

New Combination: *Dichanthelium scribnerianum*

JUSTIN R. THOMAS¹

The combination “*Dichanthelium scribnerianum* (Nash) Gould” has been used in a few references recently (e.g. Mohlenbrock 2014; Wilhelm and Rericha 2017) and ascribed to Gould (1974). However, Gould (1974) did not make or imply such a combination, but did make the new combination *D. oligosanthos* var. *scribnerianum* in the process of elevating the genus *Dichanthelium* from *Panicum*. More specifically, Gould (1974) intended to make Fernald’s (1934) *Panicum oligosanthos* var. *scribnerianum* into *Dichanthelium oligosanthos* var. *scribnerianum*. Because the combination has not been made within *Dichanthelium* at the species level, I publish it here.

***Dichanthelium scribnerianum* (Nash) J.R. Thomas comb. nov.**

BASIONYM: *Panicum scribnerianum* Nash, Bull. Torrey Bot. Club 22(10): 421. 1895. Based on *Panicum scoparium* S. Watson, Gray, Man. Ed. 6: 632. 1890 non Lamarck (1798).

SYNONYMS: *Panicum macrocarpon* Torr. Fl. N. Middle United States 143. 1823 non Leconte (1819). *Panicum scoparium* var. *minor* Scribn, Grasses Tennessee pt. 2, 48 (1894). *Panicum oligosanthos* var. *scribnerianum* (Nash) Fernald, Rhodora 36(423): 80. 1934. *Dichanthelium oligosanthos* var. *scribnerianum* (Nash) Gould, Brittonia 26(1): 60. 1974. *Dichanthelium oligosanthos* subsp. *scribnerianum* (Nash) Freckmann & Lelong, Sida 20(1): 170 (2002).

TYPE: USA. Pennsylvania. Bradford Co., Wysox: *J. Carey s.n.* (lectotype: GH).

Lectotypification was done by Hitchcock and Chase (1910) via a convoluted but accurate route, which they detail well. The lectotype was originally called *P. pauciflorum*, as was another specimen by a different collection from Georgia which is the type for *D. oligosanthos* (Hitchcock and Chase 1910). Gould and Clark (1978) inaccurately cited the holotype as the type specimen of *Panicum macrocarpon* Torr. (not Leconte). While this is the holotype for that name and that name is a synonym for *D. scribnerianum*, it is not the type for *D. scribnerianum*.

Contemporary interpretations of this taxon such as in the floristic works of Mohlenbrock (2014) and Wilhelm and Rericha (2017), as well as my own personal experience and research within the genus, support recognizing this entity as a distinct species. It differs markedly and consistently from *D. oligosanthos* in terms of morphology and habitat. *Dichanthelium scribnerianum* is less rhizomatous, has wider leaves that are more oblong in shape with more truncate bases, and its upper leaves have an ascending curvature compared to the straight and narrower leaves of *D. oligosanthos*. There is also a strong tendency for the autumnal form of *D. scribnerianum* to consist of one or two fascicles of leaves close together along the stem and for *D. oligosanthos* to have three well-spaced fascicles of leaves. More diagnostic characters are included in the key below, which also includes distinguishing characters for the closely related *D. helleri*.

¹ JUSTIN R. THOMAS — NatureCITE, 1530 E. Farm Road 96, Springfield, MO 65803. email: justin.thomas@naturecite.org

Dichanthelium scribnerianum typically occurs in dry open fields and degraded portions of dry grassland and woodland systems, whereas *D. oligosanthos* typically occurs in mesic woodland and forest communities of variable ecological complexity and stability. In terms of geographical range, in North America *D. oligosanthos* is mostly restricted to the southeastern Gulf Coast Plain but for disjunct populations around the Great Lakes region. *Dichanthelium scribnerianum* occurs commonly across the middle of the United States, and less commonly into northeastern North America, with occurrences into the southwest and northwest. Accurate distribution maps that represent the contemporary interpretations of *Dichanthelium* in general are lacking.

KEY TO THE *DICHANTHELIUM OLIGOSANTHES* GROUP IN MISSOURI

- 1 Largest vernal stem leaves 5 - 8 mm wide and 6 - 14 cm long, usually more than 10 times longer than wide; spikelets typically 3.5 - 4.0 mm long; spikelets more broadly elliptic to subtly obovate with obtuse tips; plants generally taller with more divergent vernal stem leaves (especially in autumnal stage); autumnal stage with two to three distinct fascicles of leaves; plants tend to grow in small colonies of several stems in shaded to partially shaded woodlands and forests..... *Dichanthelium oligosanthos*
- 1 Largest vernal stem leaves 6 - 12 mm wide and 5 - 10cm long, less than 10 times longer than wide; spikelets 2.9 - 3.5 (-4.0) mm long; spikelets strongly obovate with rounded, blunt tips; plants shorter with more ascending vernal stem leaves; autumnal stage with one or two distinct fascicles of leaves; plants tend to grow in small clumps with few stems radiating from a common basal tuft in various types of open habitats.
 - 2 Spikelets around 3.5 mm long (occasionally longer); vernal stem leaves typically truncate to rounded at the base with nearly parallel margins to an abrupt tip; distal vernal stem leaves hammock-shaped (with a slight upward curvature) when fresh; upper vernal sheaths often hispid..... *Dichanthelium scribnerianum*
 - 2 Spikelets around 3.1 mm long; vernal stem leaves slightly tapering at the base with subtly diverging margins and a more drawn tip; distal vernal stem leaves flat when fresh; upper vernal sheaths often glabrous to glabrate..... *Dichanthelium helleri*

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