

## Minoru SAITO\*: Notes on moss flora of Hokkaido\*\* (1)

齊藤 実\*: 北海道蘚類植物報告\*\* (1)

1) *Pogonatum rubellum* Horikawa et Saito, sp. nov. (Fig. 1).

Planta parva, caespitosa vel sparsa, rubiginosa vel rubida, rigidisculis. Caulis erectus, simplex, brevis, tantum 1-3 mm altus. Folia incurvata, madida divaricata,

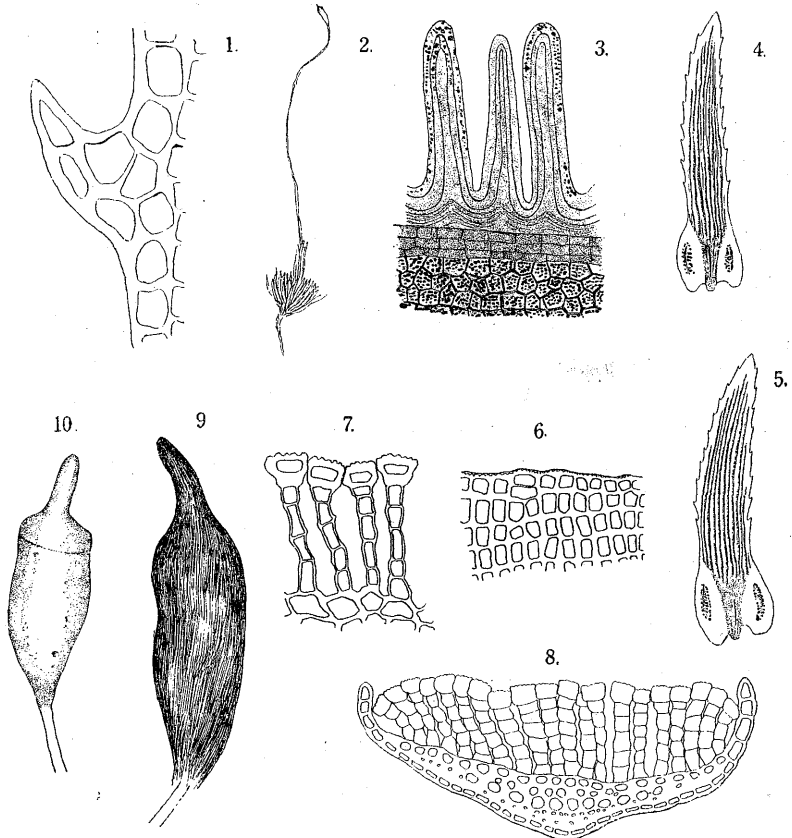


Fig. 1. *Pogonatum rubellum* Horikawa et Saito. 1. Marginal cells of leaf,  $\times 600$ . 2. Plant,  $\times 3$ . 3. Peristome,  $\times 150$ . 4, 5. Leaves,  $\times 28$ . 6. Side view of lamella,  $\times 280$ . 7. Cross section of a few lamellae,  $\times 280$ . 8. Cross section of leaf,  $\times 200$ . 9. Capsule covered by calyptra,  $\times 28$ . 10. Capsule,  $\times 28$ .

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e basi late vaginantia lineal-lanceolata, subacuta, in medio folii ad 2.5-3.5 mm longa, 0.4-0.5 mm lata (in parte vaginarum 0.7-0.9 mm longa, 0.6-0.8 mm lata), costa angusta minor, dorso superne haud serratulis, margine serrata, serratulis acutis, duo vel tres cellulis. Lamella numerosa ca 20-35, 4-7 cellula alta, in sectione transversali cellula marginalis major, quadrata, papillosa. Calyptra albicans in basi et fusca in apice, capsula vix tegens. Seta ad 0.8-1.8 cm alta, rubello-flava, superne flexuosa. Capsula oblonga, parum inclinata, 1.4 mm longa, 0.7 mm crassa. Peristomium rubro-fuscum. Spori subvirides.

Nom. Jap. Akasugigoke (nov.).

Hab. On sandy soil, at about 1200 m above sea-level. Hokkaido, Prov. Kushiro: Mt. Oakan (M. Saito, Aug. 4, 1951 No. 5512, 5538 — Type in Herb. Furano High School).

2) **Pogonatum capillare** (Rich.) Brid. Bryol. Univ. **2**: 127 (1827) (Fig. 2).

*Polytrichum capillare* Rich., Michx. Fl. Bor. Am. **2**: 294 (1803)—*Pogonatum yuccaefolium* Beauv. Prodr. 85 (1805)—*Polytrichum dentatum* Brid. Sp. Musc. **1**: 66 (1806)—*Polytrichum capillare* var. *minus* Wahlenb. Fl. Lapp. 348 in part (1812)—*Polytrichum urnigerum* var. *capillare* Wahlenb. Fl. Suec. (Ed. 1) **2**: 739 (1826)—*Pogonatum dentatum* Brid. Bryol. Univ. **2**: 122 (1827)—*Pogonatum intertextum* LaPyl., Brid. Bryol. Univ. **2**: 742 (1827)—*Pogonatum longidens* Angstr. Thed. Nya. Bot. Not. (1852)—*Polytrichum capillare* var. *orycalyx* Lindb. Bot. Not. 137 (1867)—*Polytrichum capillare* var. *dentatum* Lindb. Acta. Sci. Fenn. **10**: 266 (1872)—*Polytrichum Wahlenbergii* Kindb. Rev. Bryol. **21**: 37 (1894)—*Pogonatum dentatum* var. *minus* Hag. Danske Kgl. N. Videns. Saellsk. Skrift. **1913** (1): 32 (1914).

Nom. Jap. Kesujisugigoke.

Hab. On sandy soil, ranging about 1100-2100 m above sea-level. Hokkaido, Prov. Kitami: Mt. Rishiri (M. Saito, Aug. 10, 1952 No. 9517, 9537); Prov. Ishikari: Mt. Tokachi~Mt. Daisetsu (Nishiki-daira~Tomuraushi-kitanuma) (M. Saito, July 26, 1951 No. 5032); Prov. Tokachi: Mt. Bibairo (M. Saito, Aug. 6, 1954 No. 20586a); Prov. Iburi: Mt. Yōtei (H. Ochi, July 19, 1953 S. No. 13717).

Area Geogr. Europe, Japan, N. America.

Though this species was reported in our country by Mr. Iishiba and Dr. Sakurai, I have never heard of its exact place. But I found this species on Mt. Daisetsu in 1951, and on Mt. Rishiri in 1952. The marginal cells of its lamella are remarkably large, and the cross section of lamella is rectangular, and has pa-

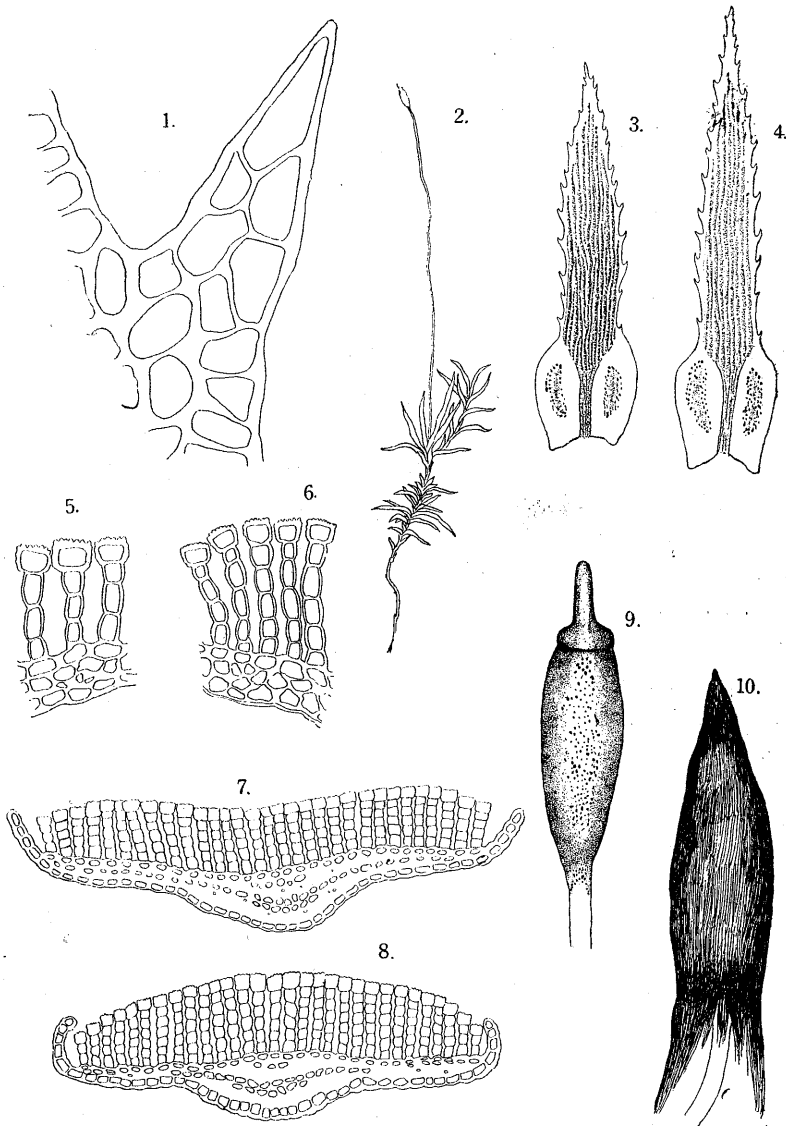


Fig. 2. *Pogonatum capillare* (Rich.) Brid. 1. Marginal cells of leaf,  $\times 600$ . 2. Moist plant,  $\times 3$ . 3, 4. Leaves,  $\times 28$ . 5, 6. Cross section of a few lamellae,  $\times 280$ . 7, 8. Cross section of leaves,  $\times 150$ . 9. Capsule,  $\times 28$ . 10. Capsule covered by calyptra,  $\times 28$ .

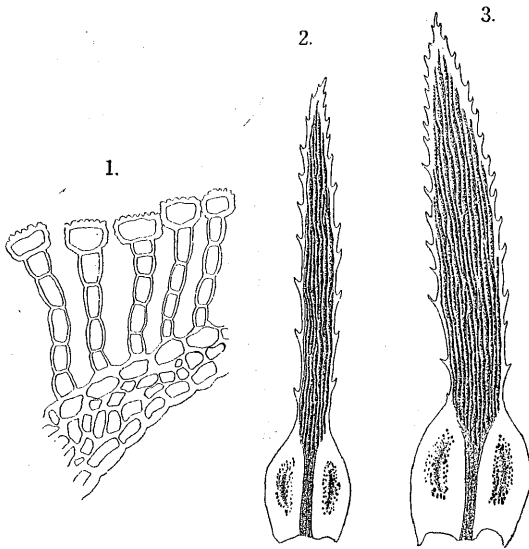


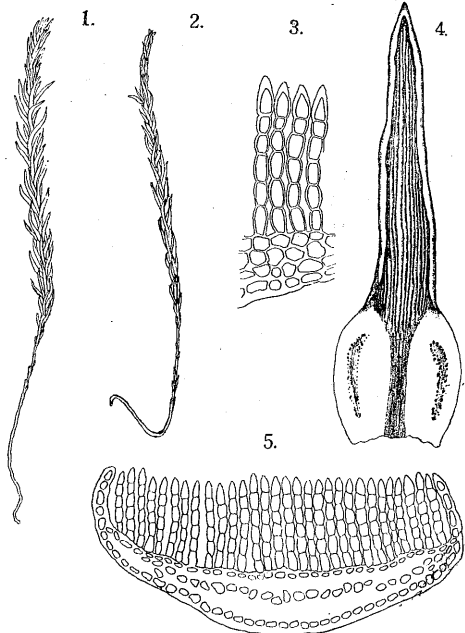
Fig. 3. *Pogonatum capillare* (Rich.) var. *incurvum* Horikawa et Saito. 1. Cross section of a few lamellae,  $\times 280$ . 2, 3. Leaves,  $\times 28$ .

1570m above sea-level. Hokkaido, Prov. Kitami: Mt. Rishiri (M. Saito, Aug. 10, 1952 No. 9529—Type in Herb. Furano High School); Prov. Hidaka: Meguro-mura (Toyonibashi ~ Toyoninuma) (M. Saito, May 5, 1954 No. 18228).

4) ***Polytrichum norvegicum*** Hedw. Sp. Musc. Frond. 99, pl. 22, f. 1-4 (1801) (Fig. 4).

*Polytrichum Oederi* Hedw. Sp. Musc. Frond. 99 (1801), as

Fig. 4. *Polytrichum norvegicum* Hedw. 1. Moist plant,  $\times 3$ . 2. Dry plant,  $\times 3$ . 3. Cross section of a few lamellae,  $\times 300$ . 4. Leaf,  $\times 28$ . 5. Cross section of leaf,  $\times 150$ .



pillae. Here, I should like to report the exact localities of this species in our country.

3) ***Pogonatum capillare*** (Rich.) Brid. var. ***incurvum*** Horikawa et Saito, var. nov. (Fig. 3).

A typo differt: Planta luteo-virens et minor. Caulis ad 1-2cm altus. Folia sicca incurvata, angustiora et longiora.

Nom. Jap. Rishirisugigoke (nov.).

Hab. On soil, at about

synonym—*Polytrichum crassisetum* Lam. & De Cand. Fl. France Ed. 3, 486 (1805)—*Polytrichum septentrionale* Beauv. 86 (1805), not of Brid, Ment. Musc. 4: 198 (1819)—*Polytrichum sexangulare* Hoppe, Bot. Tasch. 1799: 128 (1800); also Web. & Mohr. Bot. Tasch. 20 (1807)—*Polytrichum helveticum* Schleich. Cent. Pl. Helv. 3, No. 16 (1815)—*Polytrichum sexangulare* var. *nivale* Kindb. Hedw. 35: 67 (1896).

Nom. Jap. Daisetsusugigoke (nov.).

Hab. On ground under *Pinus pumila*, at about 1800 m above sea-level. Hokkaido, Prov. Ishikari: Mt. Tokachi~ Mt. Daisetsu (Goshikiga-hara) (M. Saito, July 27, 1951 No. 5103).

Area. geogr. Europe, N. America, Asia.

This species is a new addition to the flora of Japan.

On my way from Mt. Tokachi to Mt. Daisetsu in 1951, I found a *Polytrichum* at Goshikiga-hara (1800 m above the sea-level) which seemed to be an unusual species in our country. The specimens collected were all sterile. As I have never found it anywhere else in spite of my frequent travellings, I assume that the locality of this species is extremely limited to a certain area.

5) ***Polytrichum alpinum*** L. var. ***Macounii*** (Kindb.) Card. & Thér., Proc. Wash. Acad. Sci. 4: 328 (1902)(Fig. 5).

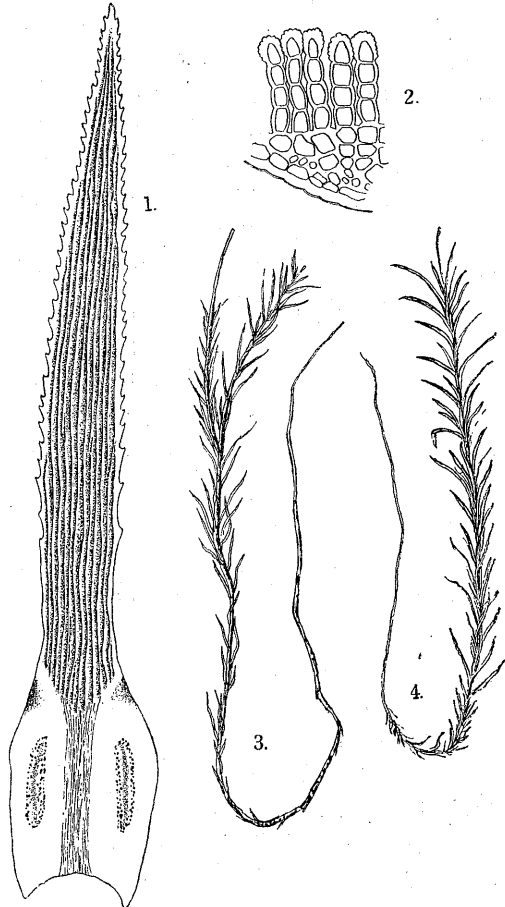


Fig. 5. *Polytrichum alpinum* L. var. *Macounii* (Kindb.) Card. & Thér. 1. Leaf.  $\times 22$ . 2. Cross section of a few lamellae,  $\times 28$ . 3, 4. Moist plant,  $\times 2$ .

*Pogonatum Macounii* Kindb. Bull. Torr. Club. **16**: 96 (1889)—*Polytrichum Macounii* Kindb. Birdrag. 453, according to Paris Index Bryol. Ed. 2, **4**: 49 (1905).

Nom. Jap. Ezomiyamasugigoke (nov.).

Hab. On soil in subalpine region, at about 1100 m above sea-level. Hokkaido, Prov. Ishikari: Mt. Soranuma (M. Saito, June 21, 1953 No. 12980).

Area geogr. Asia, Alaska, N. America.

This species is a new addition to the flora of Japan.

1. **アカスギゴケ**(新種) 阿寒国立公園内, 雄阿寒岳にて採取の赤褐色の小蘚。ラメラの頂端細胞の横断面が方形なのは, *Pogonatum capillare* と似ている。

2. **ケスジスギゴケ**(日本新産?) 既に飯柴氏及び桜井博士の報告があるが, 産地が明らかでないので, 本邦における確実な産地として北見国利尻山, 日高国美生岳, 胆振国羊蹄山等の数ヶ所をあげる。

3. **リシリスギゴケ**(新変種) 北見国利尻山及び日高国目黒村豊似沼での採品。基本種に比較してやや小型, 葉はより狭長, 乾けば巻縮する。

4. **ダイセツスギゴケ**(新称) グリーンランド, アラスカからモンタナ, オレゴンにかけて分布しているが, 本邦においても筆者が1951年十勝岳から大雪山まで峯伝いに80余軒縦走の途中, 五色ヶ原(海拔1800m)において採取した。その後かなり精密な調査にもかかわらず他の地域からは発見されないと見ると本道における分布は限られているものと思われる。

5. **エゾミヤマスギゴケ**(新称) 石狩国空沼岳での採品。主としてアラスカからワシントン州にかけての太平洋岸に分布する。本邦からは未報告のもの。

御指導頂いた廣大教授堀川博士に深甚なる謝意を表します。

## ○ヒメカイウの産地 (水島正美) Masami MIZUSHIMA: On the locality of *Calla palustris*.

植物分類地理 **16**: 55 (1955) に小山鉄夫氏が「ヒメカイウが青森県下北半島に産し, 之は本州には初発見である」旨を記された。小生も同地方の恐山(オソレザン)ウソリ湖畔にえているが, 本種が本州に産することは既に岩淵初郎氏が少くとも2回に亘り陸中焼石岳に産して珍品であることを活字に示されている。大井博士の御話により村田源氏を煩わして京都大学の腊葉庫を調べて載き, 福田裕氏の採品 No. 23 (陸中焼石岳, 1931年7月26日)を小泉源一先生が同定しておられるとの御返事を得た。なお本種は朝鮮半島咸鏡南道の赴戦高原にも産する。満洲には知られていたが朝鮮には未報告であった。終りに御助言を戴いた原, 大井岡博士, 村田源, 菊池政雄の両氏に御礼申し上げる。

*Calla palustris* L., which has been reported from Manchuria, is a new addition to the Korean flora (Fusen plateau, prov. Kannan in northern Korea).