utroque latere) simplicibus, soris æque numerosis linearibus medialibus nec costam nec marginem tangentibus 3 cent. longis, indusio pallido lineari. Textura flaccide carnosula, colore pallide viridi, opaco.

HAB. Formosa: Kōtōshō.

Polypodium hastatum, TH. **var. nikkoense**, n. var. Multo minus, lamina 3–7 cent. longa rotundato-obtusa, fertilis. Plantula gregario-caespitosa, sine dubio alpestris.

HAB. Nikko.

Observations on the Flora of Japan.

(Continued from p. 234.)

By

T. Makino.

Hydrocotyle dichondroides Makino, sp. nov.

A perennial forming a small flat densely foliiferous mass covering the ground, inodorous. Stem gracile, filiform, repent, radicanat at the nodes with ramose white delicate roots, retrorsely puberulent with white pubes as well as the petiole and peduncle, viridescent, loosely ramose. Leaves laxly placed, erect or ascending, short- or long-petiolate, orbiculato-reniform, cordate with an open deep sinus at the base, shallowly sub-9- or 7-lobate with sinuses often closed in the bottoms, membranaceous, green, opaque, very minutely pale-punctulate under lens on the upper surface, very thinly dispersed with setulose erect hairs on the veins on both sides, 5–15mm. broad, $3\frac{1}{2}$ –11mm. long; lobes depressed, creniform, usually 3- (sometimes 5 in the terminal lobe) depressed-crenate, radiately 7-nerved with rather

loosely anastomosing delicate veinlets; petiole gracile, viridescent, 2–35 mm. long; stipules semiorbicular or lunato-semiorbicular, minutely erosulo-denticulate, thinly membranaceous, punctulate. Umbel minute, capitate, short- or long-peduncled, exserted, about 7–10-flowered; bracts very minute, oblong, acutish, entire, hyaline, stoutly 1-nerved, often bay-punctulate dorsally, $\frac{1}{2}$ mm. long; peduncle erect or ascending, 5–30 mm. long. Flowers minute, very shortly pedicellate, 1 mm. long, glabrous. Petals elliptical, acute, entire, about $\frac{2}{5}$ mm. long, delicately 1-nerved, purplish. Stamens 5, shorter than the petals; filament subulato-filiform, longer than the anther; anther minute, rounded, yellow. Styles subdivergent-erect, shorter than the petals. Ovary rounded, viridescent, about as long as the petal, glabrous. Fruits glomerate, very shortly pedicellate, complanate, broadly rotund, subdidymous, subcordate at the base, glabrous, smooth, viridescent, impunctate when dried, crowned with a small pulvinate disk and the divaricate short persistent styles at the top; mericarp semiorbiculate, slightly convex and 1-costato-angulate on each side, subcostate on the dorsal margin.

Nom. Jap. *Ke-chitomegusa* (nov.).

Hab. Prov. SATSUMA: Kagoshima (*T. Makino*! Aug. and Sept. 1909), Sezaki in Ibusuki-gōri (*T. Makino*! Aug. 23, 1910).

By the hairiness and opaque leaves this is easily distinguished from the allied common Japanese species. It has the habit of *Dichondra evolvulacea* (Linn.) Britton (= *D. repens* Forst.). *Hydrocotyle hirsuta* var. *minuta* Blume seems to approach this species.

Hydrocotyle Yabei Makino, nom. nov.

Hydrocotyle rotundifolia var. *pauciflora* Yabe, Revis. Umbellifer. Jap. in Journ. Coll. Sc. Imp. Univ. Tokyo, XVI. p. 14 (1902).

Hydrocotyle rotundifolia Maxim. in Mél. Biol. XII. p. 461, pro parte, non Roxb. excl. syn.

A perennial, glabrous, odoriferous. Stem gracile, filiform, repent, radicanat at the nodes. Leaves reniform, with a wide

open sinus at the base, nitid, 5-7-cleft, 5-7-nerved; lobes broad and shortly cuneate, 3-5-dentate. Fruits 2-4 or rarely several to an umbel, broadly orbiculate, complanate, subdidymous, smooth, glabrous, impunctate and latericio-flavous when dried, crowned with short gracile divaricate persistent styles and a small pulvinate disk at the top, $1\frac{1}{2}$ mm. long; mericarp convex and 1-nerved on each side, obtuse with a delicate costal line on the dorsal edge.

Nom. Jap. *Hime-chitomegusa*.

Hab. Japan.

The fruits are few in the umbels but proportionally large.

Hydrocotyle sibthorpioides Lamk. Encycl. Meth. Bot. III. (1789), p. 153; Pers. Syn. Pl. I. p. 302; Rich. Monogr. Hydroc. p. 56, tab. 54, fig. 8; Spreng. Syst. Veg. I. p. 877; DC. Prodr. IV. p. 66; Franch. et Sav. Enum. Pl. Jap. I. p. 178.

Hydrocotyle ranunculoides β . *sibthorpioides* Spreng. in Schult. Syst. Veg. VI. (1820), p. 349.

Hydrocotyle rotundifolia Roxb. 'Hort. Bengal. (1814), p. 21,' et Fl. Ind. II. (1832), p. 88; DC. l. c. p. 64; Wight Ill. Ind. Bot. tab. 564, et Ic. Pl. Ind. Or. tab. 564; Benth. Fl. Hongk. p. 134; Hance in Ann. Sc. Nat. 4^{me} sér. XVIII. p. 220; Clarke in Hook. fil. Fl. Brit. Ind. II. p. 668; Forbes et Hemsl. in Journ. Linn. Soc. XXIII. p. 325; Henry, List Pl. Formos. in Trans. Asiat. Soc. Jap. XXIV. Suppl. p. 47; Ito et Matsum. Tent. Fl. Lutch. I. p. 259; Diels in Engl. Bot. Jahrb. XXIX. p. 491; Yabe, Revis. Umbel. Jap. p. 12, tab. 1, fig. 3; Komar. Fl. Mansh. III. p. 181.

Hydrocotyle rotundifolia Maxim. in Mém. Biol. XII. p. 461, pro parte, non Roxb. excl. syn.

Hydrocotyle nitidula Rich. Monogr. Hydroc. (1820), p. 60, tab. 63, fig. 33; Spreng. Syst. Veg. I. p. 877, excl. syn.; DC. Prodr. IV. p. 66; Zoll. et Moritz. Syst. Verz. (1845-46), p. 42; Zoll. Syst. Verz. Ind. Archip. p. 139; Hiern in Oliv. Fl. Trop. Afric. III. p. 5; Molkenb. in Miq. Pl. Jungh. p. 92; Miq. Fl. Ind. Bat. I. 1, p. 735, et Prol. Fl. Jap. p. 243.

Hydrocotyle tenella Don, Prodr. Fl. Nepal. (1825), p. 183 ; DC. l. c. p. 64 ; Wight et Arn. Prodr. Fl. Penins. Ind. Or. I. p. 366.

Hydrocotyle ranunculoides var. *incisa* Blume, Bijdr. Fl. Nederl. Ind. p. 884 (1826), fide Molkenb. in Miq. Pl. Jungh. I. (1853), p. 92.

Hydrocotyle Zollingeri Molkenb. in Miq. Pl. Jungh. I. (1853), p. 91 ; Zoll. Syst. Verz. Ind. Archip. p. 139 ; Miq. Fl. Ind. Bat. I. 1, p. 733.

Hydrocotyle splendens Zoll. herb. n. 834, ex Molkenb. in Miq. Pl. Jungh. I. p. 91, non Blume.

? *Hydrocotyle glabrata* Black ex Miq. Prol. Fl. Jap. p. 244.

Hydrocotyle perexigua Hance in Walp. Ann. II. (1851–52), p. 691.

A perennial, glabrous, odoriferous. Stem gracile, filiform, radicanat at the nodes. Leaves subreniform-orbiculate, with a close or subclose deep sinus at the base, nitid, shallowly 7-sub-9-lobed with sinuses closed at the bottom, 7–9-nerved ; lobes very short and 3-sub-5-crenate. Fruits about 10–15 to an umbel, broad-orbiculate, complanate, subdidymous, crowned with short gracile divaricate persistent styles and a minute pulvinate disk, glabrous, smooth, dispersedly bay-punctulate when dried, 1mm. long.

Nom. Jap. *Chitome-gusa*.

Hab. Japan, very common.

Clematis ovatifolia Ito, ex Maxim. in Mél. Biol. XII. p. 415 (1886).

Clematis longiloba DC.? ex Maxim. in litt.

Nigricant when dried. Leaflets petiolulate, shining and sometimes pale-variegated above when fresh ; petiolule articulated above the middle ; those of the superior leaves unipinnately arranged, oval to ovately oblong-elliptical, rounded or obscurely cordate at the base, mucronately acute or short-acuminate at the apex, quite entire and very angustately revolute beneath on

margin, about $3\frac{1}{2}$ – $6\frac{1}{2}$ cm. long, 2 – $3\frac{1}{2}$ cm. broad; petiolule 10–30mm. long; those of the leaves of the lower branches uni- or bi-pinnately arranged, lanceolate or angustato-lanceolate, obtuse or acutish at the base, acuminate, entire, 3–7cm. long, 7–17mm. broad; petiolule 3–14mm. long. Panicles (compound cyme) terminal and axillary. Carpels about 7–10, narrowly fusiform, about 6mm. long; tails about $2\frac{3}{8}$ cm. long, filiform, finely plumose.

Nom. Jap. *Tani-modama*.

Hab. Prov. Kii (Herb. ! Imp. Univ. Tokyo, sterile), Kamikitsu-mura in Nishimuro-gōri (*N. Ui* ! Sept. 12, 1910, fructiferous).

A rare species.

Hemistepta carthamoides (Buch.-Hamilt.) O. Kuntze, Revis. Gen. Pl. I. (1891), p. 344.

Serratula carthamoides Buch.-Hamilt. ex Roxb. 'Hort. Bengal. (1814), p. 60,' et Fl. Ind. III. (1832), p. 407.

Saussurea carthamoides Buch.-Hamilt. ex DC. Prodr. VI. (1837), p. 540; Benth. Fl. Hongk. (1861), p. 168, et Fl. Austral. III. (1866), p. 456; Hoffm. in Engl. et Prantl, Nat. Pfl.-Fam. IV. 5 (1894), p. 320.

Cnicus calthamoides Wall. 'Cat. (1831), n. 2896'.

Aplotaxis carthamoides DC. Prodr. VI. (1837), p. 540.

Serratula multicaulis Wall. 'Cat. n. 2897'.

Cnicus multicaulis Wall. ex DC. Prodr. VI. (1837), p. 540.

Aplotaxis multicaulis DC. Prodr. VI. (1837), p. 540, et in 'Deless. Icon. Sel. Pl. IV. (1839), tab. 68'; A. Gray in Perry's Jap. Exped. II. (1857), p. 314; Miq. Ann. Mus. Bot. Lugd.-Bat. II. (1865–66), p. 183, et Prol. Fl. Jap. (1866–67), p. 115 (cum *β. tenera* Miq.).

Saussurea stricta Spreng. ex DC. Prodr. VI. (1837), p. 540.

Aplotaxis Bungei DC. Prodr. VI. (1837), p. 539.

Haplotaxis Bungei F. Muell. Fragm. Phytogr. Austral. I. (1858–59), p. 36.

Saussurea Bungei Benth. et Hook. fil. ex Franch. et Sav.

Enum. Pl. Jap. I. (1875), p. 255 ; Franch. Pl. David. I. (1884), p. 182.

Cirsium lyratum Bunge, Enum. Pl. Chin. Boreal. p. 110, n. 203 (1832).

Hemistepta lyrata Bunge in 'Dorpat, Jahrb. für Litt. I. (1833), p. 221 ', et in 'Fisch. et Mey. Ind. Sem. Hort. Peterop. II. (1835), p. 38 (*Hemisteptia*)'; Maxim. Prim. Fl. Amur. Suppl. Ind. Fl. Pekin. (1859), p. 473, et in Mém. Biol. IX. p. 334 (1874); Baker et Moore in Journ. Linn. Soc. XVII. p. 383 (1879).

Saussurea affinis Spreng. ex DC. Prodr. VI. (1837), p. 540 ; Clarke, Compos. Ind. (1876), p. 232 ; Hook. fil. Fl. Brit. Ind. III. p. 373. (1881) ; Forbes et Hemsl. in Journ. Linn. Soc. XXIII. p. 463 (1888) ; Henry, List. Pl. Formos. p. 55 ; Diels in Engler's Bot. Jahrb. XXIX. (1901), p. 624 ; Hayata, Compos. Formos. (1904), p. 35 ; Matsum. et Hayata, Enum. Pl. Formos. (1906), p. 211 ; Komar. Fl. Manshur. III. (1907), p. 717.

Serratula tinctoria Siebold ex Miq. Prol. Fl. Jap. in Ann. Mus. Bot. Lugd.-Bat. II. p. 183, non Linn.

Haplotaxis australasica F. Muell. Fragm. Phytogr. Austral. I. (1858-59), p. 36.

Nom. Jap. *Kitsune-azami*.

Hab. Japan, common.

Serratula deltoides (Ait.) Makino, nom. nov.

Onopordon deltoides Ait. 'Hort. Kew. ed. 1, III. (1789), p. 146,' et ed. 2, IV. (1812), p. 486 (*Onopordum*).

Cirsium ficifolium Fisch. in 'Mém. Soc. Nat. Mosc. III. (1812), p. 69.'

Stemmacantha ficifolium Turcz. in litt. (1832), ex DC. Prodr. VI. (1837), p. 662.

Carduus atriplicifolius Trevir. 'Hort. Wralislaw. (1820)'.

Silybum atriplicifolium Fisch. 'Ind. Sem. Hort. Petrop. (1824).'

Rhaponticum atriplicifolium DC. Prodr. VI. (1837), p. 662.

Serratula atriplicifolia Benth. et Hook. fil. Gen. Pl. II. p. 475; Makino in Bot. Mag., Tokyo, X. (1896), p. 319.

Centaurea atriplicifolia Matsum. Shokubutsu-Meii (1895), p. 72, n. 777, excl. syn. nonnul.

Stem not stout. Heads ovoid, cernuous, loosely disposed, slenderly long-peduncled. Involucral-scales angustately linear, finely subspinuloso-acuminate, subcarinato-uninerved dorsally, purplish, subarachnoid. Flowers purple, rarely white.

Nom. Jap. *Yama-bokuchi*, *Kumatori-bokuchi*, *Yama-gobō*, *Urajiro*.

Hab. Prov. ŌMI: Mt. Ibuki (*T. Makino*!).

Icon. Iinuma, Sōmoku-Dzusetsu, XV. fol. 35 recto.

var. palmatopinnatifida Makino.

Leaves deeply lobed or parted.

Nom. Jap. *Kikuba-yamabokuchi* (nov.).

Hab. Prov. YAMASHIRO: Mt. Hiyei (*T. Makino*! Nov. 7, 1894); Prov. SUŌ: Miyano-mura (*D. Nikai*! herb. Sc. Coll. Imp. Univ. Tokyo, Oct. 24, 1897).

Serratula pungens Franch. et Sav. Enum. Pl. Jap. II. (1879), p. 416, in nota.

Phaponticum pungens Franch. et Sav. l. c. I. (1875), p. 263, et II. (1879), p. 415.

Serratula atriplicifolia var. *pungens* Makino in Bot. Mag., Tokyo, X. (1896), p. 319.

Stem stout, strictly erect, often tall. Leaves olivaceous above when dried; basal lobes rounded and not subhastate. Heads approximate or loose. Involucral-scales lanceolato-subulate, hard. Flowers purple.

Nom. Jap. *O-yamabokuchi* (*T. Makino*).

Hab. Prov. SHIMOTSUKE: Nikkō (*T. Makino*!), Chūzenji in Nikko (Herb. Sc. Coll. Imp. Univ. Tokyo, Sept. 26, 1879); Prov. IWASHIRO: Aidzu (*J. Matsumura*! herb. ibid. Aug. 6, 1879); Prov. ECHIZEN: Ohara (*J. Matsumura*! herb. ibid. Aug. 5, 1881); Prov. RIKUZEN: Mt. Katta (*Y. Yabe*; herb. ibid. Aug. 16, 1898); Prov. Awa in Shikoku: Mt. Tsurugi (*D. Nikai*! herb. ibid. Aug. 14, 1904).

***Serratula excelsa* Makino, nom. nov.**

Serratula atriplicifolia var. *excelsa* Makino in Bot. Mag., Tokyo, X. (1896), p. 319.

Serratula pungens var. *excelsa* Makino, in sched. herb. Sc. Coll. Imp. Univ. Tokyo.

Stem stout, strictly erect, tall. Leaves deltoid, but narrowly deltoid in the superior ones, with a wide open sinus and subhastate side lobes at the base, mucronato-acute at the apex, angulato-lobate and mucronato-denticulate on margin, hoary beneath, usually dark-reddish or dark-purplish above when dried. Heads about 1–6, usually aggregate and stoutly short-peduncled at the top of the stem, globose, large, cernuous. Involucral-scales linear-subulate, spinoso-acuminate, entire, subcarinato-uninerved dorsally, dark-purple, constantly transversely white-arachnoid, about 2mm. broad. Flowers deeply dark-purple.

Nom. Jap. *Habayama-bokuchi* (T. Makino).

Hab. Prov. TOSA: Dzūjirō-mura (*T. Makino!* Nov. 7, 1885), Ogawa-mura (*T. Makino!* Nov. 1892), Chōja-mura (*T. Makino!* Nov. 1892); Prov. SŪO: Mt. Hōben (*D. Nikai!* herb. Sc. Coll. Imp. Univ. Tokyo, Nov. 3, 1897); Prov. BUZEN: Mt. Hikosan (*S. Hamada!* herb. ibid. Oct. 1905); Prov. ECHIZEN? (Herb. ! idid.).

This species differs from the preceding *Serratula pungens* Franch. et Sav. by having the leaves with the projecting basal lobes and of a deep colour when dried, narrower and much arachnoid involucral scales, and intensely coloured flowers.

***Cirsium maritimum* Makino, sp. nov.**

Cnicus brevicaulis Cat. Pl. Herb. Coll. Sc. Imp. Univ. Tokyo (1886), p. 109.

Cnicus japonicus var. *brevicaulis* Savatier in Iinuma, Somoku-Dzusesetsu, ed. 2, XV. n. 38, non Maxim.

Cirsium brevicaule herb. Sc. Coll. Imp. Univ. Tokyo., non A. Gray.

? *Carduus acaulis* Thunb. Fl. Jap. p. 306, non Linn.

Root perpendicular, elongate. Stem erect, about 35–40cm.

or more in height, often stout, often ramose from the base with the erect-patent branches, terete, obscurely striate but when dried obviously striato-sulcate, thinly villose with pale patent hairs and then often subglabrate, foliose. Leaves radical and cauline, oblong-lanceolate, narrowed below, spinoso-acute at the apex, deeply pinnatiparted with oval-ovate to orbiculate and sinuses obtuse at the bottom, spinoso-dentate (spines valid) and spinuloso-ciliated, thickly herbaceous and shining when fresh, very thinly piloso-pubescent with erect pale scattered hairs above but then often glabrate, thinly piloso-villose (not arachnoid) with erect white hairs (which are curled when dried) and hairs more or less denser on the midrib, 11–35cm. or more long, 6–10cm. or more broad; radical ones spreading, often shorter than the stem and shortly petiolate or sessile; cauline ones alternate, smaller, sessile and semiamplexicaul, not decurrent, narrowly oblong; lobes approximately arranged or a little remote, several to numerous on each side, horizontally or sub-horizontally patent, sometimes interrupted, few-several-cleft, spinoso-acute at the apex, basal ones sometimes much reduced into smaller and simpler formes; veins loose, impressed above and prominent beneath in recent; veinlets inconspicuous; midrib very prominent beneath. Heads erect, few to several or many, disposed in a corymbose cyme or panicle, short- or long-peduncled, folioso-bracteate at the base, purple, about 5cm. across; peduncles thinly villose (not arachnoid) with white patent hairs; bracts about 4–7, elliptical, few-pinnatifid, validly spinose and spinuloso-ciliated, sessile or shortly petiolated, thinly villose on the midrib dorsally; exterior ones usually longer than the involucre but interior ones smaller and often shorter than the involucre. Involucre ovoid-conical, obtuse at the base, glabrous, $2\frac{1}{2}$ – $2\frac{2}{3}$ cm. long; scales imbricate, thickish, smooth, green with a purple tint, subulately linear-lanceolate, spinoso-acuminate (spine purplish), closely adpressed but erect-patently ascending or spreading and linear-subulate in the upper free thicker portion, entire and minutely subciliolated, thin on margins, loosely 3–5-nerved; exterior ones subulate; interior ones longer and thinner, linear, the apical portion subulate with

a finely acuminate point. Corolla glabrous; tube angustate, slightly longer or shorter than the pappus, often curved above, white, $1\frac{1}{2}$ –2cm. long; limb shorter than the tube, purple; lobes 5, linear, obtuse or acute, tortuous, about 7–8mm. long; throat shorter than the lobes, subovato-tubular, subinflated towards the base, about 4mm. long. Syngenesious anthers angustately cylindrical; connective-tip subulate; basal lobes linear-subulate, sublacinate towards the apex; filaments slightly shorter than the anthers, white then fuliginous, minutely pubescent with patent papillose hairs. Style exserted, filiform, purple, puberulent at the neck; branches connate into a straight filiform one. Pappus sordid and avellaneo-isabellinous, plumose, $1\frac{2}{3}$ –2cm. long. Ovary short, oblong, glabrous, nearly 3mm. long.

Nom. Jap. *Hama-azami*, *Hama-gobō*, *Gobō-azami*.

Icon. Inuma, Sōmoku-Dzusesu, XV. n. 38.

Hab. Prov. KŪ: Wakanoura (*J. Matsumura* and *S. Ōkubo*! herb. Sc. Coll. Imp. Univ. Tokyo, Dec. 29, 1878); Prov. MUSA-SHI: Tokyo, Bot. Gard. Koishikawa, cult. (Herb. ! *ibid.* Oct. 17, 1879; *T. Makino* ! Sept. 27, 1910); Prov. AWA in Shikoku: Kamoda-saki in Tsubaki-mura, Naka-gōri (*D. Nikai* ! herb. *ibid.* Aug. 25, 1906); Prov. TOSA: Hata-gōri (*T. Makino* ! Aug. 1889), Ō-tani (*T. Makino* ! Dec. 1892), Ōyama in Aki-gōri (*T. Makino* ! Nov. 1892), Shimoyama in Aki-gōri (*T. Makino* ! Dec. 3, 1892); Prov. ŌSUMI: Ōhama near Konejime-mura (*T. Makino* ! Aug. 27, 1910).

This species grows always on the coast; it is very closely allied to *Cirsium brevicaule* A. Gray from Liukiu Islands, from which my species differs by the lack of the not cleft lobes of leaves, and by the arachnoid midrib, pubescent (not villose) peduncles, heads with few and smaller bracts, spinuloso-ciliated and several-nerved involucreal scales, smaller florets, shorter pappus, corolla-lobes shorter than the throat, subglabrous filaments, etc.

Cirsium brevicaule A. Gray, Bot. Jap. in Mem. Amer. Acad. Art a. Sc. (1859), p. 396.

Cnicus brevicaulis Henry, List Pl. Formos. in Trans. Asiat.

Soc. Jap. XXIV. Suppl. p. 55; Hayata, Compos. Formos. p. 34; Matsum. et Hayata, Enum. Pl. Formos. p. 211.

Cnicus japonicus β . *brevicaulis* Maxim in Mél. Biol. IX. p. 324; Franch. et Sav. Enum. Pl. Jap. I. p. 261.

? *Cirsium japonicum* var. Hook. et Arn. Bot. Beechey's Voy. (1841), p. 266.

Stem short, ramose from the base, leafy. Leaves arachnoid-pubescent on the midrib beneath; lobes ovate or oblong-ovate, spinose and spinuloso-ciliated. Heads corymbosely cymose; bracts subtending the heads few and small; peduncles usually short, pubescent (not villose). Involucre rounded at the base, glabrous; scales imbricated, subulately linear-lanceolated, spinose at the apex, spinuloso-ciliated, several-nerved, adpressed, the upper short portion free and ascending. Florets very numerous. Corolla about 18mm. long; tube angustate, about 10mm. long; lobes 5, linear, acutish or obtuse, shorter than the throat which is narrowly tubular and 4mm. long. Connective-tip deltoid, basal lobes of the anther-cells subulato-linear, subsimply acuminate; filament subglabrous. Style exerted, filiform; branch-portion connate into one and about 3mm. long. Pappus about 13mm. long. Achene linear-oblong, subangulato-cylindrical, glabrous, pale, delicately vertically veined, 3½mm. long.

Nom. Jap. *Shima-azami* (nov.).

Hab. LIUKIU: Shuri in Isl. Okinawa (*K. Miyake*! herb. Sc. Coll. Imp. Univ. Tokyo, Sept. 20, 1899).

Lactuca Matsumuræ Makino in Bot. Mag., Tokyo, VI. (1892), p. 56, et XII. (1898), p. 45.

var. *dissecta* Makino, var. nov.

Leaves deeply pinnati-parted; segments remote, few to several on each side, spreading, linear, usually spreadingly few-pinnati-parted into patent lobules; rachis narrowly alate. Otherwise as in the type.

Nom. Jap. *Kikuba-nonigana* (nov.).

Hab. Prov. HIZEN: Kaminagasaki-mura (Commun. *Zentarō Tashiro*).
(To be continued).