A Contribution to the Knowledge of the Flora of Nippon.

(Continued from p. 24.)

By Tomitaro Makino, Sc. D.

**Diervilla nikoensis** MAKINO, NOV. SP.

A deciduous shrub; branches terete, brown-cinereous, dispersed with punctate lenticels, glabrous, provided with a large pith centrally; shoot of this year terete, with 2 narrowly elevated pubescent lines alternating the leaves, the rest glabrous, reddish-purple or reddish-purpurascence in the sun, dispersed with shortly linear pale lenticels. Leaves opposite, petiolate, elliptical to rounded, abruptly caudato-acuminate at the apex, acute obtuse or rounded at the base, serrated and often purple on margins, chartaceous or coriaceo-chartaceous, green sometimes shaded with purple and thinly pubescent (hairs denser on the midrib) above, paler and densely appressed-pubescent with pale hairs on the midrib and veins beneath, 4-13 cm. long, 2-3 cm. wide; midrib veins and transverse main veinlets prominent beneath; venation impressed above; veins about 5-8 on each side, arcuate upwards; petiole semiterete, broadly and shallowly canaliculated with dense-ciliated margins and pubescent face in front, rounded and very thinly pubescent in back, reddish-purple, 5-16 mm. long. Cymes with 3-fasciculate flowers, shortly peduncled, with linear pubescent bracts and subulate bracteoles. Sepals 5, angustately linear, light green, often purplish or purple, pubescent outside, about 8 mm. long. Corolla tubuloso-infundibuliform, at first greenish-white, then milky white, and at length changing into non-fresh rose-purple colour, 3½-4 mm. long; lobes 5, ovato-oval, rounded at the apex, spreading or erect-patent; tube long-enlarged below, gradually enlarged and hardly 5-angled (each angle with a corner in the lower end) above, glabrous externally, yellow in front within. Stamens 5, slightly lower than the corolla in height; filament stout-filiform, white, glabrous; anther linear, milky white. Style slightly exerted, white, pubescent on one side in the basal portion; stigma orbicular, fungiform.
Nectaries 2. Ovary inferior, angustate, attenuated above, glabrous or slightly pubescent, 10-15mm. long. Capsule terete, usually arcuate, 13-23mm. long, 2-3mm. across, terminating with a persistent straight style about 4-6mm. long, glabrous or very thinly pubescent, smooth and green, often with a purplish shade when young. Flowers July-August.


Hab. Prov. SHIMOTSUKE: Nikkō (T. Makino!).

Diervilla fujisanensis Makino, nov. sp.

A deciduous shrub; branches numerous and erectly ramulose, drab-cinereous, glabrous, terete, but branchlets and young shoot of this year 4-angular with thinly pubescent very narrow thick wings. Leaves opposite, petiolate, elliptical, obovate, or oval, attenuately acuminate at the apex, acute at the base, serrulate, chartaceous, green and very thinly pubescent (hairs especially denser on the midrib) above, paler and hisrate-pubescent with antrosely depressed pale hairs on the midrib and veins, about 3-8cm. long and 1½-4cm. wide in the flowering time, not shining; midrib prominent beneath; veins 3-7 on each side, prominent beneath, ascending, arcuate upwards; veinlets fine; petiole 5-7mm. long, glabrous or nearly so and rounded dorsally, canaliculated and antrosely appressed pubescent in front, ciliated on margin, greenish. Cymes 1-3-flowered, axillary and terminal on the foliiferous branchlets of this year, very shortly peduncled or sessile, with the minute linear bracts, the superior ones often in the axil of pubescent narrow-linear bracts, or sometimes small leaves, turned laterally, clearly and lovely coloured. Sepals 5, erect, not spreading, narrowly linear, acuminate at the apex, thinly pubescent dorsally, thinly ciliated on entire margins, green, often reddish-purple, 6-10mm. long, sometimes more or less unequal in length, Corolla about 3½cm. long, scarcely curved downwards, narrowly tubular below, gradually enlarged above into a tubuloso-infundibular form above, equally 5-lobed with imbricated erectly spreading rounded-ovate and rounded-tipped segments, about 1½cm. across, thinly pubescent externally. Stamens 5, equal to the corolla in height; filament glabrous; anther linear, with white pollen, about 5mm. long, rose or reddish-purple. Style exserted, filiform, white, glabrous; stigma large, rounded, depressed, fungiform, about 3mm. across. Ovary inferior, angustate, terete, thinly pubescent with antrosely appressed pale hairs, light-green and reddish-purplish, about 9-13mm. long, very shortly pedicellate; pedicel 3-4mm. long, with 2 minute subulate opposite and pubescent bracts. Flowers June.

α. typica Makino.

Corolla constantly red-purple.

β. versicolor Makino.

Corolla at first pale-rose and at length changing into red-purple.

γ. rosa Makino.

Corolla constantly rose.
Nom. Nipp. Sanshiki-utsugi (nov.).

Hab. Prov. SURUGA: Mt. Fuji-san (T. MAKINO!).

**Juncus effusus** L. var. decipiens Buchen, forma spiralis Makino, nov. f.
Stems caespitose, loosely spirally coiled, deep-green, about 30-40cm. long, about 2mm. across. Cymes loosely clustered; first branch attaining about 2\(\frac{1}{2}\)cm. long. Capsule about 3mm. long.


Hab. Prov. IGA: Ueno, cultivated (HIDETARO MACHII June 1931.).
This curious one was first found at the wet place in the Rokuromi of Hinaga village, Mie district, prov. Ise.

**Sasa Kurokawana** Makino, nov. sp.
Rhizome hypogaeous, horizontally long-repent, loosely ramose, rooting at the nodes, terete, fistulose, thick-walled, smooth, ochroleucous, 2\(\frac{3}{4}\)-5mm. in diameter; internodes 2-4\(\frac{1}{2}\)cm. long; roots fibrous, strong. Culm erect, attaining about 7 decim. or more in height, slender, loosely ramose, fistulose, smooth, glabrous, 2\(\frac{3}{4}\)-5mm. across, entirely green without the trace of purple; node slightly prominent, at first shortly dense-puberulous and at length glabrate; internodes attaining about 14cm. long, white-bloomy under the nodes; branches one to a node, erect or erect-patent; culm-sheaths not deciduous, shorter than the internode. Leaves sempervirent, palmately aranged in the apical portion of branchlets, 4-6 in number, shortly petiolate, angustate-oblong or oblong, entire green without the trace of purple; node slightly prominent, at first shortly dense-puberulous and at length glabrate; internodes attaining about 14cm. long, white-bloomy under the nodes; branches one to a node, erect or erect-patent; culm-sheaths not deciduous, shorter than the internode. Leaves sempervirent, palmately aranged in the apical portion of branchlets, 4-6 in number, shortly petiolate, angustate-oblong or oblong, attenuatedly acuminate with a sharp point at the apex, acute to rounded at the base, minutely ciliato-spinulose on margins, thin in texture, bright green and glabrous above, subglaucous and thinly pubescent with delicate hairs beneath, about 15-29cm. long, 4 to nearly 7cm. broad; midrib yellowish green and prominent beneath; veins 7-11 on each side; veinlets finely tessellate with mainly cross-rectangular areolae mixed with square ones; petiole 3-11mm. long, compressed, subcuneate, thick, glabrous and subcarinate dorsally, puberulent below in front, light green; ligule 1\(\frac{1}{2}\)-3mm. long, coriaceous, light green, truncate and minutely ciliated on margin, puberulent dorsally; sheath closely encircled, coriaceous, light green, finely nervate, finely striate when dried, glabrous, ciliated with spreading white hairs on margin; shoulder-fimbriae none. Panicle long-pediculcated, not large, about 10-14cm. long, 5-8cm. broad, laxly ramose; rachis and branches gracile, puberulent; peduncle erect from the basal portion of culms, one to a node, slender, 2\(\frac{3}{4}\)-4mm. across, fistulose, rather thin-walled, with long-internodes and slightly prominent glabrous nodes, also with theaths shorter than the internodes, light green, glabrous but puberulent under the panicle, exceeding the leaves in height. Spicule pedicellate, linear, 1\(\frac{1}{2}\)-4cm. long, 2-3mm. broad, 4-8-flowered; rachilla flexuous, green, appressedly pubescent with pale hairs. Flower lanceolate, tapering at the apex, 7-8\(\frac{1}{4}\)mm. long. Glumes 1 or 2, very minute, pubescent. Flowering-glume ovate, acute and
pubescent at the apex, green, subscarious and often purpurascent on the entire margins, thinly pubescent towards the margins externally, obscurely angulate dorsally, thin, several-nerved. Palea equal to or hardly longer than the flowering-glume, bicarinata, membranaceous, pubescent on the carinae above and at the apex, scarious and purpurascence on the entire margins, 3-nerved dorsally, 2-nerved laterally. Lodicules 3, small, ovate, pubescent above. Stamens .... Ovary ovoid, glabrous; style 3-branched; branches plumose. Caryopsis with old flowering-glume and palea, oblong-ovoid, acute at the apex, acutish to rounded at the base, smooth, glabrous, brown, about 6mm. long, 3mm. in diameter.

Hab. Prov. IGA: Ueno (T. Kurokawa! June 1931.).

**Chrysanthemum sibiricum Fisch. var. campanulatum Makino**


Heads 3-5cm. across, double, pale-rosaceous. Ray-florets entirely campanulated by the complete connection of all them and enveloping the inner florets, or partly so, usually then the curtain-like blade reflexed downwards. Disk-florets usually extraorinarily developed and attaining about 2cm. long; corolla tubular, plicate, often few-several-connate into a broad blade or tube, interplacing with minute laciniate-mouthed tubular incomplete yellowish florets. Ovary incomplete, sterile, scantily hairy externally.


Hab. Prov. MUSASHI: Omori-machi, cultivated in the garden of the Teikoku-Joshi-Igaku-Yakugaku-Semmongakko from Chosen (Korea) by Miss Sada-Ko Ogura.

(To be continued)