

*POLYGONUM RAII Bab.—Maritime sand and shingle; C. locally. Sandy borders of Grand Etang de Miquelon, July 31, 1901.

POLYGONUM NATANS (Michx.) Eaton. See Stanford, RHODORA, xxvii. 158 (1925).—Ponds and quiet streams; C. Etang de Savoyard, September 2, 1900.

An exclusively American plant to which Delamare and Bonnet give the name of the European *Polygonum amphibium* L., var. *natans* Moench.

*POLYGONUM NATANS (Michx.) Eaton, forma HARTWRIGHTII (A. Gray) Stanford.—Damp sandy places; terrestrial and usually sterile; R. Anse à Ravenel, St. Pierre, shingle bank near the sea, Sept. 2, 1900.

POLYGONUM HYDROPIPER L.—Damp places; R. Anse à Ravenel, August 20, 1901. Native.

Reported by Gautier, but not by Bonnet and Delamare.

POLYGONUM SAGITTATUM L.—Low ground, marshy and peaty plains; C. Anse à Ravenel, August 27, 1902.

Reported only by Gautier.

(To be continued)

THE CASE OF THE GRASS GENUS DILEPYRUM.

AGNES CHASE.

THE name *Dilepyrum* Michx. has been taken up by Farwell¹ to replace the long-established *Brachyelytrum*, a genus of grasses represented by a single species, *B. erectum* (Schreb.) Beauv., rather common in the eastern United States. The substitution of *Dilepyrum* for *Brachyelytrum* has been accepted by some without verification. Before *Dilepyrum* comes into more general use it seems desirable to correct Mr. Farwell's misconception.

*Dilepyrum*² is described with two species, *D. aristosum* and *D. minutiflorum*. The second species, the type of which is preserved in the Paris Herbarium, where it was examined by Professor Hitchcock in 1907, is *Muhlenbergia Schreberi* Gmel.³ No specimen of the first, *D. aristosum*, can be found. Elliott⁴ refers it with a question to *Muhlenbergia erecta*, indicating at two points in his description his

¹ Midland Naturalist 8: 33. 1922.

² Michx. Fl. Bor.-Amer. 1: 40. 1803.

³ See Types of American Grasses. Contr. U. S. Nat. Herb. 12: 144. 1908.

⁴ Bot. S. C. & Ga. 1: 98. 1816.

doubt of the identity. Subsequent authors have referred *D. aristosum* to *Brachyelytrum erectum* apparently without further investigation.

Mr. Farwell states that Michaux's "generic description is more accurately descriptive of his first species, *D. aristosum*, than of his second, [and that] the former must be considered as the type of his genus." Mr. Farwell quotes "valvis—subulato-linearibus, carinatis" as characteristic of the first species, but "subaequalibus," which does not apply to the glumes (in our sense) of the first species, but better to the second, is replaced in his quotation by "—." (In *Brachyelytrum* the first glume is obsolete or nearly so, the second 1 to 2 mm. long.) Mr. Farwell also fails to quote "exteriore apice longius recteque aristata," which is not characteristic of the glumes (in our sense) of either species.

Michaux's generic description of *Dilepyrum*² is: "GLUMA simplex, bivalvis: valvis subaequalibus, subulato-linearibus, carinatis; exteriore apice longius recteque aristata." Descriptions of stamens, pistils, and caryopsis follow.

In studying descriptions it is necessary to have in mind the author's terminology. "Gluma" as used by Michaux refers to the husk, "gluma exterior" being the glumes (according to present usage) and "gluma interior" or "calyx" being the lemma and palea. *Agrostis* is described as having "gluma 2-valvis" "cal. 2-valvis," that is, glumes 2 and one floret with lemma and palea. *Trichodium* (species of *Agrostis* in which the palea is wanting) is described as having gluma exterior bivalvis and gluma interior 1-valvis.

It is evident that Michaux regarded the floret of *Dilepyrum* (lemma and palea) as a "gluma simplex," that is, there being no "gluma interior" or "calyx." In *D. minutiflorum* (*Muhlenbergia Schreberi*) the first glume is obsolete and the second minute, and was apparently overlooked. Further, in giving the derivation of the name *Dilepyrum* he says, "*dis, bis, lepuron, palea seu gluma: a gluma tantummodo bivalvi.*" Thus he calls attention to the absence of what we term glumes. He further confirms this interpretation by stating that the genus [*Dilepyrum*] is allied to *Leersia* [in which the glumes are wanting]. On the other hand, in *Brachyelytrum erectum*, assuming, as does Mr. Farwell, that it is the same as *D. aristosum*, the second glume is 1 to 2 mm. long (the first commonly nearly obsolete) and the prolonged rachilla joint is more than half the length of the floret.

It seems unlikely that so keen an observer as Michaux should have overlooked both the well-marked second glume and the prominent prolongation of the rachilla, lying behind the palea. Michaux's description of the panicle "laxa debile" does not well apply to the narrow erect panicle of *Brachyelytrum*. Altogether the identity of *Dilepyrum aristosum* is uncertain.

If one works on a type basis, the second species (*D. minutiflorum*) should be chosen as the type species of *Dilepyrum* because the first one does not accord with the generic description. *Dilepyrum* then becomes a synonym of *Muhlenbergia*. If one attaches the name *Dilepyrum* to the first species (*D. aristosum*) because the second species had been described under *Muhlenbergia*, the genus is uncertain because the species on which it is based has not been identified, and *Dilepyrum* should therefore not replace *Brachyelytrum*, a well-known genus.

U. S. DEPARTMENT OF AGRICULTURE.

NOTES ON SOME FRESHWATER ALGAE FROM NEW-FOUNDLAND.

WM. RANDOLPH TAYLOR AND JOHN M. FOGG, JR.

WHILE on an expedition to Newfoundland in 1926, with Messrs. M. L. Fernald and Bayard Long, the primary object of which was the collecting of flowering plants, the junior author embraced the opportunities thus afforded to make incidental collections of freshwater algae at several widely differing localities. A list of the species procured, as prepared by the senior author, contains records which, because of their novelty or of interesting extensions of range, seem to warrant its preservation in published form.

Collections were made about the Bay of Islands (along the west coast of Newfoundland, 130 miles north of Port-aux-Basques), and in the vicinity of Burgeo (on the south coast, about 70 miles east of Port-aux-Basques). All the collecting was done between September 2 and September 14, 1926.

The freshwater flora of the territory visited promises much of interest in relation to that of the high mountains of eastern British



Chase, Agnes. 1927. "The case of the grass genus *Dilepyrum*." *Rhodora* 29, 158–160.

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