ART. III. BRYOPHYTA (BRYOPHYTES) OF SOUTHAMPTON ISLAND.

BY O. E. JENNINGS.

The Bryophytes (Mosses and Hepatics) enumerated in the following list were collected by Dr. George Miksch Sutton on Southampton Island, Hudson Bay, 1929-1930, on an expedition sponsored by Mr. John B. Semple. The specimens are mostly sterile and, in many cases, are rather fragmentary, having been extricated from among the matted tufts of other species of mosses. Six of the seven species of Hepatics were thus obtained, they being minute forms easily overlooked in the field, especially when growing amongst tufts of relatively much larger mosses.

MUSCI (MOSESSES).

The collections of mosses obtained by Dr. Sutton on Southampton Island consist of thirty-six packets, only three of which contain specimens in fruit. There were represented, altogether, twenty-seven species. Most of the species are those of general distribution through the temperate or cooler temperate regions and extending here and there into boreal localities. Four of the species (*Dicranum grænlanticum*, *Voitia hyperborea*, *Cinclidium arcticum*, and *Polytrichum hyperboreum*) are distinctly Arctic in their distribution, and it is of note that two of these, *Voitia hyperborea* and *Cinclidium arcticum*, apparently find on Southampton Island the most southerly extension of range yet recorded for them. *Seligeria brevifolia* is apparently new to North America, and one species is described as new, *Pyloisia Suttoni*.

Family SPHAGNACEÆ.

1. *Sphagnum fimbriatum* Wilson; Hooker f. & Wilson.

Sphagnum fimbriatum Wilson; Hooker f. & Wilson, in Hooker f. Fl. Antarct., p. 398 (1846).

A bog moss very widely distributed in the North and South Temperate regions.

Family SELIGERIACEÆ.

2. *Seligeria brevifolia* (Lindberg) Lindberg.

Seligeria pusilla var. *brevifolia* Lindb., Ofv. K. Yet.-Ak. Forh. 21:187 (1864).

Seligeria brevifolia Lindberg, K.S. Yet.-Ak. Handl. 28: (No. 10): 84 (1890).

This species ranges from Switzerland to Siberia, Finland, and Scandinavia. It has not been reported from Greenland or Alaska, and, so far as we can find, Dr. Sutton's specimens mark the first indication of its presence in the New World.

Collected July 30, 1930.

Family DICRANACEÆ.

3. *Dicranum Blyttii* Bruch, Schimper, & Guembel.

Dicranum Blyttii Bruch, Schimper, & Guembel, Bryol. Eur. Fasc. 37/40:26. t. 16 (1847).

This moss grows in dense tufts forming a peaty turf and it ranges from the Alps to

England, Finland, and Spitzbergen; and, in North America, from New England to Anticosti and Greenland, and from Idaho to the Yukon.

Collected July 10-12, 1930.

4. *Dicranum fuscescens* Turner.

Dicranum fuscescens Turner, *Musc. Hibern.*, p. 60, Pl. 5, fig. 1 (1804).

The range of this moss is from the Caucasus to Japan, northern Siberia, and Spitzbergen; and, in North America, from Newfoundland to Greenland, and from Oregon to Alaska.

Collected July 28, 1930.

5. *Dicranum grœnlandicum* Bridel.

Dicranum grœnlandicum Bridel, *Musc. Recent. Suppl.* 4:68 (1819).

Dicranum labradoricum C. Mueller, *Synop. Musc.* 1:366 (1848).

The specimens, which were collected July 10-12, 1930, form a dense, peaty turf. The characters are those of the species, with the exception that the leaves are a little shorter, being but 2-2.5 mm. long.

This is an almost entirely Arctic species reported from various localities along the Arctic shores and islands of Asia, Europe, and North America, where, according to Brotherus, it ranges northwards to 76° 51', and southwards to Newfoundland and the higher mountains of New England.

Family GRIMMIACEÆ.

6. *Grimmia alpicola* Swartz.

Grimmia alpicola Swartz, *Musc. Succ.*, pp. 27 and 81, Pl. 1, fig. 1 (1799).

Grimmia apocarpa var. *alpicola* Hooker and Taylor, *Musc. brit.*, p. 88 (1818).

The specimen consists of a few fragments separated from among some other mosses and lichens. The species occurs in the mountains of central Europe and in the Sierra Nevadas of North America, and ranges northwards to Finland, Spitzbergen, Greenland, and Alaska.

7. *Rhacomitrium lanuginosum* (Ehrhart; Hedwig) Bridel.

Bryum hypnoides var. *lanuginosum* Ehrhart, *Beitr. z. Naturk.* 2:95 and 186 (1788).

Trichostomum lanuginosum Hedwig, *Descr. Musc. Frond.* 3:3, Pl. 2 (1792).

Rhacomitrium lanuginosum Bridel, *Mant. M.*, p. 79 (1819).

This attractive light colored moss, with silvery hair-points to the leaves, was the most abundant species among Dr. Sutton's collections. Four different collections were made on July 26, 1930. The species is cosmopolitan in suitable habitats, occurring from Fuegia and Australia to various localities in the Arctic regions.

Family SPLACHNACEÆ.

8. *Voitia hyperborea* Greville and Arnold.

Voitia hyperborea Greville & Arnold, *Act. Soc. Wern.* 4:109, Pl. 7 (1825).

Voitia nivalis var. *hyperborea* W. P. Schimper, *Syn. Musc. Eur.*, Ed. 2, p. 21 (1876).

This interesting Arctic moss was collected July 10-12, 1930, intimately associated about half-and-half in tufts with *Bryum pendulum* (Hornschuch) W. P. Schimper, which it super-

ficially rather closely resembles, excepting for its darker and more rounded capsules and more lustrous yellowish setæ.

Thus far the moss has been reported from Nova Zembla, Spitzbergen, Grant Island, Melville Island, and Greenland. Dr. Sutton's station is apparently the most southerly yet discovered.

Family BRYACEÆ.

9. *Webera cruda* var. *minor* W. P. Schimper.

Webera cruda var. *minor* W. P. Schimper, Coroll. Bry. Eur., p. 65 (1856).

Pohlia cruda var. *minor* Moeller, Foerteckn. Sk. Voxt., II, Mossor, p. 32 (1907).

A small tuft of light green color. The species occurs in the higher mountains of Europe, and ranges to Finland. In America it ranges from Minnesota to Labrador and Greenland.

Collected July 21, 1930.

10. *Bryum pendulum* (Hornschuch) W. P. Schimper.

Ptychostomum pendulum Hornschuch, Fl., Syll. I, p. 64 (1822).

Bryum pendulum W. P. Schimper, Coroll. Bryol. Eur., p. 70 (1856).

This species ranges from the Caucasus and the Himalayas northwards to the Arctic. It occurs on Spitzbergen; and, in North America, it ranges from the northern United States to Greenland and the Mackenzie River delta.

The specimen is intimately mixed with *Voitia hyperborea* Greville and Arnold.

Family MNIACEÆ.

11. *Cinclidium arcticum* (Bruch, Schimper, and Guembel) W. P. Schimper.

Mnium (*Cinclidium*) *arcticum* Bruch, Schimper, and Guembel, Bryol. Eur., fasc. 31 (Vol. IV), Suppl. 1, p. 2, Pl. 2 (1846).

Cinclidium arcticum W. P. Schimper, Coroll. Bryol. Eur. p. 80 (1860).

Dr. Sutton made two collections of this moss; July 10-12, and July 17, 1930. Below the bright yellowish-green tips, the tufts take on a somewhat purplish brown, a quite unusual color.

This species is purely Arctic. It has been found in Arctic Siberia, Finland, Lapland, Bear Island¹, Spitzbergen, and Arctic North America. The most commonly reported species of *Cinclidium* for Arctic North America is *C. subrotundum* Lindberg (Newfoundland, Labrador, Greenland, Alaska) but the Southampton Island specimens seem rather to belong to *C. arcticum*. This is the most southern record for the species.

Family AULACOMNIACEÆ.

12. *Aulacomnium palustre* (Linnæus) Schwaegrichen.

Mnium palustre Linnæus, Sp. plant. 1: Ed. 2: 1110 (1753).

Aulacomnium palustre Schwaegrichen, Musc. frond., Suppl. 3, pt. 1, fasc. 1, Pl. 216 (1827).

This moss occurs commonly in suitably cool, moist, or swampy habitats over almost the whole earth. Northwards it ranges into Arctic Eurasia, and it has been reported from Spitzbergen, Greenland, Baffin's Land, Herschel Island, and Arctic Alaska.

¹The Bear Island referred to in this article is situated about half-way between Norway and Spitzbergen. This is not the Bear Island mentioned in Dr. Sutton's paper.

13. **Aulacomnium turgidum** (Wahlenberg) Schwaegrichen.

Mnium turgidum Wahlenberg, Fl. lapp. p. 351, Pl. 23 (1812).

Aulacomnium turgidum Schwaegrichen, Sp. Musc. frond., Suppl. 3, pt. 1, fasc. 1 (1827).

The leaves of the specimens collected July 10-12, 1930, are somewhat shorter (about 2 mm. long and 1.25 mm. wide) than described for the species, but otherwise the specimens seem quite typical.

The species is mainly Arctic in distribution, occurring from the Alps to Spitzbergen; from Japan to Arctic Siberia; and from the Adirondacks to Greenland, Melville Island, and Alaska.

Family ORTHOTRICHACEÆ.

14. **Orthotrichum anomalum** Hedwig.

Orthotrichum anomalum Hedwig, in Timm, Prodr., No. 734 (1788).

Collected July 26, 1930. This is a common species of Eurasia, northern United States, and Canada, reaching to the north as far as Greenland and Alaska.

Family THUIDIACEÆ.

15. **Thuidium abietinum** (Linnæus) Bruch, Schimper, and Guembel.

Hypnum abietinum Linnæus, Sp. pl., p. 1126 (1753).

Thuidium abietinum Bruch, Schimper, and Guembel, Bryol. Eur., fasc. 49-51, Vol. 5, p. 9, Pl. 5 (1852).

Some fine specimens of this moss were collected by Dr. Sutton on June 27, 1930, although all are sterile. In Eurasia it ranges from Kashmir and the Caucasus, north and west to the Arctic and Atlantic shores, and, in North America, from the northern United States to Greenland, Coronation Gulf, and Alaska.

Family HYPNACEÆ.

16. **Eurhynchium pulchellum** (Hedwig) Jennings, Manual Mosses W. Penn., p. 350 (1913)

Hypnum strigosum Hoffman, Deutsch. Fl. 2:76 (1796).

Eurhynchium strigosum (Hoffman) Bruch, Schimper, and Guembel, Bryol. Eur., fasc. 57-61, Vol. 5, Pl. 519 (1854).

Eurhynchium pulchellum Jennings, Man. Mosses W. Penn., p. 350 (1913).

Widely distributed through the North Temperate regions and extending its range northwards to Siberia, Finland, Greenland, Anticosti, Coronation Gulf, and Cape Barrow.

Collected July 26, 1930.

17. **Brachythecium albicans** (Necker) Bruch, Schimper, and Guembel.

Hypnum albicans Necker, Meth. Musc., p. 180, No. 36 (1771).

Brachythecium albicans Bruch, Schimper, and Guembel, Bryol. Eur., fasc. 52-54, Pl. 553 (1853).

This species is rather widely distributed through the cooler and mountainous parts of Europe northwards to Finland; and, in North America, it extends from Cape Breton Island and California northwards to Greenland and Alaska.

18. **Camptothecium lutescens** (Hudson) Bruch, Schimper, and Guembel.

Hypnum lutescens Hudson, Fl. Angl., p. 421 (1762).

Camptothecium lutescens Bruch, Schimper, and Guembel, Bryol. Eur., Fasc. 52-54, Pl. 558 (1853).

Distributed through Europe northwards to Finland, this moss occurs, in America, chiefly west of the Rockies, from California northwards to Alaska and eastwards to Coronation Gulf, also Greenland.

19. **Camptothecium nitens** (Schreber) W. P. Schimper.

Hypnum nitens Schreber, Spicil. Fl. Lips., p. 92 (1771).

Camptothecium nitens W. P. Schimper, Synop. Musc. Eur., Ed. I, p. 530 (1860).

This species is widely distributed through Eurasia and cool Temperate North America, reaching to the north as far as northern Siberia, Finland, Bear Island, Spitzbergen, Greenland, Melville Island, Northwest Territory, and Alaska.

20. **Drepanocladus uncinatus** (Hedwig) Warnstorf.

Hypnum uncinatum Hedwig, Sp. Musc. Frond. 4:65, Pl. 25 (1797).

Drepanocladus uncinatus Warnstorf, Beih., Bot. Centralbl. 13:417 (1903).

This moss, common in cool shaded places in Temperate regions of the Northern Hemisphere, extends into both the Arctic and Antarctic zones. It occurs on Spitzbergen, Greenland, and has been reported from various localities about Hudson Bay and westward to Alaska.

21. **Drepanocladus Sendtneri** (Schimper) Warnstorf.

Hypnum Sendtneri Schimper, Musc. Eur. Nov., fasc. 3-4, Hypnum, p. 2, Pl. 2 (1866).

Drepanocladus Sendtneri Warnstorf, Beih., Bot., Centralbl. 13:400 (1903).

The range of this moss is rather general across Temperate parts of Eurasia, north to the Arctic. In North America it extends from the northern part of the United States through Canada to the Arctic waters at Dolphin and Union straits about nine hundred miles west of Southampton Island. Dr. Sutton's collection apparently considerably extends the range of the species into mid-northernmost Canada.

Collected July 6, 1930.

22. **Drepanocladus fluitans** (Linnæus, Hedwig) Warnstorf.

Hypnum fluitans Linnæus, Fl. Suec. (Ed. 2), p. 899 (1755).

Hypnum fluitans Hedwig, Sp. Musc. Frond., p. 296 (1801).

Drepanocladus fluitans Warnstorf, Beih., Bot. Centralbl. 13:404 (1903).

This species, which, in one or another of its various forms extends from New Zealand to the Arctic, is known from the Southampton Island collections thus far only from a single branch extracted from among other mosses collected on July 26, 1930. The species, in its inclusive sense, extends to Finland and Spitzbergen, Greenland, Labrador, Bernard Harbor in northwestern Arctic Canada, and Alaska.

23. **Campylium polygamum** (Bruch, Schimper, and Guembel) Bryhn.

Amblystegium polygamum Bruch, Schimper, and Guembel, Bryol. Eur. 55-56, p. 16, Pl. 10 (1853).

Campylium polygamum Bryhn, D.K.N. Vid. Selsk. Skrift., p. 61 (1893).

The range of this species is from Japan and Siberia through central and western Europe to Finland, Bear Island, and Spitzbergen; and in America, from Virginia, Wisconsin, and Washington, to Labrador, Greenland, and the Yukon district (Canada).

24. **Pylaisia Suttoni** Jennings, sp. nov. (Pl. XXX, figs. 1-19).

Yellowish-green, lustrous; in thin closely interwoven mats. Stems prostrate, irregularly pinnate, bearing short, ascending, to erect, branches which are about 5-7 mm. long. Stem-leaves mostly 0.6-0.8 mm. long, slenderly acuminate from a narrowly triangular-ovate base, entire to subdenticulate towards the apex; the margin plane, the base sub-auriculate, ecostate. Branch-leaves ecostate; 0.6-1.0 mm. long, 0.25-0.3 mm. wide; ovate, slenderly acuminate, somewhat secund or, in part, somewhat falcately secund, marginally plane, entire or sometimes faintly denticulate towards apex. In cross-section the outer one or two layers of cells of the stem are small and densely incrassate, the inner much larger and thinner walled. The median and upper leaf-cells are relatively thick-walled, linear-vermicular, about 1:15-20, the median being about 60-80 long; the basal cells shorter and wider, towards the alar portion becoming oblong-hexagonal or rhomboid-hexagonal. The alar cells of the stem-leaves are few in number, somewhat incrassate, and about 1:2-4. The alar cells of the branch-leaves form an indistinct patch of about 7-12 more or less quadrate and sub-inflated hyaline cells. The inner perichætial leaves are rather broadly ovate and clasping, slenderly acuminate, and 1.0-1.3 mm. long. The seta is castaneous, mostly erect, or erect-ascending; 1-1.2 mm. long, smooth, and when dry dextrorsely twisted. The capsules are oblique or slightly arcuate, smooth, castaneous, 1.1-1.5 mm. long, about 3:1, narrowly oblong-cylindric, rather gradually tapering at the base, the mature capsules usually slightly constricted below the mouth when dry. Operculum a low obtuse or mammillate cone about as wide as high. Peristome hypnoid; the teeth lance-subulate, pale yellow, finely cross-striolate below, hyaline and papillose above; the segments narrower but a little longer than the teeth, carinately cleft between the articulations, rising from a basal membrane which comprises two-fifths of the height of the inner peristome; the cilia 2 in number but very short and rudimentary. Exothecal cells incrassate and rather regularly quadrate. Spores smooth, pale yellowish-pellucid, 12-17 μ in diameter.

Ramulorum folia minuta, 0.6-1.0 mm. longa, 0.25-0.3 mm. lata, plus minusve falcato-secunda, ovata, acuminata, plana, superne integerrima vel indistinct denticulata, inferne integerrima, ecostata. Foliorum ramulorum cellulæ mediane et superiores longe lineari-vermiculares, circa 1:15-20, basilares latiores et breviores, ad angulos paucæ, plus minusve rhomboideo-hexagonæ, alares circa 7-12, plus minusve quadrate, leviter inflatæ. Perichætii folia interna ovata, vaginantia, anguste acuminata, 1-1.3 mm. longa. Operculum brevis, convexo-conicum vel mammillatum, obtusum. Peristomii dentes pallide lutescentes, apice hyalini. Peristomii interni dentes articulati quam dentes externi leviter longiores. Cilia 2, brevissima, plus minusve imperfecta.

It is with great pleasure that this species is named after its collector, Dr. George Miksch Sutton. It appears to be most nearly related to *Pylaisia polyantha* (Schreber) Bryologia Europæa, but the leaf-cells are more linear, and those at the basal angles are less distinctly

quadrate and do not form so distinct a group. The capsule of this species is usually slightly curved and the operculum is shorter and more obtuse than that of *P. polyantha*.

Forming thin, closely interwoven mats, apparently over a thin layer of humus on rocks. The TYPE specimens are deposited in the Herbarium of the Carnegie Museum.

25. **Hypnum callichroum** (Bridel) C. Mueller.

Stereodon callichrous Bridel, Bryol. Univ. 2:631 (1827).

Hypnum callichroum C. Mueller, Syn. 2:294 (1851).

A few small sprigs of a moss which was assigned to this species were discovered among other mosses. The specimens are sterile and have leaves about 0.5 to 0.6 mm. long. The species extends from Siberia, through alpine districts of Europe to Finland and Spitzbergen, and has been reported in America from Greenland, Nova Scotia, and Alaska.

26. **Calliergonella Schreberi** (Willdenow) Grout.

Hypnum Schreberi Willdenow. Prodr. Fl. Berol. p. 325 (1787).

Hypnum Schreberi Bruch, Schimper, and Guembel, Bryol. Eur. fasc. 57-61, Pl. 620 (1854).

Pleurozium Schreberi Mitten. Journ. Linn. Soc. 12:537 (1869).

Calliergonella Schreberi Grout, Moss. Fl. N. Am. 3:103 (1931).

This beautiful moss is represented by a collection made on July 6, 1930. The species has a wide distribution in Temperate habitats from Japan to the British Isles and north to Spitzbergen; and, in America, from Ecuador to Greenland, Labrador, and Alaska.

Family POLYTRICHACEÆ.

27. **Polytrichum hyperboreum** R. Brown.

Polytrichum hyperboreum R. Brown, Suppl. Parry's Voyage p. 294, No. 69, 1824, and Flora, Pt. 2, p. 114, no. 69 (1824); (Including *Polytrichum boreale* Kindberg. Bih. K. Sv. Vet-Ak. Handl. Bd. 7, No. 9, p. 52 (1883).

The specimens consist of scattered sterile shoots among other mosses, and are evidently of the form described by Kindberg as *P. boreale*, in which the lamina are indistinctly serrulate above. Most authors do not now recognize this as sufficiently important to warrant the separation of such specimens from the typical form of the species.

The species was originally described by Robert Brown, in 1824, from specimens collected on the Parry Expedition to arctic America. The present known distribution includes localities along the Arctic coast of Siberia, Nova Zembla, Finland, Spitzbergen, Greenland, Melville Island, Labrador, the Yukon district (Canada), and Alaska.

HEPATICÆ (HEPATICS OR LIVERWORTS).

The specimens of Hepatics herewith listed were all found intermixed in tufts of mosses. They are mostly small and were usually growing well down in the tufts and overtopped by the mosses. In the identification of the Hepatics I wish to acknowledge valuable assistance in determining the specimens by Dr. Leslie H. Lanfear.

Family RICCARDIACEÆ.

1. *Riccardia* sp.

There were a few bits of this Hepatic mixed with *Cephaloziella Hampeana* var. *subtilis* (Velenovsky) McVicar.

Family LOPHOZIACEÆ.

2. *Lophozia obtusa* (Lindberg) Evans.

Jungermannia obtusa Lindberg, Musci Scand., p. 7 (1869).

Lophozia obtusa Evans, Proc. Wash. Acad. Sci., 2:303 (1900).

The few specimens found were separated from among the stems of a tuft of mosses and were all sterile. The species is Northern, and has been reported from various localities ranging from alpine regions in Italy to Finland, Sweden, Norway, and, in North America, from Ellesmere Land and Alaska.

Family CEPHALOZIACEÆ.

3. *Cephalozia ambigua* Massalongo.

Cephalozia bicuspidata var. *atra* Arnell, Lebermoosst. Nörd., Norv. p. 10 (1892).

Cephalozia bicuspidata var. *arctica* Bryhn and Kaalaas, Rpt. Sec. Norv. Arct. Exped. "Fram," Bryophyta, p. 44 (1906).

Cephalozia ambigua Massalongo, Spec. Ital. gen. Ceph., Malpighia 21:22 (1907); K. Mueller, Rabenhorst Krypt. Fl. II, p. 26 (1912).

This is a minute arctic-alpine species. Two specimens were found among the tufts of mosses collected by Dr. Sutton. One specimen is fruiting and has stems 4-7 mm. long. The other specimen was sterile and was intermixed with tufts of the moss *Aulacomnium palustre*. The latter specimen of hepatic had leaves more or less acutely 2/5-lobed, with obtuse sinuses; the amphigastria were lanceolate and scattering; and the leaf-cells were about 16-21 μ in diameter.

Family CEPHALOZIELLACEÆ.

4. *Cephaloziella Hampeana* var. *subtilis* (Velenovsky) McVicar.

Cephalozia subtilis Velenovsky, Jat. české, Tiel I, p. 37 (1901).

Cephalozia divaricata var. *Curnowii* Slater, MS.

Cephaloziella rubella var. *subtilis* K. Mueller, Rabenh. Krypt. Fl. II, p. 57 (1913).

Cephaloziella Hampeana var. *subtilis* McVicar, Stud. Handb. Brit. Hep., 2nd Edit., p. 284 (1926).

This variety was first described from central Europe in 1901 and has since been reported from various localities in central Europe and the British Isles, but has not heretofore been reported from America. The plants form a scant, dark-colored mat on raw peat. The leaves are divided three-fourths of the way to the base into two lobes each. The lobes are about 7-12 cells wide at the base, somewhat more than described by McVicar (5-8 or more), and the cells measure about 13-16 μ in diameter. The specimens were intermixed with a few bits of *Riccardia* sp.

Collected July 30, 1930.

Family PTILIDIACEÆ.

5. *Blepharostoma tricophyllum* (Linnæus) Dumortier.

Jungermannia tricophylla Linnæus, Sp. Plant., p. 1135 (1753).

Blepharostomma trichophyllum Dumortier, Rec. d'obs., p. 18 (1835).

A few bits of this Hepatic were found in a tuft of *Dicranum fuscescens* in company with bits of *Scapania compacta*.

Collected July 10-12, 1930.

6. *Ptilidium ciliare* (Linnæus) Hampe.

Jungermannia ciliaris Linnæus, Sp. Pl., p. 1134 (1753).

Ptilidium ciliare Hampe, Prod. Fl. Herc., p. 76 (1836)

Blepharozia ciliaris Dumortier, Rec. d'obs., p. 16 (1835).

The plants were found in two different tufts of mosses, in one case somewhat mixed with the Reindeer Lichen.

Collected July 1, and July 10-12, 1930.

Family SCAPANIACEÆ.

7. *Scapania compacta* (Roth) Dumortier.

Jungermannia compacta Roth, Tent. Fl. Germ., p. 375 (1800).

Jungermannia resupinata Hooker, Brit. Jungerm., Pl. 23 (1812).

Scapania compacta Dumortier, Rec. d'obs., p. 14 (1835).

This Hepatic is stated (McVicar) to mostly occur on rocky banks, rocks, and old walls; but Dr. Sutton's specimen from Southampton Island was found in a tuft of *Dicranum fuscescens* and *Blepharostoma tricophyllum* and apparently on peaty soil. The lobes of the leaves in these specimens are subequal, mostly entire; the leaf-cells are 18-25 μ in diameter, smooth, and with rather prominent trigones.

Collected June 10-12, 1930.

EXPLANATION OF PLATE XXX.

Pylaisia Suttoni Jennings, sp. nov.

- FIG. 1. Individual plant, enlarged 2 diameters.
FIG. 2. Branch, enlarged 10 diameters.
FIG. 3. Stem-leaf, enlarged 30 diameters.
FIG. 4. Apex of stem-leaf, enlarged 320 diameters.
FIG. 5. Median cells of a stem-leaf, enlarged 320 diameters.
FIG. 6. Basal cells of a stem-leaf, enlarged 320 diameters.
FIG. 7a and 7b. Branch-leaves, enlarged 30 diameters.
FIG. 8. Branch-leaf, enlarged 120 diameters.
FIG. 9. Apex of a branch-leaf, enlarged 350 diameters.
FIG. 10. Median cells of a branch-leaf, enlarged 350 diameters.
FIG. 11. Cells at basal angle of a branch-leaf, enlarged 350 diameters.
FIG. 12. Perichæatial leaves at base of seta, enlarged 10 diameters.
FIG. 13a. Lower (smaller) perichæatial leaf, enlarged 30 diameters.
FIG. 13b. Upper (larger) perichæatial leaf, enlarged 30 diameters.
FIG. 14. Apex of a perichæatial leaf, enlarged 320 diameters.
FIG. 15. Median cells of same, enlarged 320 diameters.
FIG. 16. Basal angle of same, enlarged 320 diameters.
FIG. 17. Cross-section of seta, enlarged 150 diameters.
FIG. 18. Capsule and detached operculum, enlarged 15 diameters.
FIG. 19. Piece of mouth of capsule showing exothecal cells, a tooth of the outer peristome, a piece of the inner peristome with two segments, and three spores, all enlarged 150 diameters.

Drawings, by O. E. Jennings, from specimens collected by George M. Sutton on Southampton Island, Hudson Bay, and deposited in the Herbarium of the Carnegie Museum.

Jennings, Otto E. 1936. "Bryophyta (bryophytes) of Southampton Island." *Memoirs of the Carnegie Museum* 12(3), 7–16. <https://doi.org/10.5962/p.234860>

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