

Koji ITO* : Observations on Northern Japanese Plants (9)**

伊藤浩司 : 北日本植物観察 (9)

53) *Eriocaulon sachalinense* MIYABE et NAKAI in Bot. Mag. Tokyo 42 : 479. 1928. : SATAKE "Eriocaulaceae" (NAKAI & HONDA Nov. Fl. Jap.) 61. & 81. fig. 28. 1940. & in Bull. Tokyo Sci. Mus. No. 4. 51. & 68. pl. 8. fig. 15. 1940.

Syn. *Eriocaulon atrum* sensu WOROSCHILOV (non NAKAI) Fl. Sov. Far East 109. 1966. quoad pl. Sakhal.

Nom. Jap. Karafuto-Hoshikusa (NAKAI 1928).

Hab. Shallow pools or wet peaty shores. Pref. Kamikawa, Hokkaido : Kamikawa Ukijima Mire (Sept. 1968-Ko. ITO!).

Range : Sakhalin (Southern Parts), Japan (Hokkaido).

New to the flora of Hokkaido.

The present species were collected on the *Sphagnum* bog in the Yuzhno Sakhalinsk district in Sakhalin by Mr. S. SUGAWARA at first. This species is very similar to *E. atrum* NAKAI in appearance, from which it is distinguished by the quite dime-rous floral organs, i. e. two bracts of the involucre, two sepals and petals in both male and female floweres, four stamens, the free femal sepals andthe deeply parted male sepals.

Compared the isotype specimenspr eserved in our Herbarium with the Ukijima plants, in the latter the sepals, petals and bracts are somewhat larger in size, and the female flowers are often with 3 petals. In the isotype specimens, however, the fruits are often found one-celled, but in our plants they are two-celled.

54) *Eriocaulon kusiroense* MIYABE et KUDO, ex SATAKE in Journ. Jap. Bot. 15 : 629. 1939., "Eriocaulaceae" (NAKAI & HONDA Nov. Fl. Jap.) 62. & 81. fig. 29. 1940. & in Bull. Tokyo Sci. Mus. No. 4. 52. & 68. pl. 8. fig. 16. 1940.

Syn. *Eriocaulon atrum* sensu MIYABE et KUDO (non NAKAI) Fl. Hokkaido & Saghal 3 : 288. 1932. p. p.

Nom. Jap. Kushiro-Hoshikusa (MIYABE & KUDO, ex SATAKE 1932).

Specim. exam. Pref. Kushiro : Shakubetsu (3, Aug. 1866-M. NAKAMURA! Holotype!). Pref. Nemuro : Notsuke-Zaki (8, Sept. 1963-Ko. ITO!).

55) *Eriocaulon miquelianum* KOERNICKE var. *involutratum* NAKAI in Bot. Mag. Tokyo 24 : 6. 1910.

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**Contributions from the Laboratory of Plant Ecology & Taxonomy No. 3.

Nom. Jap. Mutsu-Inunohige (NEMOTO 1936).

Hab. Shallow or peaty shores. Pref. Rumoe, Hokkaido : Shimosarobetsu-Genya, Minami-Shimonuma, Horonobe T. (6, Aug. 1968-K. ISHIZUKA & Ko. ITO!).

New to the flora of Hokkaido.

Planta annua, acaulis. Radices fibrosae, in sicco sordide albae, transverse septatae. Folia dense erecto-caespitosa, lineari-subulata, apice callosa, obtusa, 4-7-fenestrato-nervia, 2-4 cm longa, medio 1-1.5 mm lata. Vaginae teretes, laxae, 15-30 mm longae, apice hyalino-membranaceae, oblique fissae. Scapi numerosi, sub anthesi foliis superantes, 3.5-6 cm alti, filiformes, 5-6-costati, parce torti, glabri, laeves. Capitula in sicco obconica, 2-3 mm lata, bracteis involucrentibus, ca. 7, glabris, lanceolatis, apice acutis vel obtusis, 1-vel 3-nerviis, margine hyalino-membranaceis, medio viridibus, exterioribus 3-4, 5.5-7-10 mm longis, 0.5-1.2 mm latis, capitulo 2-3-plo longioribus, interioribus 3-4, conformibus, 4-6 mm longis. Receptaculum glabrum vel saepe pilosum. Flores pauci, masculi ca. 4, centrales, feminei ca. 3, marginales. Bractee florum ♂ et ♀ similes, lanceolatae, vel oblongo-lanceolatae, vel cymbiformes, apice acutae vel acutiusculae, margine circa apicem albo-puberulae, pilis columnaribus 2-1-cellularibus.

Flos ♂ : Sepala 2.2-2.5 mm longa, petalis paulo longiores, in spatham late ovatam antice fissam connata, apice leviter trilobulata, lobulis margine et dorso sparse albo-puberulis, pilis columnaribus unicellularibus; petala 3, raro 2, ca. 1 mm longa, basi in tubum connata, tubo aequilonga, apice bifida, lobis albo-puberulis, pilis columnaribus 2-vel 1-cellularibus, in sinu apicali cum glandula nigra unica; Stamina 6, antherae nigrae, ellipticae, 0.2 mm longae.

Flos ♀ : Sepala 2.8 mm longa, petalis paulo breviores, fusco-aureovirides, in spatham late ellipticam vel ovato-ellipticam antice fissam connata, intus dense vel sparse barbata, extus glabra, apice trilobi, vel saepe dipartiti, lobis triangularibus, acutis, mediis lateralibus brevioribus, margine sparse albo-puberula, pilis columnaribus unicellularibus. Petala 3, libera, lanceolato-spathulata, 3 mm longa, 0.5-0.7 mm lata, albo-spongiosa, cellulis subellipticis composita, extus glabra, intus dense barbata, apice bifida, lobis albo-puberula, pilis columnaribus bicellularibus, in sinu apicali cum glandula nigra unica. Germen vulgo bi- vel tri-coccum, raro monococcum. Stylus 1, raro 2. Stigma stylo longiores vel aequilonga, vulgo 2 vel 3, raro 1 mixta. Semina elliptica, glabra, 1 mm longa, 0.6 mm lata. - Fl. VIII. Fr. IX.

56) *Carex vaginata* TAUSCH : OHWI Fl. Jap. rev. ed. 276. 1965.

Syn. *Carex sparsiflora* (WAHLENB.) STEUD. : MIYABE & KUDO Fl. Hokkaido & Saghal. 2 : 256. 1931. : AKIYAMA Cons. Car. Jap. 163. 1932. - *C. vaginata* var. *petersii* (C. A. MEY.) AKIYAMA in Journ. Jap. Bot. 11 : 499. 1935. & Car. Far

East. Reg. Asia 153. *pl.* 146. 1955. : OHWI Cyper. Jap. 1 : 419. 1936. & Fl. Jap. 204. 1953. - *C. sparsiflora* var. *petersii* (C. A. MEY.) KÜKENTH. Cyper. Car. (ENGLER Pfl. -reich IV. 20) 513. 1909. : MIYABE & KUDO 1. c.

Nom. Jap. Sayasuge.

Specim. exam. in Hokkaido : Pref. Kamikawa : Takanegahara, Mts. Taisetsu (19, Aug. 1934-S. AKIYAMA!). Pref. Kushiro : Kiritappu moorland, Makkibetsu, Hamanaka V. (15, Jul. 1968-Ko. ITO!). Pref. Nemuro : Goyomai, Nemuro C. (16, June 1930-M. TATEW.!), Noshappu, Nemuro C. (16. June 1930-M. TATEW.!), Tomoshiri, Nemuro C. (23, Jul. 1954-T. KOYAMA!), Ochiishi, Wada V. (20, Jul. 1937-M. TATEW. !).

In our specimens of Hokkaido, the stems attain to 60 cm in height, and the utricles which are usually 4 mm long have the somewhat elongated beaks as shown by Dr. AKIYAMA (1955, *pl.* 146-D), though the leaves are not always over the stems. It is, in my opinion, difficult to separate var. *petersii* from the typical variety.

57) *Smilacina japonica* A. GRAY form. *trinervis* (MIYABE et KUDO) KO. ITO, comb. et stat. nov.

Basion. *Smilacina trinervis* MIYABE et KUDO Fl. Hokkaido & Saghal. 3 : 332. 1932.

Smilacina trinervis is, in my opinion, merely a form of *S. japonica*. The former is characterized by having the larger cauline leaves and trinerved perianth-lobes.

Nom. Jap. Oni-Yukizasa (MIYABE & KUDO 1932)

subform. *viridiflora* KO. ITO, subform. nov.

Folia caulis elliptica vel late elliptica, laminis 15-20cm longis, 8-11cm latis. Tepala viridia, spathulata vel obovato-elliptica, apice obtusa vel rotunda, saepe minime emarginata, vulgo tri- raro uni- nervis, 4-5 mm longa, 1.3-2 mm lata.

Nom. Jap. Midori-oniyukizasa (n. n.)

Hab. Pref. Ishikari : Sankakuyama hill, Sapporo C. (1, June 1965-T. SASAKI!- Typus in SAPA).

58) *Athyrium filix-femina* (LINN.) ROTH var. *longipes* HARA in Bot. Mag. Tokyo 48 : 691. 1934. : Ohwi Fl. Jap. Pterid. 118. 1957.

Syn. *Athyrium filix-femina* var. *melanolepis* MAKINO in Bot. Mag. Tokyo 13 : 30. 1899. cum descr. opt. excl. basion. : MIYABE & MIYAKE Fl. Saghal. 631. 1915. : MAKINO & NEMOTO Fl. Jap. 2nd ed. 31. 1931. : MIYABE & KUDO Fl. Hokkaido & Saghal. 1 : 28. 1930.

A. brevifrons NAKAI, ex KITAGAWA Rep. Ist. Sci. Exped. Manch. sect. 4. 2 : 75. 1935. : TAGAWA Color. Illust. Jap. Pterid. 121. *pl.* 47. *fig.* 260. 1959. : SUGIMOTO Keys Herb. Pl. Jap. Pterid. 201. 1966.

Comparing of *Athyrium filix-femina* with *A. melanolepis*, the differences between the both taxa are mainly shown by the differences of the scales in texture and in color. In the former, the scales on the lower parts of the stipes are generally membranaceous in texture, flat or scarcely twisted, and light brown to yellowish brown in color. In the latter, however, the scales are considerably hard and lethery, two to three times twisted, and coal-black in color. *A. filix-femina* distributes nearly all parts of the temperate-boreal regions of the Northern Hemisphere. In the north-boreal areas around Hokkaido, this lady-fern ranges from Alaska, throughout the Aleutian and Kamchatka (ssp. *cyclosorum*? cf. HULTEN 1968) to the Paramushir Isl. in the N. Kuriles. While *A. melanolepis* seems to be limited to Honshu in its range. In Hokkaido, Sakhalin and the S. Kuriles, the lady-fern is represented by *A. filix-femina* var. *longipes* or *A. brevifrons* NAKAI, ex KITAGAWA, which shows a transitional form from *A. filix-femina* to *A. melanolepis*, especially in the characteristic of the scales. In *A. filix-femina* var. *longipes*, the scales are soft to more or less stiff in texture, brown to dark brown or partly blackish in color, and the twisting is moderate in degree.

It is generally accepted that *A. filix-femina* var. *longipes* is characterized by its shorter fronds. In *A. melanolepis*, the fronds are two to three times as long as the stipes. In var. *longipes*, the fronds are 2/3 to 2.5 times as long as the stipes. According to the "Flora Europaea I", in European *A. filix-femina* ".....petiole..... pale yellow-green or purplish-red, 1/4-1/2 as long as lamina.....". These figures mentioned above seem to suggest that there is a tendency in which the fronds are longer in *A. melanolepis* and European *A. filix-femina* than in var. *longipes*, but whether this tendency is reliable in the practical classification or not, it is doubtful.

According to WOROSCHILOV's key to *A. filix-femina* complex in the Far East regions of the Soviet Possessions, there are three taxa in the areas related to Hokkaido. WOROSCHILOV recognized *A. filix-femina* in the Kuriles, Kamchatka and the Komandorskii, *A. melanolepis* (FR. et SAV.) CHRIST in Sakhalin and the Kuriles, and *A. rubripes* (KOM.) KOM. in Sakhalin, the Maritime Prov., Amur and Ochotsk. Of the synonymy of *A. rubripes* KOM., he cited *A. brevifrons* NAKAI. According to his key, the lowest pinnae of *A. rubripes* considerably reduce in size, while, those of *A. filix-femina* are usually 1/2 to 1/3 as long as the longest middle pinnae. Although *A. rubripes* is very similar to our lady-fern (var. *longipes*), especially in having wine-red colored stipes and rachis, and reddish-green pinnae, not light green as European authors describe, it is different from our plants by having the rachis and principal veins densely clothed with glandular bloom (cf. Fl.

URSS 1. translated Engl. ed. p. 41). In our herbarium specimens of this complex from Hokkaido, Sakhalin and the Kuriles I have failed to find any demarcations given by WOROSCHILOV (1966).

In conclusion, I would retain *A. filix-femina* var. *longipes* in Hokkaido, Sakhalin and the S. Kuriles plants as an intermediate variety between *A. filix-femina* and *A. melanolepis* in the sense of the scale characteristic, notwithstanding the original description of var. *longipes* in which such short fronds are stressed as a character.*

59) *Eleocharis palustris* var. *major* SONDER : KOYAMA in Journ. Fac. Sci. Univ. Tokyo 8 (3) : 95. 1961.

Syn. *Eleocharis palustris* sensu MIYABE & KUDO (non R. BR.) Fl. Hokkaido & Saghal. 2 : 208. 1931.

E. intersita ZINSERL. in KOMAR. Fl. URSS 3 : 76. & 581. tab. 6. fig. 11. & 26. 1935. : OHWI Cyper. Jap. 2 : 48. 1944., Fl. Jaq. ed. 1. 226. 1953. & ibid. rev. ed. 223. 1965. : EGROVA in Fl. Arc. URSS. 3 : 33. 1966. : STRANDHEDE in Oper. Bot. 10 (2) : 146. 1966. sub ssp. *plaustris* : VOROBYEV et al. Key Pl. Maritime & Preamur Reg. 100. 1966. : WOROSCHILOV Fl. Sov. Far East. 11. 1966.

E. palustris ssp. *intersita* (ZINSERL.) T. KOYAMA in KITAMURA et al. Colour. Illust. Herb. Pl. Jap. (Monocotyl.) 227. 1964. nom. nud.

In the typical specimens of this variety, the stem is slender and firm, the spikelets are dark purplish-reddish brown in color, the scales are with acute tip, the bristles are four in number, and the style-base is conical in outline and clearly longer than broad, being 1/2 to 1/3 as broad as the fruit. *Eleocharis mamillata* is different from the former by the softer stems, rusty spikelets, blunt or rounded female scales, five to six perianth bristles and the style-base, in which its width is 1/2 to 3/4 as long as the width of fruit. Some specimens of the present variety have the *mamillata* type style-base. These specimens are seldom found in the specimens collected in Hokkaido, but found frequently in those collected in Sakhalin and the Kuriles.

Nom. Jap. Kuronuma-Harii

Specim. exam. in Hokkaido. Pref. Kamikawa : Numanohara, Mts. Taisetsu (9, Aug. 1952-J. SAMEJIMA & T. MISUMI!), Syosenen, Mts. Taisetsu (3, Aug. 1938-T. YAMANAKA & H. Yokoyama! with the *mamillata* type of style-base). Pref. Sorachi : Mt. Yubari (7, Aug. 1913-S. Nishida! with the *mamillata* type of style-base). Pref. Hidaka : Shiomi, Mukawa T. (31, May 1964-Y. TAKAHASHI!). Pref. Kushiro : Chanai, Hamanaka T. (13, Jul. 1949-M. TATEWAKI!), Kiritappu, Hamanaka T. (14, Jul. 1968-Ko. ITO!). (to be continued)

摘 要

53) カラフトホシクサ (新産地) 一本種は 最初樺太豊原地区深草地方の ミズゴケ泥炭

* "Stipes longae frondibus subaequilonga vel parum breviores." (HARA l. c.)

地より採集され、中井博士により新種として発表された。1968年筆者は上川支庁管内の浮島高層湿原（標高約870メートル）で本種を採集した。北海道を含め、旧日本新産の種類である。クロホシクサに似るも、花が2数性であること（総苞片2、萼片2、花弁2、雄しべ4）、雌花萼片は離生するが雄花では深裂して離生しない点などを特徴とする。

54) クシロホシクサ（新産地）—タイプロカリティーは釧路地方であるが、筆者は1963年根室支庁管内野付崎の湿地から採集した。

55) ムツイヌノヒゲ（新産地）—従来北海道には *Eriocaulon miquelianum* は産しないとされているが、この系統の一変種が下サロベツ原野の、ミズゴケ湿原中に見出される。北海道新産。

以上3種類の *Eriocaulon* 属種類の同定に当っては国立科学博物館佐竹義輔博士の御手を煩わした。厚く御礼申上げる次第である。

56) サヤスゲ（産地整理）—従来の標本に基づき産地を整理した。大雪山高根ヶ原のような高山帯にみられる他は専ら道東地方の湿原に見出される。また標本を多数検査すると、var. *petersii* を区別することが難かしくなってくる。

57) オニユキザサ（品種）とミドリオニユキザサ（亜品種）—ユキザサの広葉品で花被片に3脈あるものをオニユキザサと称し、これはユキザサの一品種と考える。希に緑花品あり、これをミドリオニユキザサと新称したい。

58) エゾメシダ—メシダ群の分類は難かしいとされているが、北海道を中心に、本州、樺太、千島、カムチャツカ、アリューシャンの標品について比較検討を試みた。結局、葉柄下部の鱗片の性質において、北千島、カムチャツカ、アリューシャンのメシダ類は一つのみまとまり（膜質、巾広く、振れは少く、色彩は淡褐色～褐色）があり、本州中部のいわゆるミヤマメシダは、革質で巾狭くなり、振れが多くなり、黒色を呈する点でやはりまとまる。北海道、樺太、南千島産のものは、この両型の中間移行的性質を示している。結局、葉柄鱗片の性質から、筆者は、上記地域のメシダ類については *A. filix-femina* var. *longipes* あるいはエゾメシダを用いたいと考える。

59) クロヌマハリイ（産地整理）—最近 STRANDHED E 博士は *Eleocharis intersita* ZINSERL. を *E. palustris* の中に含めた見解を発表したが、結局独立種とみるのは無理なようである。北大標本庫所蔵の標本についてみると、樺太、千島産のものの中では、柱基の形態において往々として *E. mamillata* とまぎわらしくなるものがある。（つづく）