

MATERIALS FOR A FLORA OF FORMOSA. II.

Yushun KUDO.

(Accepted for publication October 3, 1930)

11. *Kalanchoë garambiensis* KUDO, n. sp.

Planta humilis, glaberrima, 5-8 cm alta, radicibus valde crassis subramosis. Folia parva, petiolata, spathulata, apice mucronato-rotundata, basi ad petiolum attenuata, margine integerrima, utrinque glabra, carnea, 1-1.8 cm longa, 3-7 mm lata. Cymae 3-10-florae, in corymbo laxo dispositae. Calyx valde 4-partitus, segmentis ovato-oblongis apice acutis glandulosis 5 mm longis. Corolla lutea, 2.0 cm longa, basi urceolatae, tubo aequali gracili, lobis 4 in numero late orbiculari-ovatis apice obtusis retusis vel acutiusculis.

HABITAT. *Formosa*, in rupibus prope Garambi. (KUDO et MORI, n. 16132, April 3. 1930).

DISTRIB. Endemic species!

12. *Paracalanthe*¹⁾ *reflexa* (MAXIM.) KUDO, n. comb.

Calanthe reflexa MAXIM., in Bull. Acad. Pétersb. XVIII. (1873) p. 68, et in Mém. Biol. VIII. (1872) p. 644; FR. et SAV. Enum. Pl. Jap. II. (1879) p. 26; MATSUM. Ind. Pl. Jap. II. 1. (1905) p. 237; SCHLTR. Orch. Sino-Jap. Prodr. (1919) p. 241.

Alismorchis reflexa OK. Rev. Gen. (1891) p. 65.

NOM. JAP. *Natsuebine*.

HAB. *Formosa*: Mt. Arisan (Y. OHNI, Yakuro KUDO et Y. YAMAMOTA! July 10, 1930; Y. OKADA! Aug. 23, 1930).

DISTRIB. Yezo, Honshu, Shikoku, Kyushu, Tsushima, Korea.

var. *puberula* (LINDL.) KUDO, comb. n.

Calanthe puberula LINDL. in WALL. Cat. (1823) n. 7342; Schltr. l. c. p. 240.

Alismorchis puberula OK. l. c. p. 650.

DISTRIB. *China*: Setschuan; Himalaya.

1) *Paracalanthe* KUDO, n. nom. *Limatodes* LINDL. Gen. et Sp. Orch. (1833) p. 252 (non *Limatodes* BL.); *Ghiesbreghtia* A. RICH. et GAL. in ANN. Sc. Nat. sér. 3. III. (1845) p. 23, (non A. GRAY) p. p.; *Calanthe* R. BR. Sect. III. *Ghiesbreghtia* PFRITZ in ENGL. u. PR. Nat. Pfl.-fam. II. 6. (1889) p. (53), p. p. Herbae terrestres, caulibus foliatis, foliis herbaceis plicatis in petiolum contractis, scapis erectis, floribus racemosis, sepalis et petalis similibus, labello ad basin columnae adnato ecalcarato, columna brevi, pollinibus 8 in numero.

Bot. XXXVI. (1903) p. 25; SCHLTR. Orched. Sino-Jap. Prodr. (1919) p. 237; RIDL. Fl. Malay Penin. IV. (1924) p. 122.

Limatodis gracilis LINDL., Fol. Orch. Lim. (1854) p. 1; BENTH. Fl. Hongk. (1861) p. 359.

Alismorchis gracilis OK. Rev. Gen. (1891) p. 650.

DISTRIB. China; Indo-china; Malay; Khasia Hill, alt 3-4000 ft.

17. *Paracalanthe lamellata* (HAY.) KUDO, n. comb.

Calanthe lamellata Hay. Icon. Pl. Formos. IV. (1914) p. 70, f. 33; SCHLTR. Orch. Sino-Jap. Prodr. (1919) p. 239.

NOM. JAP. *Hidabuchi-ebine*.

HAB. *Formosa*: Mt. Rontabun (U. MORI, Apr. 1910.)

DISTRIB. Endemic!

18. *Liparis hensoaënsis* KUDO, n. sp.

Terrestris, erecta, 30-55 cm alta; pseudobulbis subterraneis, ovoideis, parvis, ca. 1 cm altis, ca. 8 mm. diametentibus, 3-4-foliatis. Folia erecto-patentia vel suberecta, oblanceolata, apice acuta, basi longe decurrentia, scapi basin vaginantia, membranacea, concoloria. utrinque glabra, 16-30 cm longa, 1.1-1.4 cm lata. Scapus erectus, subflexuosus, lineatus, glaber. Racemus florifer brevis, sublaxe pauci- (ca. 10-) florus, usque ad 6.5 cm longus, 2.2 cm diametens, bracteis minutis hyalinis deltoideo-subulatis apice acuminatis 4.5-6 mm longis; pedicellis erecto-patentibus et leviter arcuatis, apicem versus subincrassatis, glabris, ca. 1 cm longis. Sepalum intermedium oblongo-lanceolatum, apice acutum, 6-nerviium, 9 mm longum, ca. 2 mm latum. Sepala oblongo-ovovata, latere innere truncata, 5-nervata, nervis curvatis, ca. 5.5 mm longa, 3.2 mm lata. Petala membranacea, oblanceolato-lineararia, 3-5-nervia, 9 mm longa, 1.3 mm lata. Labellum valde incrassatum, late oblongo-ellipticum, apice 2-lobulatum, inter lobulos cuspidate minuta praeditum, lobulis rotundatis marigine crenatis, supra medium papillosum, basi discis parvis instructum. Columna glabra, incurvata, 5 mm alta, auriculis valde abbreviato-truncatis.

HAB. *Formosa*. In paludibus insulae innatae in laci Nichigetsutan prope Mukaiyama (KUDO et SASAKI! n. 15635, Sept. 22, 1929 type; Sept. 19, 1929, n. 15391.)—Prope Sekiin ad Nichigetsutan (KUDO et SASAKI! n. 15503, Sept. 20, 1929.)

Valde similis videtur *Liparis Kawakamii* HAY. cujus specimen authenticum non vidi. Tamen species nostra statim distinguitur, sepalis lateralibus postico valde brevioribus, petalis 3-5-nervatis nec univervatis, labello nec cuneiforme, medio nec contracto.