Observations on the Flora of Japan.

(Continued from p. 162.)

By

T. Makino,

*Assistant in the Botanical Institute, Science
College, Imperial University of Tokyo.*

Mazus japonicus (Thunb.) O. Kuntze Revis. Gen. Pl. II. (1891) p. 462, non Makino.

Lindernia japonica Thunb. Fl. Jap. (1784) p. 253; Willd. Sp. Pl. III. (1800) p. 326; Pers. Syn. Pl. II. (1807) p. 166.

Mazus rugosus Lour. Fl. Cochinch. (1790) p. 385, et ed. Willd. (1793) p. 468; Ait. Hort. Kew. ed. 2, IV. (1812) p. 53; Spreng. Syst. Veg. II. (1825) p. 803; Benth. in DC. Prodr. X. p. 375, et Fl. Hongk. p. 247; Herd. Pl. Radd. IV. p. 297; Maxim. Prim. Fl. Amur. p. 205, Suppl. p. 475, et in Mém. Biol. IX. p. 402; Regel Tent. Fl. Ussur. p. 119; Seem. Bot. Voy. 'Herald' p. 402; Miq. Fl. Ind. Bat. II. p. 677, et Prol. Fl. Jap. p. 48; A. Gray in Perry's Exped. Jap. II. p. 316; Franch. et Sav. Enum. Pl. Jap. I. p. 344; Franch. Pl. David. I. p. 222; Kanitz Anthoph. Jap. p. 11; Debeuax Fl. Schangh. p. 97, Fl. Tchef. p. 336, et Fl. Tients. p. 58; Hook. fil. Fl. Brit. Ind. IV. p. 259; Hillebr. Fl. Hawai. Isl. p. 324; Forbes et Hemsl. in Journ. Linn. Soc. XXVI. p. 183; Makino in Bot. Mag., Tokyo, XI. p. 391; Henry in Trans. Asiat. Soc. Jap., Suppl. p. 67; Palib. Consp. Fl. Kor. II. p. 20; Diels in Engl. Bot. Jahrb. XXIX. p. 566; Bretschn. Hist. Eur. Bot. Disc. in China pp. 197, 219, et 608.

Tittmannia obovata Bunge Enum. Pl. Chin. Boreal. p. 49; Bretschn. l. c. p. 337.

Vandellia obovata Walp. Repert. III. p. 294.

Mazus vandelliioides Hance in Walp. Ann. III. p. 193; Bretschn. l. c. p. 368.

Hornemannia bicolor Willd.

Mazus bicolor Benth.

Gratiola goodenicefolia Hornem.

Columnnea tomentosa Roxb. Fl. Ind. III. p. 98, non Oerst.

Stemodia tomentosa G. Don.

Nom. Jap. *Tokiwa-haze*.

Hab. Japan; common and widely distributed.

Crawfurdia trinervis (Thunb.) Makino nom. nov. non D. Dietr.

Convolvulus trinervis Thunb. Fl. Jap. (1784) p. 85; Lam. Encycl. méth. Bot. III. (1789) p. 543; Willd. Sp. Pl. I. (1797) p. 860; Pers. Syn. Pl. I. (1805) p. 179; Rœm. et Schult. Syst. Veg. IV. (1819) p. 298; Spreng. Syst. Veg. I. (1825) p. 596.

Crawfurdia japonica Sieb. et Zucc. in Abhandl. Akad. Muench. IV. 3, (1846) p. 160; Miq. Prol. Fl. Jap. p. 288; Franch. et Sav. Enum. Pl. Jap. I. p. 324; Walp. Ann. I. p. 516; S. Moore in Journ. Bot. (1880) p. 4; C. B. Clarke in Journ. Linn. Soc. XIV. p. 443, et in Hook. fil. Fl. Brit. Ind. IV. p. 107; Maxim. in Mél. Biol. IX. p. 399; Gilg in Engl. et Prantl. Pfl.-Fam. IV. 2, p. 80, fig. 37 F, G.

Golovinina japonica Maxim. in Mél. Biol. IV. p. 41, cum tab.

Galacomine japonica Maxim. herb. ex Miq. Prol. Fl. Jap. p. 288.

Crawfurdia fasciculata Griff. Notul. Pl. Asiat. IV. (1854) p. 92; Henry in Trans. Asiat. Soc., Suppl. p. 61, non Wall.

Crawfurdia fasciculata Hemsl. in Journ. Linn. Soc. XXVI. p. 122, ex parte, non Wall.

Gentiana volubilis D. Don Prodr. Fl. Nep. (1825) p. 126.

Nom. Jap. *Tsuru-rindō*.

Hab. Prov. TOSA: Kitagawa in Nanokawa-mura (*T. Makino*! Nov. 3, 1887), Mt. Yokogura (*T. Makino*! Sept. 4, 1889); Prov. IWAKI: Hirono (*T. Makino*! Aug. 15, 1890); Prov. MUSASHI: Ōmiya-hachiman (*T. Makino*! Oct. 3, 1897), Mt. Takao (Herb.! Sc. Coll. Imp. Univ. Tokyo, Aug. 24, 1878), Mt. Mitsumine (*Y. Yabe*! herb. ibid. Oct. 27, 1900); Prov. SHIMOTSUKE: Mt. Nikkō (*R. Yatabe*! herb. ibid. Aug. 2, 1877; Herb.! ibid. Oct. 1, 1879), Konsei-tōge in Nikkō (*K. Sawada*! herb. ibid. Oct. 3, 1879; *J. Matsumura*! herb. ibid. July 22, 1885), Kanuma (Herb.! ibid. Sept. 25, 1879); Prov. SHINANO: Mt. Ondake (*R. Yatabe* and *J. Matsumura*! herb. ibid. July 27, 1880), Mt. Togakushi (*R. Yatabe* and *J. Matsumura*! herb. ibid. July 12, 1884); Prov. IWASHIRO: Mt. Iide (Herb.! ibid. Aug. 13, 1878); Prov. RIKUZEN: Kanomata (Herb.! ibid. Aug. 23, 1878); Prov. UZEN: Mt. Rokuzyūri-goe (*R. Yatabe* and *S. Ōkubo*! herb. ibid. July 22,

1887); Prov. KAGA: Mt. Hakusan (*R. Yatabe* and *J. Matsumura*! herb. ibid. Aug. 8, 1881); Prov. SAGAMI: Hakone (*S. Ōkubo*! herb. ibid. Dec. 30, 1886); Prov. IDZU: Mt. Amagi (*S. Ōkubo*! herb. ibid. June 9, 1883); Prov. YAMATO: Mt. Kasuga (*J. Matsumura* and *S. Ōkubo*! herb. ibid. July 15, 1883); Prov. IYO: Ofuki in Nii-gōri (*K. Watanabe*! herb. ibid. Sept. 24, 1891); Prov. OSHIMA in Hokkaidō: Esashi (*K. Miyabe* and *Y. Tokubuchi*! herb. ibid. Aug. 4, 1890); Prov. ISHIKARI: Sapporo (*Y. Tokubuchi*! herb. ibid. Sept. 6, 1890; *Id.*! Sept. 8, 1892); Hokkaidō (*L. Bœhmer*! herb. ibid.).

A Javan *Crawfordia trinervis* D. Dietr. is *Crawfordia Tripterospermum* (Bl.) m. (= *Tripterospermum trinerve* Blume Bijdr. p. 849 (1826). = *Crawfordia Blumei* G. Don.)

Physalis Alkekengi Linn. var. **monstrifera** Makino var. nov.

Flower monstrously alternating into a raceme form, peduncled, pendulous, simple or few-branched, about 4–10 cm. long including the peduncle; calyx many-divided, sparse on the rachis which is a much elongated receptacle, sessile, spreading and curved downwards, boat-shaped, acuminate, at first viridescent and then minaceous, reticulately nervate; corolla, stamens, and pistil suppressed and absent. Stem and leaves as in the type.

Hab. Prov. MUSASHI: Tokyo, cult. (*T. Makino*! Aug. 16, 1895).

A rare and curious garden variety.

Alchemilla vulgaris Linn. Sp. Pl. p. 123, Cod. n. 1015; Houtt. Nat. Hist. XXV. (1777) p. 371; Willd. Sp. Pl. I. p. 698; Pers. Syn. Pl. I. p. 149; Roem. et Schult. Syst. Veg. III. p. 468; Spreng. Syst. Veg. I. p. 454; Lamk. Illustr. tab. 86, fig. 1; Lamk. et DC. Fl. Fr. ed. 3, V. p. 451; Peterm. Deutsch. Fl. p. 168; Engl. Bot. tab. 597; DC. Prodr. II. p. 587; Hook. Fl. Bor.-Am. I. p. 197; Torr. et Gray Fl. N. Amer. I. p. 432; Ait. Hort. Kew. ed. 2, I. p. 278; Ledeb. Fl. Alt. I. p. 152, et Fl. Ross. II. p. 29; Nyman Syl. Fl. Eur. p. 275; Berg Pharm. Bot. (1860) p. 350, et Charakt. ed. 2, (1861) p. 79, tab. 63, fig. 481; Koch Syn. Fl. Germ. et Hely. ed. 3, p. 201; Benth. Handb. Brit. Fl. ed. 5, p. 140; Focke in Engl. et Prantl Pfl.-Fam. III. 3, p. 43.

Nom. Jap. *Hagoromo-gusa* (nom. nov.).

Hab. Prov. SHINANO: Mt. Shirouma-dake in Hokuzyō-mura, Kita-Adzumi-gōri *Ōri*! Aug. 29, 1902).

Rare, and new to the Flora of Japan. I possess a specimen through the kindness of Mr. M. Orii. It was also collected in the same mountain by Mr. Y. Yabe.

Saxifraga (*Nephrophyllum*) **cernua** Linn. Sp. Pl. p. 403, Cod. n. 3164; Houtt. Nat. Hist. XXVI. p. 557; Willd. Sp. Pl. II. p. 632; Pers. Syn. Pl. I. p. 489; Spreng. Syst. Veg. II. p. 363; Don in Transact. Linn. Soc. XIII. p. 364; Engl. Bot. tab. 664; Peterm. Deutsch. Fl. p. 210; Ait. Hort. Kew. ed. 2, III. p. 123; Ledeb. Fl. Alt. II. p. 122, et Fl. Ross. II. p. 219; Reg. et Tiling Fl. Ajan. p. 96; Nyman Syl. Fl. Eur. p. 256; Hook. Fl. Bor.-Amer. I. p. 245; Hook. et Arn. Bot. Beech. Voy. p. 124; Torr. et Gray Fl. N. Amer. I. p. 573; Ser. in DC. Prodr. IV. p. 36; Hook. fil. et Thoms. in Journ. Linn. Soc. II. p. 63; Engler Monogr. Gatt. Saxifr. p. 106; Id. in Engl. et Prantl Pfl.-Fam. III. 2a, p. 55; Benth. Handb. Brit. Fl. ed. 5, p. 169; Koch Syn. Fl. Germ. et Helv ed. 3, p. 238; Clarke in Hook. fil. Fl. Brit. Ind. II. p. 391.

Lobaria cernua Haw.

Saxifraga bulbifera Gunn.

? *Saxifraga sibirica* Torr. et Gray Fl. N. Amer. p. 573, ex Engler.

? *Saxifraga Cymbalaria* Torr. et Gray l. c. p. 574, ex Engler.

Nom. Jap. *Mukago-yukinoshita* (nom. nov.).

Hab. Prov. SHINANO: Alpine summit of Peak Aka-gake in Mt. Yatsugadake (*Kōichi Tanaka*! August 1902).

Rare, and new to the Flora of Japan.

Hosta Sieboldiana Engl. = *Hemerocallis Sieboldiana* Lodd. = *Funkia Sieboldiana* Hook. = *Saussurea Sieboldiana* O. Kuntze.

var. glauca Makino var. nov.

Leaves smaller, thicker, glaucous on both surfaces.

Icon. Iinuma's Sōmoku-Dzusetsu VI. no. 26.

Nom. Jap. *Tokudama*.

var. nigrescens Makino var. nov.

Leaves smaller, narrower, acuminate, firmly thick, subconvolute on the lower margin, darkish-green.

Icon. Iinuma's l. c. no. 27.

Nom. Jap. *Kuro-gibōshi*.

The above two varieties are sometimes found cultivated.

(*To be continued.*)