



Title	北海道植物志料 I
Author(s)	宮部, 金吾; 工藤, 祐舜
Citation	札幌博物学会会報, 4(2), 97-104
Issue Date	1913-04-30
Doc URL	https://hdl.handle.net/2115/60868
Type	journal article
File Information	Vol.4No.2_001.pdf



北海道植物志料 I.

理學博士 宮部金吾
理學士 工藤祐舜

MATERIALS FOR A FLORA OF HOKKAIDO. I.

By

K. MIYABE, *SD, Rigakuhakushi,*

and

Y. KUDO, *Rigakushi.*

While engaged on the preparation of a Flora of Hokkaido or the group of Islands better known by the names of Yezo and Kuriles, we have come across now and then with the plants which are either new to its Flora or very imperfectly known. The results of our study on these plants will be published from time to time under the above title.

In order to give a fair understanding of the distribution and variation of some of these plants, we are obliged to refer in the following notes to plants belonging to adjacent floral regions, especially to those of Saghalin, Kamtschatka and Northern Nippon or Honshu. All the specimens cited in this paper marked with an exclamation point are preserved in the Herbarium of our Botanical Institute.

1. *Delphinium brachycentrum* Ledeb. in Fl. Ross. 1. p. 60. (1842); Regel, Pl. Radd. 1. p. 66. (1861).

Radix ignota. Caulis 10-poll. altus, distincte striatus, ascendens, teres, villosus, pilis deorsum curvis sericeis. Folia radicalia ignota. Folia caulina membranacea, longe petiolata, petiolis sericeo-villosis, 4-5.5 cm longis, basi subdilatatis, ambitu profunde cordata, 2-5 cm longa, 3.5-4.5 cm lata, 5-7 partita, partitionibus ambitu

rhombeis basi late cuneatis, profunde pauciserratis, apice saepius acutis vel acuminatis, subtus dense, supra parce villosa; inferiora longe petiolata, parviora; superiora breviter petiolata, petiolis laminis brevioribus, saepius tripartita, summa ad bracteas mutata. Bracteae inferiores caulina superiora aequantes; superiores angustiores, lineares vel filiformes. Rami breves, villosi, pauciflori (saepius 1-2-flori), pedicellis apice cum bracteolis 2 filiformibus floribus brevioribus. Flos cum calcar 4.8 cm longus, atro-cyaneus; sepalum superius maximum ovato-lanceolatum apice acuminatum; lateralia 2.3 cm longa late elliptico-lanceolata ipso apice tamen obtusa, basi rotundata; inferiora 2.5 cm longa, ovato-lanceolata, apice acuta, basi cuneata. Petala superiora 2, aequalia, non alata, 2.5 cm longa, discolora, basi unguiculata, apice obtusa, emarginata; inferiora 2, aequalina, 1.8 cm longa, spathulata, apice imperfecte bifida, intus parce barbata. Filamenta 28-30, subulata, nervo parce piloso; antherae glabrae oblongae. Germina 3 staminibus breviora, dense villosa, stylis nudis. Fructus nobis ignotus.

NOM. JAP. *Chishima-hiyenso*, (nov.).

HAB. *Kuriles*: Paramushir Island (Tsutomu Sakurai! Aug. 1911).

DISTRIB. Kamtschatka, and Northern Kuriles.

In an interesting collection of the Kurile plants made by Mr. Tsutomu Sakurai, a teacher in a common school in Nemuro, on the Island of Paramushir in the summer of 1911, there was a well preserved specimen of *Delphinium*, about ten inches in height and with a few large dark blue colored flowers. Notwithstanding of the fact, that the genus is widely and largely represented on the Asiatic continent, it is noteworthy, that this is the first record of the occurrence of a species of *Delphinium* in the Japanese Archipelago.

The original description of *Delphinium brachycentrum* by Ledebour and also its supplementary notes by Regel agree remarkably well with our plant, except perhaps in the characters of the base of the petiole and also of the lower pair of petals. In our specimen, the base of the petiole is somewhat dilated, and the lower pair of petals have an irregularly fissured lobe, which appears to us to be accidental rather than natural. As our specimen is single and the flowers fit for dissection only two, we hesitate in this connection to make a decisive statement on the presence of a natural lobe in the lower petal.

Our plant is also very near to *D. cheilanthum* Fisch. and *D. pauciflorum* Rehb.; but it is easily distinguished from the former by its strongly haired stems and long-petioled lower leaves, and from the latter by its larger flowers and blue colored lower petals.

2. *Polemonium coeruleum* Linn., Spec. Pl. ed. 1. p. 162 (1753); Ledeb., Fl. Ross. 3. p. 83 (1846-47); Trautv. et Mey., Fl. Ochot. p. 69 (1856); Regel et Maack, Fl. Ussur. p. 106 (1862); Herder, Pl. Radd. IV. 1. p. 197 (1873); Brand, in Engl. Pfl-reich. 27. Heft (IV. 250) p. 37 (1907).

Subspec. A. **vulgare** (Ledeb.) Brand, l. c. p. 38.

P. coeruleum Linn. *a. vulgare* Ledeb., l. c.; Trautv. et Mey., l. c.; Regel et Maack, l. c.; Herder, l. c.

Var. *a. yezoense* Miyabe et Kudo, var. nov.

ICON. T. Iwasaki, Honzo-zufu 18. fol. 21. (1829).

Caulis erectus, striatus, multifolius. Folia glabra, breviter petiolata, petiolis basi subdilatatis, margine minute ciliatis; foliola ovato-lanceolata vel lanceolata, 20-35 mm longa, 8-12 mm lata, apice acuta vel acuminata, basi saepius rotundata. Inflorescentia thyrsoidea vel corymbosa, laxiflora, pubescens, puberula, plus-minus villosa vel canescens, semper glandulosa. Flores magni, corollis 22-25 mm longis, lobis obovatis vel elliptico-ovatis, apice rotundatis vel emarginatis. Calyx leviter villosus vel puberulus, pilis plerumque eglandulosis vel rarius glandulosis, demum glabrescens.

NOM. JAP. *Yezo-no-hanashinobu*, (nov.).

HAB. *Hokkaido*. Prov. Oshima: Kakkumitoge (Y. Tokubuchi! Aug. 21, 1888). — Prov. Shiribeshi: Mt. Raiden (S. Ishikawa! June 11, 1897), — Prov. Ishikari: Sapporo (S. Tanouchi! June 1889; K. Miyabe! May 1880; Y. Tokubuchi! June 1, 1889). — Prov. Tokachi: Puka Riv. (Y. Obanawa! June 18, 1892). — Prov. Hidaka: Shoya (Y. Tokubuchi! Aug. 17, 1892); Shibuchari (K. Miyabe! June 16 1884).

DISTRIB. Endemic.

The present variety is easily distinguished from the following by its larger conspicuous flowers and loose inflorescence. Perhaps it is the most beautiful among the varieties of *Polemonium coeruleum*, deserving the attention of horticulturists. It is distributed in the southern and middle provinces of Hokkaido, and is especially common in the vicinity of Sapporo in the alluvial banks of a river.

Var. *β. racemosum* (Regel).

P. coeruleum Linn. *a. vulgare* Ledeb. *lusus 2. racemosum* Regel, l. c.; Herd., l. c. p. 199.

Caulis teres, erectus, striatus, simplex, 60-80 cm altus, internodiis plerumque elongatis, 6-12 (3-17) cm longis, paucifolius. Folia radicalia minora, cum petiolo ca. 10 cm longa, petiolis basi dilatatis, margine non ciliatis, plerumque 3-4 cm

longis; foliola 23, sessilia, lanceolata vel ovato-lanceolata, apice acuminata vel acuta, 10-12 mm longa, 3 mm lata, utrinque glabra: caulina inferiora longe petiolata, cum petiolo 6-10 cm longo 11-18 cm longa, foliolis linearilanceolatis vel lanceolatis, 23-27 in numero, apice acuminatis: superiora breviter petiolata vel subsessilia, 3-7 cm longa, foliolis linearibus apice acuminatis vel acutis: summa ad bracteas mutata. Bracteae sessiles minores pinnatae vel pinnatifidae. Inflorescentia cymosa racemiformis vel rarius thyrsoida, glanduloso-pubescent. Flores parvi, breviter pedicellati. Calyx puberulus, leviter villosus, pilis nonnullis glandulosis, lobis angustioribus, apice obtusiusculis, tubo longioribus. Corollae 14-16 mm longae, lobis elliptico-ovatis, apice rotundatis. Stamina corollae paulo breviora. Stylus corollae longitudine, plerumque apice 3-fidus, rarius 4-fidus.

NOM. JAP. *Kushiro-hanashinobu*, (nov.).

HAB. *Hokkaido*. Prov. Kushiro: Hamanaka (K. Miyabe! July 4, 1884); Shitakara (Sukeo Ito! Aug. 1895).

Saghalin. Toyohara-district: Toyohara or Vladimirohuka (K. Miyabe & T. Miyagi! Aug. 22, 1906.); Dalni (T. Miyake! June 29, 1906).—Shikka-district: Shikka (K. Miyabe & T. Miyagi! July 23, 1906).

DISTRIB. Amur- and Ussuri-regions, Saghalin, and north-eastern part of Yezo.

This is a distinct variety with the smallest leaves as well as the smallest flowers, which are generally arranged in a racemiform cyme or thyrsus. The length of the corolla including the tube is only about 15 mm. According to Herder (Pl. Radd. l. c. p. 199), Regel once gave to the plant the name, var. *parviflorum*, which is probably more appropriate than his published name, var. *vulgare*, lusus *racemosum*. The diagnosis given by Regel for the plant, though brief, is so well delineated, that we do not hesitate to include our forms from Kushiro and Saghalin, and also those from the Amur- and Ussuri-regions under the one and same variety.

In the specimens collected at Shikka in Saghalin, the lobes of the corolla are mucronate at the apex, although in other characters we could not find any point of difference from the present variety.

In one of the specimens collected in Kushiro, all the flowers are provided with a 4-lobed stigma. Such an anomalous case has already been observed in some species of *Phlox* and *Gilia*, but as far as we know, the fact is new in the genus *Polemonium*.

Var. *γ. laxiflorum* (Regel).

P. caeruleum Linn. *a. vulgare* Ledeb, lusus *1. laxiflorum* Regel, l. c.; Herder, l. c.

Caulis erectus, solitarius, teres, simplex, striatus, foliatus. Folia caulina deorsum longe sursum breviter petiolata, petiolis glabris, basi subdilatatis, margine non ciliatis; foliola sessilia, ca. 25, lanceolata, opposita vel alternata, apice acuminata, 20 mm longa, 4–5 mm lata: superiora breviora, foliolis paucis, angustioribus: summa ad bracteas mutata. Bracteae sessiles, saepe pinnatae vel pinnatifidae. Inflorescentia laxiflora vel densiflora, ramis inferioribus elongatis, glanduloso-puberula. Flores mediocres. Calyx plus-minus canescens, rarius pilis albis mixtus, plerumque eglandulosus, demum glabrescens, lobis acuminatis tubo longioribus, fructifer auctus 10–12 mm longus, lobis tubo paulo longioribus. Corollae 17–22 mm longae, lobis elliptico-ovatis apice rotundatis. Stylus corollae paulo brevior, staminibus longior.

NOM. JAP. *Karafuto-hanashinobu*, (nov.).

HAB. *Hokkaido*. Prov. Kitami: Rebun Island (K. Miyabe! Aug. 23, 1894).

Saghalin. Todomoshiri or Kaibatō: Tomarizawa (T. Miyake! July 23, 1906); Kotan (T. Miyake! July 24, 1906); Shimizudani (T. Miyake! July 26, 1906).—Mauka-district: Tokotan (T. Miyake! June 22, 1907); Tobutsu (T. Miyake! June 27, 1907); Notasan (T. Miyake! June 28, 1907).—Odomari-district: Menabetsu (T. Miyake! July 3, 1908).—Toyohara-district: Galkinowlaskoe (T. Miyake! July 11, 1906).—Shikka-district: Makunkotan (K. Miyabe & T. Miyagi! July 22, 1906).—Nayoro-district: Sorokai (K. Miyabe & T. Miyagi! Aug. 13, 1906)—Russian Saghalin: Alexandrovski (M. Takamatsu! July 30, 1905); Pilewo (Miyabe & Miyagi! Aug. 13, 1906).

DISTRIB. Amur-region and Maritime Province of Siberia, Saghalin and Rebun Island.

The present variety is quite common in Saghalin, where it is most widely distributed. It is, however, not yet collected in the main island of Hokkaido, being known only from Rebun. Its general characters are intermediate between those of the two preceding varieties. The flowers are of medium size, and are not so loosely set as in the var. *yezoense*.

In our floral region, at least, the present form deserves to be treated as a distinct variety together with two others already described.

Subspec. *B. villosum* (Rud.) Brand, l. c. p. 38.

P. villosum Rud. ex Georgi, Besch. Russ. Reich. 3/4. p. 781 (1800).

P. acutiflorum Willd. ex Roem. et Schult. Syst. 4. p. 792 (1819); Benth. in DC. Prodr. 9. p. 318 (1845); Eastwood, in Bot. Gazette 33. p. 286 (1902).

P. coeruleum Linn. β . *acutiflorum* Ledeb., l. c. p. 84; Trautv. et Mey., l. c. p.

69; Regel et Tiling, Fl. Ajan. p. 112 (1859); Herder, l. c. p. 201; Kurtz, in Engl. Bot. Jahrb. 19. p. 399 (1895).

P. coeruleum Koizumi, in Tokyo Bot. Mag. 25, p. 218 (1911).

NOM. JAP. *Kyokuchi-hanashinobu*, (nov.).

HAB. *Saghalin*. Toyohara-district: Takinosawa (T. Miyake! June 29, 1906); Sekiguchi-toge (T. Miyake! June 30, 1906); Osaka (T. Miyake! July 1, 1906).

Behring Sea Region. E. Siberia: East-Cape (H. Hashimoto!, *alias* Yokoyama, Aug. 4, 1907); Anadyr (N. Hashimoto! Aug. 14, 1907); St. Lawrence Bay (N. Hashimoto! Aug. 8, 1907),—Behring Island (N. Hashimoto! Aug. 26, 1907).—Alaska, Nome (N. Hashimoto! Aug. 6, 1907).

DISTRIB. Eastern Siberia, Saghalin, Manchuria, Aleutian Islands, Alaska, and British North America.

Although we have followed here the monographer Brand in the nomenclature of this plant, yet we could not help thinking that the present subspecies may be worth after all of a specific rank, especially when we examine a large series of specimens collected from the regions around the Behring Sea, the original home of the plant. An acute deltoid tip of the corolla-lobe and shaggy-haired calyx are very characteristic. The corolla-lobes, as they fade in color, often leave behind deeper colored spots giving to them a fine punctate or mottled appearance. The last mentioned character is also observable in the Saghalin specimens.

Brand seems to have considered the Saghalin *Polemonium* to be entirely of this type. The examination of a large number of specimens collected by Messrs. T. Miyake, T. Miyagi and one of us in different parts of Saghalin shows an interesting fact, that the *villosum*-type is localized around a small area in the central portion between Mauka and Vladimilovka. The most common form in Saghalin, as has already been stated, is of the var. *laxiflorum*, and next to it the var. *racemosum*.

3. *Polemonium humile* Willd., ex Roem. et Schult. Syst. 4. p. 792 (1819): Peter in Engl. et Prantl, Nat. Pfl.-fam. IV. 3a. p. 52 (1891).

P. pulchellum Bunge, var. *humile* Ledeb., l. c. p. 84 (1847-49).

P. coeruleum Linn. var. *humile* Herder, l. c. p. 202; Kurtz, l. c.

P. lanatum Pall. var. *humile* Brand, l. c. p. 40.

NOM. JAP. *Hime-hanashinobu*, (nov.).

HAB. *Hokkaido*. Prov. Chishima or Kurile Islands: Shumshu, in the vicinity of Bettobu (S. Yokoyama! Sept. 22, 1893).

Kamtschatka. (S. G. Littledale! 1900).

DISTRIB. Widely distributed in the arctic and subarctic regions of Europe and Asia, from Spitzenberg to Kamtschatka.

Our plant, even when fully matured, does not attain the height of more than 15 cm. The base of the stem is villose, and leaflets are ciliate on the margin but not glandular. Pedicels are generally longer than the length of calyx. The upper flowers in an inflorescence have often a shorter pedicel, while the lower flowers have always a longer one.

Botanical Institute, College of Agriculture,
Tohoku Imperial University, Sapporo, Hokkaido.

Dec. 25, 1912.

摘 要

北海道植物志を編纂せんが爲め、本學所藏の標本を調査するに當り、未だ學界に發表せられざる種類、若しくは已に發表せられたるも、其記載甚だ不完全なるものに遭遇する事少なしとせず。是等植物研究の結果は、漸次北海道植物志料なる名目の下に發表せんとす。尙種類の分布及び變化を闡明せんが爲め、北海道に隣接せる諸地方の植物に論及する事あるべし。

1. *Delphinium brachycentrum* Ledeb. ちしまひゑんさう(新稱)

多年生草本にして、高さ尺に充たず。葉は掌狀を呈し表裏兩面に毛あり。花は ひゑんさう に似て、深藍色、頗る美なり。本種は1842年露人レーアホニアにより、新種として發表せられたるものにして從來單に カムチャカ 地方より知られたるものなりしが、茲に本種の一新産地を加へたるものとす。尙ほ本屬は元來亞細亞大陸に於ては、普通なるものなれども、未だ日本群島に之を産するを知らざしが、今や此種の發見と共に、其植物志中に一屬を新たに加へ得たるを悦ぶ。本種は櫻井戀氏の千島幌筵島に於て採集し、當教室に寄贈せられたるものなれば、深く同氏の好意を謝す。

2, *Polemonium coeruleum* Linn. はなしのぶ

北海道並に樺太に産する はなしのぶ は、多くの變種を含むを以て、茲に はなし

のぶ科専攻學者 プラント 氏の説を採用し、これを二亞種に大別し、更に著者の見解に依り、第一亞種に新たに三變種を屬せしめたり。

Subspec. A. **vulgare** Brand.

Var. α . **yezoense** Miyabe et Kudo. ねぞはなしのぶ(新稱)

明かに一新變種にして、花序の開張せる、葉の大にして葉柄の基脚有毛なる、一見他と區別し得べき特點少からず。この變種は札幌附近に普通なるのみならず、十勝石狩以南渡島に渉り廣く分布し、其の花の美麗なる、恐くははなしのぶ中之れに及ぶものなかるべく、從ひて園藝植物として愛賞せらるゝに至るべし。

Var. β . **racemosum** (Regel) Miyabe et Kudo. くしろはなしのぶ(新稱)

此の變種は北海道にては釧路、樺太にては豊原並にシツカ地方に分布するのみならず、大陸にては黒龍江及び烏斯里地方に渉り、廣く分布し、小なる花、細小なる小葉、總狀花序に類する有限花序等は易しく他と區別し得べき要點となす。

Var. γ . **laxiflorum** (Regel) Miyabe et Kudo. からふとはなしのぶ(新稱)

其性質前二者の中間に位し、樺太に最も普通なるものにして、西海岸、海馬島、大泊地方、敷香地方、露領樺太等を経て、遠く黒龍江地方並に沿海洲地方に連續する變種にして、北海道にては僅に禮文島に發見せられたるのみ。

Subspec. B. **villosum** Brand. きよくちはなしのぶ(新稱)

前出の三變種は花瓣の上半部略圓形を呈し、從ひて第一亞種に屬すべきものなれども、本亞種にありては、花瓣の上半部三角狀を呈し、萼も亦白色の長毛を密生し、重に亞細亞の極地、ベーリシグ海沿岸等に産するものなるが、更に南下して滿洲に及ぶ。樺太豊原方面に自生するものは、明かに此の亞種と認むべきものなり。

3. **Polemonium humile** Willd. ひめはなしのぶ(新稱)

矮生なる多年生草本にして、高さ五六寸、莖は叢生にして脚部に毛あり。小葉卵形若しくは橢圓形をなし兩面に毛あり、葉邊にある毛は密腺を有せず。我が腊葉室に藏せるものは、千島占守島並にカムチャツカにて採集せられたるものなれども、此種は廣く歐羅巴並に亞細亞の極地に分布す。