A Contribution to the Knowledge of the Flora of Japan.

By

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Deutzia Nagurai MAKINO, nov. comb.


A small deciduous shrub; branches terete, fistulose, smooth, pale-avellaneous; young branchlets sterile or floriferous, opposite, erect-patent, terete, substriate; smooth, glabrous, perulate at the base, the floriferous ones short, about 1-3 cm. long in flower; perulse firmly membranaceous, marcescent, gilvo-avellaneous, many, adpressed, opposite, deltoid-subulate, but shorter and deltoid in the outer ones, sharply acuminate, subcarinate, thinly covered with stellate hairs in the inner ones, the innermost one attaining about 6 mm. long.
Leaves opposite, petiolate, ovato-elliptical, ovato-lanceolate or lanceolate, long-attenuato-acuminate at the apex, obtuse at the base, incumbent-serrulat-ed with papillose-tipped teeth, membranaceous, subconcolorous (very slightly paler beneath), adpressedly covered with stellate pale hairs on the upper surface, but glabrous or subglabrous in the basal ones of the branchlets, about 2–5½ cm. long and 1–2½ cm. broad in flower; midrib prominent beneath, impressed above when fresh; veins about 3–5 on each side, ascending from the lower portion. Paniculated-cyme terminating the foliiferous short branchlet of this year, cernuous, subloosely submany-flow ered, peduncled, 1½–4½ cm. long; rachis gracile, glabrous, light green often shaded with purple as are the pedicels; bracts narrowly linear, acuminate, caducous, membranaceous, light green and shaded with purple, attaining about 6 mm. long. Flower small, pedicellate, 5–11½ mm. across; pedicels opposite, erect-patent, often with a minute subulate bracteole, 1½–6 mm. long. Calyx-segments 5, erect-patent, ovato-deltoid, shortly acuminate, entire, one-nerved, concave within, deciduous, glabrous, light green and often shaded with purple, or sometimes, purplish on margin, 2–2½ mm. long. Petals 5, patent, often recurved or revolute dorsally on margin, broadly ovate, obtuse, entire, white, or white and viridescent at the base, or light green but broadly white towards the both margins, glabrous internally, adpressedly covered with white stellate hairs dorsally, marked with 2 vertical folded traces in the middle portion of the both sides, and the outside portion of the trace-line thinner and more or less crispate, 2½–6 mm. long, 2–4 mm. wide, deciduous. Stamens 10, inserted on margin of the epigynous disk, free, erect then erect-patent, slightly exserted, shorter than the petals, introrse, oppositisepalous 5 longer; filament compressed, subulato-rectangular-cuneate or subulato-cuneate with an obscure or obvious or subhastate obtuse angle above the middle on each edge, glabrous, white or viridescent, about 1½–3 mm. long in the oppositisepalous 5, 1–2 mm. long in the oppositipetalous 5; anther yellow or greenish-yellow, oval-ovate, shortly bifid at the apex, cordate at the base, scantily with stellate white hairs, 1–1½ mm. long; anther-cells oblong. Ovary inferior, shortly turbinate, often obscurely 3–4-furrowed below, 1½–1¾ mm. long, about 2 mm. across, deep green and sometimes shaded with purple, smooth and thinly with adpressed stellate white hairs, 3-celled, thickly walled, with many minute ovules on the projecting thick placentas; epigynous disk truncate, annular, glabrous, deep-green; styles 3–4, erect, about equalling the stamens in height, unequal in length, stout-filiform, glabrous, white above and viridescent below; stigma terminal, not thick, obtuse or obtusely short-tapering.
April 5, 1916,

T. MAKINO.—CONTRIB. TO FLORA OF JAPAN.


Hab. Prov. MIKAWA (G. NAGURA! 1902); Prov. BITCHÛ (Z. YOSHINO! 1907); Prov. MUSASHI (T. MAKINO! 1914).

The flower of this species is the smallest among the Japanese species of Deutzia, and the flowering time is a little earlier than that of Deutzia gracilis Sieb. et Zucc.


var. Harai MAKINO, nov. var.

Perennial, about 7 decim. high, ramose; stem and branches stender, terete, slightly striate, glabrate, virid-purple; branches erect-patent, foliiferous throughout, ramulose and puberulent above. Leaves oblong-lanceolate or lanceolate, very shortly petiolate, very acuminate, cuneate or attenuated-cuneate at the base, remotely mucronato-dentate, rigid when dried, sebrous or sebro-hispidulous and green above, paler and thinly pubescent on the midrib and veins beneath, sebro-ciliated, triplinerved below, attaining about 14 cm. long and 2½ em. broad, the upper ones gradually smaller. Heads peduncled, numerous, loosely corymbose-disposed, not large, about 1½–2 em. in diameter, mainly violascent, or white, peduncled gracile, often with a bract; bract minute, attenuated below. Involucral-scales imbricated, obtuse at the apex, ciliated, 1-nervecl; lower ones shorter, oblong or oblong-subspathulate, dark-purple, or dark-purple above; inner ones oblong-linear, dark-purple towards the apex, the innermost one about 3½ mm. long. Ligule narrowly oblong. Pappus shorter than the yellow tubular flowers, pale. Ovary hispidulous with antrorsely subadpressed pale bairs.

Nom. Jap. Sagami-giku (nov.).


This variety grows mostly in shady places, and it is much taller than other members of Japanese varieties of this species; bearing slender branches, glabrate purple stem, glabrous leaves and mainly violascent ligules. I have named this variety in honour of Mr. TORNOSUKE HARA, who collected it first and kindly sent me the specimen.

Ligustrum Hisauchii MAKINO, nov. sp.

A semi-sempervirent shrub, attaining about 2½ m. in height, many-branched; branches erect-patent or spreading, terete, glabrous, cinereo-umber. Leaves opposite, petiolate, ovato-oval, elliptical, ovato-elliptical, elliptical-oblong, ovato-oblong, oblong-lanceolate, or narrowly oblong, obtuse or acute sometimes rounded and usually shortly decurrent at the base, acute or shortly acuminate sometimes obtuse
at the apex, entire and not ciliated on margin, glabrous on both surfaces, green and slightly shining above, light green and dispersedly minute-punctate under lens beneath, thickish and subcoriaceous, or somewhat flaccid, 2½–8½ cm. long, 1½–4½ cm. broad; midrib paler and prominent beneath; veins 5 to 10 on each side, loose, erect-patent, delicate; veinlets inconspicuous; petiole thick, shallowly canaliculated in front, rounded dorsally, smooth, glabrous, 3–6 mm. long. Panicle (fructiferous) terminal, about 2½–10½ cm. long, 3–10 cm. broad, pyramidal, oppositely ramose; rachis and branches glabrous or slightly pubescent, umber; branches and branchlets divaricato-patulous or erect-patent. Fruit shortly pedicellate, accompanied by the persistent 4-parted calyx at the base, ovoid-oval, rounded-obtuse at the top, 6–8 mm. long, smooth, glabrous, black when mature but not glaucous.

**Nom. Jap. Oka-ibota (nov.).**

**Hab.** Prov. SAGAMI: Akiya (K. HISAUCHI! Nov. 21, 1915).

This species is very closely allied to *Ligustrum ovalifolium* Hassk. (= *L. medium* Franch. et Sav.), but it has the ovoid fruit, thinner and slightly shining leaves. Leaves are very variable in form and size. It is commonly growing wild on sea-side hills in the prov. Sagami and the southern part of the prov. Musashi. I have named this species in honour of Mr. KIYOTAKA HISAUCHI, who was kind enough to give me the specimen collected by himself.

**var. pubescens** MAKINO.

Leaves pubescent along the midrib beneath.

**Nom. Jap. Yabu-ibota (nov.).**


**Colocasia antiquorum** Schott, Meletem. I. p. 18.

**var. multifolia** MAKINO.


Corm subterranean, widely turbinate, subtruncate and with many buds at the top, attaining about 14 cm. long, rooting below; branch-corums few to several, depressed-turbinate, subtruncate and with many buds at the top, subconfluent to the main central corm in the inferior ones but greatly confluent in the upper ones, and entirely confluent in the uppermost ones; whole corm attaining about 17 cm. in diameter. Leaves smaller, green; petioles numerous, cespitose, purpurascence.

**Nom. Jap. Yutsugashira-imo.**

**Hab.** JAPAN, cultivated.

(To be continued.)