Notes on the Genus Ilex Linnaeus

The American Horticultural Society and the Holly Society of America are going to publish a revised edition of the Handbook of Hollies. For the revision of the chapter on Eastern Asian Hollies, I found it necessary to publish the following notes in advance.

Name Change
Since the publication of the Handbook of Hollies in 1957, a species of Ilex has been introduced into the United States of America under the name Ilex insignis Hook. f., first by Mrs. F. Leighton Meserve from Sikkim, and again by Dr. F. G. Meyer from gardens and nurseries of England. These materials have been used in holly hybridization in America. Since Hooker's specific epithet is a later homonym, its use should be discontinued. The correct name is Ilex nobilis Gumbleton, which is not listed in the Index Kewensis. The nomenclatural history of this species is as follows:

Ilex nobilis Gumbleton, Gard. Chron. III. 1: 177. 1887.
Ilex kingiana Cockerell in Torreya 11: 264. 1911.

In a short article on “Hardiness of Ilex nobilis or insignis,” Gumbleton gave the origin of the plant: “a native of the Darjeeling hills.” He also characterized it as having “leaves from 10 to 11 inches long, of a rich deep shade of green, and deeply toothed along the edges.” Regarding hardiness he said, “when grafted on a stock of common holly . . . it becomes almost, if not perfectly hardy.”

A New Hybrid
Recently several members of the American Holly Society have tried to produce hollies of distinct horticultural merits by hybridizing species from widely separated phytogeographical regions. In the United States National Arboretum, Mr. William Kosar has produced many interesting new hybrids. In St. James, Long Island, New York, Mrs. F. Leighton Meserve has had wonderful results in hybridizing Asiatic species with the English
Holly, *Ilex aquifolium* L. So far as I know, only two clones selected from one hybrid population of the Meserve products are in the market. These have been distributed by Jackson & Perkins Co. since 1964. For inclusion of this hybrid in the revised edition of the *Handbook of Hollies*, it is necessary to name and describe it properly.

*Ilex × meserveae* (*I. rugosa* F. Schmidt × *I. aquifolium* L.), S. Y. Hu, hyb. nov.

Frutex ramosus, 1–2 m. altus; ramulis erectis vel patentibus, hornotinis sparse puberulis; foliis ovatis vel ellipticis, 1.8–5 cm. longis, 0.7–3 cm. latis, margine spinoso-dentatis, basi rotundatis, acutis vel obtusis, apice acutis et spinosis, coriaceis, costa media et nervis lateralibus supra impresso-insculptis; inflorescentiis fasciculatis, axillaribus; floribus 4-meris; fructibus rubris, globosis, 8 mm. diametro; pyrenis 4, subsemiellipsoideis, 4 mm. longis, dorso 2.5 mm. latis, lignescentibus durescentibusque.

Specimens examined (all deposited in the Arnold Arboretum); Group A. F, hybrids of *I. rugosa* (I) × *I. aquifolium* (I): S. Y. Hu 7792, a compact shrub 1.5 m. high; leaves ovate, spinose; flowers white (May 4, 1964), fruit red (Dec. 31, 1964); nursery name 'Blue Girl' (Type, AA) (Plant Patent 2434)¹. S. Y. Hu 7793, a selection from the same hybridization, nursery name 'Blue Girl 2'; endosperm of fertile seeds white like coconut meat. S. Y. Hu 7794, a compact shrub, ca. 1 m. high; leaves ovate, deep green, spinose, the nerves insculped above; flowers white, fragrant (May 4, 1964); nursery name 'Blue Boy' (Plant Patent 2435)². S. Y. Hu 7796, a staminate plant with elliptic leaves, 5–8 spines on each side. S. Y. Hu 7797, a staminate plant with ovate spinose leaves; nursery name 'Yellow Boy'. S. Y. Hu 7798,


Fig. 2: a. Habit sketch of the seed parent, *Ilex rugosa* F. Schmidt, showing the crenulate serrate leaves, few-flowered inflorescences, and conspicuously impressed veins (S. Y. Hu 7810). Scale: X1.


c. Habit sketch of *Ilex x meserveae* S. Y. Hu, showing the spinose leaves, abundant flowers, and conspicuously impressed veins (S. Y. Hu 7792). Scale: X1.

d. A fruit of *Ilex x meserveae*. Scale: X3.
a staminate plant with ovate spinose leaves 3–3.5 cm. long, 1.7–2.3 cm. wide, base rotundate; nursery # 4–53. S. Y. Hu 7799, a staminate plant with small elliptic leaves 2–3 cm. long, 1.2–1.6 cm. wide; nursery # 1–57. Group B. F, hybrids *I. rugosa* (I) × *I. aquifolium* (II): S. Y. Hu 7795, compact shrubs with elliptic strongly spinose leaves; nursery numbers M–3 for the staminate plant, F–1 for pistillate plant. S. Y. Hu 7800, a very compact staminate plant with small elliptic spinose leaves, 1.8–3 cm. long, 0.7–1.5 cm. wide, acute at the base; nursery # 2–57. S. Y. Hu 7802, a pistillate plant with rather large elliptic spinose leaves 3–4.5 cm. long, 1.3–2.3 cm. wide, green with purplish tint; fruits abundant, pyrenes all fertile; nursery # F–1. S. Y. Hu 7803, a pistillate plant with elliptic spinose leaves 2.5–3.5 cm. long, 1.3–2 cm. wide, base acute or obtuse; fruits sometimes in cymose clusters, nursery # F–2. S. Y. Hu 7804, a staminate plant with weakly spinose elliptic leaves 3.5–4.5 cm. long, 1.4–1.9 cm. wide, approaching the shape and spines of the leaves of *I. cili spinosa* Loes.; nursery # M–5. S. Y. Hu 7805, containing two branches, one a staminate plant and the other a pistillate plant, both with rather large elliptic leaves, strongly spinose, 3–5 cm. long, 1.7–2.5 cm. wide; nursery numbers F–2 for the pistillate plant and M–4 for the staminate plant. Group C. F, hybrid of *I. rugosa* (II) × *I. aquifolium* (I): S. Y. Hu 7801, a very compact staminate plant with elliptic or oblong spinose leaves 2.5–3 cm. long, 1.1–1.8 cm. wide, base acute or obtuse; nursery # 2–58. Group D. F, hybrids of *I. rugosa* (I) × *I. aquifolium* (III): S. Y. Hu 7806, a pistillate plant with elliptic weakly spinose leaves rather loosely arranged on the stem, 3–4.5 cm. long, 1.3–2 cm. wide, base acute, rarely obtuse, approaching the appearance of *I. cili spinosa* Loes.; fruiting pedicels rather long, almost equal to the diameter of the fruit in length. S. Y. Hu 7807, vigorously growing pistillate plant shy of flowering and with rather large elliptic spinose leaves, 5–5.3 cm. long, 1.8–2.3 cm. wide, obtuse at the base, 5–10 spines on each side. Group E. F, hybrid of *I. rugosa* (II) × *I. aquifolium* (II): S. Y. Hu 7808, a staminate plant with elliptic leaves strongly spinose, 3–4 cm. long, 1.1–1.6 cm. wide, base obtuse or acute; nursery # 1–58. Group F. Parent plants: S. Y. Hu 7809, *Ilex rugosa* F. Schmidt (I), a low shrub ½ m. high, top flat, with elliptic or ovate-elliptic crenulate-serrate leaves (Fig. 2a), glabrous stem and pedicels; said to be introduced from Japan by the Arnold Arboretum, 6 plants went to the Westbury Rose Company, Long Island, New York. Paul D. Vossberg, Propagator of the Company gave Mrs. F. L. Meserve one plant which became the mother
of many of her hybrids. *S. Y. Hu 7810*, the flowering stage of the same plant. *S. Y. Hu 7811*, a staminate plant of *Ilex aquifolium* L. (I), small tree 3 m. high, with purplish puberulent branchlets, pilose peduncles and pedicels, ciliate calyx lobes; oblong sinuate strongly spinose leaves (Fig. 2b). *S. Y. Hu 7812*, a staminate plant of *I. aquifolium* L. (III) with puberulent branchlets, rather large elliptic or rarely obovate leaves 5-8 cm. long, 2-4.3 cm. wide, strongly spinose with 4-9 spines on each side.

From the material cited above, it is apparent that *Ilex × meserveae* includes many *F₁* hybrids made between *I. rugosa* and *I. aquifolium* which have rather small spinose leaves, fasciculate puberulent inflorescences, ciliate calyx lobes, and red globose fruits with 4 woody pyrenes each.

For the seed parent, the hybridizer used two plants of *I. rugosa* which she called 'Long Island' = (I), and 'Arnold Arboretum' = (II), and for the pollen parent she used three plants of *I. aquifolium* which she called 'Lawrence White' = (I), 'Fisher's Island' = (II), and 'Goliath' = (III). All the plants of the *F₁* generation acquire the characters of low stature and the impressed nerves on the upper leaf-surface from the seed parent, and the characters of spinose leaves, puberulent stems and inflorescences, and abundance of flowers from the pollen parent.

There are two distinct leaf-forms, i.e., plants with ovate leaves and plants with elliptic leaves. The clones in the market, *I. meserveae* 'Blue Girl' (Plant Patent 2434) and *I. meserveae* 'Blue Boy' (Plant Patent 2435) both have ovate leaves.

*SHIU-YING Hu*