs. blue green; male; sdlg. orig. about 1932; sel. and named by Styer Nurs., Concordville, Pennsylvania.

NATIONAL (in U.S. Plt. Pat. No. 4685. 1981 for ***I.*** × ***meserveae*** MESID VARIETY, without descr.). In this plt. pat. of MESID VARIETY mention is made that MESID VARIETY was found superior in hardiness to ***I. crenata*** NATIONAL. No other record has been found for ***I. crenata***

NATIONAL. The references to ***I. crenata*** NATIONAL in this plt. pat. were erroneous, as a selection by this name does not exist. Possibly ***I. cornuta*** NATIONAL was intended. = ? ***I. cornuta*** **NATIONAL.**

NIGRA (C. Tuley, Proc. 38th Meet. Holly Soc. Amer., p. 2. 1965) - semiupright; lvs. large, slightly convex, rich green color; this plant now being sold in place of ROTUNDIFOLIA [at Greenbrier Farms Nurs., Chesapeake, Virginia]; male; (Bennett Hybrid Group). Name changed by Greenbrier Nurs., the originator, to **ALLEN SEAY**. = **ALLEN SEAY.**

NIGRA UPRIGHT (C. Parkerson, Combined Proc. Intern. Plt. Propag. Soc. 50:483. 1980, without descr.). D. Milbocker et al., Southern Nurserymen's Assoc., Res. Jour. 7(2):2-4. 1981, without descr.). Not the same plant as NIGRA, the Bennett Hybrid from Greenbrier Nursery. Illegitimate, since descr. is lacking and the name is in Latin form.

NO. 400 (Tom Dodd Nurs., Semmes, Alabama, cat. p. 14. 1960-61, without descr.).

NOBILIS (Appalachian Nurs., Waynesboro, Pennsylvania, cat. p. 9. fall 1950-sp. 1951) - upright; lvs. slightly larger than most ***I. crenata*** lvs. Illegitimate, since the name ***I. aquifolium*** **NOBILIS** has priority. = **NOBLE UPRIGHT**, NOBLE.

NOBLE (Lillards Nurs., Jeffersontown, Kentucky, advert. in Amer. Nurseryman 132(9):73. 1970) - upright. = **NOBLE UPRIGHT**, NOBILIS of Appalachian Nurs.

NOBLE UPRIGHT (M. Dirr in O. Pride, Holly Soc. Amer. Let. 60:3. 1968, without descr.) - growing at Bernheim Forest, Louisville, Kentucky. Appalachian Nurs., Waynesboro, Pennsylvania, cat. p. 9. fall 1950-sp. 1951, as NOBILIS - upright; lvs. slightly larger than most ***I. crenata***. Male. F. Galle (personal communication) indicates that the leaves are not larger than most ***I. crenata***, based on examination of authentic plants. The authors have selected **NOBLE UPRIGHT,** a later syn. of the illegitimate NOBILIS, as the most appropriate name available and legitimately publish **NOBLE UPRIGHT** here for the first time using the descr. of NOBILIS. = NOBILIS, NOBLE.

NORTH STAR (C. Rizzo et al., Scientia Horticulturae 14(1981):182. 1981, without descr.). Roemer Nurs., North Madison, Ohio, cat. p. 4. sp. 1983, without descr. Upright spreading; lvs. dark green, elliptic to obovate, tips obtuse, bases cuneate; orig. Lincoln Nurs., Michigan; introd. early 1970's by Roemer Nurs., now dropped. Legitimately published here for the first time by providing a descr. = ? NORTHERN STAR.

NORTHERN BEAUTY (Zelenka Evergreen Nurs., Grand Haven, Michigan, advert. in Amer. Nurseryman 130(10):132. 1969, without descr.). Fairview Evergreen Nurs., Fairview, Pennsylvania, cat. p. 13. fall 1975-sp. 1976 - "our recent introd."; lvs. small, convex, glistening. Monrovia Nurs., Azusa, California, cat. p. 62. 1988 - Hardy in USDA zone 6; more compact than **HETZII**; dense branches; small. Male, also reported as being vigorous upright.

(Nummularia Group) (T. Dudley and G. Eisenbeiss, Mitt. Deut. Dendr. Gesel. 70:115-132. 1978) - no nomenclatural status; erected for convenience to accommodate the close genetic and morphological relationship of five current cultivars: **DWARF PAGODA**, **GREEN DRAGON**, **MARIESII**, **NAKADA**, and **NUMMULARIA**.

var. *nummularia* (Franchet & Savatier) Yatabe (R. Yatabe, Bot. Mag. Tokyo 6(63):157. 1892, without descr.) - rank transfer based on ***I. nummularia*** Franchet & Savatier. Named from a plant that was and still is in cult. in Japan. = **NUMMULARIA**, ***I. crenata*** f. *nummularia* (Franchet & Savatier) Hara; not var. *nummularia* of Dallimore or Bean, and not ***I. mariesii*** Veitch ex Bean, *mariesii* at any rank, or **MARIESII**.

f. *nummularia* (Franchet & Savatier) Hara (H. Hara, Enumeratio Spermatophytarum Japonicarum Pt. 3. p. 70. 1954, without descr.) - changed rank from var. to f. with syns. of ***I. nummularia*** Franchet & Savatier, var. *nummularia* (Franchet & Savatier) Yatabe, and ***I. mariesii*** Veitch ex Bean. As stated in T. Dudley and G. Eisenbeiss, Mitt. Deut. Dendr. Gesel. 70:117. 1978, and idem, Holly Soc. Amer. Bul. 16. 1978, we do not equate the Franchet & Savatier plt. with the Veitch plt., which is **MARIESII,** because these 2 cultivated plants differ in time and place of origin. The Hara name at *forma* rank is questionable because the Franchet & Savatier name was based on a plt. of cult. origin. = **NUMMULARIA**, ***I. nummularia*** Franchet & Savatier, var. *nummularia* (Franchet & Savatier) Yatabe. Not var. *nummularia* in Dallimord, or NUMMULARIA of many horticultural authors, not ***I. mariesii*** Veitch ex Bean, not *mariesii* at any other bot. ranks, and not **MARIESII**.

NUMMULARIA (A. Franchet and L. Savatier, Enum. Pl. Jap. 2:511. 1879, as ***I. nummularia***) - shrub with many dwarf cushion-shaped branches that have dense leaf scars; lvs. glabrous, petioles 1-2 mm long, blade obovate or round-edged, 1 cm long and wide, apex 3- or rarely 5-dentate, dentations triangular and pointed forward, with those on lateral sides smaller; 3-flowered cyme with floral pedicels 2-3 times longer than the peduncle; similar to ***I. crenata*** but differs from it by having denticulate, triangular apical teeth on the leaves. The earliest use of this name at cultivar rank or as a "cultivated variety" is obscure. There have been continuous rank changes from species through cultivar for both names, **NUMMULARIA** and **MARIESII**. The synonymy of both names has been seriously mixed. ***I. mariesii***, var. *mariesii*, and f. *mariesii* all equate directly to **MARIESII**. The names ***I. nummularia***, var. *nummularia* and f. *nummularia* all equate directly to **NUMMULARIA** but in the past were incorrectly applied to **MARIESII** or all of its previous ranks. This complex and confusing synonymy was well established before the rank of cultivar was invented. Sorting of the synonymy of both names was not possible until after clarification of identification. T. Dudley and G. Eisenbeiss, in

Mitt. Deut. Dendr. Gesel. 70:115-131. 1978 and in Holly Soc. Amer. Bul. 16:1-18. 1978, established the separate, distinct identities of **NUMMULARIA** and **MARIESII** and clarified the confused synonymy. **NUMMULARIA,** as a cultivar, is based on ***I.*** *nummularia* Franchet & Savatier, a single clone of cultivated origin. ***I.*** *nummularia* was a rare, early derived Japanese plant not known outside of Japan and may no longer be in cultivation. The clone named **NUMMULARIA** clearly should not be confused with **MARIESII**. The NUMMULARIA of van Gelderen (Dendroflora 8:33. 1971) and of many other horticultural authors equates to **MARIESII**. See f. *nummularia* for full syn.

NYMPH (E. Orton, Jr., Holly Soc. Amer. Let. 60:28. 1978, without descr.).

OCONEE RIVER (Evergreen Landscape Service, Athens, Georgia, cat. p. 4-5. 1960, without descr.) - discov. as a sdlg. in their nurs. 1952. Plt. Pat. No. 1902, Feb. 2, 1960, to A. Rowland, Jr., Athens, Georgia - as a cross of ***I. crenata*** f. *convexa* × probably f. *latifolia*; vigorous, upright; branches divaricate; lvs. slightly larger than *convexa*; male; not subject to chlorosis as *convexa*; roots easily; transplants well. R. Clark, Proc. 31st Meet. Holly Soc. Amer., p. 11. 1961 - Holly Soc. Amer. Reg. No. 5-61 by Rowland; globular; lvs. dark blue green; twigs dark purple in winter.

OLEAFERA (Tingle Nurs., Pittsville, Maryland, cat. p. 20. fall 1956-sp. 1957) - spreading; lvs. dark olive green, large; female; (Bennett Hybrid Group). S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957 - lvs. obovate or oblong-obovate.

ORCHARD (Clarendon Gdns., Pinehurst, North Carolina, cat. 1957, as ORCHARDI, without descr.). Ibid., cat. p. 11. 1962, as ORCHARD - upright; lvs. broader than most. Orig. Orchard Nurs., Raleigh, North Carolina. Female.

ORIENTALIS (University of Washington Arb. Bul. 12(2):44. 1949, without descr.).

var. ***paludosa*** (Nakai) Hara (H. Hara, Sci. Res. Ozegahara, p. 446. 1954) - new name combination based on ***I.*** *paludosa* Nakai ex Hondo & Tobita, in Kirigamine Shokubustsu, p. 208. 1941, *nomen nudum* with Nakai, Jour. Jap. Bot. 20:189. 1944, providing the basionym ***I.*** *radicans* var. *paludosa* Nakai. H. Hara, Enumeratio Spermatophytarum Japonicarum Pt. 3, p. 17. 1954, provides a detailed list of syns. S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957 - grows in swampy places; stems prostrate; lvs. broad-elliptic with rounded apex and obtuse base; not yet introd. J. Ohwi, Fl. Jap., English ed., p. 600. 1965 - similar to "typical phase" [of ***I. crenata***] but has low creeping stems and branches; swampy places Hokkaido, and Honshu, Japan, and the Kuril Islands and Sakhalin. E. Griffith and H. Hyland, USDA Plant Inventory No. 167:228. 1959 - PI 260835, Aomori City, Honshu, Japan; PI 260386, Mutsu Prov.,

Japan; seed presented 1959 by Gov't. Forest Exp. Sta., Okidate, Aomori, Japan. H. Fisher, Amer. Hort. Mag. 49(4):318. 1970 - lists many more PI collections of this taxon from the wild in Japan, some of which were named subsp. *radicans*, or var. *radicans*. Considerable controversy exists regarding which infraspecific name, var. ***paludosa*** or var. *radicans*, is correct for this taxon. At the botanical rank of *varietas*, the combination ***I. crenata*** var. *radicans* was not validly published until 1953 by Ohwi (Flora Japan, 1st ed., in Japanese). The varietal rank, var. *paludosa*, was validly published 9 years earlier by Nakai (Jour Jap. Bot. 20:189. 1944) but as ***I.*** *radicans* var. *paludosa* instead of ***I. crenata*** var. ***paludosa***. In accordance with the International Code of Botanical Nomenclature, the earliest validly published epithet at the botanical rank must be regarded as the correct name; therefore, the current correct name for this taxon is ***I. crenata*** var. ***paludosa*** (Nakai) Hara. It is interesting to note that Ohwi (1953) called the taxon ***I. crenata*** var. *radicans* without citing the basionym (***I.*** *radicans* Nakai ex Hara, Bot. Mag. Tokyo 50:187. 1935). However, in the corrections and additions to his Flora (Bull. Sci. Mus. Tokyo 33:78. 1953), Ohwi correctly made the validating combination of var. *radicans* by including the basionym ***I.*** *radicans* Nakai ex Hara. The English edition of Ohwi's Flora of Japan, p. 600. 1965, followed Hara (1954) and accepted var. ***paludosa*** and cited ***I. crenata*** subsp. *radicans*, ***I. crenata*** var. *radicans*, ***I.*** *radicans*, and ***I.*** *radicans* var. *paludosa* as syns. of ***I. crenata*** var. ***paludosa***. The name ***I. crenata*** var. ***paludosa*** refers to biologically highly variable populations that are found occurring in the wild and differ from var. ***crenata***, the type variety of ***I. crenata***, in a number of correlated characters. Therefore the name ***paludosa*** can never be legitimately applied as a cultivar epithet. = PALUDOSA of Krüssmann (but not PALUDOSA of Clarendon), RADICANS, ***I.*** *radicans* var. *paludosa*, ***I.*** *radicans* subsp. *radicans*, var. *radicans*.

PALUDOSA (Clarendon Gdns. Nurs., Pinehurst, North Carolina, cat. p. 11. 1962) - lvs. variegated; narrow, 1" long; very new; seed from Japan. It is known that Clarendon was a recipient of USDA plant introductions of var. ***paludosa***. The Clarendon plant probably is a seedling from this source and may be an authentic clonal selection. Illegitimate as a cultivar name, since it is in Latin form. If the leaf variegation of this plant is stable in the future, the plant could be given a new, legitimate name, and internationally registered.

PALUDOSA (G. Krüssmann, Handb. Laub., 1st ed., Fascicle Pub., 2:23. Dec. 1960, as a cultivar name) - low growing; lvs. broadly elliptic, apex round, base obtuse; occurs in swampy locations; orig. Japan; probably not yet introd. Idem, Handb. Laub., 2d ed., 2:183. 1977 - correctly recognized var. ***paludosa*** (Nakai) Hara at botanical rank, and not as a cultivar. D. Huttleston, Plants Growing in Conservatories and Gardens, Longwood Gardens, Kennett Square, Pennsylvania, p. 5. Oct. 1970, as a

cultivar, without descr. Huttleston also listed PALUDOSA, incorrectly, at cultivar rank. Longwood Gardens received numerous USDA Plant Introd. seed accessions as var. and subsp. *radicans* [var. ***paludosa***] collected in the wild in Japan. = var. ***paludosa***, RADICANS, ***I. radicans*** var. *paludosa*, but not PALUDOSA of Clarendon, subsp. *radicans* (Nakai) Tatewaki, var. *radicans* Nakai.

PECONIC (G. Eisenbeiss and T. Dudley, Proc. 47th Meet. Holly Soc. Amer., p. 22. 1972) - sdlg. sel. by M. Nosal originated about 1945 at Nosal Holly Nurs., Calverton, New York; mound shape, compact, slow growing; lvs. small, narrow, elliptic; male; Holly Soc. Amer. Reg. No. 8-72 by M. Nosal.

PEKING (Wister et al., Holly Soc. Amer. Bul. 6:37. 1953, without descr.) - introd. about 1947 by Styer's Nurs. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - upright, irregular, slow growing; lvs. small; female. Sdlg. orig. about 1932; sel. and named by Styer's Nurs., Concordville, Pennsylvania.

var. *pendula* (G. Koidzumi, Act. Phytotax. Geobot. 8:194. 1939) - weeping branches; habitat Mt. Rokkozan, Settsu Prov., Japan. No indication of cult. origin. Most assuredly it does occur in the wild. = f. ***pendula*** (Koidzumi) Hara.

f. ***pendula*** (Koidzumi) Hara (H. Hara, Enumeratio Spermatophytarum Jap., p. 71. 1954, without descr.) - changed rank of var. *pendula* Koidzumi to f. ***pendula***. S.-y. Hu, Nat'l. Hort. Mag. 36(1):49. 1957 - "a variety with pendulous branchlets; native Japan; not yet introd." = var. *pendula* Koidzumi. Most assuredly originated in the wild; but two plants, PENDULA of Sugimoto and PENDULA of Huttleston, are possible sel. of f. ***pendula*** now in cult.

PENDULA (D. Huttleston, Longwood Gdns., Kennett Square, Pennsylvania, Plts. Growing in Conservatories and Gdns., p. 5. 1970, without descr.). Illegitimate, since the name is in Latin form, and since the name ***I. aquifolium*** **PENDULA** has priority. Possibly a clone of f. ***pendula***.

PENDULA (J. Sugimoto, New Keys to Woody Plts. Jap., p. 227. 1972) - weeping. Illegitimate, since the name is in Latin form and since ***I. aquifolium*** **PENDULA** has priority. Possibly a clone of f. ***pendula***.

PETITE Orig. unkn. Reported at North River Gdn. Center, Chattanooga, Tennessee, 1989; lvs. dark green, elliptic to broadly elliptic; tips acute to obtuse, bases cuneate. Illegitimate by priority of ***I. aquifolium*** **PETITE**.

PETITE POINTE (Wight Nurs., Cairo, Georgia, cat. p. 3. fall 1964) - pyramidal, compact, slow growing, shears well; lvs. similar in size to **HELLERI**; female; new; developed on Eastern Shore, Maryland. A. Knox, Nursery Business 11(8):5. 1966 - introd. by Wight Nurs.

PHYTO ECOLOGY (Phyto Ecology Nurs., Easton, Maryland, cat. p. 15. sp. 1981) - new from Phyto Ecology; dense, mushroom habit; lvs. waxy green. An example of minimal description.

PICCOLO (Cannon Plants, Greenwood, Delaware, cat. p. 4. fall 1977) - self-shaping ball or mound; about 8" wide after 8 years; very tiny lvs.; not yet released. Cannon Plants, Greenwood, Delaware, advert. in Amer. Nurseryman 151(6):111. 1980 - miniature, grows approx. 1" per year and forms a dense globe; new. G. Eisenbeiss and T. Dudley, Proc. 50th Meet. Holly Soc. Amer., p. 13. 1980 - Holly Soc. Amer. Reg. No. 5-80 by N. Cannon; female; orig. 1954 from an F_3 population of a cross of **CONVEXA** × MICROPHYLLA made by Cannon; introd. commercially 1979 by Cannon.

PIEDMONT PYRAMIDAL (H. Hopkins, Holly Soc. Amer. Let. 75:11. 1983, without descr.) - in holly collection at Sandhills Community College, Pinehurst, North Carolina. Gilbert's Nurs., Chesnee, South Carolina, cat. p. 1. Jan.-March 1983, without descr. Broad and upright, pyramidal; lvs. obovate, dark green; female. Legitimately published here for the first time by providing a descr. = PIEDMONT.

PIN CUSHION (Monrovia Nurs., Azusa, California, cat. p. 19. 1988) - tiny leaves on a very dense globe. Name may be orthographic variant of PINCUSHION. Illegitimate, since the name ***I. opaca* PIN CUSHION** has priority.

PINCUSHION (Cannon Plants, Greenwood, Delaware, cat. p. 2. 1974, without descr.). Phyto Ecology Nurs., Galena, Maryland, cat. p. 7. 1976 - dwarf, with pin cushion form, low growing. Orig. before 1969 by Cannon. Illegitimate, since the name ***I. opaca* PIN CUSHION** has priority.

var. *praecox* (J. M. Fogg, Jr., Proc. 28th Meet. Holly Soc. Amer., p. 2. 1960, without descr.) - in holly collection, Morris Arb., Philadelphia, Pennsylvania. = PRAECOX of Wister.

PRAECOX (Chugai Shokubutsuen Nurs., Yamamoto, Kawabe-Gum, Kobe, Japan, cat. p. 3. 1938-39) - said to have a white berry; seed offered. While this cv. may be genuine, its sdlgs. are not the same clone as **PRAECOX** and cannot use this name. Probably a different clone from the PRAECOX at Henry Foundation and Morris Arb. (Watanabeana Group).

PRAECOX (Wister et al., Holly Soc. Amer. Bul. 6:38. 1953, without descr.) - in holly collection Henry Foundation, Gladwyne, Pennsylvania, and Morris Arb., Philadelphia, Pennsylvania. L. Barnes, List of Woody Plt. Materials, Arboretum Barnes Foundation, Marion, Pennsylvania, p. 11. 1956, without descr. - probably a different clone from **PRAECOX** of Chugai Shokubutsuen Nurs. = var. *praecox* of Fogg. Female. Illegitimate, since the name **PRAECOX** of Chugui Shokubutsuen Nurs. has priority.

PRIDE DWARF (O. Pride, Proc. Holly Symposium, Ann. Meet., Missouri State Nurs. Assoc., p. 11. 1963) - lvs. small, convex, very dark rich foliage; sdlg. of **GREEN LUSTRE**; sel. and named by O. Pride, Butler, Pennsylvania. Dwarf, compact.

PRIDE GEM (E. Orton, Jr., Holly Soc. Amer. Let. 60:28. 1978, without descr.).

PRIDE HYBRID 18 (O. Pride, Holly Soc. Amer. Let. 60:2. 1978, without descr.) - no leaf burn in past 12 yrs; has survived -25°F.

PRIDE JEWEL (E. Orton, Jr., Holly Soc. Amer. Let. 60:28. 1978, without descr.).

PRIDE'S TINY (H. Schroeder, Proc. 56th Meet. Holly Soc. Amer., p. 16. 1979) - hardy in Evansville, Indiana; has survived -26°F. **PRIDE'S TINY** has been documented and described under TINY and TINY TIM. Even though ***I. crenata*** TINY and TINY TIM were published earlier than **PRIDE'S TINY**, they are illegitimate, since ***I. opaca*** has priority by even earlier publication. **PRIDE'S TINY** is legitimate as the next, though later available name. = ***I. crenata*** TINY, ***I. crenata*** TINY TIM.

PROCUMBENS (B. Wigginton, Trees and Shrubs for Southeast, p. 74. 1963) - dwarf, weeping or spreading, scrambling growth, thins out in center; a new introd. Illegitimate, since the name is in Latin form.

PROSTRATA (Gilmore Plants and Bulbs, Julian, North Carolina, cat. p. 11. fall 1976-sp. 1977, without descr.) - in syn. under **REPANDENS**. = **REPANDENS**, SPREADING, not PROSTRATA of Lindley.

PROSTRATA (Lindley Nurs., Greensboro, North Carolina, cat. p. 7. fall 1959-sp. 1960) - prostrate. Named by Harry Deverman of Clifton, New Jersey, and known to have been distributed in 1976 or earlier. Illegitimate, since the name is in Latin form and the descr. is too limited. Not PROSTRATA of Gilmore.

PUMILA (Fox Hill Plt. Nurs., Keston, Kent, England, cat. p. 12. 1930) - more dwarf than type [of ***I. crenata*** var. ***crenata***]. Illegitimate, since the name ***I. aquifolium*** **PUMILA** has priority.

PYGMY (Gerard K. Klyn Nurs., Mentor, Ohio, cat. p. 4. fall 1958, without descr.) - "will be introd. in 1959-60." Dense, glossy; female; orig. by A. Shammarello, South Euclid, Ohio. = **GREEN PYGMY**.

PYRAMIDALIS (Angelica Nurs., Angelica, Pennsylvania, cat. p. 11. fall 1959-sp. 1960) - broad, compact, pyramidal; lvs. glossy; fr. glistening; extremely hardy; finest ***I. crenata*** seen. Illegitimate, since the name ***I. aquifolium*** **PYRAMIDALIS** has priority.

PYRAMIDALIS FASTIGIATA (Winn Nurs., Norfolk, Virginia, cat. p. 6. 1966-67, without descr.).

PYRAMIDALIS LITTLELEAF (Winn Nurs., Norfolk, Virginia, cat. p. 5. 1966-67, without descr.).

subsp. *radicans* (Nakai) Tatewaki (M. Tatewaki, Act. Phyto. Geo. 2:243. 1933, without descr.) - rank change of ***I. radicans*** Nakai, Rep. Veg. Mt. Apoi, p. 37. 1930, *nomen nudum* to ***I. crenata*** subsp. *radicans*. H. Hyland, USDA Plt. Inventory 168:149, 242. 1961 - seed of ***I. crenata*** subsp. *radicans* PI 266339 and PI 269256, seed presented 1960 by H. Kubota, Nikko, Tochigi Prefecture, Japan. Idem, USDA Plt. Inventory 168:215. 1961 - seed of ***I. crenata*** subsp. *radicans*, PI 275851-275857,

were coll. in the wild in elevations from 120 m to 1,200 m by J. Creech 1961 from Aomori Prefecture, Honshu, Japan. These plants were variable in habit from prostrate to vigorous upright and also variable in leaf size and site preferences. The 1933 subsp. combination, ***I. crenata*** subsp. *radicans*, of Tatewaki is invalid for lack of a descr. The basionym, ***I.*** *radicans*, was not validated with a descr. until 1936 by Hara, as ***I.*** *radicans* Nakai ex Hara, Bot. Mag. Tokyo 50:187. 1936. = PALUDOSA of Krüssmann, var. ***paludosa*** (Nakai) Hara, RADICANS, ***I.*** *radicans*, ***I.*** *radicans* var. *paludosa*, not PALUDOSA of Clarendon.

var. *radicans* (Nakai) Murai (H. Murai, Prelim. Rep. Fl. Towada & Hakkoda, p. 69. 1935, without descr.) - invalid new combination. Based on ***I.*** *radicans* Nakai (a *nomen nudum*), Rep. Veg. Mt. Apoi, p. 37. 1930. The 1935 varietal combination by Murai of ***I. crenata*** var. *radicans* (another *nomen nudum*) is invalid because ***I.*** *radicans* as a species was not validated until 1936 by Hara (***I.*** *radicans* Nakai ex Hara, Bot. Mag. Tokyo 50:187. 1936). J. Ohwi, Fl. Jap., 1st ed. p. 733. 1953 - referred to var. *radicans* without citing the basionym. Ohwi, however, corrected this omission in Bull. Sci. Mus. Tokyo 33:78. 1953, 9 years after Hara validated, with a description and basionym, ***I.*** *radicans* var. *paludosa* in Jour. Jap. Bot. 20:189. 1944. Ohwi, Fl. Jap. (English ed.), p. 600. 1955 - var. *radicans* cited as syn. of var. ***paludosa*** (Nakai) Hara. E. Griffith, USDA Plt. Inventory 163:186, 188, 189. 1955, as var. *radicans* - PI 227531, coll. in Mopporo Nat'l. Forest, Hokkaido, Japan; var. *radicans* PI 227569 and var. *radicans* PI 227576, coll. from the wild 1955 in Aomori Prefecture, Honshu, Japan, by J. Creech, prostrate, lvs. small; female. These are the earliest of many USDA PI collections of this taxon from Japan. = PALUDOSA of Krüssmann, var. ***paludosa*** (Nakai) Hara, subsp. *radicans* (Nakai) Tatewaki, RADICANS, ***I.*** *radicans*, ***I.*** *radicans* var. *paludosa*, not PALUDOSA of Clarendon.

RADICANS (J. Floyd, Holly Evaluation at Hort. Gdns. of Clemson University, Clemson, South Carolina Agr. Exp. Sta. Tech. Bul. 1050:19. 1974) - spreading, dwarf, dense, compact; lvs. larger than most ***I. crenata*** lvs. Probably a sdlg. clone of var. *radicans* that originated from USDA Plt. Introd. distribution. Illegitimate, since the name is in Latin form. Possibly could be renamed, registered, described, and published as a sdlg. cultivar of var. ***paludosa***.

RECURVIFOLIA (Greenbrier Farms Nurs., Norfolk, Virginia, cat. p. 40. 1971-72) - excellent, spreading; intended to replace **CONVEXA**; male; (Bennett Hybrid Group). Illegitimate, since the name is in Latin form.

RED LION (Wister et al., Holly Soc. Amer. Bul. 6:38. 1953, without descr.) - sel. 1934 by P. du Pont, Longwood Gdns., Kennett Square, Pennsylvania. Wilmat Hollies, Gladwyne, Pennsylvania, cat. p. 14. 1959 - "fine as a rock garden specimen." Male. Similar to and sometimes confused with **HELLERI**, which is female. Propagated by Earl Hamilton, Red Lion Nurs. After a great deal of comparison, Red Lion

Nurs. decided that there was essentially no difference between **RED LION** and **HELLERI**, so discontinued propagating and selling **RED LION**. However, the names are not synonymous, since the plants are of different cultivated origin, different sex, and are not the identical clone.

REFLEXA SUPREME (Stephens Nurs., Semmes, Alabama, cat. fall 1966, without descr., in syn. under **HETZII**). (Rovex Hybrid Group). = **HETZII**, GLOBOSA ROTUNDIFOLIA, GLOBOSA ROTUNDIFOLIA HETZII.

f. *rehderiana* (S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957, in the formulation of the name var. *longifolia* f. *rehderiana* MICROPHYLLA) - low compact; lvs. small, shiny, elliptic, acute at both ends, 4 minute teeth on each side. Seemingly, f. *rehderiana* is described by Hu only as a single clone, in the sense of MICROPHYLLA. However, if her intention was to erect a new botanical *forma*, her descr. of f. *rehderiana* lacks a Latin diagnosis, a designation of a type, and data on natural distribution. While this botanical *forma* may have been described and published elsewhere, the above reference is the only one found to date.

REPANDENS (Wister et al., Holly Soc. Amer. Bul. 6:38. 1953, without descr.) - orig. about 1940 by B. Howell, Bristol, Virginia; also sold under the name "Spreading." Howell Nurs., Knoxville, Tennessee, cat. p. 6. 1939, without descr. - listed as "Spreading"; possibly intended as a common name and not as a cultivar name. Tom Dodd Nurs., Semmes, Alabama, cat. p. 20. 1953-54 - very low, spreading; lvs. flat, closely spaced. Flattest growing of all ***I. crenata*** cultivars; male. = PROSTRATA of Gilmore, SPREADING of Howell (not SPREADING of Angelica).

ROBBIN'S #2 New name. Upright, rounded; lvs. dark green, obovate, crenulate, apices obtuse, bases cuneate; orig. before 1972; introd. by Robbin's Nurs., Willard, North Carolina. The authors of this checklist are the first to legitimately publish the name **ROBBIN'S #2**.

ROBERT CULPEPPER (Tom Dodd Nurs., Semmes, Alabama, cat. 1967-68, without descr.). Broad, upright and spreading; lvs. dark green, curved, crenulate, elliptic obovate, tips obtuse, bases cuneate; male; sdlg. sel., named, and introd. by Tom Dodd, Jr.; named for a Baptist missionary. Legitimately published here for the first time by providing a descr.

ROCKY CREEK (G. Eisenbeiss and T. Dudley, Holly Soc. Jour. 7(4):22. 1989) - orig. 1982 by Owen Howell as a mutation of **BENNETT'S COMPACT** (Bennett Hybrid Group); broad with upright cork screw stems; lvs. flat to convex, broadly elliptic; male; Holly Soc. Amer. Reg. No. 3-89 by Owen Howell, Rocky Creek Nurs., Lucedale, Mississippi. = CONVEXA TORULOSA.

var. *rotundifolia* Maximowicz ex Matsumura (J. Matsumura, Shokubustsu Mie-i, p. 149. 1895, 1897, 1900). No description for this name or

reference by Maximowicz has ever been found. No authentic material is extant from which to prepare a description. All syns. of this name are questionable. See ROTUNDIFOLIA for discussion of the use of this name.

f. *rotundifolia* (S.-y. Hu, Nat'l. Hort. Mag. 36(1):49,64. 1957) - described as "a Horticultural variety, also known as f. *rotundifolia*, f. *fortunei*, f. *major*"; ROTUNDIFOLIA, as a cultivar, is described on p. 64 of the Hu reference as a clone of f. *latifolia*, but is stated as a "horticultural variety" on p. 49. It is not clear whether Hu was determining or just reporting synonymy. At the botanical rank of *forma*, the name *rotundifolia* is invalid, since it has not been found with a Latin description. Furthermore, the "original" reference to var. *rotundifolia* on which the *forma* was presumably based has not been located. Part of the problem of ROTUNDIFOLIA as a cultivar under f. *rehderiana* appears to be resolved by S.-y. Hu, Amer. Hort. Mag. 49(4):199. 1970 - where LATIFOLIA, **MAJOR**, and ROTUNDIFOLIA are recognized as distinct and different cultivar names and are not assigned as belonging under any stated bot. rank under ***I. crenata***.

ROTUNDIFOLIA Name based on var. *rotundifolia* Maximowicz ex Matsumura. (Matsumura, Shokubustsu Mei-i, p. 149. 1895 and 1900, without descr.). No description of var. *rotundifolia* Maximowicz ex Matsumura has ever been found. Perfection Nurs., Foley, Alabama, cat. p. 11. 1929-30 (the earliest commercial listing found) - similar to usual ***I. crenata*** but lvs. larger and roundish. Manshu Nosan Shokai Nurs., Dairen (Luta), Manchuria, cat. 1932, without descr. - offered seed of *rotundifolia*. A. Rehder, Biblio. Trees & Shrubs, p. 402. 1949 - ? syn. of f. *latifolia* (Goldring) Rehder. H. Hume, Hollies, p. 106. 1953, under var. *latifolia* - stated that var. *latifolia* is frequently sold as ROTUNDIFOLIA [in U.S. nurseries]. Wister et al., Holly Soc. Amer. Bul. 6:39. 1953, without descr. - male; with "? *globosa*" in syn. Tingle Nurs., Pittsville, Maryland, cat. p. 60. fall 1956-sp. 1957 - compact; female. S.-y. Hu, Nat'l Hort. Mag. 36(1):49, 64. 1957, as clone of f. *latifolia* - upright; lvs. dark green, shiny, oblong or obovate-oblong, 5/8"-1 1/4" long, 3/7"- 5/8" wide, obtuse at both ends, 11-16 teeth on each side; having the largest lvs. among all ***I. crenata*** in American gdns. Although detailed, Hu's description lacks a sex determination, which is critical, since clones of different sex have been reported for this cultivar. Idem, Amer. Hort. Mag. 49(4):199. 1970 - with descr., but differs from the previous reference in that lvs. are described as 1/2"-3/4" wide. B. Boom, Benaming, Geschiedenis en Kenmerken Van een Aatal Hortachtig Planten 2:128. 1959 and idem, Nederl. Dendr., 5th ed., p. 323. 1965 and p. 323. 1972 - lvs. large, usually 2- 4 cm long, similar to LATIFOLIA but glossier and somewhat more prominently rounded; origin unknown. D. Wyman, Amer. Nurseryman 123(1):123. 1960 - growth sparse and lanky; in syn. to *latifolia*. Appalachian Nurs.,

Waynesboro, Pennsylvania, cat. p. 15. sp. 1967 - globe shape, dense, compact; lvs. rounded; female. D. van Gelderen, Dendroflora 8:33. 1971 - in syn. to LATIFOLIA. R. Clark, Hortus Third, p. 591. 1976 - upright; lvs. dark green, glossy, to 1 1/4" long, serrate. The authenticity of the above descriptions are dubious, since the original Maximowicz name and plant have never been established. Moreover, a large number of obviously different clones of independent and often obscure origins are labeled as ROTUNDIFOLIA and extensively grown in U.S. nurseries. Considerable synonymy has been cited but cannot be verified. The var. *rotundifolia* Maximowicz ex Matsumura was probably a "cultivated variety" known in Japan; but a description for it is unknown, and its existence and introd. outside of Japan has not been confirmed. At cultivar rank, there is no known plant to which the name ***I. crenata*** ROTUNDIFOLIA can be legitimately applied. Perhaps in the case of the Perfection Nursery plant and plants from other nurseries too numerous to list, no relationship to the Maximowicz plant was intended. The cultivar name ROTUNDIFOLIA in ***I. crenata*** is illegitimate, since the name ***I. aquifolium ROTUNDIFOLIA*** (1874) has priority. = ? *globosa* Wister, ? LATIFOLIA, ? var. *latifolia*, ? f. *latifolia*, ? var. *rotundifolia* Maximowicz, ? f. *rotundifolia* Hu, ? ROUND LEAF.

ROTUNDIFOLIA AUREA (Royal Moerheim Nurs., Dedemsuaart, Netherlands, cat. p. 17. 1935-36, without descr.). (Variegated Group). = ? AUREA. Illegitimate because both words of the name have been previously published as individual cultivar names.

ROTUNDIFOLIA AUREO-VARIEGATA (A. Lavallee, Arb. Segrezianum, p. 44. 1877, without descr., as var. *rotundifolia aureo-variegata*). = AUREO-VARIEGATA, var. *aureo-variegata* Goldring, f. *aureo-variegata* Schelle, var. *luteo-variegata* Regel, f. *luteo-variegata* (Regel) Rehder, (not **LUTEO-VARIEGATA**).

ROTUNDIFOLIA PYRAMIDALIS (Charles Fiore Nurs., Prairie View, Illinois, cat. p. 56, 110. fall 1966) - pyramidal. Illegitimate, since the name is in Latin form.

ROTUNDIFOLIA SUSPENSUM (Robbins Nurs., Willard, North Carolina, cat. p. 6. 1966-67) - medium growing, somewhat like ROTUNDIFOLIA but more spreading; lvs. dark green, smaller than ROTUNDIFOLIA. Holly Soc. Amer. Let. 75:12. 1983 - in holly collection Sandhills Community College, Pinehurst, North Carolina, as ROTUNDIFOLIA SUSPENSA; male. Illegitimate, since the name is in Latin form.

ROTUNDIFOLIA UPRIGHT (Chandler Nurs., Florence, Alabama, cat. p. 3. fall 1980, without descr.). Illegitimate, since the name lacks a descr. and since part of the name is in Latin form.

ROUND LEAF (Millcreek Nurs., Newark, Delaware, cat. p. 2. 1958, without descr.). Suspected as a common name for ROTUNDIFOLIA.

(Rovex Hybrid Group) Orig. before 1940 from a block of sdlgs. of open-pollinated **CONVEXA** × ROTUNDIFOLIA at Fairview Evergreen

Nurs., Fairview, Pennsylvania. Only two selections from the block of sdlgs. are known to have been introd. Earl Dilatush, Robbinsville, New Jersey, cat. 1952 - indicated that the two legitimately named sel. are **HETZII** and **ROVEX HYBRID #32**.

ROVEX HYBRID #32 (Earl Dilatush, Robbinsville, New Jersey, cat. 1952 - semidwarf, wider than tall; lvs. dark; discontinued. (Rovex Hybrid Group).

RUGOSA (Tingle Nurs., Pittsville, Maryland, cat. p. 27. fall 1971-sp. 1972, without descr.). RUGOSA as a cv. name is certainly a misapplication: the intended plant is ***I. rugosa***.

SCHWOEBELI (Tankard Nurs., Exmore, Virginia, cat. p. 10. sp. 1969) - spreader; very hardy. Illegitimate, since the name **SCHWOEBEL'S COMPACT** has priority. = **SCHWOEBEL'S COMPACT**, COMPACTA of Schwoebel.

SCHWOEBEL'S COMPACT (Tankard Nurs., Exmore, Virginia, cat. 1968-69, as SCHWOEBEL'S COMPACTA) - spreader, very hardy. Introd. before 1964 by Richard Schwoebel Nurs., Ardmore, Pennsylvania. Orig. from seed of open-poll. **CONVEXA** growing among MICROPHYLLA, and sown 1949 by Richard Schwoebel. First offered for sale by Schwoebel Nurs. 1954. Similar to **HELLERI** in spreading habit but faster growing and hardier. Lvs. small, more or less convex, light green. Female. = COMPACTA of deWilde's Rhodo-Lake Nurs., SCHWOEBELI, SCHWOEBEL'S COMPACTA. By providing corrected orthography, the authors are the first to legitimately publish the name **SCHWOEBEL'S COMPACT**.

SCHWOEBEL'S UPRIGHT New name. While this name appears to have been used earlier, it is not known to have been published before. All published synonyms are illegitimate. Orig. from same sdlg. population that yielded **SCHWOEBEL'S COMPACT**. First offered for sale 1953. Upright, very compact with little need for pruning; lvs. very shiny, boxwoodlike appearance. = ERECTA, EXCELSA, EXCELSA SCHWOEBEL, EXCELSA UPRIGHT. The authors are the first to publish the name **SCHWOEBEL'S UPRIGHT**.

SENSATION (Cannon Plants, Greenwood, Delaware, cat. Nov. 1973) - semidwarf, cone shape when landscape size, medium growth rate, dense when sheared; lvs. small, recurved, dark green; male; orig. after 1954 from a cross made by N. Cannon; sel., named, and introd. by Cannon.

SENTINALIS (R. P. Tuthill Associates, Newton, Pennsylvania, cat. p. 15. 1989, without descr.). = ? **SENTINEL**.

SENTINEL (J. Feucht, Proc. 35th Meet. Holly Soc. Amer. p. 5. 1963) - narrow upright, conical, loose growing; lvs. large, dark shiny, convex; heavy fruiting; very hardy; resist. to spider mite; orig. 1955 from an open-poll. group of 5,000 sdlgs.; sel., named, introd. by N. Cannon; Holly Soc. Amer. Reg. No. 3-63 by Cannon. = ? SENTINALIS

SHANGHAI (Wister et al., Holly Soc. Amer. Bul. 6:39. 1953, without

descr.) - introd. about 1947 by Styer's Nurs. D. Wyman, Amer. Nurseryman 112(9):122. 1960 - slow growing, globe shaped; lvs. small; sdlg. orig. about 1932. Sel. and named by Styer's Nurs., Concordville, Pennsylvania; female.

SHOUL (Towson Nurs., Cockeysville, Maryland, cat. p. 8. sp. 1963, as SHOULI, without descr.). Compact, spreading, low growing; lvs. gray green; probably introd. by Towson Nurs.; named for Lawrence Shoul before 1957. By providing a descr., the authors are the first to legitimately publish the name **SHOUL**.

SIR ECHO (Cannon Plants, Greenwood, Delaware, cat. p. 3. fall 1977, without descr.). Orig. at Cannon Plants, Greenwood, Delaware. Brother sdlg. to BUTTERBALL, **FORTY NINER**, **HONEYCOMB**, **IVORY HALL**, **IVORY TOWER**, **STARGLOW**. Lvs. oval to slightly obovate; fr. yellow; heavy fruiting. One of seven yellow fr. plts. from 400 sdlgs. rec. from USDA. (Watanabeana Group). Illegitimate, since the name ***I. aquifolium*** **SIR ECHO** has priority.

SIROFUKURIN (J. Creech, Plt. Explorations Ornamentals in Southern Japan, USDA, ARS 34-1:39. 1957, as var., PI 236234, without descr.). E. Griffith and H. Highland, USDA Plant Inventory 164:221. April 1966, without descr. - as SHIRO-FUKURIN, variegated form, PI 236020; coll. by J. Creech from Nakada Nurs., Angyo, Japan. Ibid., 165:6. April 1966 - as SIRO-FUKURIN, PI 236234, without descr.; rec. Jan. 1957; purchased by J. Creech from Nakada Nurs., Angyo, Japan. The same plt. is represented by PI 236020 and PI 236234, and NA 25699. Illegitimate, because the name is a Japanese common name (meaning white margin) and has unstable spellings in Romanji. = **SNOWFLAKE**, ***I. crenata*** ALBO-MARGINATA of Conder.

SIRUMI-INTSUGE (Seed Exchange List, Aritaki Arb., Saitama-Ken, Japan, Pt. 1, p. 1. 1981, without descr.). This Romanji name is considered a descriptive common name (English translation is "white fruited holly") and is not acceptable as a cultivar name. (Watanabeana Group).

SKY PENCIL (Shibamichi Hoten Nurs., Kawaguchi-City, Saitama, Japan, Wholesale Price List 1990, without descr.). Discovered in the wild and named by Norihiro Shibamichi on Mount Daisen, Honshu, Japan. Extremely and uniquely columnar, at least ten times taller than wide; lvs. to 3.5 cm long and to 0.8 cm wide, curved, keeled, slightly convex, elliptic, bases broadly acuminate, tips rounded, margins finely serrate, color dark glossy green above, petioles 4 mm long. Female. First introd. into U.S. in 1985 from the private collection of Dr. Masato Yokoi, Kawaguchi City, Japan. Dr. Yokoi donated propagation material of this selection (NA 57190) to the U.S. National Arboretum collecting expedition of 1985 (sponsored by the Friends of the National Arboretum). Now in commercial production in Japan. Legitimately published here for the first time by providing a description.

SNOWFLAKE New name. Erected here to replace the name SIROFUKURIN (or SHIRO-FUKURIN) of Creech PI 234020 and PI 236234 (NA 25699), and ALBO-MARGINATA of Conder. The name SIROFUKURIN with its various Romanji spellings is considered a descriptive common name, not a cultivar name. Conder, recognized the Romanji "Shiro-kukurin-tsuge" as a common name and gave the name *albo-marginata*, which is illegitimate by priority of ***I. aquifolium*** ALBO-MARGINATA. Upright, moderate growth rate; lvs. broadly ovate, 3 cm long, 1.1 cm wide, concave on the upper surface, with pale green streaking between the dark green center and irregular cream colored margin; margin distinctly thinner than the rest of the blade; variegation very stable; hardy in USDA zone 7; female. Possibly cultivated in Japan for many years. Since this plt. was without a legitimate name, the authors provided the new name **SNOWFLAKE**, which is published here for the first time. = ALBO-MARGINATA of Conder, SHIROFUKURIN.

SOFT HELLERI (Magnolia Nurseries, Chunchula, Alabama, advert. in Anderson Hort. Library's Source List. p. 94. 1989, without descr.). Illegitimate, because the originator changed the name. = **SOFT TOUCH**.

SOFT TOUCH New name. Compact and spreading; branchlets not ridged, and very flexible hence the name SOFT TOUCH; lvs. dark green, elliptic, mid rib distinctly light green above; female; sel. and named by D. Ellis, Magnolia Nurs., Chunchula, Alabama. The authors are the first to publish the name **SOFT TOUCH**. = SOFT HELLERI.

SPARKLER (Bosley Nurs., Mentor, Ohio, cat. p. 4. 1963) - compact; lvs. shiny. Lovett's Nurs., Colts Neck, New Jersey, cat. p. 26. fall 1966-sp. 1967 - compact, pyramidal; lvs. very glossy, which provided the inspiration for the name.

SPECIAL (Tingle Nurs., Pittsville, Maryland, cat. p. 12. fall 1954-sp. 1955) - low growing, very compact; lvs. bright green. Illegitimate, since the name ***I. aquifolium*** SPECIAL has priority.

SPREADING (Angelica Nurs., Mohnton, Pennsylvania, cat. p. 13. 1961-62) - very low, spreading; lvs. long, narrow; resembles ROTUNDIFOLIA in character but hardier; male; new Angelica sel. Illegitimate, since the name SPREADING of Howell has priority. Not syn. with SPREADING of Howell, and not **REPANDENS**.

SPREADING (Howell Nurs., Knoxville, Tennessee, cat. p. 6. 1939, without descr.). Wister et al., Holly Soc. Amer. Bull. 6:38. 1953, without descr. - in syn. of **REPANDENS**. = **REPANDENS**, PROSTRATA of Gilmore; not SPREADING of Angelica and not "Spreading Howell Hybrid" (= HALLIANA).

SPREADING COMPACTA (Manor View Farm, Monkton, Maryland, cat. p. 13. 1989, without descr.). = ? **BENNETT'S COMPACT**, ? BENNETTII, ? COMPACTA (Bennett Hybrid Group).

SPREADING GLASS (E. Orton, Jr., Holly Soc. Amer. Let. 60:28. 1978, without descr.).

SQUAMATA (Turner Bros., West Long Branch, New Jersey, cat. p. 11. sp. 1961) - low growing; lvs. small. E. Orton, Jr., Holly Soc. Amer. Let. 25:17. 1965, without descr. - Rutgers—The State University, New Brunswick, New Jersey, rec. from Don McLaughlin. Illegitimate, since the name is in Latin form.

STARGLOW New Name. Sel. and named by N. Cannon, Greenwood Delaware, from 400 sdlgs. grown from seed distrib. 1965 by USDA Plt. Intro. Sta., Glenn Dale, Maryland. Designated earlier as Cannon #7. Lvs. dark green, elliptic; yellow fr. Sister sdlg. to BUTTERBALL, **FORTY NINER**, **HONEYCOMB**, **IVORY HALL**, **IVORY TOWER**, SIR ECHO. (Watanabeana Group). = CANNON #7. Published here for the first time.

STEED'S (G. Klingaman, Holly Soc. Amer. Let. 73:8. 1982, without descr.). Piney Ridge Nurs., Bostic, North Carolina, cat. p. 2. Aug. 1983 - "Upright Holly," without further descr. Mobjack Nurs., Mobjack, Virginia, cat. p. 7. sp. 1986, without descr. Dudley Nurs., Thompson, Georgia, cat. p. 14. 1987 - upright, moderate size. Ingleside Plantation Nurs., Oakgrove, Virginia, cat. p. 26. fall 1988-sp. 1989 - upright, narrower than other upright ***I. crenata***. Male. = STEED'S UPRIGHT.

STEED'S NO. 2 (R. Evans, Proc. 51st Meet. Holly Soc. Amer., p. 6. 1974, without descr.).

STEED'S UPRIGHT (Sandhills Community College, Holly Soc. Amer. Let. 75:12. 1983, male, without descr.). Taylor's Nurs., Raleigh, North Carolina, cat. p. 39. fall 1988-sp. 1989 - similar to COMPACTA [**BENNETT'S COMPACT**] in foliage but with definite upright habit. Illegitimate, by priority of **STEED'S**. = **STEED'S**.

STOKES (Anonymous, Proc. 76th Annual Convention Amer. Assoc. Nurserymen, p. 174. 1951) - extremely dwarf, compact, semi-formal; new lvs. golden green; exceptionally heavy root system; extremely hardy; adaptable to varied soil conditions; discov. about 1925 at Stokes Nurs., Butler, Pennsylvania; introd. about 1951. Amer. Assoc. Nurserymen Reg. No. 265, 1951, by W. Stokes. U.S. Plt. Pat. No. 887, Oct. 25, 1949, issued to W. Stokes, without cultivar name - flattened globular shape; said to be hardier than ***I. crenata*** **CONVEXA**, MICROPHYLLA, ROTUNDIFOLIA, and ***I. glabra***. Male. = STOKES VARIETY (not ***I. vomitoria*** STOKES or ***I. vomitoria*** **STOKES DWARF**).

STOKES SPORT (Phyto Ecology, Ridgely, Maryland, cat. p. 15. fall 1981-sp. 1982) - dense, low, globular shape; lvs. tiny, dark green; new from Phyto Ecology. Male.

STOKES VARIETY (Magnolia Gdns. & Nurs., Charleston, South Carolina, cat. p. 4. fall 1970-sp. 1971, without descr.). = **STOKES**.

STOKEY'S (O'Connor Nurs., Warsaw, Kentucky, advert. in Amer.

Nurseryman 157(1):161. 1983) - upright. Illegitimate, since descr. inadequate.

SUNSHINE (George W. Park Seed Co., Greenwood, South Carolina, cat. p. 5. sp. 1973) - dense, tolerates pruning; fr. green until Christmas then turns yellow; holds up well in cold; hardy USDA zone 6. Previously named YELLOW BERRY by originator, N. Cannon, Greenwood, Delaware. (Watanabeana Group). = YELLOW BERRY of Cannon, ? YELLOW BERRY of Huttleston.

T1 (Tingle Nurs., Pittsville, Maryland, cat. p. 20. fall 1956-sp. 1957) - compact, low growing; lvs. small; Tingle Nurs. introd. Female. = **T-ONE**, TINGLE-ONE.

TEE DEE (Tom Dodd Nurs., Semmes, Alabama, cat. p. 10. 1982-83, without descr.). Plt. first sold by Tom Dodd Nurs., cat. fall 1970, as HELLERI MUTATION. The name HELLERI MUTATION is a descriptive term, since the plt. orig. as mutation of HELLERI at Tom Dodd Nurs. before 1968. The name **TEE DEE** is accepted here as the correct name replacing the illegitimate name HELLERI MUTATION. Very slow growing with upright branches forming a broad mound that is wider than tall; lvs. small, broadly elliptic. Female. By providing a descr., the authors are the first to legitimately publish the name **TEE DEE**. = HELLERI MUTATION.

TENNYSON (Boulevard Nurs., Newport, Rhode Island, cat. p. 11. 1940) - compact, "cleaner" and more glossy lvs. than typical for ***I. crenata*** [a combined descr. of TENNYSON and LONGFELLOW]; sdlg. sel. many years ago; all stock from original plt. D. Wyman, Arnoldia 29(7):46. 1960 - ragged grower; closely resembles ***I. crenata microphylla***. Wister et al., Holly Soc. Amer. Bul. 6:41. 1953, without descr. - orig. Holland 1917, Boulevard Nurs. about 1920; female. = ? TENNYSON of Hohman.

var. ***thomsonii*** (Hooker f.) Loesener (T. Loesener, Monog. Aquifol., Pt. 1, 78:202. 1901) - change in rank from species to bot. var. J.D. Hooker, Flora British India 1:602. 1875 - as ***I. thomsonii***; small shrub; branchlets puberulous; lvs. 1/2"-1", obovate or oblanceolate, subacute or apiculate serrulate, punctate; fr. solitary on pedicels 1/4" long, purple; grows at 4,000-5,000 ft elev. in Bhutan. H. Hyland, USDA Plt. Inventory 173:147. 1969, as ***I. intricata*** Hooker f., PI 307276 - evergreen shrub to 25 feet; lvs. small, margins crenate-serrate; coll. Mount Tonglu, West Bengal, India at 8,000 ft. by F. deVos and E. Corbett, April 1965. Male. This PI 307276 was misidentified as ***I. intricata*** Hooker f. and was later more accurately identified by S.-y. Hu as ***I. thomsonii*** Hooker f. H. Hara, Flora of Eastern Himalaya, p. 187. 1966 - preferred the name ***I. crenata*** var. ***thomsonii*** over ***I. thomsonii*** and commented "The relationship between the Himalayan and typical ***I. crenata*** of Japan needs further critical studies based on ample material." The usage of var. ***thomsonii*** (Hooker f.) Loesener here does not solve this difficult taxonomic

identification problem but does indicate that ***I. crenata*** var. ***thomsonii*** or ***I. thomsonii*** is in cultivation. This taxon also occurs in the wild in Sikkim and Nepal, 3,000-3,300 m elev. = ***I. thomsonii*** Hooker f.

TINGLE-ONE (S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957 and idem, Amer. Hort. Mag. 49(4):2. 1970) - low growing; lvs. oblong-elliptic, small, occasionally rounded at tip, sometimes convex; probably a hybrid of f. *microphylla* and f. *convexa*; female; orig. Tingle Nurs., Pittsville, Maryland. = **T-ONE**, T1.

TINY (Orlando Pride, Butler, Pennsylvania, advert. in Amer. Nurseryman 142(1):86. 1975) - the lowest growing; lvs. large, convex, very dark green, shiny; female; very hardy in Butler, Pennsylvania. Illegitimate, since the name ***I. opaca*** **TINY** has priority. = **PRIDE'S TINY**, TINY TIM.

TINY TIM (Orlando Pride, Butler, Pennsylvania, cat. p. 4. 1963-64, without descr.) - very hardy. O. Pride, Proc. Holly Symposium, Ann. Rpt. Missouri State Nurs. Assoc., p. 11. 1963 - as hardy as **STOKES**; orig. about 1953 as sdlg. of **STOKES** that was given to O. Pride by Warren Stokes, Butler, Pennsylvania; sel., named, and introd. by O. Pride. Very compact and spreading, similar to **STOKES** in habit but much more luster to lvs. At one time in conversation, O. Pride ultimately preferred the name TINY to TINY TIM. However, he was not aware, when he named this cultivar of ***I. crenata***, of the priority of ***I. opaca*** **TINY** and ***I. opaca*** **TINY TIM**, which made his ***I. crenata*** TINY and TINY TIM illegitimate. = **PRIDE'S TINY**, TINY.

T-ONE (Tingle Nurs., Pittsville, Maryland, cat. p. 16. fall 1958-sp. 1959) - low, compact, spreading. Female. The name **T-ONE** is accepted over the earlier name T1 because **T-ONE** has been used consistently by the originator since 1958. = T1, TINGLE-ONE.

TOPIARY (Cannon Plants, Greenwood, Delaware, cat. sp. 1973) - dense, stiff, unusual; said to grow in any direction in which a new bud is pointed, even straight down; suitable for topiary work; female. Twiggy, dwarf, branching at all angles; orig. after 1954 from a cross made by N. Cannon; sel., named, and introd. by Cannon.

f. ***tricocca*** (Makino) Hara (H. Hara, Enumeratio Spermatophytarum Japonicarum Pt. 3 p. 71. 1954, without descr.) - changed rank from var. *tricocca* Makino (T. Makino, Zissai-Engei 27:1096. 1941.) to bot. *forma*. S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957 - a *forma* with fruit born in threes; native Japan; probably not introd. yet. = TRICOCCA, var. *tricocca* Makino.

TRICOCCA (J. Sugimoto, New Keys to Woody Plts. Jap., p. 277. 1972) - flowers in threes. Sugimoto does not indicate whether this cultivar is based on var. *tricocca* Makino. If TRICOCCA was intended as a cultivar name, it is illegitimate, since it is in Latin form. = f. ***tricocca*** (Makino) Hara, var. *tricocca* Makino.

TWIGGY (G. Eisenbeiss and T. Dudley, Holly Soc. Amer. Let. 70:1.

1981) - Holly Soc. Amer. Reg. No. 1-81 by G. Eisenbeiss; orig. as a hybrid sdlg. 1964 by W. Kosar at the U.S. Nat'l Arb. and was named by him; NA 31352, PI 452266; compact, globose to broadly pyramidal, slow growing; lvs. elliptic to narrowly elliptic, keeled and strongly curved, prominent and raised crenations; female. Phyto Ecology, Ridgely, Maryland, cat. p. 3. summer-fall 1978, without descr. Ibid., cat. p. 4. fall 1979-sp. 1980 - dwarf, compact, twiggy appearance; new from Nat'l Arb. Mr. Ceserini's (Phyto Ecology) use of this name was unauthorized, and the name was published and released in two Phyto Ecology catalogs prior to the official USDA Notice of Release April 7, 1981.

TYKE (G. Eisenbeiss and T. Dudley, Holly Soc. Amer. Let. 72:6. 1982) - sdlg. sel. from PI 276082, 1961 as ***I. crenata*** subsp. *radicans*; prostrate, dwarf, compact, good color, male; Holly Soc. Amer. Reg. No. 3-82 by D. Bradshaw and L. Schmid, Clemson University, Clemson, South Carolina. This is a cv. of ***I. crenata*** var. ***paludosa***.

var. t*ypica* Loesener (T. Loesener, Monog. Aquifol., Pt. 1., p. 200. 1901). Loesener's descr. of var. *typica* was limited to mainly fruit and pyrene characteristics and geographical origins. All of these characteristics and geographical ranges are well within the ranges of both cultivated expressions and wild occurring ***I. crenata*** var. ***crenata***. Typical ***Ilex crenata*** var. ***crenata*** includes the ***I. crenata*** described from cultivation by Regel in 1887, ***I. elliptica*** Siebold, and ***I. fortunei*** Hort. A. Rehder, Mitt. Deut. Dendr. Gesel. 17:161. 1908 - translated from German:

> lvs. elliptic, oval or ovate-egg shaped to lanceolate-elliptic or lanceolate-egg shape, 1.5 - 4.0 cm long; the forms cultivated in England, vars. m*ajor*, *latifolia*, and *elliptica*, were from material sent to me by my friend W. J. Bean from Kew Arboretum are definitely the type form; the extensive number of Japanese examples [from the wild] I have seen scarcely differ from this [the type *forma*] in that their leaves are inverted egg shape at the point while the point of the leaf in the cultivated forms is elliptic.

Rehder (1908) also recognized a var. n*ummularia* [now called **MARIESII**]. Later, Rehder (Biblio. Trees & Shrubs, p. 402. 1949) recognized six bot. *formae* of ***I. crenata*** but still only one variety, var. *nummularia*. Variety *typica* was simply noted by Rehder (1949) under the species heading of ***I. crenata*** and was not connected with the infraspecific elements of ***I. crenata***. Since so many garden variations of ***I. crenata*** are now recognized, the broadly inclusive descr. by Loesener and Rehder of var. *typica* are of little value for identification and determination of cultivated elements. Nevertheless Loesener's var. *typica*, the typical expression, served botanical and nomenclatural purposes, since it clearly distinguished some character differences and geographical locations of ***I. crenata*** in the wild. According to current

botanical nomenclature var. *typica* Loesener = var. ***crenata***.

UPRIGHT (J. Dickerson & Assoc., Troy, Ohio, advert. in Amer. Nurseryman 120 (2):119. 1964 (about the liquidation of Grovatt's Holly Nurs., Burlington, New Jersey), without descr.).

UPRIGHT (Millcreek Nurs., Newark, Delaware, cat. p. 8. 1963) - vertical form of **CONVEXA**. Illegitimate because of inadequate description and priority of **UPRITE**.

UPRIGHT (Scott Farms Nurs., Sewell, New Jersey, cat. p. 4. fall 1990-sp. 1991, without descr.).

UPRIGHT CHEROKEE (Manor View Farm, Monkton, Maryland, cat. p. 12. 1983, without descr.). = **CHEROKEE**.

UPRIGHT HETZI (Robbins Nurs., Willard, North Carolina, cat. sp. 1972, without descr.). Was intended to be different plant from **HETZII**, since **HETZII** is listed separately in the same catalog.

UPRITE (D. Wyman, Arnoldia 20(7):46. 1960) - somewhat similar to var. *latifolia*; subject to chlorosis. Appalachian Nurs., Waynesboro, Pennsylvania, cat. p. 15. sp. 1967 - larger, bulkier habit than most; lvs. very dark green; extremely hardy.

VALERIA RANKIN (Tom Dodd Nurs., Semmes, Alabama, cat. p. 11. 1967, without descr.). Upright, compact, rounded; lvs. dark green, slightly convex, curved, broadly elliptic to obovate, tips obtuse to rounded, bases cuneate; sel., named, introd. by Tom Dodd, Jr., Tom Dodd Nurs., Semmes, Alabama. By adding a descr., the authors are the first to legitimately publish the name **VALERIA RANKIN**.

(Variegated Group) Established to include names of variegated selections in ***I. crenata*** only. Although an artificial grouping, assembling all the names applied to variegated ***I. crenata*** is convenient for horticultural uses. Includes: ALBO-MARGINATA, **ANGYO**, ARGENTEA VARIEGATA, AUREA, AUREO-VARIEGATA, **DAN'S GOLD**, **ELEGANS MACULATA**, FULVO-MARGINATA, **GOLDEN GEM**, **GOLDEN HELLER**, GOLDEN QUEEN, **GOLDEN VARIEGATED**, **LUTEO-VARIEGATA**, MARGINATA, ROTUNDIFOLIA AUREA, **MIDAS TOUCH**, PALUDOSA of Clarendon, **SNOWFLAKE**, VARIEGATA of Bean, VARIEGATA of Lavallee, VARIEGATA of Tingle, VARIEGATA of Vilmorin, VARIEGATA GOLDEN of Wieman, and VARIEGATED MICROPHYLLA.

var. *variegata* (G. Nicholson, Illus. Dict. Gardening 2:174. 1884) - lvs. blotched dull yellow (see fig. 271 in Nicholson. Idem, Kew Hand-List Trees and Shrubs, 1:61. 1894, without descr. Richard Smith, St. John's Nurs., Worcester, England, cat. p. 47. 1893, without descr. F. Pierson Nurs., Tarrytown-on-Hudson, New York, cat. p. 12. 1897 - lvs. blotched and variegated with dull yellow. W. Dallimore, Holly Yew & Box, p. 122. 1908 - golden variegated lvs. W. J. Bean, Trees & Shrubs Hardy Brit. Isles 1:646. 1914 - lvs. of same shape and size as the type

but spotted or blotched yellow; lvs. sometimes completely yellow. Nicholson, Dallimore, and Pierson seem to have described a clone from cultivation, yet it cannot be confirmed whether all of them referred to the same clone. However, since Nicholson, Dallimore, and Bean worked in England and their publications were successive and relatively closely timed, it is possible that the three of them reported the same clone. = **LUTEO-VARIEGATA**. See **LUTEO-VARIEGATA** for full syn.

f. *variegata* (A. Rehder, Mitt. Deut. Dendr. Gesel. 17:161. 1908, based on [var. *variegata* in] G. Nicholson, Kew Handlist, p. 61. 1894) - lvs. small, narrowly elliptic to lanceolate, pointed; gold and green flecked; in contrast with f. *luteo-variegata*, which is a mutation of var. *typica*, f. *variegata* is often a recurring mutation of f. *longifolia*. Idem, Biblio. Trees & Shrubs, p. 402. 1949 - reduced var. *variegata* Nicholson to syn. of f. *luteo-variegata* (Regel) Rehder. In this change of opinion Rehder was possibly considering his f. *luteo-variegata* as a bot. *forma* that included numerous clones or cultivated varieties (cultivars), or he may have considered f. *luteo-variegata* and f. *variegata* as representing the same clone. T. Loesener, Mitt. Deut. Dendr. Gesel. 1919:16. 1919, as ***I. crenata*** *variegata*. Loesener (1919) recognized *aureo-variegata* and *luteo-variegata* and *variegata* as distinct and as Japanese cultivated forms. = **LUTEO-VARIEGATA**. See **LUTEO-VARIEGATA** for full syn.

VARIEGATA (W.J. Bean, Trees & Shrubs Hardy Brit. Isles, 8th ed., 2:441. 1973) - lvs. are of same shape and size as normal form but sometimes spotted, blotched yellow, or all yellow; AUREO-VARIEGATA as a syn. of VARIEGATA. Bean (1973) was the first to list VARIEGATA at the cultivar rank in ***I. crenata***. In this ref. Bean did not list var. *variegata* as a syn. of VARIEGATA, but his description of VARIEGATA is identical to his previous descriptions of var. *variegata* (W.J. Bean, Trees & Shrubs Hardy Brit. Isles, 1st ed., 1:649. 1914 and idem, 7th ed., 1:134. 1950). VARIEGATA of Bean (1973) should be regarded, therefore, as the same clone as var. *variegata* Bean (1914). This description of VARIEGATA also fits var. *luteo-variegata* Regel. Since Regel's name predates VARIEGATA of Bean, the name **LUTEO-VARIEGATA** at cultivar rank is considered the legitimate cultivar name instead of VARIEGATA. Considerable confusion exists in the literature regarding the names *luteo-variegata*, *aureo-variegata*, and *variegata*. In W. Goldring, Garden (London) 31:129. 1887, at least 2 recognizable variegated clones are involved, and Loesener, Mitt. Deut. Dendr. Gesel. 1919:16. 1919, recognized 3 distinct forms: f. *aureo-variegata* Hort., f. *luteo-variegata* Regel, and f. *variegata* Hort., all from Japan. The reported synonymy among the three names is conflicting. Subsequent variegated mutations have been found, further confusing the situation. Descriptions are inadequate and authentic

material is not available. Under these circumstances, the solution by Boom (Nederl. Dendr., p. 337. 1959), which states that AUREO-VARIEGATA and **LUTEO-VARIEGATA** are both acceptable cultivar names, has been regarded as the most reasonable, except that the name AUREO-VARIEGATA is illegitimate by priority of ***I. aquifolium*** **AUREO-VARIEGATA**. (Variegated Group). = ? **LUTEO-VARIEGATA**. See **LUTEO-VARIEGATA** AND AUREO-VARIEGATA for full syn.

VARIEGATA (Hilliers & Sons, Winchester, England, cat. p. 53. 1949) - low spreading, lvs. blotched yellow. Hilliers', Man. Trees & Shrubs, p. 157. 1972 - lvs. suffused yellow in sp., becoming pale green; as syn. of AUREO-VARIEGATA. Although these two descriptions vary, they probably represent the same clone. = AUREO-VARIEGATA.

VARIEGATA (A. Lavallee, Arb. Segrezianum, p. 44, 1877, without descr.) - as var. f*oliis variegatis*. Possibly a different clone from all other VARIEGATA. (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **VARIEGATA** has priority.

VARIEGATA (Tingle Nurs., Pittsville, Maryland, cat. p. 11. fall 1952-sp. 1953) - golden variegated type. Possibly a different clone from all other ***I. crenata*** VARIEGATA. (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **VARIEGATA** has priority.

VARIEGATA (Vilmorin Nurs., Paris, France, Primary Cat. p. 32. 1904, without descr.). Possibly a different clone from all other VARIEGATA. (Variegated Group). Illegitimate, since the name ***I. aquifolium*** **VARIEGATA** has priority.

VARIEGATED GOLDEN (The John Wieman Holly, Sherwood, Oregon, cat. p. 3. 1965) - lvs. oblong with unusual gold tinge; male; hardy. Illegitimate, since both words in the name have been used in a previous name, **GOLDEN VARIEGATED**, of S.-y. Hu.

VARIEGATED MICROPHYLLA (American Holly Products, Millville, New Jersey, cat. fall 1986-sp. 1987, without descr.). Lvs. small, elliptic, and variously spotted blotched and streaked yellow; sel. and named by American Holly Products some years ago. Illegitimate, since part of the name is in Latin form. = **DAN'S GOLD**, GOLDEN MICROPHYLLA.

VASEYI (Tingle Nurs., Pittsville, Maryland, cat. p. 21. fall 1956-sp. 1957) - broad at base, branches readily; lvs. medium convex; (Bennett Hybrid Group). S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957 - lvs. oblong-obovate, loosely arranged, more or less convex, apex rounded, base obtuse; clone of f. *latifolia*. Male.

VIRIDIS (H. van de Laar, Jaarboek Proefstation voor de Boomkwekerij, Boskoop, Netherlands, p. 243. 1968, without descr.). Illegitimate, since the name is in Latin form, and since the name ***I. glabra*** **VIRIDIS** has priority.

(Watanabeana Group) Group name for plts. of ***I. crenata*** that have yellow fruit or are of yellow-fruited parentage. Includes BUTTERBALL,

FORTY-NINER, f. *fructo-alba*, **GAYLE**, **HONEYCOMB**, ? IVORY, **IVORY HALL**, **IVORY TOWER**, IVORY UPRIGHT, ? **MARIGOLD GLITTERS**, **PRAECOX** of Chugai Shokub., SIR ECHO of Cannon, SIRUMI-INTSUGE, **STARGLOW**, **SUNSHINE**, WATANABEANA, f. ***watanabeana***, *xanthocarpa*, XANTHOCARPA, YELLOW BERRY of Cannon, YELLOW BERRY of Huttleston, YELLOW FRUIT of Clemson, YELLOWBERRY of Clemson, YELLOWBERRY of Univ. Wash. Arb.

f. w***atanabeana*** Makino (T. Makino, Jour. Jap. Bot. 1(4):12. 1917, as var. *typica* f. ***watanabeana***) - lvs. coriaceous; fr. greenish-pale yellow ("viridiflavescent"); native to Bizen Province, "Yataka-Yama," Japan; named for Toyodzi Watanabe [a noted Japanese botanist]. S.-y. Hu, Nat'l Hort. Mag. 36(1):49. 1957 - lvs. "papery" [?], oblong-elliptic, 1"-1 1/4" long; native to southern Japan and Okinawa. Fruit color was not mentioned by Hu. Idem, Amer. Hort. Mag. 49(4):200. 1970 - fr. greenish yellow; introd. to U.S. late 1950's. E. Griffith and H. Hyland, USDA Plt. Inventory 164:45. 1966, as ***I. crenata*** - (fr. yellow) PI 231948; plt. obtained by J. Creech from Kyushu Agr. Exp. Sta., Kurume Fukuoka, Japan 1956. PI 231948 was propagated and widely distributed from USDA Plt. Introd. Sta., Glenn Dale, Maryland. PI 231948 is not identified as f. ***watanabeana*** in PI Inventories or in Glenn Dale distributions. Also not indicated in the PI Inventories is the fact that when PI 231948 was introduced its seed was also introduced as PI 231948-S. Plants were grown at Glenn Dale from this seed and were also widely distributed from Glenn Dale. Probably all named selections of yellow-fruited ***I. crenata*** originating in U.S. are from seed or seedlings of PI 231948-S. The single female clone also represented by PI 231948 was propagated and distributed to the trade from the USDA Plt. Introd. Sta., Glenn Dale, Maryland. Propagations of this plt. were also grown at the National Arboretum and distributed as NA 10815. According to authors' correspondence with T. Tamura in 1969, Makino's description was based on a plant that was from the garden of Chikushi Harada. Harada's plt. was originally coll. from the wild in the town of Uematsu-Cho, Nischikuma-Gum District, Hagano-Ken Prefecture, Japan, by his father Chushiro Harada. Since 1956, additional seed of f. ***watanabeana*** has been brought into the U.S. from Kyushu Agr. Exp. Sta. In 1975, seed from cultivated material of "f. *fructo-alba*" was offered in the Seed Exchange List (1976), Aritaki Arb., Japan.

WATANABEANA (J. Sugimoto, New Keys Woody Plants Japan, p. 277. 1972) - yellow fr. Illegitimate, since the name is in Latin form. (Watanabeana Group).

WAYNE (E. Quillen, Virginia Nurs. Assoc. Newslet., p. 3. 1961) - resembles **HELLERI** but stronger growing; sdlg. sel. about 1955 or 1960; named at Waynesboro Nurs., Waynesboro, Virginia; will not be

introd. before 1962. Robbins Nurs., Willard, North Carolina, cat. p. 5. 1963-64, as WAYNESII - very low, fast spreading, same general habit as **REPANDENS**, but more dense and better dark green lvs. The plt. was provided to Robbins Nurs. by S. Thrasher, Greenbrier Farms Nurs., Norfolk, Virginia, about 1952. Tankard Nurs., Exmore, Virginia, cat. p. 10. 1969-70 - a special dwarf, low growing or spreading; similar to **GLORY**. Female. Information available about the origin, dates of introd., and descr. is confusing.

WIER (Millcreek Nurs., Newark, Delaware, cat. p. 9. 1963, without adequate descr.) - upright. Multistemmed and upright, vigorous, well shaped; lvs. oval, generally less yellowing in winter than the lvs. of most *I. **crenata*** in New Jersey; sel. from a local gdn. by Millcreek Nurs. before 1963. = WIER UPRIGHT. By providing an adequate descr., the authors are the first to legitimately publish this name.

WIER UPRIGHT (J. Dickerson & Assoc., advert. of auction of Millcreek Landscape Div., Newark, Delaware, in Amer. Nurseryman 144(5):48. 1976, without descr.). Illegitimate, since the name **WIER** has priority. = **WIER**.

WIESMOOR SILBER New name. Dense, compact, wider than tall, not as vigorous as **CONVEXA**; lvs. convex, variegated with mottled gray-green and cream, sometimes completely cream; female; hardiness same as **CONVEXA**: Orig. as a mutation of **CONVEXA**; discov. 1975 in Martin Zimmer Nurs., Wiesmoor, West Germany. The authors are the first to publish this name.

WIGHT'S COMPACT (C. Parkerson, Combined Proc. Internat'l Plt. Prop. Soc. 80:484. 1980, as WIGHT'S COMPACTUM, without descr.). D. Milbocker et al., Southern Nurs. Assoc. Res. Jour. 7(2):2, 3, 4. 1981, as WIGHT'S COMPACTA, without descr. Historyland Nurs., Montrose, Virginia, cat. p. 11. June 1, 1990-June 1, 1991, as COMPACTA WIGHT'S - smaller size and lvs. more rounded than BENNETT'S COMPACT. By correcting the orthography, the authors are the first to legitimately publish this name.

WILDWOOD (E. Orton, Jr., Proc. 40th Meet. Holly Soc. Amer., p. 16. 1966) - dense mound, low, spreading, similar to **HELLERI** but faster growing; male; Holly Soc. Amer. Plt. Reg. No. 1-66 by R. Marvin, Walterboro, South Carolina. Originated before late 1940's at Wildwood Nurs., Walterboro, South Carolina.

WILEY B. GLASS (E. Orton, Jr., Holly Soc. Amer. Let. 25:7. 1965, without descr.) - rec. by Rutgers—The State University, New Brunswick, New Jersey, from W. Frierson.

WILLIAM JACKSON (E. Orton, Jr., Holly Soc. Amer. Let. 25:17. 1965, without descr.) - Rutgers—The State University, New Brunswick, New Jersey, rec. from W. Frierson. Tom Dodd Nurs., Semmes, Alabama, cat. p. 3. 1966-67, without descr. Orig. and named at Tom Dodd Nurs.; Tom Dodd pedigree No. TD 56-332; named for a Baptist missionary; compact,

horizontal branching; but branchlets not in distinct flat sprays as found in **LOYCE NELSON** and **EDWIN DOZIER,** faster growing than either; lvs. oval, small; male. By providing a descr., the authors are the first to legitimately publish this name.

WILLOW (King Nurs., Greensboro, Pennsylvania, advert. in Amer. Nurseryman 113(4):43. 1970, without descr. = ? **WILLOW LEAF**.

WILLOW LEAF (Tingle Nurs., Pittsville, Maryland, cat. p. 21. fall 1956-sp. 1957) - spreading; lvs. flat, light green; (Bennett Hybrid Group). S.-y. Hu, Nat'l Hort. Mag. 36(1):64. 1957 - lvs. oblanceolate, some slightly convex; sel. of ***I. crenata*** f. ***longifolia***. Idem, Amer. Hort. Mag. 49(4):201. 1970 - sel. of **LONGIFOLIA**. C. Tuley, Proc. 38th Meet. Holly Soc. Amer., p. 2. 1965 - lvs. elongate; male; (Bennett Hybrid Group). Not to be confused with ***I. cornuta*** WILLOW LEAF, a later homonym. = ? WILLOW.

WINTER KING (Angelica Nurs., Mohnton, Pennsylvania, cat. p. 24. fall 1968-sp. 1969) - spreading, resembles ***Taxus cuspidata***; extremely hardy. Illegitimate, since the name ***I. aquifolium*** **WINTER KING** has priority.

WINTERGREEN (Kalmia Farms Nurs., Clarksville, Maryland, cat. p. 10. fall 1969-sp. 1970) - lvs. large, dark green; extremely hardy. Narrow upright, gradually becoming pyramidal; sel. from 3,000 sdlg. for winter hardiness, named and introd. by C. Orndorff, Kalmia Farms Nurs., Clarksville, Maryland.

WOOTTENI (Winn Nurs., Norfolk, Virginia, cat. p. 6. 1966-67, without descr.). Illegitimate, since the name is in Latin form.

XANTHOCARPA (J. Ford, Finding List and Guide Secrest Arb., Ohio Agr. Res. Development Center, Special Circ. (Revised) 91:73. 1978, as *xanthocarpa*) - yellow berried, without further descr. Illegitimate, since the name is in Latin form. (Watanabeana Group). = ? XANTHOCARPA of Watnong.

XANTHOCARPA (Watnong Nurs., Morris Plain, New Jersey, cat. p. 6. sp. 1966) - free growing; yellow berried; sel. by Watnong from plts. rec. from USDA Plt. Introd. Sta., Glenn Dale, Maryland. Illegitimate, since the name is in Latin form. (Watanabeana Group). = ? XANTHOCARPA of Ford.

YELLOW BERRY (Cannon Plants, Greenwood, Delaware, cat. sp. 1973, without descr.) - yellow fr.; N. Cannon of Cannon Plants selected it from sdlgs. rec. from USDA Plt. Introd. Sta., Glenn Dale, Maryland. The name **SUNSHINE** of the Park Seed Co. represents the same plant. The name YELLOW BERRY is illegitimate, since the name ***I. opaca*** **YELLOW BERRY** has priority. The next available name, although a later syn., is **SUNSHINE**, which was not erected by the originator but has his approval by virtue of correspondence with authors. (Watanabeana Group). = **SUNSHINE**, ? YELLOWBERRY of Clemson, ? YELLOW BERRY of Longwood, ? YELLOW FRUIT of

University of Washington, ? YELLOW FRUIT of Clemson.

YELLOW BERRY (D. Huttleston, Plants Growing in Conservatories and Gdns. Longwood Gdns., Kennett Square, Pennsylvania, Oct. 1970, without descr.). Illegitimate, since the name *I. opaca* **YELLOW BERRY** has priority. (Watanabeana Group). = ? **SUNSHINE**, ? YELLOWBERRY of Clemson, ? YELLOW BERRY of Cannon, ? YELLOW FRUIT of Clemson, ? YELLOW FRUIT of University of Washington.

YELLOW FRUIT (Anonymous, University of Washington Arb. Bull. 29(4):96. 1966, without descr.) - rec. from U.S. National Arboretum in 1959 as PI 231948, and NA 10815, an unnamed yellow fruited sel. of f. *watanabeana*. J. Floyd, Holly Evaluation at Horticultural Gdns., Clemson University, Clemson, South Carolina, Agr. Exp. Sta. Tech. Bul. 1051:17. 1974, as PI 231948. Illegitimate, since the descr. is inadequate. (Watanabeana Group). = ? **SUNSHINE**, ? YELLOWBERRY of Clemson, ? YELLOW BERRY of Longwood and of Cannon, ? YELLOW FRUIT of Clemson.

YELLOW LEAF (Foxborough Nurs., Street, Maryland, in Andersen Hort. Library's Source List p. 94. 1988-89, without descr.).

YELLOWBERRY (J. Floyd Jr., Ornamental Plt. Coll. Hort. Gdn., Clemson University, Clemson, South Carolina, Miscel. Pub. 9:1973, without descr.). Illegitimate, since the name *I. opaca* **YELLOW BERRY** has priority. (Watanabeana Group). = ? **SUNSHINE**, ? YELLOWBERRY of Clemson, YELLOW BERRY of Cannon, YELLOW BERRY of Longwood, YELLOW FRUIT of University of Washington.

YUNNAN (Wister et al., Holly Soc. Amer. Bul. 6:42. 1953, without descr.). Introd. about 1947 by Styer's Nurs., Concordville, Pennsylvania, cat. p. 11. 1961 - slender, upright column, dense; twigs yellow tinged; lvs. large; grows well in heavy soil. Female. Sdlg. orig. about 1932; sel. and named by Styer's Nurs.

YUNNANENSIS (Clarendon Gdns. Nurs., Pinehurst, North Carolina, cat. 1957, without descr.). = ? **YUNNAN**, or possibly intended to be *I. yunnanensis*.

ZWISCHENAHN (J. Bruns, Baumschulen, Bad Zwischenahn, West Germany, cat. p. 130. 1959-60) - broad, upright, compact, particularly adapted for a small ornamental hedge; lvs. small like those of **BRUNS**. Female.

151 (Flowerwood Nurs., Mobil, Alabama, advert. in Amer. Nurseryman 123(6):109. 1966, without descr.). = BULLATA NO. 151.

Appendix A. List of New Cultivar Names of *I. crenata*

The names in this list have not been previously published and are published here for the first time with a description.

ANGYO
DAN'S GOLD
DELAWARE DIAMOND
DUNCAN
FRIERSON
GREEN CONE
HUNT SELECTION
LISA
LONGBOY
LUSTGARTEN
LUTHER COPELAND
MOUNT HALLA
ROBBIN'S #2
SCHWOEBEL'S UPRIGHT
SNOWFLAKE
SOFT TOUCH
STARGLOW
WEISMOOR SILBER

Appendix B. List of Newly Legitimized Cultivar Names of *I. crenata*

The names in this list have been previously published as illegitimate names and are published here legitimately for the first time by adding a description and/or correcting the orthography of the name.

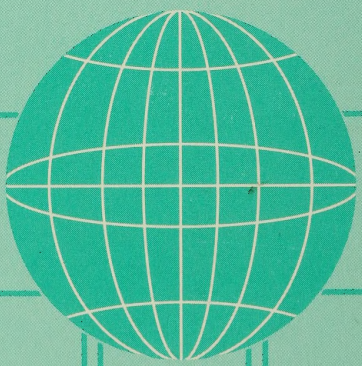
BENNETT'S COMPACT
CAROLINA UPRIGHT
EDWIN DOZIER
GOLDEN HELLER
GREENPOINT
GRIER
HAYDEN
HONEYCOMB
HOWARD'S COMPACT
LAUREL LAKE
LOEB
LOYCE NELSON
MAGDA
MOUNT AMAGI
NOBLE UPRIGHT
NORTH STAR
PIEDMONT PYRAMIDAL
ROBERT CULPEPPER
SCHWOEBEL'S COMPACT
SHOUL
SKY PENCIL
TEE DEE
VALERIA RANKIN
WIER
WIGHT'S COMPACT
WILLIAM JACKSON

Appendix C. List of Doubtful Cultivar Names of *I. crenata*

All the names in this list are illegitimate and have never been published. These names were found on plant labels or were brought to our attention through conversations and correspondence. Some of the names were found in printed matter that does not qualify for valid publication according to specifications in "International Code of Nomenclature of Cultivated Plants—1980," article 37 (C. Brickell et al., Regnum Vegatabile 104:32. 1980). The purpose of publishing these illegitimate and formerly invalid names is to prevent them from being legitimately applied to new and different plants. An equal sign (=) has been placed after a few names that have been equated as synonyms of legitimate, illegitimate, or other doubtful names. The legitimate names and synonyms, when known, are listed after the equal sign. Many of the names can be made legitimate if validly published with adequate descriptions and background information. Among the entries in the Alphabetical List of Documented Epithets are a few synonyms that do not have their own entries. These are appropriately placed here. We greatly welcome comments and additional information about any of the names in this appendix, particularly with regard to plant descriptions and background information and evidence of publication.

ARBORESCENS
AUTUMN GOLD
BIG DADDY
BUFFALO
BULLATA #5, #6
CANARY LEAF = HIGHLANDER VARIEGATED
CANNON #7 = **STARGLOW**
CHANDLER
CLEMSON (A, B, & C selections)
COMPACTA of deWilde = **SCHWOEBEL'S COMPACT**
COMPACTA 1
COMPACTA 2
COMPACTA NANA = COMPACTA NANA #1
CONVEXA MICROPHYLLUS = ?**HETZII**
CONVEXA ROTUNDIFOLIA
COPLEN'S SMALL LEAF
COUNTRY COURT
CRAZY QUILT
DENSA = ? **MENTOR DENSE**
DEWDROP
DEWERTH = I. vomitoria **DEWERTH**
DODD #2, #3, #4, #5, #7, #70, #140, #160, #180, #500, #800
ELFIN of Cannon = **DELAWARE DIAMOND**, NYMPH

FAIRYLAND
FOSTER SPREADING NO. 1 = FOSTER NO. 1, SPREADING FOSTER NO. 1
FOSTER SPREADING NO. 2 = FOSTER NO. 2, SPREADING FOSTER NO. 2
FORTUNE
FRIERSON SPECIAL = **FRIERSON**
FRIERSON YELLOWSTEM
GABLE SDLG. = ? GABLE'S
GALLE'S
GOLDEN MICROPHYLLA = **DAN'S GOLD**
GOLDENBERRY
GOLDSTAUB
GREEN GLORY = **GLORY**
GREEN POINT
HALLA = **MOUNT HALLA**
HARMAN UPRIGHT = UPRIGHT of Harman
HETZI SPORT
HEXE
HIGHLANDER VARIEGATED = CANARY LEAF
HOWARDI = **HOWARD'S COMPACT** (Bennett Hybrid Group)
JACKSON
JOHN NASH = ? **JOHN NOSAL**
LANCASTER YELLOW = **GOLDEN HELLER**
LATIFOLIA MAJOR = ? **MAJOR**
LONG ISLAND DWARF
LUSTER = ? **GREEN LUSTER**
MAGNOLIA
MAJOR of Rowland
MAJOR AUREA in B.K. Boom's herbarium, Leiden, Netherlands.
MAJOR AUREA VARIEGATA
MARIESII VARIEGATA
MARY ALEXANDER
MIST GOLD = ? ***I. aquifolium MISTGOLD***
MT. HALLA = **MOUNT HALLA**
NO. RX-4
NO. 400
NORTHERN STAR = ? **NORTH STAR**
NYMPH of Cannon = **DELAWARE DIAMOND**, ELFIN of Cannon
PIEDMONT = **PIEDMONT PYRAMIDAL**
PRIDE = ? PRIDE 18, ? PRIDE HYBRID 18
PRIDE 64-1, 64-16, 64-18
PRIDE 18 = ? PRIDE, ? PRIDE HYBRID 18
PRIDE'S DWARF IMPROVED
RED VELVET

REPANDENS SMALL LEAF
ROTUNDIFOLIA VARIEGATA
ROTUNDIFOLIA WEEPING
SELENE (Bennett Hybrid Group)
SHINY
SPREADING FOSTER NO. 1 = FOSTER NO. 1, FOSTER SPREADING NO. 1
SPREADING FOSTER NO. 2 = FOSTER NO. 2, FOSTER SPREADING NO. 2
STOKESDALE
SUSSEX NO. 1, NO. 2, NO. 3, NO. 5, NO. 12
TENNYSON of Hohman 1936 = ? **TENNYSON** of Boulevard
TOTEM POLE
UPRIGHT of Harmon = ? HARMAN UPRIGHT
UPRIGHT HELLERI
VIRIDIS
WELLERI = ? HELLERI
WOODHAM NO. 1, NO. 2, NO. 3, NO. 4, NO. 5, NO. 6, NO. 7
WYCKOFF #5, #6
X-4
YELLOW BEAM
YELLOW HELLERI = **GOLDEN HELLER**
YELLOW STEMS
#1 = **CONNERS**

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