

## Koji ITO\* : Observations on Northern Japanese Plants (12)

## 伊藤浩司\* 北日本植物観察 (十二)

75) *Solanum nigrum* LINN. var. *villosum* LINN. Sp. Pl. ed. 1. 1 : 186. 1753. : GLEASON New Britton-Brown III. Fl. 3 : 199. 1963.

Syn. *Solanum villosum* (LINN.) MILL. : BRITTON-BROWN III. Fl. N. U. S. & Canada 3 : 165. 1913. : MARZELL in Hegi III. Fl. Mitt.-Europ. 5 (4) : 2594. fig. 3416-f. 1927. : FERNALD Gray's Man. Bot. ed. 8. 1253. 1950.

Dr. ASAI (1956\*\*) reported naturalization of *Solanum sarrachoides* SENDT., which is characterized by having the stem and deeply lobed leaves with silvery hairs, on Kugenuma, Pref. Kanagawa in Honshu. A *Solanum* plant which is covered densely with white hairs was collected on the campus of the Hokkaido University. In appearance, this plant is similar to *S. sarrachoides*, but is different from it by the calyx which is not accrescent after flowering and which does not embrace the mature berry. Its inflorescences are umbellate with 3 to 5 flowers and pedicels become clavate in fruiting. Judging from the characters mentioned above, this plant seems to be *S. nigrum* var. *villosum* LINN. According to LINNE, MARZELL, FERNALD and BRITTON-BROWN, the color of the fruit is yellow in this variety, but in the plant collected it is dark yellow as GLEASON described.

**Nom. Jap.** Birodo-Inuhozuki (n. n.)

**Hab.** : Prov. Ishikari : The University campus, Sapporo C. (26, Aug. 1967-A. MASUDA!).

76) *Carex rupestris* BELL., ex ALL. [Fl. Pedem. 2 : 264. t. 92. fig. 1. 1785\*] : \*KUEKENTH. Cyper. Caric. 86. 1909. : MIYABE & KUDO Fl. Hokkaido & Saghal. 2 : 214. 1930. : MAKINO & NEMOTO Fl. Jap. 2nd ed. 1450. 1931. : AKIYAMA Consp. Caric. Jap. 48. 1932. & Caric. Far East. Reg. Asia 37. pl. 2. fig. 3. 1955. : V. KRECZETOVICZ in Komar. Fl. URSS 3 : 381. 1935. : OHWI Cyper. Jap. 1 : 405. 1936. & Fl. Jap. ed. 2. 260. 1965. : FERNALD Gray's Man. Bot. ed. 8. 330. fig. 615. 1950. : KUZENEVA Fl. Murman. 2 : 127. t. 41. fig. 1. 1954. : CLAPHAM et al. Fl. British Isl. 1406. fig. 76. 1957. : POLUNIN Circumpol. Arc. Fl. 78. 79 & 104. 1959. : GLEASON New

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\*\* Journ. Jap. Bot. 31 : 125. 1956.

Britton-Brown Ill. Fl. N. U. S. & Canada 1 : 331. *with fig.* 1963.

A small and slender perennial herb. Rhizome shortly creeping and covered with stiff scales. Culms 7 to 13 cm tall, sharply triquetrous with narrow wings, scabrous above. Leaves flat or folded, 0.5 to 2 mm wide, about equaling culms and usually recurved at apex, green or pale green, very scabrous on margins and on midribs beneath. Lower sheaths dark chestnut brown to reddish purplish brown, less shining, not lacerated into fiber.

Spike solitary on the top of culm, few-flowered, lance-cylindric, the upper 2/3 staminate, the basal portion pistillate, bractless; the staminate scales embracing the rachis, yellowish brown to dark brown in color, broadly elliptic, 3 mm long, truncate or obtuse at apex, with broadly hyaline margins; the pistillate scales chestnut brown in center with broad or narrow hyaline margins, broadly elliptic in outline with prominently raised midrib, acute at apex, or broadly ovate with rotundate to truncate or often emarginate apex, 2 to 3 mm long, embracing the rachis.

Utricles which are erect-ascending longer than the scales, somewhat thin in texture, 3 to 4 mm long, ellipsoid-obovoid, bluntly angled, thinly nerved, abruptly contracted into a very short terete beak about 0.3 mm long, scabrous, usually stramineous to olivaceous, or brownish, often glaucous, barely lustrous. Achene filling the utricle, triquetrous, often persisting the short style with more or less thickened base. Fl. VII. Fr. VII. (Fig. 1.)

**Nom. Jap.** Karafuto-Iwasuge

(TATEWAKI, 1928. in Journ. Jap. Bot. 5 : 38. ) .

**Hab.** in Hokkaido : in dry & exposed calcareous rock ledges or gravels. Prov. Ishikari : Mt. Kirigishiyama (1072 m alt.) (23, Aug. 1969-S. WATANABE!, 26, Jul. 1970-M. TOHYAMA et al ! ) .

Range : Arctic Europe, England,

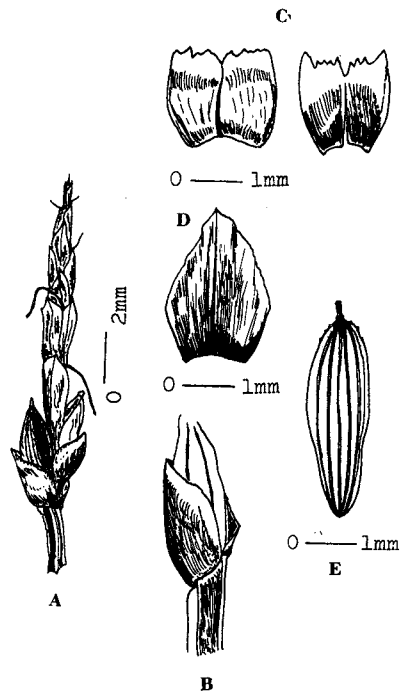


Fig. 1. *Carex rupestris* BELL., ex ALL. A : A spike. B : shows that a female scale embraces the rachis. C & D : Female scales E : A utricle.

Alps, Pyrenee, Carpathians, Corsica : Urals, Siberia, Greenland. Arctic North America, Arctic Alaska. Sakhalin & Japan (Central Honshu\* & Hokkaido).

In our Hokkaido flora, the present species is characterized by as follows ; 1) leaves well recurved at apex, 2) the spike is born on the top of the culm and only one, and 3) sheaths at base do not lacerate longitudinally into fiber.

The plants collected in Mt. Kirigishi are well agreeable with ones in Sakhalin in whole habit. There was found some variation in the female scales of Sakhalin plants, in which the midrib of the scales becomes more scabrous and also often it protrudes to be awn-like. In some case, it was observed in the sakhalin specimens deposited in our Herbarium that both plants with awn and plants without awn occurred within the same habitat. This is a case in which among the five sheets of specimens collected in Mt. Kawashima, S. Sakhalin, one is with short awns, another is with more scabrous protruded midribs, and the rest three are normal, being awnless.

GLEASON (1. c.) described that the present species grows on 'dry calcareous soils. Mt. Kirigishi is composed mainly of calcareous rocks\*\*, and we have found some interesting plants associated with calcareous substrata\*\*\* The present species is found preferentially on the calcareous rock ledges or gravels in Mt. Kirigishi, though may be not an obligate calciphilous plant.

New to the flora of Hokkaido.

77) *Athyrium crenatum* (SOMMERF.) RUPR. var. **glabrum** TAGAWA in Acta Phytotax. Geobot. 11 : 238. 1942. & Color. Ill. Jap. Pterid. 128. pl. 51. fig. 282. & 181. 1959. : OHWI Fl. Jap. Pterid. 123. 1957.

Syn. *Athyrium crenatum* RUPR. sensu MAKINO in Bot. Mag. Tokyo. 13 : 35. 1899. : MIYABE & KUDO Fl. Hokkaido & Saghal. 1 : 31. 1930. p. p. : OGATA Ic. Fl. Jap. 6 : pl. 259. 1935.

**Nom. Jap.** Miyamashida (MAKINO, 1899).

**Hab.** in Hokkaido : Prov. Oshima : Osatsube (9, Jul. 1937-I. YAMAMOTO!). Prov. Ishikari : Mt. Teine (21, Sept. 1913. -H. YANAGISAWA!, 3. Sept. 1915-H. YANAGISAWA!), Garugawa (26, Jul. 1912-T. TAKENOCHI!), Upper

\* OHBA, T. in Journ. Jap. Bot. 39 : 139. 1964.

\*\* TAKEDA, H. et al. in Hokkaido-Chikashigen-Chosashiryō No. 36. 19-28. 1957.

\*\*\* WATANABE, S. & SATO, K. "On the limestone flora of Mt. Kirigishi, Pref. Sorachi, Hokkaido." Oral proceedings on 14 th Nov. 1970.

stream of the R. Hassamu, Mt. Teine (June 1912-H. YANAGISAWA!), Nopporo (25, May 1963-Ko. ITO!), Tatsuno-Ariake, Sapporo C. (2, Jul. 1970-Ko. ITO!), Yuni-Ishikari-Sawa, Mt. Taisetsu (11, May 1949-M. TATEWAKI!). Prov. Tokachi : Mt. Satsunai (24, Jul. 1917-S. NISHIDA!). Prov. Kitami : Aioi-Akan Lake, Kitami Pass (17, Aug. 1926-M. TATEWAKI!). (Fig. 2).

78) *Calypso bulbosa* (LINN.) OAKES [in THOMPSON, Hist. of Vt. Pt. 1 : 200. 1842.\*] : FERNALD Gray's Man. Bot. ed. 8. 486. 1950. : \*HITCHCOCK et al. Vasc. Pl. Pac. N. W. 1 : 828. 1969.

Basion. *Cypripedium bulbosum* LINN. Sp. Pl. ed. 1. 2 : 951. 1753.

Syn. *Calypso bulbosa* (LINN.) REICHB. fil. Ic. Fl. Germ. 13 : 158. 1851.\* : ASCHERS u. GRAEDN. Synop. Mitt.-europ. Fl. 3 : 908. 1907. : NEVSKI in Komarov Fl. URSS. 4 : 604. t. 37. fig. 9. 1935. & Israel ed. 4 : 460. 1968. : HULTEN Fl. Alaska & Yukon 3 : 494. 1943. & Fl. Alaska & Neighb.

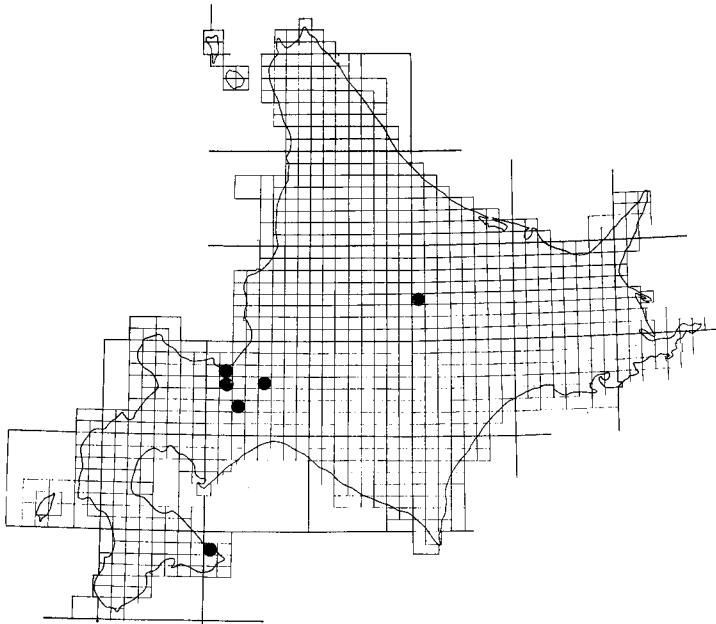


Fig. 2. Distribution of *Athyrium crenatum* var. *glabrum* TAGAWA  
(Preparation for the flora of Hokkaido 3)

Terr. 331 with fig. 1968.

*Calypto borealis* SALISB. [Parad. Lond. pl. 89. 1806\*.] : \*LEDEB. Fl.

Ross. 4 : 52. 1853

*Cytherea borealis* SALISB. in Transac. Hort. Soc. London 1 : 301. 1812. :  
House in Bull. Torrey Bot. Club 32 : 382. 1905. pro syn.

*Cytherea bulbosa* (LINN.) HOUSE 1. c.

Misidentification : "*Calypto bulbosa* var. *speciosa* MAKINO" Ko. ITO in Jo-  
urn. Geobot. 19 : 94. 1969.

In the previous "Observations", I reported a new occurrence of *Calypto bulbosa* var. *speciosa* in Hokkaido, but the identification was made erroneously. The plant misidentified was *Calypto bulbosa*, in which the sac-body of a lip is shorter than the apron.

Corm ellipsoid. A single leaf basal with shorter stalk attaining to 1.5 cm long ; blade oval, 5 cm long, 3.5 cm wide, minutely mucronate at apex, broadly cuneate or shallowly cordate at base, undulate on margins, glabrous. Scape with two membranaceous sheathing bracts, 24 cm tall, bearing a single flower on the top ; pedicel of flower subtended by a bract, being membranaceous, elliptic-lanceolate in shape and 3.5 cm long. Sepals and the two inner petals alike, narrowly elliptic, 2 to 2.3 cm long, ca. 3 mm wide, abruptly attenuate at apex, narrowly cuneate at base, magenta with 3 deeper-colored veins ; the lip large, pendent, sac-shaped, red-purple but yellowish brown toward the top and streaked inside the sac with brownish-purple ; the flanged appendage or apron with yellowish to yellow tape-like hairs above, 2.2 cm long and longer than the sac-body which attains to 1.7 cm long ; the hairs are 1.3 mm long, 0.1 to 0.2 mm wide, twisted twice or three times with rounded apex. Colum erect with broader wings in each side, reddish-purple, pollen mass flat, disclike, four in number, yellow in color.

**Nom. Jap.** Hime-Hoteiran (TAKEDA, 1910. in Bot. Mag. Tokyo 24 : 136.).

79) *Cinna latifolia* (TREVIR.) GRISEB. in Ledeb. Fl. Ross. 4 : 435. 1853. :  
ROSHEVITZ in KOMAROV Fl. URSS. 2 : 169. t. 12. fig. 10. 1934. & Israel ed.  
2 : 136. 1963. ; HITCHCOCK Man. Grasses U. S. 2nd & revised ed. 355. fig. 499  
& 847. 1950. ; KITAMURA et al. Color. Ill. Herb. Pl. Jap. (Monocotyl.) 347. pl.  
91. fig. 661. 1964. ; OHWI Fl. Jap. 2nd ed. 105. 1965.

Basion. *Agrostis latifolia* TREVIR ex GÖPP. [Beschreib. Bot. Gart. in  
Breslau. 82. 1830\*.] : \*GRISEB. 1. c.

Syn. *Cinna pendula* TRIN. [in Mém. Acad. St. Pétersb. 6. sér. 6. 280.

1845.\*) : \*GRISEB. l. c.

**Nom. Jap.** Fusa-Gaya.

**Specim. exam.** in Hokkaido : Prov. Hidaka : Nissho Pass, 800 to 900 m alt. - Hidaka Eirinsyo 72-Rinpan (23, Aug. 1967-Ko. ITO!). Prov. Ishikari : Mts. Taisetsu, Sounpets (16, Aug. 1925-K. MIYABE & M. TATEWAKI!), Mt. Kurodake (11, Aug. 1947-M. TATEWAKI!), Headwater of the R. Ishikari, Tenmakunosawa, Yuni-Ishikari (29, Aug. 1952-M. TATEWAKI & K. TAKAHASHI!), Ishikarigawa-Genryu 35-36-38-Rinpan (21, Aug. 1952-M. TATEWAKI & K. TAKAHASHI!). Prov. Kitami : Onneyu (23, Oct. 1936-M. TATEWAKI!). Prov. Kushiro : Panketo, Akan (25, Aug. 1926-M. TATEWAKI!). (Fig. 3).

80) **Primula sorachiana** MIYABE et TATEWAKI in Trans. Sapporo Nat. Hist. Soc. 13 : 2. t. 1. fig. 4. 1933.

A perennial herb. Rootstock short with thick dirty white roots. Leaves membranaceous, white-yellowish farinose beneath; yellowish-green, lustreless,

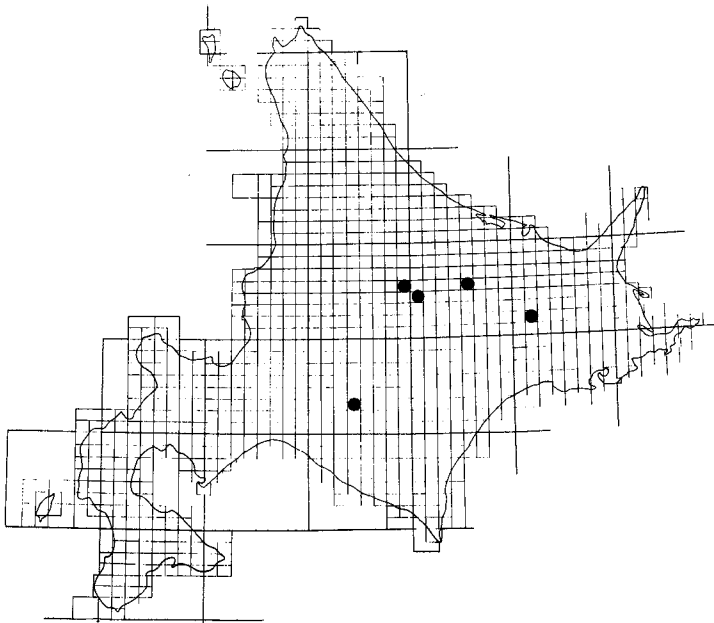


Fig. 3. Distribution of *Cinna latifolia* (TREVIR.) GRISEB.  
(Preparation for the flora of Hokkaido 4).

smooth, more or less rugose, efarinose but thinly glandular above, ; elliptic-ovate spatulate, or rhombic spatulate, tapering into a broad or narrow winged petiole, usually (2-) - 3-7 cm long together with the petiole, 0.7 to 1.5 cm wide, usually shorter than the scape, dentate, initially somewhat revolute, & later more or less flat or entirely flat, nerves pinnate, 5 to 8 in each side, prominently raised beneath. Scapes (3-) 5-9 cm long, slender, or somewhat stout, 0.5 to 1.5 mm thick at base, white-yellowish farinose, with short glandular hairs ; involucre bracts linear, 4 to 6 mm long, commonly dark green, often thinly raised but hardly gibbose at base ; pedicels slender, 0.5 to 0.8 mm thick at base, 2 to 3 mm long, or 8 to 10 mm long at anthesis, a little or remarkably longer than flowers, thinly farinose with gland-hairs, upward at first and downward afterthen. Calyx urceolate or urceolate-campanulate, usually white-yellowish farinose, 4 to 5 mm long at maturity, parted to the middle or  $2/3$  of the lower down into the lanceolate & somewhat obtuse

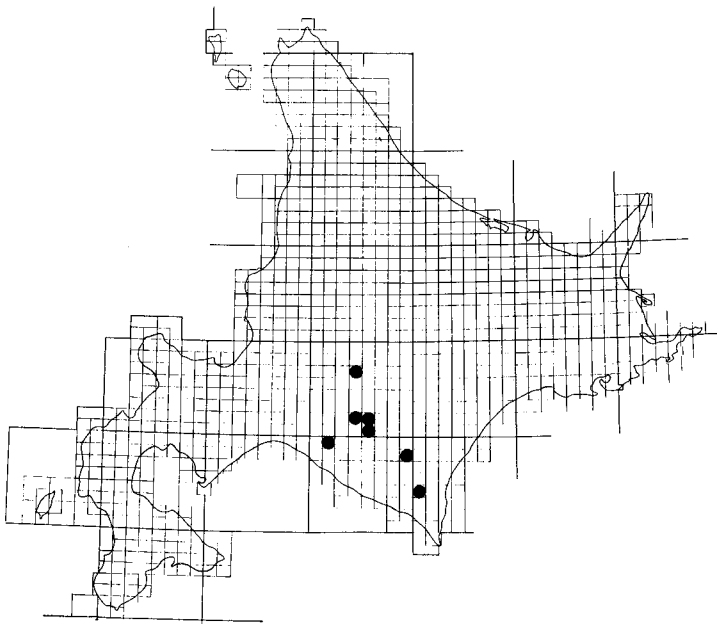


Fig. 4. Distribution of *Primula sorachiana* MIYABE & TATEWAKI  
(Preparation for the flora of Hokkaido 5)

teeth, which are commonly appressed to the corolla-tube. Corolla red-purple to lightly reddish purple in color, its tube apparently exceeding the calyx, the flat limb 8 to 15 mm across; the lobes obcordate, 5 to 7 mm long, 5 to 7 mm wide, deeply notched or parted to the 1/3 of the top, the included angle of the notch usually 50° to 60°, often to 90° to 130°. Capsule as long as the calyx or scarcely over it; seeds angulate, minute, 0.5 to 0.8 mm long, ca. 0.2 mm thick, brown to dark brown, smooth or granulate, lustreless. Fl. V. Fr. V-VI.

**Nom. Jap.** Sorachi-Kozakura (MIYABE & TATEWAKI, 1933.).

**Specim. exam.** Prov. Hidaka: Furenai National Forest 74-Rinpan, Hobetsu V. (16, May 1970-Ko. ITO!-fl.), Biratori, Biratori V. (16, May 1970-Ko. ITO!-fl.), Mitsuiwa, Hidaka T. (16, May 1970-Ko. ITO!-fl.), Upper stream of the R. Nukabira (19, May 1959-T. KOGURE!-fl.), Shintomi, Samani T. (4, May 1951-MORIMOTO!-fl.). Prov. Tokachi: Ponyaoromappu-Rindo, 300 m alt. (8, June 1970-M. HORIE & M. DOGEN!-fl.). Prov. Ishikari: Along the R. Sorachi, near Kanayama (5, May 1933-M. TATEWAKI!-fl.; Holotype and isotype of *P. sorachiana*). (fig. 4).

Range: Endemic in Hokkaido.

(to be continued)

## 摘 要

### 75) ヒロードイヌホソヅキ (新帰化植物)

1967年8月北大構内で採集され、現在も散発的にみられる。全体はイヌホソヅキに似て、全株白軟毛に被われている点を特長とする。1956年浅井博士の報じたケイヌホソヅキには該当しないようである。

### 76) カラフトイワスゲ (新産地)

本種が日本本土にも分布することは、活字の上では1964年大場達之氏の赤石山系仙丈岳での採集記事から明らかである。北海道では、夕張—芦別山系の一峰岬山の石灰岩地帯から、1969年、1970年に互って二度採集された。

### 77) ミヤマシダ (産地整理)

### 78) ヒメホテイラン (旧報訂正)

前々報で筆者は札幌近郊定山溪簾舞園有林からホテイランの新産を報告したが、これは、ホテイランに関する筆者の誤解に基づく、明らかな同定誤りであった。正しくは、樺太や歐洲にみられるヒメホテイランである。ここに訂正する。なお本種の同定に当っては、大井博士に種々御教示頂いた。厚く御礼申し上げる。

### 79) フサガヤ (産地整理)

### 80) ソラチコザクラ (産地整理)

(つづく)