

Observations on the Flora of Japan.

(Continued from p. 38.)

By

T. Makino.

Assistant in Botany, Science College,
Imperial University of Tokyo.

CORRECTION.

Page 37, line 15, for "graduations" read: gradations.

Rhododendron macrosepalum Maxim. in Mél. Biol. VII. p. 335 (1870), in Regel, Gartenfl. (1870) p. 258, tab. 662, et Rhod. Asiæ Orient. p. 31; Franch. et Sav. Enum. Pl. Jap. I. p. 290.

Azalea macrosepala Kuntze, Rev. Gen. Pl. II. p. 387.

Nom. Jap. *Mochi-tsutsuji*.

Hab. Japan, spontaneous and cultivated.

var. linearifolium (Sieb. et Zucc.) Makino.

Rhododendron linearifolium Sieb. et Zucc. Fl. Jap. Fam. Nat. in Abhandl. Akad. Muench. IV. 3, p. 131; Miq. Ann. Mus. Bot. Lugd.-Batav. I. p. 34, et Prol. Fl. Jap. p. 97; Maxim. Rhod. As. Orient. p. 34; Franch. et Sav. Enum. Pl. Jap. I. p. 290.

Azalea linearifolia Hook. fil. in Bot. Mag. tab. 5769; Kuntze, Rev. Gen. Pl. II. p. 384.

Nom. Jap. *Seigai-tsutsuji*.

Hab. Japan, cultivated.

A garden variety!.

Rhododendron (Tusisia) ripense Makino, sp. nov.

Rhododendron macrocephalum Maxim. in litt., non Mél. Biol. VII. p. 335 et alibi.

A shrub, about 1m. or more in height, densely branched; branches verticillate; branchlets directed upwards, subsetoso-pilose. Leaves aggregated towards the top of branchlets, persistent, angustato-lanceolate, mucronato-acute or short-acuminate, about $2\frac{1}{2}$ -5cm. long, 6-13mm. broad, chartaceo-coriaceous and often recurvo-patent, but membranaceous and erect-patent

in those of innovations, adpressed-piloso-pubescent, ciliated, green, subconcolorous; midrib narrow, prominent beneath; veins 3-5 on each side, loose, ascending, arcuate; petiole short, densely subsetoso-pilose. Perulæ deciduous, oval to ovato-oblong, the inner ones sometimes subspathulato-linear or much more angustate. Flowers 1-3-umbellate, coetaneous with young leaves; peduncles erect, subsetoso-pubescent, eglandular, 1-2½ cm. long. Sepals 5, erect-patent, green, angustato-lanceolate, acuminate, entire or sometimes pauciserrulate, shortly and dispersedly glandular-hairy and ciliated, 1¼-1½ cm. long, shorter than the corolla-tube. Corolla infundibuliform-campanulate, about 4-5½ cm. across, 4-4½ cm. long, dilute lilac, very slightly bilabiate, the upper lip trifid with elliptical lobes and maculate on the face, and the lower biparted with oblong lobes; lobes erect-patent, subemarginato-roundate, minutely glandular-ciliato-serrulate on the lower margins; tube nearly equalling the lobes in length. Stamens 10, slightly shorter than the style, declinate, not longer than the corolla, but especially the posterior one shorter; filaments filiform, papillate below; anther obovato-oblong, about 3 mm. long. Style slightly longer than the corolla, glabrous; stigma thickish, truncato-5-lobed. Ovary densely adpressed-pilose. Capsule erect, shorter than the sepals, attenuato-ovoid, adpressed-pilose, about 12 mm. long.

Nom. Jap. *Iso-tsutsuji* (vernacular name in Tosa).

Hab. Prov. Tosa: Ochi, side of River Niyodo (*T. Makino*! 1884, 1885, 1889, spontaneous); Prov. Iyo: Shingū, side of River Dōzan-gawa (*T. Makino*! May 3, 1893, spontaneous).

A species allied to *Rhododendron rosmarinifolium* (Burm.) (= *Rh. ledifolium* Don), having the narrower leaves and light lilac flowers. It is found wild by river-side in the prov. Tosa and Iyo in Shikoku, but is also frequently cultivated.

Rhododendron indicum Sweet, var. **japonicum** (Maxim.) *Makino*.

Rhododendron indicum ε. *amœnum* a. *japonicum* Maxim. Rhod. Asiæ Orient. p. 41.

Plant depressed, attaining about $\frac{2}{3}$ m. in height, densely ramosc; branches verticillate; branchlets adpressed-setose. Leaves dense, coriaceous, broadly obovato-elliptical to oblanceolate, often lato-lanceolate and membranaceous in those of the innovations, mucronato-obtuse or acute, cuneate towards the base, dispersedly adpressed-pilose, adpressed-ciliated, green above, paler beneath, very shortly petiolate, 5–25mm. long, 3–13mm. wide. Umbel few to several flowered; peduncles erect-patent, adpressed-pilose, about 5–10mm. long, but about 7–12mm. long in fruit. Sepals minute, orbicular to ovate, rounded-obtuse, white-villose, green, persistent, $1\frac{1}{2}$ –3mm. long in fruit. Corolla red-purple, infundibuliform-campanulate, about 2– $2\frac{2}{3}$ cm. across, the 3 posterior lobes oval and the 2 anterior lobes elliptical. Stamens 5, hardly longer than the corolla. Style exserted, longer than the stamens. Ovary densely villose. Capsule small, attenuato-ovate, about 6–9mm. long, adpressed-pilose.

Nom. Jap. *Miyama-kirishima* (nov.).

Hab. Prov. HYŪGA: Mt. Kirishima (*I. Katsuge!*); Prov. HIZEN: Mt. Unzen (*Z. Tashiro!*; *M. Yamasaki!*); Prov. HIGO: Mt. Aso (*T. Makino!*).

An alpine and alpestrine one.

Rhododendron serpyllifolium Miq. Prol. Fl. Jap. p. 97; Maxim. Rhod. As. Or. p. 42, tab. 4, fig. 18–25; Franch. et Sav. Enum. Pl. Jap. I. p. 292; Hook. fil. in Bot. Mag. tab. 7503.

Azalea serpyllifolia A. Gray in Perry, Exped. Jap. II. p. 315, et in Mem. Amer. Acad. Arts a. Sc. N. Ser. VI. (1859) p. 399; Masters in Gard. Chron. (1882) I. p. 429; Kuntze, Rev. Gen. Pl. II. p. 386.

var. albiflorum Makino, var. nov.

Branches laxer. Leaves more or less larger and laxer, pubes denser. Flower white.

Nom. Jap. *Shirohana-unzensutsuji* (nov.).

Hab. Japan, western, mountains.

(To be continued.)