

New additions to the Flora of Taiwan (1)

By

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During the past several years, we collected a great deal of specimens of the vascular plants for the Herbarium of National Taiwan University from all parts of Taiwan and its adjacent islets, such as Lan-yu (Botel Tobago), Luh-tao (Orchid Islet) and Peng-hu (the Pescadores). While working on these materials, we have now and then met with plants which are new to science or new to the flora of the island.

The following are some results of our studies of the vascular plants of Taiwan:

Ehretia lanyuensis LIU et CHUANG sp. nov. (Plate I).

Arbor parva; rami et ramuli teretes glabri, cicatricibus foliorum subrotundatis notati, cortice griseo-viridescenti, minute lenticellato, lenticellis minutis elevatis.

Folia alterna chartaceo-coriacea petiolata, elliptica vel oblongo-ovata, 15-19 cm. longa, 7-8 cm. lata, apice acuminata vel leviter caudata, basi obtusa vel subrotundata, margine integra, utrinque pagina glabra, costis et venis supra impressis, subtus elevatis, venis lateralibus primariis utroque latere 5-6, a costa angulo 50°-60° divaricatis, petiolis 3 cm. longis, supra sulcatis. Flores ignoti. Cymae fructiferae terminales, 7 cm. longae totiusque latae, glabrae, ramis divaricatis. Fructus appresso-globosus, 5 mm. in diametro, 4-loculares, basi calycis lobis persistentibus suffulti, lobis 5, patentibus, triangularibus acutis, 2 mm. longis, 1.5 mm. latis, extus pubescentis, intus glabris. Semina triquetro-ovata, 3.5 mm. longa, 2.5 mm. lata, dorso convexa, verrucosa, 5-striata, 4-caniculata, ventrale profunde sulcata.

A small evergreen tree up to 8 m. high, with glabrous branchlets, long-stalked elliptic or oblong-ovate, entire, coriaceous leaves, and depressed globose fruits.

Branches and branchlets terete, glabrous, griseous-viridescient when dry; the lenticels elevated; the leafscars suborbicular. Leaves alternate, petiolate; petioles about 3.5 cm. long, canaliculate above; lamina chartaceous-coriaceous, shiny above, opaque beneath, glabrous, elliptic or oblong-ovate, 15-19 cm. long, 7-8 cm. wide, obtuse or subrotundate at the base, acuminate or slightly caudate at the apex; margin entire; midrib glabrous, impressed above, elevated beneath, the lateral nerves 5-6 pairs, arcuate-ascending, spreading at an angle of 50°-60° from the midrib, with glands on the under surface in the angles between the 3 lower lateral nerves and the midrib; the reticulations of the veinlets obscure above, evident beneath. The flowers

not seen. Fruiting inflorescences terminal, cymose, about 7 cm. in width, glabrous. Fruit depressed-globose, 5 mm. in diameter, the persistent calyx explanate, 5-lobed; lobes triangular, acute at the apex, 2 mm. long, 1.5 mm. wide, pubescent outside. Seeds 4, triangular-ovate in outline, 3.5 mm. long, 2.5 mm. wide, the back convex, verrucose, longitudinally 5-striate and 4-grooved, the ventral side smooth, deeply grooved.

Habitat: In thicket at low altitudes, Botel Tobago, leg. C. C. Hsu et T. I. Chuang, Aug. 17, 1958 (No. 2373 Typus!)

Distribution: Endemic.

Type specimen: In Herb. Dept. Bot. Coll. Sci. National Taiwan University.

Near *Ehretia philippinensis* A DC.; but differs from it in having triangular lobes of calyx and leaves which are obtuse or subrotundate at the base.

Rhododendron kawakamii HAY. var. **flaviflorum** LIU et CHUANG var. nov. (Plate II).

A type speciei differt floribus flavis parvis circiter 1.5 cm. in diametro.

An epiphytic evergreen shrub attaining 20-30 cm. high with stout glabrous branchlets, oblanceolate to obovate coriaceous leaves, umbellate inflorescences and yellow flowers.

Branchlets stout, straight, grey or nigrescent, glabrous with elevated broadly deltoid leaf-scars; the current year's growth brown, sparsely clothed with lepidote scales. Leaves crowded, coriaceous, oblanceolate to obovate, 2-3 cm. long, 8-12 mm. wide, apex rounded or mucronate, base obtuse, the margins entire and recurved, the lower surface covered with lepidote scales, especially prominent when young; the midrib impressed above, elevated beneath, the lateral nerves 3-4 pairs, obscure above, rather evident beneath. Inflorescences umbellate, terminal; the umbells 3- to 6-flowered; the budscales deciduous, the outer ones small, broad-ovate, the inner ones larger, suborbicular, both pubescent outside. Flowers yellow; pedicels 1-2 cm. long, glabrescent or sparsely lepidote when young; calyx deeply 5-lobed, lobes 1.5 mm. long, 1 mm. wide, glabrous; corolla funnel-form about 1.5 cm. across, deeply 5-lobed, lobes obovate, about 6 mm. long, 4 mm. wide, corolla-tube nearly half the length of the lobes, pubescent inside; stamens 10, filaments hairy at the lower half; ovary ovoid, about 2 mm. long, pubescent, style 6 mm. long, glabrous, stigma capitate. Fruit ovoid, 10mm. long, pubescent.

Habitat: On trees in mixed forests at an elevation of about 2,300 meters., Mt. Hsin-shan (Pa-shien-shan), Nantou Hsien, leg. M. T. Kao, C. C. Kuo and T. I. Chuang. Aug. 7, 1956 (No. 2748, Typus!); also on trees in coniferous forest at the height of 1,800m. Mt. Ta-Yuan, I-lan Hsien, leg. C. C. Kuo and C. C. Liu, July, 4, 1960 (No. 197).

Distribution: Endemic.

Type specimen: In Herb. Dept. Bot. Coll. Sci. National Taiwan University.

This new variety differs from the type by the yellow flowers which are rather small, as compared with those of the type. Moreover, the flowers of the type are red

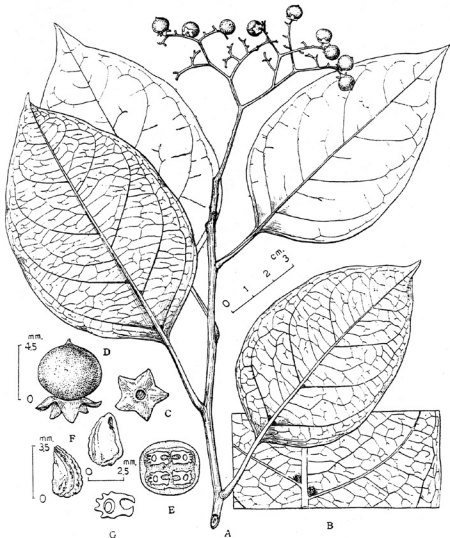


Plate I. *Ehretia lauyensis* LIU et CHUANG

A. A fruiting branch.

C. A calyx.

E. Cross section of a fruit.

G. Cross section of a seed

B. A portion of a leaf, showing two glands
on the lower surface.

D. A fruit.

F. Lateral and ventral views of seeds.