

## NEW OR NOTEWORTHY GRASSES\*

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In a recent revision of the specimens of grasses from the United States in the U. S. National Herbarium, the following notes that seemed worthy of record were made.

MANISURIS L. Mant. Pl. 2: 300. 1771. *Rottboellia* L. f. Nov. Gram. 23. 1779. *Hemarthria* R. Br. Prodr. Fl. Nov. Holl. 207. 1810. *Coelorhachis* Brogn. in Duperrey, Bot. Voy. Coquille 64. 1831. *Stegosia* Lour. Fl. Cochinch. 51. 1790.

We are considering these groups congeneric under the oldest name.

**Manisuris fasciculata** (Lam.). *Rottboellia fasciculata* Lam. Tabl. Encycl. 1: 204. 1791. *Hemarthria fasciculata* Kunth, Rév. Gram. 1: 153. 1829.

RYTILIX GRANULARIS (L.) Skeels, U. S. Dept. Agr. Bur. Pl. Ind. Bull. 282: 20. 1913. *Cenchrus granularis* L. Mant. Pl. 2: 575. 1771. Skeels has shown that the earliest generic name for this species, hitherto referred to Manisuris and to Hackelochloa, is Rytlix Raf.

**Andropogon stolonifer** (Nash). *Schizachyrium stoloniferum* Nash in Small, Fl. Southeast. U. S. 59. 1903.

HOLCUS SORGHUM L. Sp. Pl. 1047. 1753.

HOLCUS HALEPENSIS L. loc. cit.

Elsewhere<sup>1</sup> have been indicated the reasons for using the name *Holcus* for the group of plants including the sorghums and Johnson grass. *Holcus sorghum* is the type of the genus *Holcus*. The grasses that have been included by recent authors under *Holcus* have received a new generic name *Notholcus* Nash.<sup>2</sup>

CHAETOCHELOA LUTESCENS (Weigel) Stuntz, U. S. Dept. Agr. Bur. Pl. Ind. Inv. Seeds 31: 36. 1914. *Panicum lutescens* Weigel, Obs. Bot. 20. 1772.

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<sup>1</sup> Contr. U. S. Nat. Herb. 12: 195. 1909.

<sup>2</sup> Hitchcock in Jepson, Fl. Calif. 126. 1912. *Notholcus* Nash in Britt. & Brown, Illust. Fl. ed. 2. 1: 214. 1913.

Stuntz has shown that the name *Panicum glaucum* L. should be applied to pearl millet, the grass that has been called *Pennisetum americanum* (L.) Schum. *Chaetochloa glauca* Scribn. is a typonym of this. The grass that has been called *C. glauca* by recent authors should be known as *C. lutescens*.

PENNISETUM GLAUCUM (L.) R. Br. Prodr. Fl. Nov. Holl. 195. 1810.  
*Panicum glaucum* L. Sp. Pl. 56. 1753.

As indicated above the name *Panicum glaucum* was applied by Linnaeus to the grass we call pearl millet, now referred to the genus *Pennisetum* as *P. spicatum*, *P. typhoideum* or more recently as *P. americanum* (L.) Schum. Robert Brown transferred *Panicum glaucum* to *Pennisetum* as *P. glaucum*. The plant he described was the species we have been calling *Chaetochloa glauca* but under the system of nomenclatorial types *Pennisetum glaucum* is a typonym of *Panicum glaucum* and the application of the name rests upon the identity of the latter species, independent of the species described when the transfer is made.

TORRESIA Ruiz & Pav. Syst. Veg. Peruv. Chil. 251. 1798. *Savastana* Schrank, Baier. Fl. 1: 100 & 337. 1789, not *Savastania* Scop. Introd. 213. 1777. *Hierochloë* R. Br. Prodr. Fl. Nov. Holl. 208. 1810.

*Hierochloë* R. Br. is conserved by the Vienna Code but the earlier name *Savastana* Schrank has been used for this genus by botanists working under the American Code. The latter name is, however, invalidated by the earlier homonym *Savastania* Scop. (Melastomaceae). Scopoli gives a generic description but mentions no species. However as he cites *Tibouchina* Aubl. the genus *Savastania* Scop. is properly published. The next name available is *Torresia* Ruiz & Pav. This name was first used in an earlier work,<sup>3</sup> but no species were given, so the name must date from 1798 where it is properly published with the type species *T. utriculata* Ruiz & Pav. The North American species are:

***Torresia alpina*** (Swartz). *Holcus alpinus* Swartz; Willd. Sp. Pl. 4. 937. 1806.

***Torresia macrophylla*** (Thurb.). *Hierochloë macrophylla* Thurb.; Boland. Trans. Calif. Agr. Soc. 1864-65: 132. 1866.

<sup>3</sup> Ruiz & Pav. Fl. Peruv. Chil. Prodr. 125. 1794.

**Torresia mexicana** (Rupr.). *Ataxia mexicana* Rupr.; Fourn. Mex. Pl. 2: 71. 1886.

**Torresia odorata** (L.). *Holcus odoratus* L. Sp. Pl. 1048. 1753.

**Torresia pauciflora** (R. Br.). *Hierochloë pauciflora* R. Br. Suppl. App. Parry's Voy. 293. 1823. (*Chloris Melvilliana*.)

ARISTIDA ADSCENSIONIS L. Sp. Pl. 82. 1753. *A. humilis* H. B. K. Nov. Gen. & Sp. 1: 121. 1816. *A. bromoides* H. B. K. op. cit. 122.

The type of the earliest name is from the island of Ascension, the type of *A. humilis* is from Cumaná, Venezuela, the type of *A. bromoides* from the equatorial Andes. The three names appear to apply to the same species, which ranges throughout tropical America and in the warmer parts of the Old World.

**Stipa pulchra** n. sp.

A caespitose perennial; culms scaberulous or smooth, pubescent below the nodes, mostly 60 to 100 cm. high; sheaths smooth or scaberulous; ligule truncate, 2 to 3 mm. long, or shorter on the innovations; blades flat or soon involute, 1 to 4 mm. wide, pilose above, scaberulous beneath; panicle open, 10 to 30 cm. long, the main axis smooth or scaberulous, the branches slender, scaberulous, ascending or spreading, somewhat flexuous, mostly in pairs, naked below, the lower 8 to 15 cm. long, sometimes pubescent around the axils; spikelets loosely clustered toward the ends of the branches, the branchlets slender, the ultimate lateral pedicels 2 to 3 mm. long; glumes nearly equal, usually purple, attenuate-pointed, about 15 mm. long, the lower 3-nerved, the upper 5-nerved; lemma oblong, including the narrow sharp pilose callus 8 to 10 mm. long, pubescent in lines from below to about the middle or somewhat pubescent all over, the surface minutely tuberculate, the apex somewhat constricted into a neck, the edge of this ciliate with erect hairs; awn 6 to 8 cm. long, twice geniculate, appressed pilose to the first bend, scabrous above, the terminal segment slender and flexuous.

Type specimen in the U. S. National Herbarium, no. 416590, collected in a railroad cut three miles south of Healdsburg, Sonoma County, California, April 9, 1902, by A. A. Heller (no. 5252). Common in California throughout the state at lower altitudes. This species has been referred to *S. setigera* Presl.<sup>4</sup> The latter differs in having a fruit 6 mm. long with a well-marked neck, with a crown merely toothed and not long-ciliate, and with an awn only about 5 cm.

<sup>4</sup> Rel. Haenk. 1: 226. 1830.

long. The origin of Presl's type is not known. It does not quite agree with any North American species. The above notes were taken on the type in the Bohemian National Museum at Prague.

Kneucker<sup>5</sup> states that the species that has been called *Stipa setigera* is *S. tenuis* Philippi. I have examined a duplicate type specimen of *S. tenuis* and find that it differs from *S. pulchra* in several important respects. The glumes are shorter and the awns are capillary, flexuous, but not geniculate.

***Stipa lepida* n. sp.**

A caespitose perennial; culms erect, smooth or scaberulous, pubescent below the nodes, 50 to 80 cm. high; sheaths smooth or scaberulous, or sometimes a little pubescent, more or less villous at the mouth; ligule a narrow membrane about 0.5 mm. long; blades flat, more or less involute in drying, 10 to 30 cm. long, 1 to 4 mm. wide, pubescent above, smooth or scaberulous beneath; panicle loose, 10 to 13 cm. long, the axis smooth or scaberulous, the branches single or in pairs, or the lower sometimes in threes, spreading, scabrous, slender, naked below, sometimes pilose in the lower axils, the lower nodes distant; spikelets pale or purplish, clustered on the upper half or two thirds of the branches, the branchlets appressed; glumes thin, narrow, gradually acuminate, slightly unequal, the lower 7 mm. long, 3-nerved, the upper 3-nerved or faintly 5-nerved; lemma about 5-nerved, pilose on the callus, rather sparsely pubescent all over or glabrate above, narrowed toward the apex but with no distinct neck, the inconspicuous crown minutely ciliate; awn mostly 2.5 to 3.5 cm. long, very slender, minutely appressed pubescent below or nearly glabrous, scabrous above, twice geniculate, the bends often indistinct, the terminal segment somewhat flexuous.

Type specimen in the U. S. National Herbarium, no. 733683, collected on an open hillside in the Santa Ynez Forest Reserve, Santa Barbara County, California, April 19, 1910, by Agnes Chase (no. 5611).

This species, common in California at lower altitudes, has been referred to *Stipa eminens* Cav.<sup>6</sup> The latter, the type of which was examined at the herbarium of the Botanical Garden at Madrid, differs in having long ligules, the uppermost as much as 3 mm. long, and in having 3 or 4 more flexuous branches at each node of the panicle, and a more flexuous awn. A synonym is *Stipa flexuosa* Vasey.<sup>7</sup> *Stipa eminens* is found on the highlands of Mexico from Puebla to Sonora and extends into the United States from southern Arizona to western Texas.

<sup>5</sup> Allg. Bot. Zeitschr. 19: 171. 1913.

<sup>6</sup> Icon. Pl. 5: 42, pl. 467. f. 1. 1799.

<sup>7</sup> Bull. Torrey Club 15: 49. 1888.

**Stipa lepida Andersoni** (Vasey). *Stipa eminens Andersoni* Vasey, Contr. U. S. Nat. Herb. 3: 54. 1892.

This differs in being smaller, and in having narrower and fewer-flowered panicles and somewhat smaller spikelets. The type was collected by Anderson near Santa Cruz, California. The published type locality, "Lower California," is an error.

**MUHLENBERGIA TRIFIDA** Hack. Repert. Nov. Sp. Fedde 8: 518. 1910.

This is the common western grass hitherto known as *M. gracilis*, which name is a synonym of *M. quadridentata* (H. B. K.) Kunth.

**MUHLENBERGIA EMERSLEYI** Vasey, Contr. U. S. Nat. Herb. 3: 66. 1892. *M. Vaseyana* Scribn. Rep. Mo. Bot. Gard. 10: 52. 1899.

This species has been confused with *M. distichophylla* Presl which is confined to Mexico. This group of Muhlenbergia is more nearly related to Epicampes than to most of the other species of Muhlenbergia.

**Sporobolus contractus** new name. *Sporobolus strictus* (Scribn.) Merr., U. S. Dept. Agr. Div. Agrost. Circ. 32: 6. 1901, not *S. strictus* Franch. Bull. Soc. Hist. Nat. Autun 8: 368. 1893.

**Sporobolus macrus** (Trin.). *Vilfa macra* Trin. Mém. Acad. St. Pétersb. VI. Sci. Nat. 4<sup>1</sup>: 79. 1840.

This species, hitherto known only from the type specimen and unrecognized in our flora, is allied to *Sporobolus Drummondii* (Trin.) Vasey, but differs from all the species of this group in having creeping scaly rhizomes. The type of *Vilfa macra* has been examined at the herbarium of the St. Petersburg Academy of Sciences. The type locality as published and as given on the label is "Louisiana," without other data. The only other specimen known to us was collected in wet pine land near Biloxi, Mississippi, October 8, 1907, by Agnes Chase (no. 4341).

**AGROSTIS EXIGUA** Thurb. in S. Wats. Bot. Calif. 2: 275. 1880.

This very rare species has been known for several years only from the single specimen in the Gray Herbarium collected by Bolander in the "foothills of the Sierras." Specimens of this species have been recently sent in from Howell Mountain, Napa County, California, collected by Mr. Joseph P. Tracy (no. 1552).

**Agrostis exarata ampla** (Hitchc.). *Agrostis ampla* Hitchc. U. S. Dept. Agr. Bur. Pl. Ind. Bull. 68: 38. 1905.

**Agrostis exarata microphylla** (Steud.). *Agrostis microphylla* Steud. Syn. Pl. Glum. 1: 164. 1854.

It seems more in accord with the facts to consider *Agrostis exarata* to be a polymorphous or variable species including the above mentioned forms as varieties. The United States specimens referred to *Agrostis glomerata* (Presl) Kunth<sup>8</sup> appear to be better placed under *A. exarata*.

AGROSTIS SCHIEDEANA Trin. Mém. Acad. St. Pétersb. VI. Sci. Nat. 4<sup>1</sup>: 327. 1841.

The type of this comes from Mexico. The specimens from the United States that have been referred to this species<sup>9</sup> prove to belong to *A. oregonensis* Vasey. The type of *A. Schiedeana* belongs to *A. perennans*. The specimens cited under *A. Schiedeana* in Mexican Grasses,<sup>10</sup> all from the plateau of Mexico, belong to *A. Bourgaei* Fourn., a valid species.

CALAMAGROSTIS SCABRA Presl, Rel. Haenk. 1: 234. 1830.

This species has been included under *C. Langsdorfii* Trin. (Gram. Unifl. 225. 1824), which differs in having longer callus hairs and less scabrous glumes. The latter is referred by Hackel to *C. villosa* Mutel; as a variety (*C. Halleriana Langsdorfii* Hack. in Sommer, Nuov. Giorn. Bot. Ital. 25: 98. 1893; *C. villosa Langsdorfii* Hack. Bull. Herb. Boiss. 7: 650. 1899). *Calamagrostis scabra* is closely related to *C. canadensis* (Michx.) Beauv. and may be only a form or variety of that species. The former appears to be confined to the vicinity of the coast of Alaska and southward while the latter is the dominant grass of the interior of Alaska. Presl's species was first described from Nutka Sound, Vancouver Island.

**Notholcus mollis** (L.). *Holcus mollis* L. Syst. Nat. ed. 10. 2: 1305. 1759.

This species not previously reported from the United States has been sent to the U. S. National Herbarium from Eureka, California, by Mr. Joseph P. Tracy. It differs from *N. lanatus*, common on the Pacific Coast, in having creeping rhizomes and glabrous sheaths.

**Sphenopholis pennsylvanica** (L.). *Avena pennsylvanica* L. Sp. Pl. 79. 1753.

Scribner<sup>11</sup> in his article on *Sphenopholis* takes up Michaux's name

<sup>8</sup> See North American Species of *Agrostis*, U. S. Dept. Agr. Bur. Pl. Ind. Bull. 68: 30. 1905.

<sup>9</sup> See North American Species of *Agrostis*, op. cit.

<sup>10</sup> Contr. U. S. Nat. Herb. 17: 319. 1913.

<sup>11</sup> Rhodora 8: 137-146. 1906.

and calls the species *Sphenopholis palustris* (Michx.) Scribn. He ignores *Avena pennsylvanica* L. because Linnaeus described the species as having a villous ovary ("seminibus villosis"). The specimen in the Linnaean Herbarium collected by Kalm has been examined and it is identical with the species that has been called *Sphenopholis palustris* and *Trisetum pennsylvanicum* Beauv. The ovary is not pubescent but Linnaeus's description applies in other respects. As the name is based on a specimen collected in Pennsylvania by Kalm, we may assume that this specimen is the type and that the description is in error as to the statement "seminibus villosis."

**Danthonia Cusickii** (Williams). *Danthonia intermedia Cusickii* Williams, U. S. Dept. Agr. Div. Agrost. Circ. 30: 7. 1901.

This differs from *D. intermedia* Vasey in being more robust, with larger spikelets, and with acute or acuminate rather than aristate lobes of the lemma.

**Danthonia Macounii** n. sp.

A caespitose perennial; culms erect, glabrous, 30 to 50 cm. high; sheaths villous, the hairs from small papillae; ligule a narrow ciliate-margined membrane; blades flat, becoming involute, villous above, glabrous beneath, erect, 10 to 20 cm. long, 3 to 4 mm. wide, the basal flexuous and usually narrower; panicle narrow, 4 to 6 cm. long, the branches scabrous-pubescent, appressed; spikelets 5- to 6-flowered; glumes equal, longer than the florets, faintly several-nerved, gradually acuminate, smooth except the slightly scabrous apex, about 15 mm. long; lemma villous on the rounded back, about 5 mm. long to the base of the awn, the lobes about 5 mm. long, abruptly narrowed into slender awns; awn of lemma about 10 mm. long, flat, loosely twisted in about 2 coils and brown at base, the upper portion slender, straight, divaricate.

The type specimen in the U. S. National Herbarium, no. 733685, collected in the vicinity of Nanaimo, Vancouver Island, July 4, 1908, by John Macoun (no. 78825).

Other specimens in the U. S. National Herbarium are: Vancouver Island, Nanaimo, Macoun 39 in 1887, Summit of Mt. Benson, Macoun 78823; Chilliwick Valley, B. C., Macoun 26080.

This species resembles *Danthonia intermedia* Vasey in habit and inflorescence but differs in the villous lemma and the aristate teeth of the lobes. From *D. thermale* Scribn. it differs in its larger spikelets and villous sheaths.

**Campulosus floridanus** n. sp.

A perennial with short creeping scaly rhizomes; culms erect, puberulent or scaberulous below the inflorescence, otherwise glabrous, 60 to 100 cm. high; sheaths glabrous, the basal numerous, becoming fibrous with age; ligule a more or less lacerate membrane, the upper acute, 2 mm. long, the lower shorter; blades firm, mostly becoming involute, attenuate at apex, glabrous, 10 to 15 cm. long, the uppermost shorter, 1 to 3 mm. wide; spike long-exserted, single, erect, straight or somewhat curved, often twisted, 8 to 15 cm. long, the outer side of the rachis smooth and rounded, the margins somewhat incurved; spikelets densely imbricated, pectinate, consisting of 2 glumes, 2 sterile lemmas, a fertile floret and 1 or 2 upper reduced and sterile florets; glumes unequal, the first lanceolate, acuminate, 1-nerved, thin, 2 mm. long, the second firm, acuminate, ridged with 2 nerves, the third nerve weak, smooth or scaberulous on the nerves, about 6 mm. long, the awn slightly below the middle, straight and divaricate at maturity, about 5 mm. long, tuberculate at base; first sterile lemma about 3.5 mm. long, long-villous on the base and margins, bifid at apex, with a straight awn from between the lobes, reaching about the apex of the fertile floret, the palea wanting; second lemma similar to the first, but with longer awn and villous chiefly above the middle, the palea well-developed; fertile lemma about 5 mm. long, sparsely villous above the middle, awnless, the palea nearly as long; reduced floret not as long as the spikelet, sometimes with a second smaller rudiment above.

Type specimen in the U. S. National Herbarium, no. 726521, collected in East Florida, in 1875, by A. H. Curtiss.

Sandy pine woods, Florida. Other specimens in the U. S. National Herbarium are: Lake City, Nash 2212; Waldo, Combs 698, 727; Gainesville, Combs 761; Duval County, Fredholm 313.

This species has been referred to *C. chapadensis* Trin. of Brazil. That differs in having scabrous sheaths and blades and usually 2 flexuous spikes, in the tuberculate second glume roughened on the midnerve, and in the more densely villous florets.

**Gymnopogon Chapmanianus** n. sp.

A caespitose somewhat purple perennial; culms erect or stiffly ascending, 25 to 40 cm. high; leaves mostly towards the lower part of the culm; sheaths glabrous, striate, more or less inflated, strongly overlapping; ligule a very narrow ciliate-margined membrane; blades flat, smooth beneath, scaberulous above, scabrous on the margins, rather leathery, stiffly spreading, abruptly narrowed or somewhat cordate at base, pungently pointed, 4 to 7 cm. long, 4 to 6 mm. wide; panicle fan-shaped, consisting of numerous slender, straight, ascending branches about 15 cm. long, arranged along a sulcate, scabrous axis



about 10 cm. in length, floriferous to the base; spikelets nearly sessile along the branches, somewhat remote but regularly arranged, usually not reaching the one above and opposite, 2- to 3-flowered, or more rarely 4-flowered, the florets distant and zig-zag on a slender rachilla; glumes narrow, attenuate-pointed, 1-nerved, smooth, scabrous on the keel, 3 to 3.5 mm. long, as long as or longer than the florets; lemmas somewhat compressed, scarcely keeled, 3-nerved, the lateral nerves faint, minutely and rather sparsely pilose, more densely pilose on the callus and on the inrolled margin, about 2 mm. long, the apex slightly bifid, the midnerve of the lower floret extending as a straight slender awn 1 to 2 mm. long; rachilla usually extending above the base of the uppermost floret.

Type specimen in the U. S. National Herbarium, no. 733684, collected in a sandy meadow at Sanford, Florida, September 25, 1907, by Agnes Chase (no. 4135).

Confined to central peninsular Florida. Other specimens in the National Herbarium are: Sanford, Chase 4134; Titusville, Chase 3999; Brevard County, Drawdy 6062; Bartow, Combs 1186; Tampa, Combs 1356; Braidenton, Combs 1334, Tracy 7102; Manatee, Chapman in 1886.

This species is distinguished from *G. ambiguus* by the ascending spikes and the shorter awns and from *G. brevifolius* by the ascending spikes that are evenly floriferous to the base. On the Chapman specimen above mentioned is a note by Dr. Chapman which says, "If we have *two* species [of *Gymnopogon*] then we must have *three* for I have one with 2-4 perfect flowers in the spikelet."

WILLKOMMIA TEXANA Hitchc. Bot. Gaz. 35: 283. 1903.

At the time this species was published it was stated that the name *Willkommia* had been applied to a group of *Compositae* before it was used by Hackel for a genus of grasses. Under the American Code as revised this earlier use does not invalidate *Willkommia* Hack. *Willkommia* Schultz-Bip. was mentioned only as a synonym of a species of *Senecio*<sup>12</sup> and hence was not properly or technically published.

The following specimens, all from Texas, are now in the U. S. National Herbarium: Ennis, J. G. Smith in 1897; Beeville, Smith in 1897; Kingville, Tracy 8903; near Houston, Thurow 10; Waller, Thurow 11 in 1906; Harvester, open "hard-pan" spot, Hitchcock 1205 in 1906.

<sup>12</sup> Nyman, *Consp. Fl. Eur.* 357. 1879.

PAPPOPHORUM BICOLOR Fourn. Mex. Pl. 2: 133. 1886.

This Mexican species, rather common in southern and western Texas, is to be added to our list of the grasses of the United States.

ORCUTTIA CALIFORNICA Vasey, Bull. Torrey Club 13: 219. pl. 60. 1886.

This species, known previously only from the type collection, from near San Quentin Bay, Lower California, has been recently collected in Goose Valley, California, by Miss Alice Eastwood (no. 1013). The type specimen was rather immature. Miss Eastwood's specimens are well-developed and show an elongated inflorescence 6 to 8 cm. long, with somewhat the aspect of *Lolium multiflorum*.

ERAGROSTIS BARRELIERI Daveau, Journ. de Bot. 8: 289. 1894.

This species from the Mediterranean region is well established in Texas. It is allied to *Eragrostis Eragrostis* (L.) Karst. (*E. minor* Host) from which it differs in the linear many-flowered divergent spikelets and in the absence of glands on the foliage. The following specimens, all from Texas, are in the U. S. National Herbarium: Abilene, Tracy 7917; Kerrville, Heller 1879, Hitchcock 5280, J. G. Smith in 1897; Llano, Smith in 1897; San Antonio, Hitchcock 5164; Kenedy, Hitchcock 5341; Brownsville, Hitchcock 5428.

***Eragrostis floridana* n. sp.**

A caespitose perennial; culms erect from a usually spreading base, smooth, 20 to 50 cm. high; leaves mostly basal, the cauline 1 or 2; sheaths shorter than the internodes, villous or the uppermost nearly smooth, a prominent tuft of hairs at the apex; ligule a narrow densely ciliate ring with numerous long hairs at the base of the blade; blades flat or soon involute, villous, especially beneath, 5 to 15 cm. long, 1 to 3 mm. wide; panicle finally exserted, open, 10 to 20 cm. long, nearly as wide, the branches stiffly spreading, finally horizontal or the lower reflexed, mostly 1 to 3 below, single above, villous in the axils, the main rachis smooth or scaberulous above, the branchlets and pedicels slender, flexuous, scabrous, the pedicels mostly as long as or longer than the spikelets, spreading; spikelets greenish or lead color, ovate-lanceolate or oblong, 3 to 4 mm. long, 1 to 1.5 mm. wide, mostly 5- or 6-flowered, the florets slightly imbricate; glumes ovate, acute, unequal, scaberulous on the keel above, the first about 1 mm. long; lemmas acutish, scarcely keeled, faintly 3-nerved, smooth, 1.5 mm. long; palea persistent, scabrous on the keels.

Type in the U. S. National Herbarium, no. 726520, collected in dry pine woods near Tampa, Florida, March, by A. H. Curtiss (no. 3494\*).

This was distributed in the exsiccatae of North American Plants as *Eragrostis lugens* Nees.

Other specimens in the U. S. National Herbarium, all from dry sandy pine woods in western peninsular Florida, are: Tampa, Curtiss C in 1886, Combs 1342; Lakeland, Hitchcock 841. What appears to be the same species comes from the vicinity of Mt. Orizaba, Mexico, Bourgeau 2643. Another specimen of the same collected in Mexico by Botteri, but without definite locality, may come from the same region.

This species resembles *E. lugens* Nees, which differs in having smooth foliage, longer spikelets and longer and more acute lemmas. *Eragrostis flaccida* Lindm., from southern Brazil, is more delicate, with smaller and more slender spikelets.

**ERAGROSTIS CILIANENSIS** (All.) Link.

This name replaces *Eragrostis megastachya* (Koel.) Link.<sup>13</sup>

**Poa Merrillana.** *Poa glacialis* Scribn. & Merr. Contr. U. S. Nat. Herb. 13: 68. 1910, not Stapf, Journ. Linn. Soc. Bot. 37: 532. 1906.

**Poa Wrightii** (Scribn. & Merr.). *Colpodium Wrightii* Scribn. & Merr. Contr. U. S. Nat. Herb. 13: 74. 1910.

**Panicularia erecta** (Hitchc.). *Glyceria erecta* Hitchc. in Jepson, Fl. Calif. 1: 161. 1912.

**Agropyron sericeum** n. sp.

Plants tufted, without rhizomes; culms smooth, erect, 60 to 100 cm. high, the nodes glabrous; sheaths glabrous, striate; ligule membranaceous, about 1 mm. long; blades flat, scabrous above, slightly scabrous beneath, 12 to 20 cm. long, 5 to 10 mm. wide, the auricles minute; spikes long-exserted, slender, erect, 10 to 15 cm. long, the rachis hispid-scabrous on the margins, the spikelets somewhat distant, exposing the rachis, not reaching the one above on the same side; spikelets appressed, 10 to 20 mm. long, green or sometimes purplish, 3- to 6-flowered; glumes 5 to 10 mm. long, about half as long as the spikelet, broad, abruptly acute, glabrous or sometimes villous near the base, distinctly 3-nerved, with sometimes 1 or 2 pairs of secondary nerves, the margin scarious, the nerves more or less scabrous; lemmas 10 to 12 mm. long, obscurely nerved below, distinctly 5-nerved above, short-villous except the glabrous tip, acute, usually extending into an awn 1 to 2 mm. long; palea hispid-ciliate on the keels.

Type in the U. S. National Herbarium, no. 725185, collected on alluvial soil along the Yukon River at Dawson, Yukon Territory, July 19, 1909, by A. S. Hitchcock (no. 4389).

<sup>13</sup> See Hubbard, Philipp. Journ. Sci. Bot. 8: 159-161. 1913.

Alluvial soil, Seward Peninsula and Yukon Valley.

Represented in the U. S. National Herbarium by 29 specimens from various localities from the White River to Fairbanks, the Koyukuk River and Anvik; also at Nome (Hitchcock 4809).

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