confined to the margins. Spruce gave to this species a manuscript name which he seems never to have published and which has since been used for a simple-leaved species by Philippi in Anal. Univ. Chile, lxxxv. 820 (1894). The description of *M. Rimbachii* also seems never to have been published by Sodiro, and I propose, therefore, to validate that name for this very distinctive species.

The Rimbach specimen was collected sometime prior to 1921 on Mt. Carihuairazo in Tungurahua Province, Ecuador. The Spruce specimen is labelled only In Andibus Ecuadorensibus, 1857–9. A perusal of Spruce's Journal shows that during the years 1857–9 Spruce made his headquarters at Ambato, in Tungurahua Province and that between the 23rd and 31st of June, 1851, he made a collecting trip to Mt. Carihuairazo. Is it not possible, therefore, that this Mutisia was found by Spruce in the locality where it was later found by Rimbach and that this is another of those endemic species so characteristic of the Andes of Ecuador?

GRAY HERBARIUM, Cambridge.

# THE SLENDER-SPIKED SPARTINA PECTINATA<sup>1</sup>

#### M. L. FERNALD

In his North American Species of Spartina,<sup>2</sup> Merrill more satisfactorily differentiated than had his predecessors the essentially southern coarse halophyte, Spartina polystachya (Michx.) Willd., and the more slender, northern transcontinental plant, with long-awned glumes, which, following erroneous usage, he called S. cynosuroides (L.) Willd., the latter based on Dactylis cynosuroides L. (1753). At that time Merrill cited for the transcontinental plant the synonym S. pectinata "Bosc." (1820).

Subsequently, Piper,<sup>3</sup> pointing out that the type of *Dactylis cynosuroides* L. is the coarse southern species long known as *Spartina polystachya*, correctly took up *S. pectinata* Link (1820) for the more slender transcontinental plant. But Hitchcock, reasoning that "S. pectinata was collected by Bosc probably in South Carolina, where S. michauxiana does not grow," renamed the slender transcontinental species S. Michauxiana Hitchc. Contr. U. S. Nat. Herb. xii. 153 (1908).

<sup>&</sup>lt;sup>1</sup> Published with aid of a grant to Rhodora from the National Academy of Sciences.

<sup>&</sup>lt;sup>2</sup> Merrill, U. S. Dept. Agric. Bur. Pl. Ind. Bull. no. 9 (1902).

<sup>&</sup>lt;sup>3</sup> Piper, Contrib. U. S. Nat. Herb. xi. 145 (1906).

Piper's correct identification of Spartina pectinata was followed by Rydberg,¹ although he ascribed the species to Bosc, who sent the specimen to Berlin, rather than to Link, who described it. And very recently Hitchcock has accepted the reduction of S. Michauxiana, but, likewise, ascribed S. pectinata to Bosc instead of Link. "S. pectinata Bosc (S. michauxiana)."² The reduction of S. Michauxiana to S. pectinata seems wholly justified. In the Gray Herbarium there is a spike of Bosc's plant (TYPE of S. pectinata Link), given many years ago to Asa Gray. This is wholly characteristic in all points of the broader- and shorter-spiked plant so common across North America from Newfoundland to Washington, and south to Maryland, West Virginia and Texas.

Since the plant reaches Maryland and West Virginia, it is not impossible that its eastern range may extend farther south and that Bosc actually collected the specimen; it is equally possible that the specimen which he sent to Willdenow was derived from a northern source. Link's description, which is apparently not generally available, is here quoted. It is one of very many new descriptions in a paper by Link upon new plants in the Botanic Garden at Berlin and in the Willdenow Herbarium.

Spartina pectinata von Bosc. aus Nord-amerika im Herbar. Foliis convolutis, spiculis alternis solitariis secundis, rachi scabra, valvulis dorso scaberrimis. Hat viel kürzere Ähren als Sp. polystachya, auch kürzer gestielte. Die Ähren stehen immer einzeln, kommen nie doppelt.

The species, although ascribed by Merrill, Rydberg and Hitchcock to Bosc, was, apparently, not described by Bosc. The specimen in the Willdenow Herbarium was received from him, just as specimens of other species described by Link in the same paper were received from von Humboldt, Klein, Bory de St. Vincent, Petit Thouars, Desfontaines and others. The error of ascribing Spartina pectinata to Bosc started, apparently, in Index Kewensis. There Link's extensive paper in Sprengel, Schrader & Link's Jahrbücher der Gewächskunde, 13. 13–93 (1820) seems to have been indexed with singular lack of consistency. In this paper Link varied the formula slightly when stating the source of the specimen in the Willdenow Herbarium; but the von consistently used by him was obviously intended for from, collected by, or sent by, not for of. A few illustrations should make this clear. I am, therefore, quoting Link's phrase and then giving the interpretation of the authorship of the species by Index Kewensis.

<sup>&</sup>lt;sup>1</sup> Rydb. Fl. Rocky Mts. and adj. Plains, 64 (1917 or 1918).

<sup>&</sup>lt;sup>2</sup> Hitchc. Bartonia, no. 14: 29 (1932).

### Link's Statement

Cyperus inaequalis von Humboldt aus Süd-Amerika.

Cyperus festivus aus Indien von Klein gesandt.

Mariscus mexicanus von Humboldt im Herbar.

Kyllingia polyphylla von Petit Thouars aus Isle de France und K. granularis von Desfontaines aus Cayenne sind noch nicht beschrieben.

Hypaelytrum umbellatum aus Cayenne von Desfontaines im Herbarium.

Hypaelytrum iridifolium. Eine sehr ausgezeichnete Pflanze, von Humboldt an den Ufern des Orinoko gesammelt, im Herbar.

Spartina pectinata von Bosc. aus Nord-amerika im Herbar. Authorship acc. to Index Kewensis

C. inaequalis Link.

C. festivus Link.

M. mexicanus Willd. ex Link.
K. polyphylla Thou. ex Link, and K. granularis Desf. ex Link.

H. umbellatum Willd. ex Link.

H. iridifolium Link.

Spartina pectinata Bosc, ex Link.

From the above very brief tabulation it is clear that the entries in the *Index Kewensis* of species described by Link in the paper above cited need scrupulous checking and consistent treatment. It is also reasonably clear that the description of *Spartina pectinata* originated with Link, not with Bosc.

Spartina pectinata occurs in two strikingly different extremes. The widest-ranging and generally more common plant has the comparatively short and broad spikes (2–11 cm. long, 5–8 mm. wide, including the salient awns) sessile, subsessile, or the lowest short-peduncled. The extreme plant, described as S. Michauxiana, var. Suttiei Farwell, Rep. Mich. Acad. Sci. xxi. 352 (1920), from Michigan, has a broad range, from Prince Edward Island to Minnesota, south to Nova Scotia, southern New England, New Jersey, Pennsylvania, Kentucky, Missouri and Oklahoma. It is distinguished by its slender spikes (mostly 0.7–1.5 dm. long, 3–5 mm. wide), with appressed awns. The spikes are more inclined to be peduncled and more divergently ascending, in extreme specimens even almost nodding. As a variety it is strongly marked; under S. pectinata it becomes

Spartina Pectinata Link, var. **Suttiei** (Farw.), comb. nov. S. *Michauxiana*, var. *Suttiei* Farw. Rep. Mich. Acad. Sci. xxi. 352 (1920). Cotype in Gray Herb.

A Suppressed Plate in Eaton's Ferns of North America.—In the library of botanical books collected by the late Walter Deane and bequeathed by him to the Gray Herbarium was found, in the original paper covers, a copy of Part I of D. C. Eaton's Ferns of North



Fernald, Merritt Lyndon. 1933. "The slender-spiked Spartina pectinata." *Rhodora* 35, 258–260.

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