The province of the Society thus being one of instruction its success will depend upon the amount of accurate and pertinent information, which it can accumulate for distribution to the public. It is urged therefore that persons who are in a position to witness needless depredations upon our native plants will kindly communicate the details of such cases to the secretary of the Society. The executive board of the Society is especially desirous of securing accurate data regarding the sources of supply to venders of wild flowers on streets and at railway stations, also the present sources of the mountain laurel, holly, and other Christmas greens, which are brought to our cities in astonishing quantities during the winter season. Information will always be welcomed regarding plants to be especially protected, nature of leaflets which should be issued, places where notices should be posted, and names of persons desiring membership in the Society or willing to sustain or participate in its work.

# NOTES ON NORTH AMERICAN GRASSES.

## ELMER D. MERRILL.

ORYZOPSIS CANADENSIS (Poir.) Torr. Fl. N. Y. 2: 433. 1843.

Stipa canadensis Poir. in Lam. Encycl. 7: 452. 1806; Pursh, Fl.

Am. Sept. 1: 72. 1814.

Stipa juncea Michx. Fl. Bor.-Am. 1: 54. 1803, non Linn. 1753. Milium, (sine nomine) Muhl. Gram. 78. 1817.

Milium (?) muhlenbergianum Schultes, Mant. 2: 178. 1824.

Milium pungens Torr. in Spreng. Neue Entd. 2: 102. 1821; & Fl. U. S. 1: 78. 1824.

Oryzopsis parviflora. Nutt. Journ. Acad. Nat. Sci. Phila. 3: 125. 1823.

Oryzopsis juncea B. S. P. Prel. Cat. N. Y. 67. 1888.

Panicum firmum Kunth, Rev. Gram. 1: 37. 1829-35.

Urachne canadensis Torr. & Gray in Trin. & Rupr. Agrost. 3: 17. 1842.

Urachne brevicaudata Trin. Mem. Acad. St. Petersb. VI,2 3: 127. 1835.

According to the Rochester rules, *Oryzopsis canadensis* (Poir.) Torr., is the correct name for this species, as it is the earliest available one, Michaux's name, *Stipa juncea*, being invalidated by *Stipa* 

<sup>&</sup>lt;sup>1</sup> Miss M. E. Carter, Boston Society of Natural History, Boston, Mass.

juncea Linn., and S. juncea, Lam., and accordingly Dr. Britton erred in taking the name Oryzopsis juncea. Stipa canadensis Poir. was based on Michaux's S. juncea. Panicum firmum Kunth, was based on Milium pungens Torr., which is certainly Oryzopsis canadensis. The descriptions of Oryzopsis parviflora Nutt. and Urachne brevicaudata Trin. certainly apply to Oryzopsis juncea. Muhlenberg's description of his Milium No. 3, without name (Milium muhlenbergianum Schultes) scarcely applies to Oryzopsis juncea but is so referred for the present.

MUHLENBERGIA EXPANSA (Poir.) Trin. Uniflor. 193. 1824.

Stipa expansa Poir. in Lam. Encycl. Suppl. 7: 453. 1806.

Trichochloa expansa DC. Hort. Monsp. 151. 1813.

Agrostis rubicunda Bosc. l. c., as syn.

1902

Agrostis trichopodes Ell. Sk. Bot. S. C. and Ga. 1: 135. pl. 8, f. 1., 1817.

Muhlenbergia trichopodes Chapm. Fl. So. U. S. 553. 1860.

There has been some uncertainty as to the identity of Stipa expansa Poir., as it has previously been confused with Agrostis arachnoidea Poir., which is a synonym of Muhlenbergia capillaris (Lam.) Trin. Poiret's full descriptions leave no doubt as to the identity of both these species and his Stipa expansa is certainly the species described by Elliott as Agrostis trichopodes. DeCandolle and Trinius also have full descriptions of the species in question. As Poiret's name is the oldest available one, it should be taken up for the species now known as Muhlenbergia trichopodes (Ell.) Chapm.

Deschampsia arctica (Spreng.).

Deschampsia brevifolia R. Br. Suppl. App. Parry's Voy. 291. 1821, non Aira brevifolia Bieb. Fl. Taur. Cauc. 3: 63. 1819; Aira arctica Spreng. Cur. Post. 32. 1827; Trin. Mem. Acad. St.

Petersb. VI. Sci. Math. Phys. et Nat. 1: 56. 1831.

Recently Mr. Nash¹ correctly considering Deschampsia brevifolia R. Br. an untenable name, changed to Deschampsia brachyphylla, and extended the range of the species south in the mountains to Montana and Wyoming, overlooking the fact that there was already an available published name for the species, Aira arctica Spreng., which was based on Deschampsia brevifolia R. Br., and which must be retained for the species.

A careful study of Robert Brown's original description of this species, its geographical distribution and an examination of all available material is convincing of the fact that Mr. Nash erred in his interpretation of this species, and that his *Deschampsia brachyphylla* (*Deschampsia curtifolia* Scribn.) is not at all the plant described by Robert Brown.

There is in the U.S. National Herbarium a specimen from Grin-

<sup>&</sup>lt;sup>1</sup> Nash in Ryd. Mem. N. Y. Bot. Gard. 1: 37. 1900.

nell Land, collected by Lieut. A. W. Greely in 1883, which we consider to represent Robert Brown's species as it agrees more closely with his description than any other specimens we have seen. This plant represents a most distinct species, and is quite different from the form from the Rocky Mountains referred to Deschampsia curtifolia. Greely's plant is figured and described by Scribner, Bot. Gaz. II: 25. pl.3. fig. A. 1886. Deschampsia brevifolia R. Br., was based on specimens from Melville Island, and Greely's plant from Grinnell Land not only agrees better with Brown's description than do the specimens from the Rocky Mountains but also in geographical distribution. Our interpretation of the species may be erroneous, but this can only be decided by examination of the type of the species in the Herbarium of the British Museum; but whether it is like the plant from Grinnell Land or like the Rocky Mountain specimens, Deschampsia arctica should be the accepted name for the species.

Deschampsia curtifolia Scribn. U. S. Dept. Agric. Div. Agros. Cir. 30: 7. 1901. (Deschampsia brachyphylla Nash in Rydb. Mem. N. Y. Bot. Gard. 1: 37. 1900, excl. syn., non Philippi, Anal. Univ. Chile, 94: 23. 1896; Deschampsia caespitosa setifolia Griseb. in Ledeb. Fl. Ross. 4; 421. 1853, non Deschampsia setifolia Koch, Syn. Fl. Germ. 914. 1837; Aira media Trin. Mem. Acad. St. Petersb. VI. Sci. Math. Phys. et Nat. 1: 57. 1831. p. p.; Deschampsia caespitosa arctica Vasey, Descr. Cat. 53. 1885; Deschampsia caespitosa alpina Vasey in Beal Grasses N. A. 2: 368. 1896; Deschampsia caespitosa brevifolia Vasey in Beal, l. c. 369, non Aira brevifolia Bieb. 1819.)

A densely caespitose form 4 dm. high or less, with numerous narrow basal leaves, very short culm leaves and exserted contracted or spreading panicles 3 to 7 cm. long. Spikelets as in *Deschampsia* 

caespitosa.

This species extends from Alaska, south to the high mountains of Montana, Wyoming and Colorado, and should perhaps more consistently be considered only as a variety of *Deschampsia caespitosa*, as in ascending the mountains one can find all intergrading forms, the plants gradually becoming smaller as one ascends, the typical form of *Deschampsia curtifolia* being found at the higher altitudes. This plant may be the true *Deschampsia arctica* (Spreng.): (*Deschampsia brevifolia* R. Br.).

ERAGROSTIS CAMPESTRIS Trin. Gram. Suppl. 72. 1836.

Poa nitida Ell. Sk. Bot. S. C. and Ga. 1: 162. 1817, non Lam.

Eragrostis nitida Chapm. Fl. So. U. S. 564. 1860.

If this form is to be considered a distinct species, it should be known as *Eragrostis campestris* Trin., which was based on *Poa nitida* Ell., a name invalidated by *Poa nitida* Lam.

Poa Arachnifera Glabrata Vasey Descr. Cat. 81. 1885, nomen; Dewey, Contr. U. S. Nat. Herb. 2: 546. 1894.

This variety is not valid as it was based on a staminate plant. In the pistillate plants the flowering glumes are constantly profusely webbed at the base, and the keel and lateral nerves are densely pilose below, while in the staminate plants the glumes are entirely glabrous and with only a few webby hairs at the base, or sometimes the hairs are entirely wanting.

Poa cuspidata Nutt. in Barton, Fl. Phila. 1: 61. 1818, excl. syn. Poa brevifolia Muhl. Gram. 138. 1817, non Gaud. 1808.

Poa pungens Nutt. Gen. 1: 66. 1818, nec Georgi 1797-1802, nec Bieb. 1808.

Poa brachyphylla Schultes, Mant. 2: 304. 1824.

Nuttall's name Poa cuspidata is the proper one for this species as Poa brevifolia Muhl. is antedated by Poa brevifolia Gaud. In taking up the names Poa cuspidata and Poa pungens it was Nuttall's intention to establish a new and more appropriate name for Poa autumnalis Ell., but he evidently had a misconception of that species for his descriptions apply not to Poa autumnalis Ell., but to Poa brevifolia Muhl. Schultes' Poa brachyphylla was based on Muhlenberg's Poa brevifolia. Poa cuspidata Roth, and P. cuspidata Baxt., were published later than Nuttall's name, which is the earliest tenable name for the species, now described in our manuals as Poa brevifolia Muhl.

Poa ampla sp. nov. A rather stout, erect, glabrous perennial about 15 dm. high, from very stout rootstocks with linear flat leaves and exserted lanceolate purplish panicles about 2.5 dm. long. Culms glabrous throughout; nodes glabrous; sheaths shorter than the internodes, glabrous; ligule firm, truncate, 2 mm. long; leaf-blades plane, acute, somewhat glaucous, glabrous beneath, scabrous above, those of the culm 1.5 to 2.5 dm. long, about 4 mm. wide, those of the innovations marcescent. Panicles interrupted, 2 to 3 cm. in diameter, the common rachis and the branches erect or ascending, scabrous, fasciculate at the nodes, flower-bearing throughout. Spikelets 7 to 8 mm. long, 3-flowered, much exceeding their scabrous pedicels; empty glumes lanceolate, acute, 3-nerved, scabrous on the keels and nerves, the first 3 to 3.5 mm. long, the second about 1 mm. longer; flowering glumes 4.5 to 5 mm. long, lanceolate, acute, rather prominently 5-nerved, minutely punctate-scabrous throughout and more prominently scabrous on the keels and nerves, basal hairs entirely wanting. Palea nearly equaling the glume, scabrous on the keels.

Type specimen collected at Steptoe, Washington by G. R. Vasey,

July 3, 1901, No. 3009.

A peculiar species, related to *Poa nevadensis* and *Poa leckenbyi*, but distinguished from the former by the very prominent rootstocks, plane leaves, short ligule, few-flowered spikelets and more prominently nerved flowering glumes, and from the latter by its scabrous, not pubescent flowering glumes.

Panicularia davyi sp. nov. A rather glaucous erect perennial

5 to 8 dm. high, with scabrous sheaths, rather harsh flat leaves and elongated contracted or open panicles 2 to 3 dm. long. Sheaths overlapping, minutely retrorsely scabrous, ligule membranaceous, acuminate, about 1.5 cm. long. Leaf blades 1.5 to 2 dm. long, about 6 mm. wide, minutely scabrous. Panicles pale, few-flowered, the common rachis glabrous; branches one or two at each node, 5 to 6 cm. long, ascending or spreading. Spikelets about 1 cm. long, 7 to 9 flowered; empty glumes unequal, the first 1 mm. long, the second about 2 mm. long; flowering glumes 3 mm. long, truncate, prominently nerved, scabrous throughout.

Type specimen collected by J. Burtt Davy, No. 6005, July 21,

1899, marsh near Guerneville, Sonoma County, California.

A peculiar species related to *Panicularia fluitans* (L.) Ktze., and *P. borealis* Nash, but differing from both in its retrorsely scabrous sheaths; also from the former in its smaller flowering glumes and from the latter in having the flowering glumes scabrous throughout. Panicularia torreyana (Spreng.).

Poa torreyana Spreng. Neue Entd. 2: 104. 1821; & Syst. 1: 346.

1825

Poa elongata Torr. in Spreng. l. c.; & Fl. U.S. 1: 112. 1824, non Willd. Enum. 1; 108. 1809.

Glyceria elongata Trin. Gram. Suppl. 58. 1836.

Sprengel's name, *Poa torreyana*, should be taken up for this species, as *Poa elongata* Torr., is invalidated by Willdenow's earlier published species under the same name.

BROMUS brachyphyllus sp. nov. A nearly glabrous, pale green, caespitose perennial 3 to 7 dm. high, with numerous rather short leaves and very small exserted few-flowered panicles. Culms slender, puberulent just below the panicle, and densely pubescent at and for a short distance below the nodes, otherwise glabrous; sheaths shorter than the internodes, glabrous; ligule rather firm, about 2 mm. long; leaf-blades firm, plane, glabrous, lanceolate, acute, 5 to 15 cm. long, 5 to 7 mm. wide; those of the culm 2 or 3, ascending, the basal ones numerous, the older ones marcescent and persistent. Panicles pale, erect, 3 to 9 cm. long, the branches spreading or ascending, mostly one-flowered. Spikelets 1 to 2 cm. long; empty glumes unequal, the first very acute, 1-nerved, about 6 mm. long, much narrower than the second which is 8 mm. long, 3-nerved, and abruptly acute, both minutely pubescent; flowering glumes lanceolate, 10 to 11 mm. long, 7-nerved, sparingly pubescent throughout with mostly spreading white hairs 0.5 mm. long or less, bearing just below the acute apex a slender straight awn 3 or 4 mm. in length.

Type specimen No. 2677, W. C. Cusick, collected in open dry pine

forests, Black Butte, Crook Co., Oregon, July 19, 1901.

A remarkable species, at once distinguished from other species in this genus by its comparatively short leaves and very small panicles.

In some respects it approaches *Bromus laevipes* Shear, but is not closely related to that species.

ELYMUS aristatus sp. nov. A rather stout, somewhat glaucous, glabrous, tufted erect perennial about 9 dm. high, with flat leaves; strict erect purplish spikes, subulate empty glumes and awned flowering glumes. Sheaths shorter than the internodes; ligule firm, membranous, about 2 mm. long; leaf-blades 1 to 2 dm. long, about 8 mm. wide, glabrous beneath, striate and somewhat scabrous above. Spikes rather densely flowered, 10 to 14 cm. long, about 5 mm. in diameter, the common rachis scabrous on the margins. Spikelets two or three at each node, 2- to 8-flowered; empty glumes subulate, 0.5 mm. broad at the base, about 12 mm. long, scabrous; flowering glumes lanceolate, 6 to 8 mm. long excluding the awns, sparingly but rather strongly scabrous, tapering into a stout straight scabrous awn which is from 3 to 5 mm. in length.

Type specimen No. 2712, W. C. Cusick, in large clumps, Silver

Creek, Harney Co., Oregon, July 31, 1901.

A species closely related to *Elymus triticoides* Buckl., which it resembles in habit of growth, although not at all stoloniferous, but from which it is distinguished by its much longer empty glumes and long-awned scabrous flowering glumes. In the type of *Elymus triticoides* in the herbarium of the Philadelphia Academy of Natural Sciences the empty glumes are from 6 to 8 mm. long and the flowering glumes nearly or quite glabrous, acute, or bearing an awn about 1 mm. in length.

### THE CHILIAN EMPETRUM IN NEW ENGLAND.

#### M. L. FERNALD.

In August, 1894, Mr. Clarence H. Knowlton and the writer found on the ledges not far above timber line on Saddleback Mt. at the head of the Sandy River, Maine, a luxuriant Crowberry with large juicy reddish or plum-colored fruit. The berries were much larger than the black fruits with which the writer had been familiar on the eastern coast of Maine; and this difference was further emphasized later in the day when at the "pinnacle" of Saddleback (alt. 4450 ft.) the ordinary *Empetrum nigrum* with coal-black fruit was found. But the matter was given little more attention at the time, although Mr. Knowlton soon after reported the form with plum-colored fruit from the slopes of a lower Mt. Saddleback (2200 ft.) in Perkins Planta-



Merrill, Elmer D. 1902. "NOTES ON NORTH AMERICAN GRASSES." *Rhodora* 4, 142–147.

View This Item Online: <a href="https://www.biodiversitylibrary.org/item/14475">https://www.biodiversitylibrary.org/item/14475</a>

Permalink: <a href="https://www.biodiversitylibrary.org/partpdf/187021">https://www.biodiversitylibrary.org/partpdf/187021</a>

## **Holding Institution**

Missouri Botanical Garden, Peter H. Raven Library

# Sponsored by

Missouri Botanical Garden

### **Copyright & Reuse**

Copyright Status: Public domain. The BHL considers that this work is no longer under copyright protection.

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <a href="https://www.biodiversitylibrary.org">https://www.biodiversitylibrary.org</a>.