
SYNOPSIS OF *DICHANTHELIUM* (POACEAE) IN FLORIDA¹

Bruce F. Hansen and Richard P. Wunderlin²

ABSTRACT

Twenty-five taxa of *Dichantheium* are recognized for Florida, with synonymy and typification compiled. Keys to species and varieties and an index to names is provided. The new combinations *D. ensifolium* var. *breve*, *D. ensifolium* var. *unciphylum*, and *D. portoricense* are proposed.

Recent papers concerning *Dichantheium* that have dealt with either the southeastern United States (Gould & Clark, 1978; Lelong, 1984, 1986) or with only a small part of the genus (Freckmann, 1981a) have been very influential in redefining the limits of the taxa. The present paper expands on the treatment of the Florida species in Wunderlin (1982) and Clewell (1985) in order to modernize the concepts and to rectify some errors. At the same time, it is an attempt to classify the Florida specimens better, recognizing that the taxa accepted here might well be inadequately separable in other geographic areas, which seems the rule for this genus. However, we feel that practicality alone would mandate such a classification for this very difficult genus to facilitate assignment of names to specimens. In *Dichantheium*, reticulate evolution caused by hybridization and autogamy is extremely common (Spellenberg, 1975a, b; Lelong, 1984, 1986). Thus, no claim is made here that a "natural" classification has been constructed.

The merits of accepting the segregate genus *Dichantheium* versus the inclusive *Panicum* will not be argued here except to point out that *Dichantheium* is as "good" a grass genus as many others (e.g., *Brachiaria*, *Sacciolepis*, and many more in different tribes). We will not detail here which authors accept one or the other genus; those

that wish to use *Panicum* will not be swayed by our arguments. Gould & Clark (1978) provided 24 characteristics separating *Dichantheium* from *Panicum*; none of these alone separates the genera, but the total we believe defines *Dichantheium* as a natural segregate from the large and variable *Panicum*. It is our belief that the acceptance of *Dichantheium* provides a more consistent generic classification of the grasses of Florida.

The species and varietal concepts used are roughly those of Gould & Clark (1978) as modified by Lelong (1984, 1986). Because the synonymy is so extensive and in many cases confusing, all known synonyms are compiled and included in the hope that future workers will find it easier to follow the nomenclature. The types are listed where known, but it must be emphasized that little original research in typification is involved here; the citation of types is mostly from published material, principally Hitchcock & Chase (1910), Gould & Clark (1978), and Lelong (1984). It seems inevitable that several new combinations are necessary, this in a group already overburdened with surplus names.

The key fairly reflects the variation in *Dichantheium* species, such that many taxa will key out in two or more places. When a character falls between an overlapping lead, either choice should lead to the correct species.

KEY TO THE FLORIDA SPECIES OF *DICHANTHELIUM*

- 1a. Leaves at base of plant numerous, relatively long and soft, similar to and only slightly shorter, if at all, than the soft, yellowish green lower culm blades; plants branching only at base; blades mostly 4–10 mm wide.

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² Department of Biology, University of South Florida, Tampa, Florida 33620, USA.

- 2a. Sheaths retrorsely pilose; uppermost culm blade at least $\frac{3}{4}$ as long as those of basal tuft *D. laxiflorum*
 2b. Sheaths glabrous or ascending pilose; uppermost culm blade less than $\frac{3}{4}$ as long as those of basal tuft *D. strigosum*
- 1b. Leaves at base of plant typically forming a basal rosette of short, relatively broad blades, these usually conspicuously shorter than the culm blades; plants normally branching above the base, especially in the autumnal phase; blades 3–25 mm wide or wider.
- 3a. Spikelets 0.8–3.2 mm long.
 4a. Spikelets 0.8–2 mm long.
 5a. Ligule hairs, at least some, 2–5 mm long *D. acuminatum*
 5b. Ligule hairs under 1.5 mm long or absent.
 6a. Lower culm internodes (and usually sheaths) pubescent, puberulent, strigose, or villous.
 7a. Blades of midculm leaves mostly 2–5 mm wide; plants usually at least 10 cm tall *D. aciculare*
 7b. Blades of midculm leaves less than 2 mm wide; plants less than 10 cm tall *D. ensifolium* (var. *breve*)
 6b. Lower culm internodes (and usually sheaths) glabrous.
 8a. Blades of midculm leaves (vernal phase) 5–15 cm long, mostly 2–5 mm wide *D. aciculare*
 8b. Blades of midculm leaves less than 6 cm long, or if longer, then wider than 6 mm.
 9a. Bases of lower culm leaves cordate or subcordate; blades 7–30 mm wide.
 10a. Spikelets 1–1.1 mm long *D. erectifolium*
 10b. Spikelets 1.4–2.2 mm long *D. sphaerocarpon*
 9b. Bases of lower culm leaves other than cordate or subcordate; blades usually less than 7 mm wide.
 11a. Spikelets 1.6–2.5 mm long; plants usually diffuse *D. dichotomum*
 11b. Spikelets 0.8–1.5 mm long; plants usually cushion-forming *D. ensifolium*
- 4b. Spikelets 2.1–3.2 mm long.
 12a. Blades of primary culms, at least some, (10–)13–25 mm wide.
 13a. Culm nodes conspicuously bearded, the lower internodes with long, spreading hairs *D. scoparium*
 13b. Culm nodes glabrous or slightly hairy, the internodes typically glabrous.
 14a. Ligule a fringed or entire membrane.
 15a. Plants less than 75 cm tall; leaf bases cordate *D. commutatum*
 15b. Plants mostly more than 75 cm tall; leaf bases rounded *D. scabriusculum*
 14b. Ligule a ring of hairs or absent.
 16a. Spikelets 1.4–2.2 mm long, broadly elliptic to suborbicular *D. sphaerocarpon*
 16b. Spikelets 2.4–3.5 mm long, narrowly ovate or elliptic *D. clandestinum*
- 12b. Blades of primary culms up to 12 mm wide.
 17a. Leaf bases cordate or subcordate.
 18a. Spikelets 1.4–2.2 mm long, broadly elliptic to ovate *D. sphaerocarpon*
 18b. Spikelets 2.4–3.2 mm long, elliptic to narrowly ovate *D. commutatum*
 17b. Leaf bases other than cordate or subcordate.
 19a. Ligule hairs, at least some, 2–5 mm long.
 20a. Nerves of the upper glume and lemma of the lower floret broad, distinct; sheaths glabrous or pubescent with short hairs *D. oligoanthes*
 20b. Nerves of the upper glume and lemma of the lower floret narrow, relatively indistinct; sheaths spreading pubescent with long hairs.
 21a. Spikelets 2.2–3.1 mm long; ligules usually with a distinct ring of short hairs in front of long hairs *D. ovale*
 21b. Spikelets 1.4–2 mm long; ligules lacking a distinct ring of shorter hairs *D. acuminatum*
- 19b. Ligule hairs less than 2 mm long.
 22a. Culm nodes, at least lower ones, conspicuously bearded.
 23a. Glabrous-glandular band present just below the nodes; leaves usually velvety-pubescent below *D. scoparium*
 23b. Glabrous-glandular band not present; leaves glabrous or variously pubescent below, not velvety.
 24a. Culm internodes, at least lower ones, strigose or villous; blades pubescent below *D. ovale*
 24b. Culm internodes glabrous; blade surfaces glabrous *D. dichotomum*
- 22b. Culm nodes not bearded, lower ones sometimes sparsely hairy or puberulent.
 25a. Ligule membranous; plants typically 75–150 cm tall *D. scabriusculum*
 25b. Ligule a ring of hairs or absent; plants mostly less than 70 cm tall.

- 26a. Blades of midculm leaves (vernal phase) linear and stiff, often becoming involute, mostly 2–5 mm wide, 6–15 cm long *D. aciculare*
- 26b. Blades of midculm leaves lanceolate, usually soft, remaining flattened, mostly more than 5 mm wide when 8 cm long or longer.
- 27a. Upper glume and lemma of the lower floret with broad, rounded nerves; spikelets rounded at the apex *D. oligosanthes*
- 27b. Upper glume and lemma of the lower floret with narrow, faint or relatively indistinct nerves; spikelets usually pointed at the apex.
- 28a. Lower culm internodes pubescent *D. portoricense*
- 28b. Lower culm internodes glabrous *D. dichotomum*
- 3b. Spikelets 3.3–5.2 mm long.
- 29a. Blades of at least some culm leaves 13–35 mm wide.
- 30a. Spikelets broadly elliptic to obovate, usually with broad, heavy nerves *D. oligosanthes*
- 30b. Spikelets narrowly elliptic to obovate, not strongly nerved.
- 31a. Culm nodes glabrous or slightly pubescent; spikelets 3.3–3.8 mm long *D. clandestinum*
- 31b. Culm nodes bearded; spikelets 3.8–5.2 mm long.
- 32a. Ligules 2.5–4 mm long; leaf blades usually puberulent-tomentose on one or both surfaces *D. ravenelii*
- 32b. Ligules 1.5 mm long; leaf blades glabrous to puberulent *D. boscii*
- 29b. Blades of culm leaves up to 12 mm wide.
- 33a. Midculm blades narrow, stiffly ascending, often becoming involute, mostly 6–15 cm long, less than 5 mm wide *D. aciculare*
- 33b. Midculm blades broader, spreading, 3–8 cm long, 3–8 mm wide *D. portoricense*

***Dichanthelium aciculare* (Desvaux ex Poiret)**

Gould & Clark, Ann. Missouri Bot. Gard. 65: 1116. 1978. *Panicum aciculare* Desvaux ex Poiret in Lamarck, Encycl. Suppl. 4: 274. July 1816. TYPE: United States. *Desvaux Herb. s.n.* (holotype, P; isotype, US, fragm.). Although the protologue gives the locality as “Habitat in india orientale,” Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 166. 1910) stated that the type collection “is without doubt from the southeastern United States.”

Panicum angustifolium Elliott, Sketch Bot. S. Carolina 1: 129. Dec 1816. *Panicum nitidum* Lamarck var. *angustifolium* (Elliott) A. Gray, N. Amer. Gram. 2: 112. 1835. *Chasea angustifolia* (Elliott) Nieuwland, Amer. Midl. Naturalist 2: 64. 1911. *Dichanthelium angustifolium* (Elliott) Gould, Brittonia 26: 59. 1974. TYPE: United States. South Carolina: *Elliott s.n.* (holotype, CHARL; isotype, US?).

Panicum setaceum Muhlenberg, Descr. Gram. 99. 1817. TYPE: United States. Georgia: *Muhlenberg Herb. s.n.* (lectotype, PH-M). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 166. 1910).

Panicum subuniflorum Bosc ex Sprengel, Syst. Veg. 1: 312. 1825. TYPE: United States. “Carolina”: *Bosc s.n.* (lectotype, B-W; isotype, G). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 166. 1910).

Panicum curtisii Steudel, Syn. Pl. Glumac. 1: 66. 1853. TYPE: United States. South Carolina: *Curtis s.n.* (holotype, P).

Panicum neuranthum Grisebach, Cat. Pl. Cub. 232. 1866. TYPE: Cuba. Oriente: 1860, *Wright 3453* (lecto-

type, GOET). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 175. 1910).

Panicum neuranthum Grisebach var. *ramosum* Grisebach, Cat. Pl. Cub. 232. 1866. *Panicum fusiforme* A. Hitchcock, Contr. U.S. Natl. Herb. 12: 222. 1909. TYPE: Cuba. 1863, *Wright 3454* (holotype, GOET).

Panicum nemopanthum Ashe, J. Elisha Mitchell Sci. Soc. 15: 42. 1898. TYPE: United States. North Carolina: Wake Co., Penitentiary Woods, Raleigh, Apr. 1895, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 177. 1910).

Panicum arenicola Ashe, J. Elisha Mitchell Sci. Soc. 15: 56. 1898. TYPE: United States. North Carolina: Orange Co., Chapel Hill, June 1898, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 166. 1910).

Panicum ovinum Lamson-Scribner & J. G. Smith, U.S.D.A. Div. Agrost. Circ. 16: 3. 1899. *Panicum aciculare* Desvaux ex Poiret var. *ovinum* (Lamson-Scribner & J. G. Smith) Beetle, Phytologia 48: 192. 1981. TYPE: United States. Texas: Waller Co., 25 May 1898, *Thurow s.n.* (holotype, US).

Panicum arenicoloides Ashe, J. Elisha Mitchell Sci. Soc. 16: 89. Feb. 1900. *Panicum aciculare* Desvaux ex Poiret var. *arenicoloides* (Ashe) Beetle, Phytologia 48: 192. 1981. TYPE: United States. North Carolina: New Hanover Co., near Wilmington, 7 June 1899, *Ashe s.n.* (holotype, NCU?; isotype, US, fragm.). Specimen at NCU not located.

Panicum filirameum Ashe, J. Elisha Mitchell Sci. Soc. 16: 88. Feb. 1900. TYPE: United States. North Carolina: New Hanover Co., June 1899, *Ashe s.n.* (holotype, NCU; isotype, US).

Panicum orthophyllum Ashe, J. Elisha Mitchell Sci. Soc.

16: 90. Feb. 1900. TYPE: United States. North Carolina: New Hanover Co., June 1899, *Ashe s.n.* (holotype, NCU?; isotype, US, fragm.). Specimen at NCU not located.

Panicum delawareense Ashe, North Carolina Agric. Exp. Sta. Bull. 175: 116. Aug 1900. TYPE: United States. Delaware: Newcastle Co., near Centerville, 6 July 1878, *Commons s.n.* (holotype, NCU).

Panicum pinetorum Swallen, Proc. Biol. Soc. Wash. 55: 93. July 1942. TYPE: United States. Florida: Lee Co., near Bonita Springs, 14 Oct. 1940, *Silveus 6604* (holotype, NA).

Panicum bennettense W. Brown, Bull. Torrey Bot. Club 69: 539, f. 1. Oct. 1942. TYPE: United States. North Carolina: Durham Co., Bennett Memorial, 5 mi. W of Durham, *Brown 2492* (holotype, DUKE).

The vernal phase is easily recognized by the long, narrow, rather stiff upright leaves. In the autumnal phase, *D. aciculare* can be confused with several other species, making determinations very difficult.

This species usually occurs in drier sites throughout Florida.

Dichanthelium acuminatum (Swartz) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1123. 1978. *Panicum acuminatum* Swartz, Prodr. 23. 1788. TYPE: Jamaica: *Swartz s.n.* (holotype, S; isotype, US, fragm.).

As treated here, specimens with long ligule hairs define the *Dichanthelium acuminatum* complex, which consists of three species characterized by spikelet length: *D. leucothrix* (0.8–1.2 mm), *D. acuminatum* (1.4–2 mm), and *D. ovale* (2.2–3 mm). *Dichanthelium ovale* was separated from *D. acuminatum* by Gould & Clark (1978) by its supposedly doubled ligule, which forced specimens with midsized spikelets into *D. ovale*. While it can at times be quite pronounced, this character is often difficult to see and actually becomes undetectable on many specimens. When segregated by spikelet length, however, formerly confusing taxa such as *D. ovale* var. *addisonii* (Gould & Clark, 1978) and *D. ovale* vars. *villosum* and *pseudopubescens* (Lelong, 1984, 1986) fall readily into *D. acuminatum*.

Within *D. acuminatum*, many of the pubescence and habit phases have received varietal or specific status in the past. Lelong (1984, 1986) recognized six varieties. His varieties *acuminatum*, "*unciphyllum*," and *columbianum* rely on whether the culm and sheath pubescence is appressed or spreading or both; this completely intergrades in a large suite of specimens. His variety *fasciculatum* is based on larger leaves, again a completely intergrading character. On the other hand, in the glabrous varieties *lindheimeri* and *densiflor-*

um, the lack of pubescence seems to be correlated with smaller spikelet size and generally robust habit for the former, and with an elongate inflorescence for the latter. Therefore, we are recognizing only three varieties in Florida:

- 1a. Culms and sheaths pubescent var. *acuminatum*
- 1b. Culms and sheaths glabrous or nearly so.
 - 2a. Panicle narrow, commonly 8–12 cm long; leaves dark green var. *densiflorum*
 - 2b. Panicle broad, 5–8 cm long; leaves yellow green var. *lindheimeri*

Dichanthelium acuminatum* var. *acuminatum

Panicum lanuginosum Elliott, Sketch Bot. S. Carolina 1: 123. 1816. *Dichanthelium lanuginosum* (Elliott) Gould, Brittonia 20: 60. 1974. TYPE: United States. Georgia: *Baldwin s.n.* (holotype, CHARL; isotype, US, fragm.).

Panicum dichotomum Linnaeus var. *fasciculatum* Torrey, Fl. N. Middle United States 145. 1824. *Panicum huachucae* Ashe var. *fasciculatum* (Torrey) F. Hubbard, Rhodora 14: 171. 1912. *Panicum lindheimeri* Nash var. *fasciculatum* (Torrey) Fernald, Rhodora 23: 228. 1922 ("1921"). *Panicum lanuginosum* Elliott var. *fasciculatum* (Torrey) Fernald, Rhodora 36: 77. 1934. *Dichanthelium lanuginosum* (Elliott) Gould var. *fasciculatum* (Torrey) Spellenberg, Madroño 23: 145. 1975. *Dichanthelium acuminatum* (Swartz) Gould & Clark var. *fasciculatum* (Torrey) Freckmann, Phytologia 48: 108. 1981. *Panicum acuminatum* Swartz var. *fasciculatum* (Torrey) Lelong, Brittonia 36: 169. 1984. TYPE: United States. New Jersey: *Torrey s.n.* (holotype, NY).

Panicum nitidum Lamarck var. *ciliatum* Torrey, Fl. N. Middle United States 146. 1824. TYPE: United States. New Jersey: *Torrey s.n.* (holotype, NY; isotype, US, fragm.).

Panicum nitidum Lamarck var. *pilosum* Torrey, Fl. N. Middle United States 146. 1824. TYPE: United States. New York: *Torrey s.n.* (holotype, NY; isotype, US, fragm.).

Panicum nitidum Lamarck var. *villosum* A. Gray, N. Amer. Gram. 2: 111. 1835. *Dichanthelium acuminatum* (Swartz) Gould & Clark var. *villosum* (A. Gray) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1124. 1978. *Panicum acuminatum* Swartz var. *villosum* (A. Gray) Beetle, Phytologia 48: 192. 1981. *Panicum ovale* Elliott var. *villosum* (A. Gray) Lelong, Brittonia 36: 272. 1984. TYPE: United States. New York: Ontario Co., *Sartwell? s.n.* (holotype, GH?).

Panicum dichotomum Linnaeus var. *villosum* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 31. 1889. TYPE: United States. District of Columbia: near Pierce's Mill, Rock Creek, 1 July 1883, *Vasey s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 233. 1910).

Panicum villosissimum Nash, Bull. Torrey Bot. Club 23: 149. 1896. *Dichanthelium lanuginosum* (Elliott) Gould var. *villosissimum* (Nash) Gould, Brittonia 26: 60. 1974. *Dichanthelium villosissimum* (Nash) Freckmann, Phytologia 39: 270. 1978. TYPE: United

- States. Georgia: Bibb Co., Ocmulgee River swamp below Macon, 18–24 May 1895, *Small s.n.* (holotype, NY; isotypes, NY, US).
- Panicum atlanticum* Nash, Bull. Torrey Bot. Club 24: 346. 1897. TYPE: United States. New York: Bronx, New York Botanical Garden, 24 June 1897, *Nash s.n.* (holotype, NY; isotypes, NY, US).
- Panicum commonsianum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 55. Feb. 1898. *Panicum columbianum* Lamson-Scribner var. *commonsianum* (Ashe) Dore in McNeill & Dore, Naturaliste Canad. 103: 562. 1976. *Dichanthelium commonsianum* (Ashe) Freckmann, Phytologia 39: 271. 1978. TYPE: United States. New Jersey: Cape May Co., Cape May, June 1898, *Commons 341* (holotype, NCU; isotypes, NY, US).
- Panicum filiculme* Ashe, J. Elisha Mitchell Sci. Soc. 15: 59. Feb. 1898, non Hackel 1895. TYPE: United States. Georgia: DeKalb Co., Stone Mountain, Aug. 1895, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 210. 1910).
- Panicum haemacarpum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 55. Feb. 1898. TYPE: United States. District of Columbia: 1897, *Kearney s.n.* (lectotype, NCU; isotypes, NY, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 233. 1910). Although Lelong (1984) cited NY as the location of the lectotype, Hitchcock & Chase (1910) clearly stated that the type is in Ashe's herbarium, which is now at NCU.
- Panicum huachucae* Ashe, J. Elisha Mitchell Sci. Soc. 15: 51. Feb. 1898. *Panicum lanuginosum* Elliott var. *huachucae* (Ashe) A. Hitchcock, Rhodora 8: 208. 1906. TYPE: United States. Arizona: Huachuca Mountains, 1882, *Lemmon s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 215. 1910).
- Panicum meridionale* Ashe, J. Elisha Mitchell Sci. Soc. 15: 59. Feb. 1898. *Panicum unciphyllum* Trinius var. *meridionale* (Ashe) Lamson-Scribner & Merrill, Rhodora 3: 123. 1901. *Panicum lindheimeri* Nash subvar. *meridionale* (Ashe) Farwell, Amer. Midl. Naturalist 11: 45. 1928. *Panicum lanuginosum* Elliott subvar. *meridionale* (Ashe) Farwell, Pap. Michigan Acad. Sci. 26: 5. 1941. *Dichanthelium meridionale* (Ashe) Freckmann, Phytologia 39: 270. 1978. TYPE: United States. North Carolina: Burke Co., Jonas Ridge, June 1893, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 210. 1910).
- Panicum microphyllum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 61. Feb. 1898. TYPE: United States. North Carolina: Orange Co., Chapel Hill, June 1898, *Ashe s.n.* (holotype, not located). Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 210. 1910) relegated this name to the synonymy of *Panicum meridionale* based on the description only.
- Panicum scoparioides* Ashe, J. Elisha Mitchell Sci. Soc. 15: 53. Feb. 1898. *Panicum villosissimum* Nash var. *scoparioides* (Ashe) Fernald, Rhodora 36: 79. 1934. TYPE: United States. Delaware: Newcastle Co., Centreville, 25 June 1873, *Commons 283* (lectotype, US; isotype, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 238. 1910).
- Panicum tennesseense* Ashe, J. Elisha Mitchell Sci. Soc. 15: 52. Feb. 1898. *Panicum lindheimeri* Nash var. *tennesseense* (Ashe) Farwell, Amer. Midl. Naturalist 11: 45. 1928. TYPE: United States. Tennessee: La Vergne Co., 7 Aug. 1897, *Biltmore Herb. 7087* (holotype, US).
- Panicum addisonii* Nash, Bull. Torrey Bot. Club 25: 83. 12 Feb. 1898. *Panicum commonsianum* Ashe subsp. *addisonii* (Nash) W. Stone, New Jersey State Mus. Annual Rep. 1910: 205. 1911. *Panicum commonsianum* Ashe var. *addisonii* (Nash) R. Pohl, Amer. Midl. Naturalist 38: 582. 1947. *Dichanthelium ovale* (Elliott) Gould & Clark var. *addisonii* (Nash) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1115. 1978. TYPE: United States. New Jersey: Cape May Co., Wildwood, 30–31 May 1897, *Bicknell s.n.* (holotype, NY; isotype, US, fragm.).
- Panicum implicatum* Lamson-Scribner in Britton & Brown, Ill. Fl. N. U.S. 3: 498. 20 June 1898. *Panicum unciphyllum* Trinius var. *implicatum* (Lamson-Scribner) Lamson-Scribner & Merrill, Rhodora 3: 123. 1901. *Panicum lindheimeri* Nash var. *implicatum* (Lamson-Scribner) Fernald, Rhodora 23: 228. 1922 ("1921"). *Panicum lanuginosum* Elliott var. *implicatum* (Lamson-Scribner) Fernald, Rhodora 36: 77. 1934. *Dichanthelium acuminatum* (Swartz) Gould & Clark var. *implicatum* (Lamson-Scribner) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1126. 1978. *Panicum acuminatum* Swartz var. *implicatum* (Lamson-Scribner) Beetle, Phytologia 48: 192. 1981. TYPE: United States. Maine: Cumberland Co., Cape Elizabeth, 26–27 July 1895, *Lamson-Scribner s.n.* (holotype, US; isotype, NY).
- Panicum thurowii* Lamson-Scribner & J. G. Smith, U.S.D.A. Div. Agrost. Circ. 16: 5. 1 July 1899. *Dichanthelium acuminatum* (Swartz) Gould & Clark var. *thurowii* (Lamson-Scribner & J. G. Smith) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1125. 1978. TYPE: United States. Texas: Waller Co., 5 June 1898, *Thurow 9* (holotype, US).
- Panicum ciliosum* Nash, Bull. Torrey Bot. Club 26: 568. Nov. 1899. TYPE: United States. Mississippi: Harrison Co., Biloxi, 1 Sept. 1898, *Tracy 4580* (holotype, NY; isotypes, NCU, US).
- Panicum pseudopubescens* Nash, Bull. Torrey Bot. Club 26: 577. Nov. 1899. *Panicum villosissimum* Nash var. *pseudopubescens* (Nash) Fernald, Rhodora 36: 79. 1934. *Panicum ovale* Elliott var. *pseudopubescens* (Nash) Lelong, Brittonia 36: 271. 1984. TYPE: United States. Alabama: Lee Co., Auburn, 7 May 1898, *Earle & Baker 1537* (holotype, NY; isotype, US).
- Panicum occidentale* Lamson-Scribner, Annual Rep. Missouri Bot. Gard. 10: 48. 1899. TYPE: Canada. British Columbia: Vancouver Island, "Hab. in Nootka-Sund," *Haenke s.n.* (holotype, MO; isotypes, PR, US, fragm.). The choice of the PR specimen as lectotype by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 228. 1910) is invalid; Lamson-Scribner worked from the specimen at MO and never saw the PR material.
- Panicum orangense* Ashe, J. Elisha Mitchell Sci. Soc. 15: 113. 1899. TYPE: United States. North Carolina: Orange Co., Chapel Hill, 29 June 1898, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 220. 1910).
- Panicum albemarlense* Ashe, J. Elisha Mitchell Sci. Soc. 16: 84. Feb. 1900. *Panicum meridionale* Ashe var. *albemarlense* (Ashe) Fernald, Rhodora 36: 76. 1934. TYPE: United States. North Carolina: Beaufort or

- Hyde Co., near Scranton, 26 May 1899, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 212. 1910).
- Panicum subvillosum* Ashe, J. Elisha Mitchell Sci. Soc. 16: 86. Feb. 1900. TYPE: United States. Minnesota: Carlton Co., Carlton, Aug., *Ashe s.n.* (holotype, NCU).
- Panicum wilmingtontense* Ashe, J. Elisha Mitchell Sci. Soc. 16: 86. Feb. 1900. TYPE: United States. North Carolina: New Hanover Co., near Wilmington, 17 May 1899, *Ashe s.n.* (holotype, NCU; isotype, US).
- Panicum alabamense* Ashe, North Carolina Agric. Exp. Sta. Bull. 164: 116. Aug. 1900, non Trinius 1854. TYPE: United States. Alabama: Lee Co., Auburn, 7 May 1898, *Alabama Biol. Surv. 1530* (holotype, NCU; isotypes, NY, US).
- Panicum auburne* Ashe, North Carolina Agric. Exp. Sta. Bull. 175: 115. Aug. 1900. TYPE: United States. Alabama: Lee Co., Auburn, 7 May 1898, *Earle & Baker 1527* (holotype, NCU; isotype, US).
- Panicum unciphyllum* Trinius forma *pilosum* Lamson-Scribner & Merrill, Rhodora 3: 124. 20 May 1901. TYPE: United States. Maine: Penobscot Co., Orono, 7 July 1891, *Fernald 501* (holotype, GH).
- Panicum unciphyllum* Trinius forma *prostratum* Lamson-Scribner & Merrill, Rhodora 3: 124. 20 May 1901. *Panicum languidum* A. Hitchcock & Chase, Contr. U.S. Natl. Herb. 15: 232. 1910. TYPE: United States. Maine: York Co., South Berwick, 26 Sep. 1897, *Fernald s.n.* (holotype, GH).
- Panicum xanthospermum* Lamson-Scribner & C. Mohr, in Mohr, Contr. U.S. Natl. Herb. 6: 348. 31 July 1901. TYPE: United States. Alabama: Butler Co., Greenville, 8 May 1898, *Mohr s.n.* (holotype, US).
- Panicum comophyllum* Nash, Bull. Torrey Bot. Club 30: 380. 10 July 1903. TYPE: Puerto Rico: Santurce, 9 Jan. 1899, *Heller & Heller 12* (holotype, NY).
- Panicum chrysopsidifolium* Nash in Small, Fl. S.E. U.S. 100, 1327. 22 July 1903. TYPE: United States. Florida: Leon Co., Lake Jackson, 12 May 1886, *Curtiss D* (holotype, NY).
- Panicum lanuginosum* Elliott var. *siccanum* A. Hitchcock & Chase, Rhodora 8: 207, 1906. TYPE: United States. Illinois: LaSalle Co., Starved Rock, 1 July 1901, *Chase 1602* (holotype, US).
- Panicum oricola* A. Hitchcock & Chase, Rhodora 8: 208. 1906. *Panicum columbianum* Lamson-Scribner var. *oricola* (A. Hitchcock & Chase) Fernald, Rhodora 36: 79. 1934. TYPE: United States. Delaware: Sussex Co., Lewes, 18 June 1905, *Hitchcock 47* (holotype, US; isotypes, MO, NY).
- Panicum praecocius* A. Hitchcock & Chase, Rhodora 8: 206. 1906. *Panicum lanuginosum* Elliott var. *praecocius* (A. Hitchcock & Chase) Dore in McNeill & Dore, Naturaliste Canad. 103: 576. 1976. *Dichanthelium villosissimum* (Nash) Freckmann var. *praecocius* (A. Hitchcock & Chase) Freckmann, Phytologia 39: 270. 1978. TYPE: United States. Illinois: Stark Co., near Wady Petra, 30 June 1900, *Chase 649* (holotype, US).
- Panicum unciphyllum* Trinius var. *thinium* A. Hitchcock & Chase, Rhodora 8: 209. 1906. *Panicum columbianum* Lamson-Scribner var. *thinium* (A. Hitchcock & Chase) A. Hitchcock & Chase in Robinson, Rhodora 10: 64. 1908. *Panicum heterophyllum* Bosc ex C. Nees von Esenbeck var. *thinium* (A. Hitchcock & Chase) F. Hubbard, Rhodora 14: 172. 1912.
- Dichanthelium sabulorum* (Lamarck) Gould & Clark var. *thinium* (A. Hitchcock & Chase) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1113. 1978. TYPE: United States. New Jersey: Ocean Co., Toms River, 28 July 1906, *Chase 3577* (holotype, US).
- Panicum oweniae* Bicknell, Bull. Torrey Bot. Club 35: 185. 29 Apr. 1908. TYPE: United States. Massachusetts: Nantucket Co., W of Nantucket, 20 Sep. 1907, *Bicknell s.n.* (holotype, NY; isotypes, NY, US).
- Panicum huachucae* Ashe var. *silvicola* A. Hitchcock & Chase in Robinson, Rhodora 10: 64. 16 May 1908. TYPE: United States. District of Columbia: 28 June 1904, *Chase 2400* (holotype, US).
- Panicum olivaceum* A. Hitchcock & Chase, Contr. U.S. Natl. Herb. 15: 225. 1910. TYPE: Guatemala. Alta Verapaz: Coban, Feb. 1888, *Türckheim 428* (holotype, US).
- Panicum pacificum* A. Hitchcock & Chase, Contr. U.S. Natl. Herb. 15: 229. 1910. TYPE: United States. California: Shasta Co., Castle Crag, ¼ mi. E of hotel, 3 Aug. 1908, *Hitchcock 3070* (holotype, US).
- Panicum lindheimeri* Nash var. *septentrionale* Fernald, Rhodora 23: 227. 1922 ("1921"). *Panicum lanuginosum* Elliott var. *septentrionale* (Fernald) Fernald, Rhodora 36: 77. 1934. TYPE: Canada. New Brunswick: St. John River, Woodstock, 14 July 1916, *Fernald & Long 12527* (holotype, GH).
- Panicum deamii* A. Hitchcock & Chase in Deam, Indiana Conserv. Dept. Publ. 82: 284, pl. 75(18). 1929. TYPE: United States. Indiana: Lake Co., ¼ mi. S of Pine, 21 June 1926, *Deam 43287* (holotype, US).
- Panicum mundum* Fernald, Rhodora 38: 392, pl. 443(1-5). 1936. TYPE: United States. Virginia: Sussex Co., 4 mi. NW of Homeville, 25 Aug. 1936, *Fernald & Long 6499* (holotype, GH; isotypes, MO, NY, US).
- Panicum brodiei* H. Saint John, Fl. S.-e. Washington 51. 1937. TYPE: United States. Washington: Whitman Co., Wawai, Snake River, June 1893, *Brodie s.n.* (holotype, WS).
- Panicum lassenianum* Schmolli, Madroño 5: 95. 1939. TYPE: United States. California: Plumas Co., Devil's Kitchen, Hot Spring Valley, *Jepson 4082* (holotype, US).
- Panicum glutinoscabrum* Fernald, Rhodora 49: 122. 1947. TYPE: United States. Virginia: Nansemond Co., ca. ½ mi. W of Kilby, 8-12 Sep. 1946, *Fernald et al. 15186* (holotype, GH; isotype, PH).

This taxon is common in north Florida south to the central peninsula, occurring primarily in pine flatwoods.

Dichanthelium acuminatum (Swartz) Gould & Clark var. **densiflorum** (Rand & Redfield) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1127. 1978. *Panicum nitidum* Lamarck var. *densiflorum* Rand & Redfield, Fl. Mt. Desert 174. 1894. *Panicum acuminatum* Swartz var. *densiflorum* (Rand & Redfield) Lelong, Brittonia 36: 270. 1984. TYPE: United States. Maine: Hancock Co., Mt. Desert, Ripples Pond, 28 July 1892, *Rand s.n.* (holotype, GH).

Panicum spretum Schultes, Mant. 2: 248. 1824. *Dichanthelium spretum* (Schultes) Freckmann, Phytologia 48: 102. 1981. TYPE: United States: "N. Anglica," *Muhlenberg Herb. Panicum no. 37* (holotype, PH).

Panicum eatonii Nash, Bull. Torrey Bot. Club 25: 84. 1898. TYPE: United States. New Hampshire: Rockingham Co., Seabrook, 1897, *Eaton s.n.* (holotype, NY; isotype, US).

Panicum octonodum J. G. Smith, U.S.D.A. Div. Agrost. Bull. 17: 73. 1899. *Panicum nitidum* Lamarck var. *octonodum* (J. G. Smith) Lamson-Scribner & Merrill, U.S.D.A. Div. Agrost. Bull. 24: 34. 1901. TYPE: United States. Texas: Waller Co., 5 May 1898, *Thurrow 6* (holotype, US).

Panicum paucipilum Nash, Bull. Torrey Bot. Club 26: 573. Nov. 1899. TYPE: United States. New Jersey: Cape May Co., Wildwood, 30-31 May 1897, *Bicknell s.n.* (holotype, NY; isotypes, NY, US).

This weak variety is apparently rather uncommon in Florida, found only along the northern edge of the state.

Dichanthelium acuminatum* var. *lindheimeri (Nash) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1127. 1978. *Panicum lindheimeri* Nash, Bull. Torrey Bot. Club 24: 196. 1897. *Panicum lindheimeri* Nash var. *typicum* Fernald, Rhodora 23: 227. 1922 ("1921"), nom. inadmiss. *Panicum lanuginosum* Elliott var. *lindheimeri* (Nash) Fernald, Rhodora 36: 77. 1934. *Dichanthelium lindheimeri* (Nash) Gould, Brittonia 26: 60. 1974. *Dichanthelium lanuginosum* (Elliott) Gould var. *lindheimeri* (Nash) Freckmann, Phytologia 39: 270. 1978. *Panicum acuminatum* Swartz var. *lindheimeri* (Nash) Beetle, Phytologia 48: 193. 1981. TYPE: United States. Texas: Comal Co., banks of the Guadalupe River, Near New Braunfels, 1846, *Lindheimer 565* (holotype, NY; isotypes, MO, NY).

Panicum funstonii Lamson-Scribner & Merrill, U.S.D.A. Div. Agrost. Circ. 35: 4. 1901. TYPE: United States. California: Tulare Co., bank of Kaweah River at Three Rivers, 26 July 1891, *Coville & Funston 1286* (holotype, US).

In Florida, this variety is confined to the northern counties. Variety *lindheimeri* represents the more glabrous extremes of *D. acuminatum*.

Dichanthelium boscii (Poiret) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1101. 1978. *Panicum boscii* Poiret in Lamarck, Encycl. Suppl. 4: 278. 1816. TYPE: United States: *Bosc s.n.* (lectotype, P; isotype, US, fragm.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 317. 1910).

Panicum waltheri Poiret in Lamarck, Encycl. Suppl. 4: 282. 1816. *Panicum porterianum* Nash, Bull. Torrey Bot. Club 22: 420. 1895, nom. illegit. TYPE: United States: "in pratis sylvestris Virginiae Carolinae," *Michaux s.n.* (lectotype, P). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 317. 1910). The application of *Panicum porterianum* can be quite confusing. Nash based his new name on three entities, namely "*Panicum latifolium* Walt. Fl. Car. 73. 1788. Not Linnaeus, 1753. *Panicum Waltheri* [*waltheri*] Poir. in Lam. Encycl. Suppl. 4: 282. 1816. Not Pursh, 1814. *Panicum latifolium* var. *molle* Vasey, Bull. Bot. Div., U.S. Dept. Agric. 8: 33 [error for 34]. 1889." If, as interpreted here, *Panicum waltheri* Poir. is not a later homonym of *P. waltheri* Pursh 1814, *P. waltheri* Poir. is a valid earlier name cited under *P. porterianum*, which makes the latter name illegitimate and automatically typified by the type of *P. waltheri* Poir. If, on the other hand, *P. waltheri* Poir. is considered a typographic error for *waltheri*, and is therefore a later homonym of *P. waltheri* Pursh, the lectotype of *P. porterianum* may be chosen from any of the entities cited by Nash. This was effectively done by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 317. 1910), who cited *P. porterianum* as a nomen novum for *P. wal[h]eri* Poir. Therefore, whether *P. waltheri* Poir. is judged to be valid or not, *P. porterianum* is always disposed as its homotypic synonym.

Panicum latifolium Linnaeus var. *australe* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 34. 1889. TYPE: United States. Alabama: Clark Co., Thomasville, 16 Apr. 1888, *Mohr s.n.* (holotype, US).

Panicum latifolium Linnaeus var. *molle* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 34. 1889. *Panicum waltheri* Poiret var. *molle* (Vasey) Porter, Bull. Torrey Bot. Club 20: 194. 1893. *Panicum boscii* Poiret var. *molle* (Vasey) A. Hitchcock & Chase in Robinson, Rhodora 10: 64. 1908. *Panicum pubifolium* Nash, Bull. Torrey Bot. Club 26: 577. 1899. TYPE: United States. District of Columbia: *Ward s.n.* (holotype, US).

This species is rather uncommon in Florida, occurring in the panhandle and south to Levy County.

Dichanthelium clandestinum (Linnaeus) Gould, Brittonia 26: 59. 1974. *Panicum clandestinum* Linnaeus, Sp. Pl. 58. 1753. *Milium clandestinum* (Linnaeus) Moench, Methodus 204. 1794. *Panicum latifolium* Linnaeus var. *clandestinum* (Linnaeus) Pursh, Fl. Amer. Sept. 1: 68. 1814. *Chasea clandestina* (Linnaeus) Nieuwland, Amer. Midl. Naturalist 2: 64. 1911. TYPE: United States. Pennsylvania: *Kalm s.n.* (lectotype, LINN 80.57). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 312. 1910).

Panicum pedunculatum Torrey, Fl. N. Middle United States 141. 1824. *Panicum clandestinum* Linnaeus var. *pedunculatum* (Torrey) Torrey, Fl. New York

2: 426. 1841. TYPE: United States. New York: "On the island of New-York," Aug., *Torrey s.n.* (holotype, NY; isotype, US, fragm.).

Panicum decoloratum Nash, Bull. Torrey Bot. Club 26: 570. 1899. TYPE: United States. Pennsylvania: Bucks Co., Tullytown, 30 May 1899, *Bicknell s.n.* (holotype, NY; isotype, US).

An uncommon species in Florida, found only in the western panhandle. It occurs in moist to wet sandy soil in woods.

Dichanthelium commutatum (Schultes) Gould, Brittonia 26: 59. 1974. *Panicum nervosum* Muhlenberg ex Elliott, Sketch Bot. S. Carolina 1: 122. 1816, non Lamarck 1797. *Panicum commutatum* Schultes, Mant. 2: 242. 1824. *Panicum polyneuron* Steudel, Syn. Pl. Glumac. 1: 91. 1854, nom. illegit. TYPE: United States. "Car. et Geor.," *Elliott Herb. s.n.* (lectotype, CHARL). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 303. 1910).

Panicum nitidum Lamarck var. *majus* Pursh, Fl. Amer. Sept. 1: 67. 1814. TYPE: United States: *Pursh s.n.* (lectotype, K). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 303. 1910).

Panicum umbrosum LeConte ex Torrey, Cat. Pl. New York 91. 1819, non Retzius 1786. TYPE: United States. New York: Essex Co., Bloomingdale, *LeConte s.n.* (lectotype, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 301. 1910).

Panicum enslinii Trinius, Gram. Panic. 230. 1826. TYPE: United States. "Am. bor.," *Enslin s.n.* (lectotype, LE). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 304. 1910).

Panicum leiophyllum Fournier, Mexic. Pl. 2: 20: 1886, non C. Nees von Esenbeck 1829. TYPE: Mexico. Veracruz: "in valle Cordovensi," Jan., *Bourgeau s.n.* (holotype, P).

Panicum commutatum Schultes var. *minor* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 34. 1889, as "minorus." *Panicum ashei* G. Pearson ex Ashe, J. Elisha Mitchell Sci. Soc. 15: 35. 1898. *Panicum commutatum* Schultes var. *ashei* (G. Pearson ex Ashe) Fernald, Rhodora 36: 83. 1934. TYPE: United States. South Carolina: Aiken Co., Aiken, 1867, *Ravenel s.n.* (lectotype, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 304. 1910). *Panicum ashei* is a new name for Vasey's variety and should be treated as a homotypic synonym, not retypified with another element as did Hitchcock & Chase (1910).

Panicum jorii Vasey, U.S.D.A. Div. Agrost. Bull. 8: 31. 1889. TYPE: United States. Louisiana: East Baton Rouge Par., near Baton Rouge, 1 Oct. 1885, *Joor 39* (holotype, US).

Panicum commutatum Schultes var. *latifolium* Lamson-Scribner in Kearney, Bull. Torrey Bot. Club 20: 476. 1893. TYPE: United States. Kentucky: Harlan Co., Pine Mountain, Aug. 1893, *Kearney 299* (?) (lectotype, US). Lectotypified by Hitchcock & Chase

(Contr. U.S. Natl. Herb. 15: 304. 1910). The lectotype is a sheet without data; collection data come from the protologue.

Panicum manatense Nash, Bull. Torrey Bot. Club 24: 42. 1897. TYPE: United States. Florida: Manatee Co., NE of Palmetto, 21 Aug. 1895, *Nash 2428a* (holotype, NY).

Panicum equilaterale Lamson-Scribner, U.S.D.A. Div. Agrost. Bull. 11: 42, pl. 2. 30 July 1898. TYPE: United States. Florida: Lake Co., Eustis, Aug. 1894, *Nash 1674* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 310. 1910).

Panicum commelinifolium Ashe, J. Elisha Mitchell Sci. Soc. 15: 29. 1898, non Rudge 1805. *Panicum curranii* Ashe, J. Elisha Mitchell Sci. Soc. 15: 113. 1899. TYPE: United States. Georgia: DeKalb Co., near Stone Mountain, 1-6 Aug. 1895, *Small s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 304. 1910).

Panicum epilifolium Nash, Bull. Torrey Bot. Club 26: 571. 1899. TYPE: United States. Florida: Lake Co., Eustis, 12-31 Mar. 1894, *Nash 45* (lectotype, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 310. 1910).

Panicum subsimplex Ashe, North Carolina Agric. Exp. Sta. Bull. 175: 115. 1900. TYPE: United States. Delaware: Newcastle Co., near Wilmington, 16 Aug. 1897, *Commons s.n.* (holotype, NCU).

Panicum mutabile Lamson-Scribner & J. G. Smith ex Nash in Small, Fl. S.E. U.S. 103, 1327. 1903. TYPE: United States. Mississippi: Harrison Co., Biloxi, 1896, *Tracy 3074* (holotype, NY).

Panicum hintonii Swallen, Contr. U.S. Natl. Herb. 29: 419. 1950. TYPE: Mexico. México: Bejucos, Temascaltepec, 8 Nov. 1932, *Hinton 2527* (holotype, US).

Dichanthelium commutatum is very common throughout Florida. It is found primarily in moist, shaded areas.

Dichanthelium dichotomum (Linnaeus) Gould, Brittonia 26: 59. 1974. *Panicum dichotomum* Linnaeus, Sp. Pl. 58. 1753. TYPE: United States. Virginia: "Habitat in Virginia," *Clayton 458* (lectotype, BM; isotype, US, fragm.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 190. 1910). Lelong (1984) erred by citing the lectotype at LINN.

Panicum nitidum Lamarck, Tabl. Encycl. 1: 172. 1791. *Panicum dichotomum* Linnaeus var. *nitidum* (Lamarck) Wood, Class-Book Bot., ed. 1861. 786. 1861. TYPE: United States. "E. Carolina," *Fraser s.n.* (holotype, P-LA).

Panicum nodiflorum Lamarck, Encycl. 4: 744. 1798. *Panicum dichotomum* Linnaeus var. *nodiflorum* (Lamarck) Grisebach, Cat. Pl. Cub. 234. 1866. TYPE: United States. "Caroline," *Fraser s.n.* (holotype, P-LA; isotype, US, fragm.).

Panicum barbdatum Michaux, Fl. Bor.-Amer. 1: 49. 1803. *Panicum dichotomum* Linnaeus var. *barbdatum* (Michaux) Alph. Wood, Class-Book Bot., ed. 1861. 786. 1861. *Panicum pubescens* La-

- marck var. *barbulatum* (Michaux) Britton, Cat. Pl. New Jersey 280. 1889. *Panicum nitidum* Lamarck var. *barbulatum* (Michaux) Chapman, Fl. South. U.S., ed. 3. 586. 1897. TYPE: Canada: "Hab. in Canada P. capillari affine. Ad ripas amnis: Riviere a Jacques Cartier dicti legi," Michaux s.n. (lectotype, P-M; isotype, US, fragm.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 193. 1910).
- Panicum microcarpon* Muhlenberg ex Elliott, Sketch Bot. S. Carolina 1: 127. 1816. TYPE: United States. Georgia: Baldwin s.n. (lectotype, CHARL). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 181. 1910).
- Panicum angustifolium* LeConte ex Torrey, Cat. Pl. New York 91. 1818, non Elliott 1816. TYPE: unknown.
- Panicum tremulum* Sprengel, Neue Entd. 2: 103. 1821. TYPE: United States: Muhlenberg Herb. s.n. (lectotype, B [destroyed]; isotype, US, fragm.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 190. 1910).
- Panicum nitidum* Lamarck var. *barbatum* Torrey, Fl. N. Middle United States 146. 1824. TYPE: unknown.
- Panicum nitidum* Lamarck var. *ramulosum* Torrey, Fl. N. Middle United States 146. 1824. *Panicum dichotomum* Linnaeus var. *ramulosum* (Torrey) Lelong, Brittonia 36: 265. 1984. TYPE: United States. New Jersey: near Quaker Bridge, June 1818, Torrey s.n. (holotype, NY).
- Panicum dumus* Desvaux, Opusc. Sci. Phys. Nat. 88. 1831. TYPE: United States? "America calidiori," Desvaux Herb. s.n. (holotype, P).
- Panicum dichotomum* Linnaeus var. *divaricatum* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 30. 1889. TYPE: United States. Mississippi: Scott Co., Lake, Tracy 127 (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 191. 1910).
- Panicum dichotomum* Linnaeus var. *viride* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 30. 1889. *Panicum nitidum* Lamarck var. *viride* (Vasey) Britton, Trans. New York Acad. Sci. 9: 14. 1889. *Panicum ramulosum* Michaux var. *viride* (Vasey) Porter, Bull. Torrey Bot. Club 20: 194. 1893. TYPE: United States. District of Columbia: Woodley Park, 1881, Ward s.n. (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 191. 1910).
- Panicum nudicaule* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 31. 1889. TYPE: United States. Florida: Santa Rosa Co., May 1886, Curtiss 3583 (lectotype, US; isotypes, NY, TAES). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 179. 1910).
- Panicum dichotomum* Linnaeus var. *commune* S. Watson & Coulter in A. Gray, Manual, ed. 6. 633. 1890. TYPE: unknown.
- Panicum sphagnicola* Nash, Bull. Torrey Bot. Club 22: 422. 1895. TYPE: United States. Florida: Columbia Co., Lake City, 29-31 Aug. 1895, Nash 2500 (lectotype, NY; isotypes, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 199. 1910).
- Panicum annulum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 58. 1898. *Panicum bogueanum* Ashe, J. Elisha Mitchell Sci. Soc. 16: 85. 1900, nom. illegit. TYPE: United States. District of Columbia: 1882, Ward s.n. (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 185. 1910).
- Panicum lucidum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 47. 1898. *Panicum dichotomum* Linnaeus var. *lucidum* (Ashe) Lelong, Brittonia 36: 265. 1984. TYPE: United States. North Carolina: Dare Co., swamps bordering Lake Mattamuskeet, June 1898, Ashe s.n. (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 198. 1910).
- Panicum maculatum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 44. 1898, non Aublet 1775. *Panicum yadkinense* Ashe, J. Elisha Mitchell Sci. Soc. 16: 85. 1900. *Panicum dichotomum* Linnaeus var. *yadkinense* (Ashe) Lelong, Brittonia 36: 266. 1984. TYPE: United States. North Carolina: Wake Co., Raleigh, May 1895, Ashe s.n. (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 195. 1910).
- Panicum mattamuskeetense* Ashe, J. Elisha Mitchell Sci. Soc. 15: 45. 1898. *Panicum dichotomum* Linnaeus var. *mattamuskeetense* (Ashe) Lelong, Brittonia 36: 265. 1984. TYPE: United States. North Carolina: Hyde Co., Lake Mattamuskeet, 10 June-6 July 1898, Ashe s.n. (lectotype, US; isotype, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 186. 1910).
- Panicum roanokense* Ashe, J. Elisha Mitchell Sci. Soc. 15: 44. 1898. *Panicum dichotomum* Linnaeus var. *roanokense* (Ashe) Lelong, Brittonia 36: 265. 1984. TYPE: United States. North Carolina: Dare Co., Roanoke Island, June 1898, Ashe s.n. (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 196. 1910).
- Panicum clutei* Nash, Bull. Torrey Bot. Club 26: 569. 1899. *Panicum mattamuskeetense* Ashe var. *clutei* (Nash) Fernald, Rhodora 39: 386. 1937. TYPE: United States. New Jersey: Tuckerton to Atsion, 3-6 July 1899, Clute s.n. (holotype, NY).
- Panicum curtivaginum* Ashe, J. Elisha Mitchell Sci. Soc. 16: 85. 1900. TYPE: United States. Mississippi: Jackson Co., Petit Bois Island, 8 May 1898, Tracy 4584 (lectotype, NCU?; isotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 196. 1910). Specimen at NCU not located.
- Panicum taxodiorum* Ashe, J. Elisha Mitchell Sci. Soc. 16: 91. 1900. TYPE: United States. Louisiana: Calcasieu Par., Lake Charles, Sep. 1898, Mackenzie 460 (lectotype, NCU; isotype, NY). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 198. 1910). Both Lelong (1984) and Gould & Clark (1978) cited the "holotype" as residing at NY. Hitchcock & Chase, by contrast, stated that the type was in Ashe's herbarium, which is now at NCU.
- Panicum multirameum* Lamson-Scribner, U.S.D.A. Div. Agrost. Circ. 19: 2. 1900. TYPE: Mexico. Veacruz: Near Jalapa, 1889, Pringle 7882 (lectotype, US; isotype, MO). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 185. 1910).
- Panicum subbarbulatum* Lamson-Scribner & Merrill, U.S.D.A. Div. Agrost. Circ. 29: 9. 1901. TYPE: United States: Elliott Herb. s.n. (holotype, CHARL).
- Panicum gravius* A. Hitchcock & Chase, Rhodora 8: 205. 1906. TYPE: United States. Delaware: Newcastle Co., on the old Commons farm, between Centreville and Mt. Cuba, 30 July 1906, Chase 3620 (holotype, US).
- Panicum caerulescens* Hackel ex A. Hitchcock, Contr. U.S. Natl. Herb. 12: 219. 1909. TYPE: United States.

Florida: Dade Co., Miami, 3 Apr. 1906, *Hitchcock* 706 (holotype, US; isotype, NY).

Panicum lucidum Ashe var. *opacum* Fernald, *Rhodora* 39: 386. 1937. TYPE: United States. Virginia: Prince George Co., N of Gary Church, 25 Aug. 1936, *Fernald & Long* 6484 (holotype, GH; isotypes, MO, NY, PH, US).

Gould & Clark (1978) included the generally cushion-forming plants with small spikelets as varieties of *D. dichotomum*. We agree with Lelong (1984, 1986) that these should be separated from *D. dichotomum*, but instead of two species each with two varieties, as one species with three varieties: *D. ensifolium* vars. *ensifolium*, *unciphyllum*, and *breve*. This leaves *D. dichotomum* consisting of the larger, more diffuse plants with spikelets longer than 1.5 mm. Lelong (1984, 1986) recognized seven varieties of *P. dichotomum* in this group, based on leaf size and pubescence forms. The Florida material shows too much overlap in these characters for satisfactory separation.

This species is common throughout Florida, occurring in both dry and moist habitats.

Dichanthelium ensifolium (Baldwin ex Elliott)

Gould, *Brittonia* 26: 59. 1974. *Panicum ensifolium* Baldwin ex Elliott, *Sketch Bot. S. Carolina* 1: 126. 1816. *Panicum nitidum* Lamarck var. *ensifolium* (Baldwin ex Elliott) Vasey, *U.S.D.A. Div. Agrost. Bull.* 8: 29. 1889. *Dichanthelium dichotomum* (Linnaeus) Gould var. *ensifolium* (Baldwin ex Elliott) Gould & Clark, *Ann. Missouri Bot. Gard.* 65: 1119. 1978. TYPE: United States. Georgia: *Baldwin s.n.* (holotype, CHARL; isotypes, PH, US, fragm.).

We recognize three varieties of *Dichanthelium ensifolium* in Florida:

- 1a. Lower internodes strigose; leaves less than 2 mm wide var. *breve*
- 1b. Lower internodes glabrous to slightly puberulent; most leaves wider than 2 mm.
 - 2a. Spikelets pubescent; leaves often with white margins var. *unciphyllum*
 - 2b. Spikelets glabrous to sparingly pubescent; leaves without white margins ... var. *ensifolium*

Dichanthelium ensifolium (Baldwin ex Elliott) Gould var. ***ensifolium***

Panicum chamaelonche Trinius, *Gram. Panic.* 242. 1826. TYPE: United States. "Am. bor.," *Enslin s.n.* (holotype, LE; isotype, US, fragm.).

Panicum nitidum Lamarck var. *minus* Vasey, *Contr. U.S. Natl. Herb.* 3: 30. 1892. TYPE: United States. Florida: St. Johns Co., St. Augustine, Apr. 1869, *Canby s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (*Contr. U.S. Natl. Herb.* 15: 268. 1910).

Panicum baldwinii Nuttall ex Chapman, *Fl. South. U.S.*, ed. 3. 586. 1897. TYPE: United States. Florida: *Baldwin s.n.* (lectotype, PH). Lectotypified by Hitchcock & Chase (*Contr. U.S. Natl. Herb.* 15: 168. 1910).

Panicum brittonii Nash, *Bull. Torrey Bot. Club* 24: 194. 1897. TYPE: United States. New Jersey: Ocean Co., Forked River, 29 May–2 June 1896, *Britton s.n.* (holotype, NY).

Panicum glabrifolium Nash, *Bull. Torrey Bot. Club* 24: 196. 1897. *Dichanthelium dichotomum* (Linnaeus) Gould var. *glabrifolium* (Nash) Gould & Clark, *Ann. Missouri Bot. Gard.* 65: 1120. 1978. TYPE: United States. Florida: Hillsborough Co., Tampa, 20 Aug. 1895, *Nash 2415a* (holotype, NY).

Panicum cuthbertii Ashe, *J. Elisha Mitchell Sci. Soc.* 15: 48. 1898. TYPE: United States. South Carolina: Beaufort Co., St. Helena Island, 1887, *Cuthbert s.n.* (holotype, NCU; isotype, US, fragm.).

Panicum glaberrimum Ashe, *J. Elisha Mitchell Sci. Soc.* 15: 62. 1898. *Panicum shallotte* Ashe, *J. Elisha Mitchell Sci. Soc.* 16: 84. 1900, nom. illegit. TYPE: United States. North Carolina: Dare Co., Manteo, June 1898, *Ashe s.n.* (lectotype, US; isotype, NY, US). Lectotypified by Hitchcock & Chase (*Contr. U.S. Natl. Herb.* 15: 265. 1910).

Panicum curtifolium Nash, *Bull. Torrey Bot. Club* 26: 569. 1899. *Panicum ensifolium* Baldwin ex Elliott var. *curtifolium* (Nash) Lelong, *Brittonia* 36: 266. 1984. TYPE: United States. Mississippi: Jackson Co., Ocean Springs, 2 May 1898, *Nash 4598* (holotype, NY; isotype, US).

Panicum earlei Nash, *Bull. Torrey Bot. Club* 26: 571. 1899. TYPE: United States. Alabama: Lee Co., Auburn, 7 May 1898, *Earle & Baker 1532* (holotype, NY; isotype, US).

Panicum flavovirens Nash, *Bull. Torrey Bot. Club* 26: 572. 1899. TYPE: United States. Florida: Lake Co., "along the edge of road leading to the ford near the J.T. & K.W. R.R. bridge across the Wekiva river," near Eustis, 26–30 June 1895, *Nash 2061* (holotype, NY).

Panicum austromontanum Ashe, *J. Elisha Mitchell Sci. Soc.* 16: 85. 1900. TYPE: United States. Alabama: Jackson Co., Sand Mountain, June 1899, *Ashe s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (*Contr. U.S. Natl. Herb.* 15: 267. 1910).

Panicum parvipaniculatum Ashe, *J. Elisha Mitchell Sci. Soc.* 16: 87. 1900. TYPE: United States. North Carolina: Onslow Co., 10–18 mi. E of Jacksonville, 20 May 1899, *Ashe s.n.* (lectotype, NCU; isotype, US). Lectotypified by Hitchcock & Chase (*Contr. U.S. Natl. Herb.* 15: 265. 1910).

Panicum vernale A. Hitchcock & Chase, *Contr. U.S. Natl. Herb.* 15: 266. 1910. TYPE: United States. Florida: Columbia Co., Lake City, 16 Apr. 1906, *Hitchcock 1020* (holotype, US; isotype, ISC).

This variety is very common throughout Florida, occurring in seeps, bogs, and wet pinelands.

Dichanthelium ensifolium (Baldwin ex Elliott)

Gould var. ***breve*** (A. Hitchcock & Chase) B. F. Hansen & Wunderlin, comb. nov. BASIONYM: *Panicum breve* A. Hitchcock & Chase, *Contr. U.S. Natl. Herb.* 15: 271. 1910. *Dichan-*

thelium dichotomum (Linnaeus) Gould var. *breve* (A. Hitchcock & Chase) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1120. 1978. *Panicum chamaelonche* Trinius var. *breve* (A. Hitchcock & Chase) Lelong, Brittonia 36: 267. 1984. TYPE: United States. Florida: Martin Co., "Jensen," 5 Apr. 1906, Hitchcock 734 (holotype, US).

This variety is endemic to the white sand scrub vegetation of central Florida.

Dichanthelium ensifolium (Baldwin ex Elliott) Gould var. ***unciphyllum*** (Trinius) B. F. Hansen & Wunderlin, comb. nov. BASIONYM: *Panicum unciphyllum* Trinius, Gram. Panic. 242. 1826; and the autonym created by *P. unciphyllum* Trinius var. *implicatum* (Lamson-Scribner) Lamson-Scribner & Merrill 1901. *Panicum acuminatum* Swartz var. *unciphyllum* (Trinius) Lelong, Brittonia 36: 269. 1984. TYPE: North America, without data (lectotype, LE). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 259. 1910). For comments concerning the mistypification by Lelong (1984), see under *D. acuminatum* var. *implicatum*.

Panicum tenue Muhlenberg, Descr. Gram. 118. 1817. *Panicum liton* Schultes, Mant. 2: 250. 1824, nom. illegit. *Panicum macrum* Kunth, Révis. Gramin. 1: 40. 1829, nom. illegit. *Dichanthelium dichotomum* (Linnaeus) Gould var. *tenue* (Muhlenberg) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1119. 1978. TYPE: United States: Muhlenberg Herb. 192 (lectotype, PH-M; isotype, US, frag.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 259. 1910).

Panicum albomarginatum Nash, Bull. Torrey Bot. Club 24: 40. 1897. TYPE: United States. Florida: Lake Co., near Eustis, June 1894, Nash 925 (holotype, NY; isotypes, MO, NY, US).

Panicum trifolium Nash, Bull. Torrey Bot. Club 26: 580. 1899. TYPE: United States. Georgia: Bibb Co., Ocmulgee River Swamp below Macon, 18-24 May 1895, Small s.n. (holotype, NY; isotype, US).

Panicum gracilicaule Nash in Small, Fl. S.E. U.S. 98, 1327. 1903, non Rendle 1899. *Panicum concinnum* A. Hitchcock & Chase, Contr. U.S. Natl. Herb. 15: 263. 1910. TYPE: United States. Alabama: Jackson Co., Sand Mountain, 1900, Harbison 2415 (holotype, NY).

Lelong (1984, 1986) applied the epithet *unciphyllum* to a variety of *D. acuminatum*. While *unciphyllum* is certainly the earliest epithet for Lelong's variety, there is a good deal of doubt that it belongs with *D. acuminatum*. Hitchcock & Chase (1910) lectotypified *Panicum unciphyllum* with material now at LE. The LE material apparently has two collections on one sheet. According to

Hitchcock & Chase, the collection chosen as lectotype is conspecific with *Panicum tenue*, while the other collection (by Enslin) matches *Panicum columbianum*, neither of which belongs in *D. acuminatum*. Without having seen the specimen, Lelong (1984) cited as holotype (not lectotype) of *Panicum unciphyllum* the Enslin collection at LE, this without explanation of the rejection of the earlier Hitchcock & Chase lectotypification. Without such explanation and barring further discoveries concerning the type, the lectotypification of Hitchcock & Chase must be followed. Therefore, *Panicum unciphyllum* is once again considered conspecific with *Panicum tenue*, which in turn is placed in *Dichanthelium ensifolium*. It is unfortunate that *unciphyllum* also turns out to be the earliest varietal epithet for what has been called *Panicum tenue*, this adding to the confusion.

This variety often approaches *D. dichotomum* in general aspect but is better classified with *D. ensifolium* on the basis of spikelet size. It is common throughout Florida, occurring in wet pinelands and woods.

Dichanthelium erectifolium (Nash) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1105. 1978. *Panicum sphaerocarpon* Elliott var. *floridanum* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 33. 1889. *Panicum erectifolium* Nash, Bull. Torrey Bot. Club 23: 148. 1896. *Panicum floridanum* (Vasey) Chapman, Fl. South. U.S., ed. 3. 585. 1897, non Trinius 1835. TYPE: United States. Florida: "Moist pine barrens, Mosquito Inlet," May 1879, Curtiss 3599 (lectotype, US; isotype, MO). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 256. 1910).

This species is closely related to *D. sphaerocarpon* but readily separable on the basis of spikelet size. It is quite common throughout most of Florida, except for southern Florida and the Keys, in moist flatwoods and meadows.

Dichanthelium laxiflorum (Lamarck) Gould, Brittonia 26: 60. 1974. *Panicum laxiflorum* Lamarck, Encycl. 4: 748. 1798. *Panicum dichotomum* Linnaeus var. *laxiflorum* (Lamarck) Beal, Grasses N. Amer. 2: 139. 1896. TYPE: United States?: Lamarck Herb. s.n. (holotype, P-L).

Panicum xalapense Kunth, in Humboldt, Bonpland & Kunth, Nov. Gen. Sp. 1: 103. 1816. TYPE: Mexico. Veracruz: near Jalapa, Humboldt & Bonpland s.n. (holotype, P).

Panicum ruprechtii Fournier, Mexic. Pl. 2: 21. 1886,

non Fenzl 1854. TYPE: Mexico. Veracruz: Jalapa, *Galeotti* 5733 (holotype, BR).

Panicum pyriforme Nash, Bull. Torrey Bot. Club 26: 579. 1899. TYPE: United States. Florida: Lake Co., Orange Bend, 12–31 Mar. 1894, *Nash* 239 (holotype, NY; isotypes, MO, NY, US).

Panicum xalapense Kunth var. *strictirameum* A. Hitchcock & Chase, Contr. U.S. Natl. Herb. 15: 161. 1910. *Panicum laxiflorum* Lamarck var. *strictirameum* (A. Hitchcock & Chase) Fernald, Rhodora 36: 75. 1934. TYPE: United States. Mississippi: Hinds Co., Jackson, 28 Apr. 1906, *Hitchcock* 1311 (holotypes, US).

Dichanthelium laxiflorum is common throughout Florida except for Dade and Monroe counties. It is usually found in moist woods.

Dichanthelium leucothrix (Nash) Freckmann, Phytologia 58: 101. 1981. *Panicum leucothrix* Nash, Bull. Torrey Bot. Club 24: 41. 1897. *Panicum acuminatum* Swartz var. *leucothrix* (Nash) Lelong, Brittonia 36: 271. 1984. TYPE: United States. Florida: Lake Co., near Eustis, July 1894, *Nash* 1338 (holotype, NY; isotypes, NCU, NY, TAES, US).

Panicum strictum Bosc ex Roemer & Schultes, Syst. Veg. 2: 447. 1817, non R. Brown 1810. TYPE: United States. "Carolina," *Bosc* s.n. (lectotype, M; isotype, B-W). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 207. 1910).

Panicum minutulum Desvaux, Opusc. Sci. Phys. Nat. 87. 1831, non Gaudichaud-Beaupré 1826. TYPE: United States?: *Desvaux* Herb. s.n. (holotype, P).

Panicum parvispiculum Nash, Bull. Torrey Bot. Club 24: 347. 1897. TYPE: United States. Georgia: McIntosh Co., Darien Junction, 25–27 June 1895, *Small* s.n. (holotype, NY; isotype, US, fragm.).

Panicum wrightianum Lamson-Scribner, U.S.D.A. Div. Agrost. Bull. 11: 44, f. 4. 1898. *Dichanthelium acuminatum* (Swartz) Gould & Clark var. *wrightianum* (Lamson-Scribner) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1126. 1978. *Dichanthelium wrightianum* (Lamson-Scribner) Freckmann, Phytologia 48: 101. 1981. TYPE: Cuba: *Wright* 3463 (holotype, US).

Panicum longiligulatum Nash, Bull. Torrey Bot. Club 26: 574. 1899. *Dichanthelium acuminatum* (Swartz) Gould & Clark var. *longiligulatum* (Nash) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1127. 1978. *Dichanthelium longiligulatum* (Nash) Freckmann, Phytologia 48: 102. 1981. *Panicum acuminatum* Swartz var. *longiligulatum* (Nash) Lelong, Brittonia 36: 270. 1984. TYPE: United States. Florida: Franklin Co., Apalachicola, 1892, *Vasey* s.n. (holotype, NY).

Dichanthelium leucothrix is the small-fruited member of the *D. acuminatum* complex. Robust, glabrous specimens may be difficult to separate from *D. acuminatum* var. *lindheimeri*, which has larger, fewer-fruited inflorescences and a more northerly distribution. There may be some justifi-

cation for the separation of the glabrous (traditionally *Panicum longiligulatum*) and pubescent (*P. leucothrix*) specimens at the varietal level; most previous authors have indeed split this taxon into at least two taxa based on forms of pubescence. The pubescence, however, intergrades completely from the extremes, while otherwise the taxon is quite homogeneous. Therefore, we have chosen not to recognize the segregates.

This species is common throughout Florida, mostly in pine flatwoods.

Dichanthelium oligosanthos (Schultes) Gould, Brittonia 26: 60. 1974. *Panicum pauciflorum* Elliott, Sketch Bot. S. Carolina 1: 120. 1816, non R. Brown 1810. *Panicum oligosanthos* Schultes, Mant. 2: 256. 1824. *Panicum scoparium* Lamarck var. *pauciflorum* Lamson-Scribner, Tennessee Agric. Exp. Sta. Bull. 7: 48. 1894. TYPE: United States. Georgia: *Elliott* Herb. s.n. (lectotype, CHARL; isotype, US, fragm.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 285. 1910).

Panicum macrocarpon Torrey, Fl. N. Middle United States 143. 1823, non LeConte 1819. TYPE: United States. Massachusetts: Franklin Co., banks of the Connecticut River, near Deerfield, *Cooley* s.n. (holotype, NY).

Panicum scoparium Lamarck var. *angustifolium* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 32. 1889. TYPE: United States. South Carolina: *Ravenel* s.n. (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 286. 1910).

Panicum scribnerianum Nash, Bull. Torrey Bot. Club 22: 421. 1895. *Panicum oligosanthos* Schultes var. *scribnerianum* (Nash) Fernald, Rhodora 36: 80. 1934. *Dichanthelium oligosanthos* (Schultes) Gould var. *scribnerianum* (Nash) Gould, Brittonia 26: 60. 1974. TYPE: United States. Pennsylvania: Bradford Co., Wysox, July 1836, *Carey* s.n. (lectotype, GH). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 283. 1910). Gould & Clark (1978) erroneously stated that this name is based on *Panicum macrocarpon* Torrey.

Panicum helleri Nash, Bull. Torrey Bot. Club 26: 572. 1899. *Panicum oligosanthos* Schultes var. *helleri* (Nash) Fernald, Rhodora 36: 80. 1934. TYPE: United States. Texas: Kerr Co., Kerrville, 14–21 May 1894, *Heller* 1759 (holotype, NY).

Panicum pernervosum Nash, Bull. Torrey Bot. Club 26: 576. 1899. TYPE: United States. Texas: Harris Co., Houston, 16 Apr. 1872, *Hall* 830 (holotype, NY).

Most recent authors have followed Fernald in recognizing *P. scribnerianum* at least at the varietal level. The characteristics of pubescence used to separate the taxa, however, are very unreliable and seem not to be correlated with any other con-

crete evidence that differentiation has occurred in this species. There seems to us little to be gained by the formal recognition of these pubescence phases.

This species is rather uncommon in the northern tier of counties, occurring in dry pine-oak-hickory woods.

Dichanthelium ovale (Elliott) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1115. 1978. *Panicum ovale* Elliott, Sketch Bot. S. Carolina 1: 123. 1816. TYPE: United States. Georgia: Camden Co., St. Marys, *Baldwin s.n.* (holotype, CHARL).

Panicum villosum Elliott, Sketch Bot. S. Carolina 1: 124. 1816, non Lamarck 1791. *Panicum consanguineum* Kunth, Révis. Gramin. 1: 36. 1829. *Panicum commutatum* Schultes var. *consanguineum* (Kunth) Beal, Grasses N. Amer. 2: 141. 1896. *Dichanthelium consanguineum* (Kunth) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1115. 1978. TYPE: United States: *Elliott Herb. s.n.* (holotype, CHARL; isotype, US, fragm.).

Panicum ciliiferum Nash, Bull. Torrey Bot. Club 24: 195. 1897. TYPE: United States. Florida: Lake Co., Eustis, 12-31 Mar. 1894, *Nash 147* (holotype, NY; isotypes, MO, US).

Panicum malacon Nash, Bull. Torrey Bot. Club 24: 197. 1897. TYPE: United States. Florida: Lake Co., Eustis, 1-15 May 1894, *Nash 628* (holotype, NY; isotypes, MO, NY, US).

Panicum georgianum Ashe, J. Elisha Mitchell Sci. Soc. 15: 36. 1898. *Panicum cahoonianum* Ashe, J. Elisha Mitchell Sci. Soc. 15: 113. 1899, nom. illegit. TYPE: United States. Georgia: McIntosh Co., Darien Junction, 27 June 1895, *Small s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 169. 1910).

Panicum strictifolium Nash, Bull. Torrey Bot. Club 26: 579. 1899. TYPE: United States. Florida: Lake Co., Eustis, 3 May 1894, *Nash 603* (holotype, NY; isotypes, NY, US).

Panicum erythrocarpon Ashe, J. Elisha Mitchell Sci. Soc. 16: 90. 1900. TYPE: United States. North Carolina: New Hanover Co., 1 mi. N of Wilmington, 19 May 1899, *Ashe s.n.* (holotype, NCU; isotype, US).

Panicum euchlamydeum Shinnars, Amer. Midl. Naturalist 32: 170. 1944. *Panicum commonsianum* Ashe var. *euchlamydeum* (Shinnars) R. Pohl, Amer. Midl. Naturalist 38: 507. 1947. *Dichanthelium commonsianum* (Ashe) Freckmann var. *euchlamydeum* (Shinnars) Freckmann, Phytologia 39: 271. 1978. TYPE: United States. Wisconsin: Adams Co., 12 mi. SE of Adams, *Shinnars & Shaw 4415* (holotype, WIS; isotypes, GH, MIL, MIN, US).

As defined here, *Dichanthelium ovale* consists of the large-fruited specimens of the *D. acuminatum* complex. If smaller-fruited plants are included in this taxon, as in past treatments, problems in naming the many overlapping specimens become

insurmountable. By delimiting the species as we have, a more homogeneous and practical system results, one where almost every specimen can be classified.

Gould & Clark (1978) recognized *Dichanthelium consanguineum* as a separate species characterized by pilose upper leaf surfaces. Again, the pubescence character seems insufficient for the separation of species.

Dichanthelium ovale is common in sandhills, pinelands, and disturbed habitats throughout Florida.

Dichanthelium portoricense (Desvaux ex Hamilton) B. F. Hansen & Wunderlin, comb. nov. BASIONYM: *Panicum portoricense* Desvaux ex Hamilton, Prodr. 11. 1825. TYPE: Puerto Rico: *Desvaux Herb. s.n.* (holotype, P).

Panicum lancearium Trinius, Gram. Panic. 223. 1826. TYPE: United States: "Am. bor.," *Enslin s.n.* (holotype, LE; isotype, US, fragm.).

Panicum heterophyllum Bosc. ex C. Nees von Esenbeck in Martius, Fl. Bras. Enum. Pl. 2(1): 227. 1829, non Sprengel 1822. TYPE: United States: *Bosc s.n.* (holotype, B-W).

Panicum webberianum Nash, Bull. Torrey Bot. Club 23: 149. 1896. TYPE: United States. Florida: Lake Co., Eustis, 16-31 May 1894, *Nash 781* (holotype, NY; isotypes, MO, NY, US).

Panicum columbianum Lamson-Scribner, U.S.D.A. Div. Agrost. Bull. 7: 78, f. 60. 1897. *Dichanthelium columbianum* (Lamson-Scribner) Freckmann, Phytologia 39: 270. 1978. *Panicum acuminatum* Swartz var. *columbianum* (Lamson-Scribner) Lelong, Brittonia 36: 270. 1984. TYPE: United States. District of Columbia: Brookland, 14 July 1894, *Lamson-Scribner s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 247. 1910).

Panicum nashianum Lamson-Scribner, U.S.D.A. Div. Agrost. Bull. 7: 79, f. 61. 1897. *Panicum portoricense* Desvaux ex Hamilton var. *nashianum* (Lamson-Scribner) Lelong, Brittonia 36: 267. 1984. TYPE: United States. Florida: Lake Co., vicinity of Eustis, 15-30 Apr. 1894, *Nash 466* (lectotype, US; isotype, MO). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 273. 1910).

Panicum tsugetorum Nash, Bull. Torrey Bot. Club 25: 86. 1898. TYPE: United States. New York: Bronx, New York Botanical Garden, 22 June 1896, *Nash 287* (holotype, NY; isotype, US, fragm.).

Panicum patentifolium Nash, Bull. Torrey Bot. Club 26: 574. 1899. TYPE: United States. Florida: Lake Co., Eustis, 12-31 Mar. 1894, *Nash 72* (holotype, NY; isotypes, MO, NY, US).

Panicum psammophilum Nash, Bull. Torrey Bot. Club 26: 576. Nov. 1899, non Welwitsch July 1899. TYPE: United States. New Jersey: Ocean Co., Tom's River, 25-31 July 1898, *Clute 175* (holotype, NY; isotype, US).

Panicum onslowense Ashe, J. Elisha Mitchell Sci. Soc.

16: 88. Feb. 1900. TYPE: United States. North Carolina: Onslow Co., near Ward's Mill, 11 mi. E of Jacksonville, 19–21 May 1899, *Ashe s.n.* (lectotype, NCU; isotypes, NCU, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 276. 1910). Lelong (1984) cited the lectotype as residing at UNC, but Hitchcock & Chase clearly stated that the type is in Ashe's herbarium, now at NCU.

Panicum pauciciliatum Ashe, J. Elisha Mitchell Sci. Soc. 16: 87. Feb. 1900. TYPE: United States. North Carolina: New Hanover Co., near Wilmington, 20 May 1899, *Ashe s.n.* (lectotype, NCU; isotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 272. 1910). Specimen at NCU not located.

Panicum nashianum Lamson-Scribner var. *patulum* Lamson-Scribner & Merrill, U.S.D.A. Div. Agrost. Circ. 27: 9. Dec. 1900. *Panicum patulum* (Lamson-Scribner & Merrill) A. Hitchcock, Rhodora 8: 209. 1906. *Panicum lancearium* Trinius var. *patulum* (Lamson-Scribner & Merrill) Fernald, Rhodora 36: 80. 1934. *Dichanthelium sabulorum* (Lamarck) Gould & Clark var. *patulum* (Lamson-Scribner & Merrill) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1113. 1978. TYPE: United States. Florida: Manatee Co., Bradenton [Bradenton], 3 Sep. 1898, *Combs 1296* (holotype, US).

As pointed out by Lelong (1984), *Panicum sabulorum* Lamarck, whose type is from Uruguay, is not conspecific with our material, contrary to the treatment by Gould & Clark (1978). This leaves as the earliest name in the taxon *Panicum portoricense* Desvaux ex Hamilton, which unfortunately necessitates a new combination in *Dichanthelium*.

Gould & Clark (1978) and Lelong (1984, 1986) recognized two varieties in this species, based on spikelet length, inflorescence size, and leaf length. In the Florida material, however, spikelet size is but poorly correlated with inflorescence size, both of which seem unrelated to leaf size. Intraspecific taxa have therefore not been applied to this species.

Panicum columbianum was classified by Lelong (1984) as a variety of *P. acuminatum*. According to the description of Hitchcock & Chase (1910), *P. columbianum* and its synonym (fide Lelong) *P. tsugetorum* have ligules up to 1.5 mm long. The short ligules take *P. columbianum* out of the *P. acuminatum* complex.

Dichanthelium portoricense is probably the most commonly collected member of the genus in Florida. It occurs in a variety of habitats throughout the state.

Dichanthelium ravenelii (Lamson-Scribner & Merrill) Gould, Brittonia 26: 60. 1974. *Panicum ravenelii* Lamson-Scribner & Merrill, U.S.D.A. Div. Agrost. Bull. 24: 36. 1901.

TYPE: United States. South Carolina: *Elliott s.n.* (lectotype, CHARL). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 287. 1910).

Panicum scoparium Lamarck var. *major* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 32. 1889, as "majus." TYPE: United States. South Carolina: *Ravenel s.n.* (holotype, US).

This large grass, related to *D. scoparium*, is known in Florida only from the panhandle region, occurring in dry hammocks.

Dichanthelium scabriusculum (Elliott) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1110. 1978. *Panicum scabriusculum* Elliott, Sketch Bot. S. Carolina 1: 121. 1816. *Panicum viscidum* Elliott var. *scabriusculum* (Elliott) Beal, Grasses N. Amer. 2: 143. 1896. TYPE: United States. Georgia: Chatham Co., Savannah, *Baldwin s.n.* (holotype, CHARL).

Panicum lanuginosum Bosc ex Sprengel, Syst. Veg. 1: 319. 1825, non Elliott 1816. *Panicum eriophorum* Schultes ex Kunth, Enum. Pl. 1: 128. 1833. TYPE: United States. Georgia: *Bosc s.n.* (holotype, B-W).

Panicum nealleyi Vasey, Bull. Torrey Bot. Club 13: 25. 1886. TYPE: United States. Texas: May 1885, *Nealley s.n.* (holotype, US).

Panicum dichotomum Linnaeus var. *elatum* Vasey, U.S.D.A. Div. Agrost. Bull. 8: 31. 1889. TYPE: United States. Alabama: Mobile Co., 18 June 1888, *Mohr s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 298. 1910).

Panicum cryptanthum Ashe, N. Carolina Agric. Exp. Sta. Bull. 175: 115. 1900. TYPE: United States. North Carolina: Johnston Co., Wilsons Mill, 15 July 1897, *Ashe s.n.* (lectotype, NCU; isotypes, NCU). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 299. 1910).

Panicum aculeatum A. Hitchcock & Chase, Rhodora 8: 209. 1906. TYPE: United States. District of Columbia: Takoma Park, 27 July 1904, *Chase 2520* (holotype, US).

Panicum recognitum Fernald, Rhodora 40: 331, pl. 497–498. 1938. TYPE: United States. New Jersey: Camden Co., headwaters of branch of Timber Creek, Albion, 27 June 1912, *Long 7671* (holotype, GH; isotype, PH). Gould & Clark (1978) erroneously cited the location of the holotype as US.

This species is quite common in northern Florida, ranging southward to Orange County. It is primarily found in bogs, cypress swamps, and wet woods.

Dichanthelium scoparium (Lamarck) Gould, Brittonia 26: 60. 1974. *Panicum scoparium* Lamarck, Encycl. 4: 744. 1798. *Panicum scoparium* Lamarck var. *genuinum* Lamson-

Scribner, Tennessee Agric. Exp. Sta. Bull. 7: 48. 1894, nom. inadmiss. TYPE: United States: "Caroline," *Michaux s.n.* (holotype, P-M). Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 287. 1910) mistypified var. *genuinum* with Elliott's material of *P. ravenelii*. Lamson-Scribner's citation of *P. scoparium* Lamarck necessitates the obvious disposal of this inadmissible varietal epithet here.

Panicum pubescens Lamarck, Encycl. 4: 748. 1798. *Panicum laxiflorum* Lamarck var. *pubescens* (Lamarck) Chapman, Fl. South. U.S., ed. 3. 586. 1897. *Chasea pubescens* (Lamarck) Nieuwland, Amer. Midl. Naturalist 2: 64. 1911. TYPE: United States. South Carolina: *Michaux s.n.* (lectotype, P-M). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 294. 1910).

Panicum viscidum Elliott, Sketch Bot. S. Carolina 1: 123, pl. 7(3). 1816. TYPE: United States: *Elliott Herb. s.n.* (lectotype, CHARL). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 294. 1910).

Panicum nitidum Lamarck var. *velutinum* Döll in Martius, Fl. Bras. 2(2): 247. 1877. TYPE: United States. Texas.

Although this species is usually locally abundant, it is confined in Florida to the northern tier of counties. It occurs in marshes, moist woods, and roadsides.

Dichanthelium sphaerocarpon (Elliott) Gould, Brittonia 26: 60. 1974. *Panicum sphaerocarpon* Elliott, Sketch Bot. S. Carolina 1: 125. 1816. *Panicum dichotomum* Linnaeus var. *sphaerocarpon* (Elliott) Alph. Wood, Class-Book Bot., ed. 1861. 786. 1861. *Panicum microcarpon* Muhlenberg var. *sphaerocarpon* (Elliott) Vasey, Grass. U.S. 12. 1883. TYPE: United States. Georgia: *Baldwin s.n.* (holotype, CHARL).

Panicum kalmii Swartz, Adnot. Bot. 6. 1829. TYPE: United States. Pennsylvania?: *Kalm s.n.* (holotype, S).

Panicum nitidum Lamarck var. *crassifolium* A. Gray ex Döll in Martius, Fl. Bras. 2(2): 247. 1877. TYPE: United States. New Jersey: *Gray? 30* (holotype, KR?; isotype, GH).

Panicum vicarium Fournier, Mexic. Pl. 2: 20. 1886. TYPE: Mexico. Veracruz: Córdoba, s.d., *Schaffner 285* (holotype, P).

Panicum inflatum Lamson-Scribner & J. G. Smith, U.S.D.A. Div. Agrost. Circ. 16: 5. 1899. *Panicum sphaerocarpon* Elliott var. *inflatum* (Lamson-Scribner & J. G. Smith) A. Hitchcock in Hitchcock & Chase, Contr. U.S. Natl. Herb. 15: 253. 1910. TYPE: United States. Mississippi: Harrison Co., Biloxi, Oct. 1898, *Tracy 4622* (holotype, US).

Panicum mississippiense Ashe, J. Elisha Mitchell Sci. Soc. 16: 91. 1900. TYPE: United States. Louisiana:

Orleans Par., "Banks of the Mississippi River below New Orleans in October," *Ashe s.n.* (holotype, not located).

This species occurs in bogs and seeps in the panhandle area of Florida.

Dichanthelium strigosum (Muhlenberg ex Elliott) Freckman, Brittonia 33: 457. 1981. *Panicum strigosum* Muhlenberg ex Elliott, Sketch Bot. S. Carolina 1: 126. 1816. TYPE: United States. "Hab. in humidis. Car: & Georg:," *Elliott Herb. s.n.* (lectotype, CHARL; isotype, US, fragm.). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 164. 1910).

Freckmann (1981b) recognized that *strigosum* was the earliest specific epithet for this species and made the necessary combinations for the three rather well marked (for this genus) varieties.

KEY TO THE VARIETIES OF *DICHANTHELIUM STRIGOSUM*

- 1a. Spikelets puberulent or pubescent, 1.5–2.1 mm long..... var. *leucoblepharis*
- 1b. Spikelets glabrous, 1.1–1.8 mm long.
 - 2a. Leaf blade surfaces glabrous; spikelets 1.2–1.8 mm long var. *glabrescens*
 - 2b. Leaf blade surfaces pilose; spikelets 1.1–1.5 mm long var. *strigosum*

Dichanthelium strigosum (Muhlenberg ex Elliott) Freckmann var. ***strigosum***

Panicum laxiflorum Lamarck var. *pubescens* Vasey, Contr. U.S. Natl. Herb. 3: 30. 1892. *Dichanthelium leucoblepharis* (Trinius) Gould & Clark var. *pubescens* (Vasey) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1101. 1978. *Panicum ciliatum* Elliott var. *pubescens* (Vasey) Freckmann ex R. Pohl, Fieldiana, Bot., n.s. 4: 356. 1980. *Panicum leucoblepharis* Trinius var. *pubescens* (Vasey) Beetle, Phytologia 48: 192. 1981. TYPE: United States. Florida: Duval Co., *Curtiss H* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 164. 1910).

Panicum longipedunculatum Lamson-Scribner, Tennessee Agric. Exp. Sta. Bull. 7: 53, pl. 16(61). 1894. TYPE: United States. Tennessee: White Cliff Springs, July 1890, *Lamson-Scribner s.n.* (lectotype, US). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 164. 1910).

Uncommon in Florida, this variety ranges from northern Florida south to the central peninsula.

Dichanthelium strigosum (Muhlenberg ex Elliott) Freckmann var. ***glabrescens*** (Grisebach) Freckmann, Brittonia 33: 457. 1981. *Panicum dichotomum* Linnaeus var. *glabrescens* Grisebach, Fl. Brit. W. I. 553. 1864.

Dichanthelium leucoblepharis (Trinius) Gould & Clark var. *glabrescens* (Grisebach) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1100. 1978. TYPE: Jamaica: *Purdie s.n.* (holotype, K).

Panicum polycaulon Nash, Bull. Torrey Bot. Club 24: 200. 1897. TYPE: United States. Florida: Hillsborough Co., Tampa, 20 Aug. 1895, *Nash 2420a* (holotype, NY; isotype, US, fragm.).

This variety is common throughout Florida in moist pinelands, bogs, and coastal swales.

Dichanthelium strigosum (Muhlenberg ex Elliott) Freckmann var. ***leucoblepharis*** (Trinius) Freckmann, Brittonia 33: 457. 1981. *Panicum leucoblepharis* Trinius, Clav. Agrostogr. Antiq. 234. 1822. *Dichanthelium leucoblepharis* (Trinius) Gould & Clark, Ann. Missouri Bot. Gard. 65: 1099. 1978. TYPE: United States. "Am. bor.," *Enslin s.n.* (lectotype, LE). Lectotypified by Hitchcock & Chase (Contr. U.S. Natl. Herb. 15: 162. 1910).

Panicum ciliatum Elliott, Sketch Bot. S. Carolina 1: 126. 1816, non Märcklin 1792. *Panicum ciliatifolium* Kunth, Révis. Gramin. 1: 36. 1829. TYPE: United States. *Elliott Herb. s.n.* (holotype, CHARL).

Panicum ciliatifolium Desvaux, Opusc. Sci. Phys. Nat. 88. 1831, non Kunth 1829. TYPE: "America boreali" (specimen unknown).

When making the new combination *Panicum ciliatum* Elliott var. *pubescens* (Vasey) Freckmann ex R. Pohl (1980), based on *P. laxiflorum* var. *pubescens* Vasey (1892), Pohl created the autonym *Panicum ciliatum* Elliott var. *ciliatum*. At first glance, this autonym would seem to be the earliest varietal name for this taxon. However, *Panicum ciliatum* Elliott, 1816, is illegitimate because it is a later homonym of *Panicum ciliatum* Märcklin, 1792, as pointed out by Veldkamp (1976). Since an autonym can only be established on a legitimate name (ICBN Art. 26), as verified by Dan Nicolson (pers. comm.), the next epithet in line, *leucoblepharis*, must be chosen.

This variety is rare in Florida, found only in the northern counties, occurring in pinelands.

EXCLUDED SPECIES

Dichanthelium linearifolium (Lamson-Scribner) Gould

This northern species was reported from the Florida panhandle by Clewell (1985), but no supporting specimens have been found.

LITERATURE CITED

- CLEWELL, A. F. 1985. Guide to the Vascular Plants of the Florida Panhandle. University Presses of Florida/Florida State Univ. Press, Tallahassee, Florida.
- FRECKMANN, R. W. 1981a. Realignment in the *Dichanthelium acuminatum* complex (Poaceae). Phytologia 48: 99–110.
- . 1981b. The correct name for *Dichanthelium leucoblepharis* (Poaceae) and its varieties. Brittonia 33: 457–458.
- GOULD, F. W. & C. A. CLARK. 1978. *Dichanthelium* (Poaceae) in the United States and Canada. Ann. Missouri Bot. Gard. 65: 1088–1132.
- HITCHCOCK, A. S. & A. CHASE. 1910. The North American species of *Panicum*. Contr. U.S. Natl. Herb. 15: 1–396.
- LELONG, M. G. 1984. New combinations for *Panicum* subgenus *Panicum* and subgenus *Dichanthelium* (Poaceae) of the southeastern United States. Brittonia 36: 262–273.
- . 1986. A taxonomic treatment of the genus *Panicum* (Poaceae) in Mississippi. Phytologia 61: 251–269.
- SPELLENBERG, R. W. 1975a. Autogamy and hybridization as evolutionary mechanisms in *Panicum* subgenus *Dichanthelium* (Gramineae). Brittonia 27: 87–95.
- . 1975b. Synthetic hybridization and taxonomy of western North American *Dichanthelium*, group *Lanuginosa* (Poaceae). Madroño 23: 134–153.
- VELDKAMP, J. F. 1976. *Panicum ciliatum* Ell. (Gramineae) has to be called *P. leucoblepharis* Trin. Taxon 25: 185–186.
- WUNDERLIN, R. P. 1982. Guide to the Vascular Plants of Central Florida. Univ. South Florida Press/University Presses of Florida, Gainesville, Florida.

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mum
 var. *mattamuskeetense* (Ashe) Lelong, p. 1645. = *D.*
dichotomum
 var. *nitidum* (Lamarck) Alph. Wood, p. 1644. = *D.*
dichotomum
 var. *nodiflorum* (Lamarck) Grisebach, p. 1644. = *D.*
dichotomum
 var. *ramulosum* (Torrey) Lelong, p. 1645. = *D. di-*
chotomum
 var. *roanokense* (Ashe) Lelong, p. 1645. = *D. dichoto-*
tomum
 var. *sphaerocarpon* (Elliott) Alph. Wood, p. 1651. =
D. sphaerocarpon
 var. *villosum* Vasey, p. 1640. = *D. acuminatum* var.
acuminatum
 var. *viride* Vasey, p. 1645. = *D. dichotomum*
 var. *yadkinense* (Ashe) Lelong, p. 1645. = *D. dichoto-*
tomum
dumus Desvaux, p. 1645. = *D. dichotomum*
earlei Nash, p. 1646. = *D. ensifolium* var. *ensifolium*
eatonii Nash, p. 1643. = *D. acuminatum* var. *densiflo-*
rum
ensifolium Baldwin ex Elliott, p. 1646. = *D. ensifolium*
 var. *curtifolium* (Nash) Lelong, p. 1646. = *D. ensi-*
folium var. *ensifolium*
enslinii Trinius, p. 1644. = *D. commutatum*
epilifolium Nash, p. 1644. = *D. commutatum*
equilaterale Lamson-Scribner, p. 1644. = *D. commu-*
tatum
erectifolium Nash, p. 1647. = *D. erectifolium*
eriophorum Schultes ex Kunth, p. 1650. = *D. scabrius-*
culum
erythrocarpon Ashe, p. 1649. = *D. ovale*
euchlamydeum Shinners, p. 1649. = *D. ovale*
filiculme Ashe, p. 1641. = *D. acuminatum* var. *acu-*
minatum
filirameum Ashe, p. 1639. = *D. aciculare*
flavovirens Nash, p. 1646. = *D. ensifolium* var. *ensi-*
folium
floridanum (Vasey) Chapman, p. 1647. = *D. erectifolium*
funstonii Lamson-Scribner & Merrill, p. 1643. = *D.*
acuminatum var. *lindheimeri*
fusiforme A. Hitchcock, p. 1639. = *D. aciculare*

- georgianum* Ashe, p. 1649. = *D. ovale*
glabrifolium Nash, p. 1646. = *D. ensifolium* var. *ensifolium*
glabrissimum Ashe, p. 1646. = *D. ensifolium* var. *ensifolium*
glutinoscabrum Fernald, p. 1642. = *D. acuminatum* var. *acuminatum*
gracilicaule Nash, p. 1647. = *D. ensifolium* var. *unciphyl-
llum*
gravius A. Hitchcock & Chase, p. 1645. = *D. dichotomum*
haemacarpon Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
helleri Nash, p. 1648. = *D. oligosanthes*
heterophyllum Bosc ex C. Nees von Esenbeck, p. 1649. = *D. portoricense*
 var. *thinium* (A. Hitchcock & Chase) F. Hubbard, p. 1642. = *D. acuminatum* var. *acuminatum*
hintonii Swallen, p. 1644. = *D. commutatum*
huachucae Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *fasciculatum* (Torrey) F. Hubbard, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *silvicola* A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
implicatum Lamson-Scribner, p. 1641. = *D. acuminatum* var. *acuminatum*
inflatum Lamson-Scribner & J. G. Smith, p. 1651. = *D. sphaerocarpon*
joorii Vasey, p. 1644. = *D. commutatum*
kalmii Swartz, p. 1651. = *D. sphaerocarpon*
lancearium Trinius, p. 1649. = *D. portoricense*
 var. *patulum* (Lamson-Scribner & Merrill) Fernald, p. 1650. = *D. portoricense*
languidum A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
lanuginosum Bosc ex Sprengel, p. 1650. = *D. scabriusculum*
lanuginosum Elliott, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *fasciculatum* (Torrey) Fernald, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *huachucae* (Ashe) A. Hitchcock, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *implicatum* (Lamson-Scribner) Fernald, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *lindheimeri* (Nash) Fernald, p. 1643. = *D. acuminatum* var. *lindheimeri*
 subvar. *meridionale* (Ashe) Farwell, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *praecocius* (A. Hitchcock & Chase) Dore, p. 1642. = *D. acuminatum* var. *acuminatum*
 var. *septentrionale* (Fernald) Fernald, p. 1642. = *D. acuminatum* var. *acuminatum*
 var. *siccanum* A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
lassenianum Schmoll, p. 1642. = *D. acuminatum* var. *acuminatum*
latifolium Linnaeus
 var. *australe* Vasey, p. 1643. = *D. boscii*
 var. *clandestinum* (Linnaeus) Pursh, p. 1643. = *D. clandestinum*
 var. *molle* Vasey, p. 1643. = *D. boscii*
laxiflorum Lamarck, p. 1647. = *D. laxiflorum*
 var. *pubescens* (Lamarck) Chapman, p. 1651. = *D. scoparium*
 var. *pubescens* Vasey, p. 1651. = *D. strigosum* var. *strigosum*
 var. *strictirameum* (A. Hitchcock & Chase) Fernald, p. 1648. = *D. laxiflorum*
leiophyllum Fournier, p. 1644. = *D. commutatum*
leucoblepharis Trinius, p. 1652. = *D. strigosum* var. *leucoblepharis*
 var. *pubescens* (Vasey) Beetle, p. 1651. = *D. strigosum* var. *strigosum*
leucothrix Nash, p. 1648. = *D. leucothrix*
lindheimeri Nash, p. 1643. = *D. acuminatum* var. *lindheimeri*
 var. *fasciculatum* (Torrey) Fernald, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *implicatum* (Lamson-Scribner) Fernald, p. 1641. = *D. acuminatum* var. *acuminatum*
 subvar. *meridionale* (Ashe) Farwell, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *septentrionale* Fernald, p. 1642. = *D. acuminatum* var. *acuminatum*
 var. *tennesseense* (Ashe) Farwell, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *typicum* Fernald, p. 1643. = *D. acuminatum* var. *lindheimeri*
liton Schultes, p. 1647. = *D. ensifolium* var. *unciphyl-
lum*
longiligulatum Nash, p. 1648. = *D. leucothrix*
longipedunculatum Lamson-Scribner, p. 1651. = *D. strigosum* var. *strigosum*
lucidum Ashe, p. 1645. = *D. dichotomum*
 var. *opacum* Fernald, p. 1646. = *D. dichotomum*
macrocarpon Torrey, p. 1648. = *D. oligosanthes*
macrum Kunth, p. 1647. = *D. ensifolium* var. *unciphyl-
llum*
maculatum Ashe, p. 1645. = *D. dichotomum*
malacon Nash, p. 1649. = *D. ovale*
manatense Nash, p. 1644. = *D. commutatum*
mattamuskeetense Ashe, p. 1645. = *D. dichotomum*
 var. *clutei* (Nash) Fernald, p. 1645. = *D. dichotomum*
meridionale Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *albemarlense* (Ashe) Fernald, p. 1641. = *D. acuminatum* var. *acuminatum*
microcarpon Muhlenberg ex Elliott, p. 1645. = *D. dichotomum*
 var. *sphaerocarpon* (Elliott) Vasey, p. 1651. = *D. sphaerocarpon*
microphyllum Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
minutulum Desvaux, p. 1648. = *D. leucothrix*
mississippiense Ashe, p. 1651. = *D. sphaerocarpon*
multirameum Lamson-Scribner, p. 1645. = *D. dichotomum*
mundum Fernald, p. 1642. = *D. acuminatum* var. *acuminatum*
mutabile Lamson-Scribner & J. G. Smith ex Nash, p. 1644. = *D. commutatum*
nashianum Lamson-Scribner, p. 1649. = *D. portoricense*
 var. *patulum* Lamson-Scribner & Merrill, p. 1650. = *D. portoricense*
nealleyi Vasey, p. 1650. = *D. scabriusculum*
nemopanthum Ashe, p. 1639. = *D. aciculare*
nervosum Muhlenberg ex Elliott, p. 1644. = *D. commutatum*

- neuranthum* Grisebach, p. 1639. = *D. aciculare*
 var. *ramosum* Grisebach, p. 1639. = *D. aciculare*
nitidum Lamarck, p. 1644. = *D. dichotomum*
 var. *angustifolium* (Elliott) A. Gray, p. 1639. = *D. aciculare*
 var. *barbatum* Torrey, p. 1645. = *D. dichotomum*
 var. *barbulatum* (Michaux) Chapman, p. 1645. = *D. dichotomum*
 var. *ciliatum* Torrey, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *crassifolium* A. Gray ex Döll, p. 1651. = *D. sphaerocarpon*
 var. *densiflorum* Rand & Redfield, p. 1642. = *D. acuminatum* var. *densiflorum*
 var. *ensifolium* (Baldwin ex Elliott) Vasey, p. 1646. = *D. ensifolium* var. *ensifolium*
 var. *majus* Pursh, p. 1644. = *D. commutatum*
 var. *minus* Vasey, p. 1646. = *D. ensifolium* var. *ensifolium*
 var. *octonodum* (J. G. Smith) Lamson-Scribner & Merrill, p. 1643. = *D. acuminatum* var. *densiflorum*
 var. *pilosum* Torrey, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *ramulosum* Torrey, p. 1645. = *D. dichotomum*
 var. *velutinum* Döll, p. 1651. = *D. scoparium*
 var. *villosum* A. Gray, p. 1640. = *D. acuminatum* var. *acuminatum*
 var. *viride* (Vasey) Britton, p. 1645. = *D. dichotomum*
nodiflorum Lamarck, p. 1644. = *D. dichotomum*
nudicaule Vasey, p. 1645. = *D. dichotomum*
occidentale Lamson-Scribner, p. 1641. = *D. acuminatum* var. *acuminatum*
octonodum J. G. Smith, p. 1643. = *D. acuminatum* var. *densiflorum*
oligosanthes Schultes, p. 1648. = *D. oligosanthes*
 var. *helleri* (Nash) Fernald, p. 1648. = *D. oligosanthes*
 var. *scribnerianum* (Nash) Fernald, p. 1648. = *D. oligosanthes*
olivaceum A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
onslowense Ashe, p. 1649. = *D. portoricense*
orangense Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
oricola A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
orthophyllum Ashe, p. 1639. = *D. aciculare*
ovale Elliott, p. 1649. = *D. ovale*
 var. *pseudopubescens* (Nash) Lelong, p. 1641. = *D. acuminatum* var. *acuminatum*
 var. *villosum* (A. Gray) Lelong, p. 1640. = *D. acuminatum* var. *acuminatum*
ovinum Lamson-Scribner & J. G. Smith, p. 1639. = *D. aciculare*
oweniae Bicknell, p. 1642. = *D. acuminatum* var. *acuminatum*
pacificum A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
parvipaniculatum Ashe, p. 1646. = *D. ensifolium* var. *ensifolium*
parvispiculum Nash, p. 1648. = *D. leucothrix*
patentifolium Nash, p. 1649. = *D. portoricense*
patulum (Lamson-Scribner & Merrill) A. Hitchcock, p. 1650. = *D. portoricense*
pauciciliatum Ashe, p. 1650. = *D. portoricense*
pauciflorum Elliott, p. 1648. = *D. oligosanthes*
paucipilum Nash, p. 1643. = *D. acuminatum* var. *densiflorum*
pedunculatum Torrey, p. 1643. = *D. clandestinum*
pernervosum Nash, p. 1648. = *D. oligosanthes*
pinetorum Swallen, p. 1640. = *D. aciculare*
polycaulon Nash, p. 1652. = *D. strigosum* var. *glabrescens*
polyneuron Steudel, p. 1644. = *D. commutatum*
porterianum Nash, p. 1643. = *D. boscii*
portoricense Desvaux ex Hamilton, p. 1649. = *D. portoricense*
 var. *nashianum* (Lamson-Scribner) Lelong, p. 1649. = *D. portoricense*
praecocius A. Hitchcock & Chase, p. 1642. = *D. acuminatum* var. *acuminatum*
psammophilum Nash, p. 1649. = *D. portoricense*
pseudopubescens Nash, p. 1641. = *D. acuminatum* var. *acuminatum*
pubescens Lamarck, p. 1651. = *D. scoparium*
 var. *barbulatum* (Michaux) Britton, p. 1645. = *D. dichotomum*
pubifolium Nash, p. 1643. = *D. boscii*
pyriforme Nash, p. 1648. = *D. laxiflorum*
ramulosum Michaux
 var. *viride* (Vasey) Porter, p. 1645. = *D. dichotomum*
ravenelii Lamson-Scribner & Merrill, p. 1650. = *D. ravenelii*
recognitum Fernald, p. 1650. = *D. scabriusculum*
roanokense Ashe, p. 1645. = *D. dichotomum*
ruprechtii Fournier, p. 1647. = *D. laxiflorum*
scabriusculum Elliott, p. 1650. = *D. scabriusculum*
scoparioides Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
scoparium Lamarck, p. 1650. = *D. scoparium*
 var. *angustifolium* Vasey, p. 1648. = *D. oligosanthes*
 var. *genuinum* Lamson-Scribner, p. 1650. = *D. scoparium*
 var. *major* Vasey, p. 1650. = *D. ravenelii*
 var. *pauciflorum* Lamson-Scribner, p. 1648. = *D. oligosanthes*
scribnerianum Nash, p. 1648. = *D. oligosanthes*
setaceum Muhlenberg, p. 1639. = *D. aciculare*
shallotte Ashe, p. 1646. = *D. ensifolium* var. *ensifolium*
sphaerocarpon Elliott, p. 1651. = *D. sphaerocarpon*
 var. *floridanum* Vasey, p. 1647. = *D. erectifolium*
 var. *inflatum* (Lamson-Scribner & J. G. Smith) A. Hitchcock, p. 1651. = *D. sphaerocarpon*
sphagnicola Nash, p. 1645. = *D. dichotomum*
spretum Schultes, p. 1643. = *D. acuminatum* var. *densiflorum*
strictifolium Nash, p. 1649. = *D. ovale*
strictum Bosc ex Roemer & Schultes, p. 1648. = *D. leucothrix*
strigosum Muhlenberg ex Elliott, p. 1651. = *D. strigosum* var. *strigosum*
subbarbulatum Lamson-Scribner & Merrill, p. 1645. = *D. dichotomum*
subsimplex Ashe, p. 1644. = *D. commutatum*
subuniflorum Bosc ex Sprengel, p. 1639. = *D. aciculare*
subvillosum Ashe, p. 1642. = *D. acuminatum* var. *acuminatum*
taxodiorum Ashe, p. 1645. = *D. dichotomum*
tennesseense Ashe, p. 1641. = *D. acuminatum* var. *acuminatum*
tenue Muhlenberg, p. 1647. = *D. ensifolium* var. *unciphyllum*
thurowii Lamson-Scribner & J. G. Smith, p. 1641. = *D. acuminatum* var. *acuminatum*
tremulum Sprengel, p. 1645. = *D. dichotomum*
trifolium Nash, p. 1647. = *D. ensifolium* var. *unciphyllum*

- tsugetorum* Nash, p. 1649. = *D. portoricense*
umbrosum LeConte ex Torrey, p. 1644. = *D. commu-*
tatum
unciphyllum Trinius, p. 1647. = *D. ensifolium* var.
unciphyllum
var. *implicatum* (Lamson-Scribner) Lamson-Scribner
& Merrill, p. 1641. = *D. acuminatum* var. *acu-*
minatum
var. *meridionale* (Ashe) Lamson-Scribner & Merrill,
p. 1641. = *D. acuminatum* var. *acuminatum*
forma *pilosum* Lamson-Scribner & Merrill, p. 1642.
= *D. acuminatum* var. *acuminatum*
forma *prostratum* Lamson-Scribner & Merrill, p. 1642.
= *D. acuminatum* var. *acuminatum*
var. *thinium* A. Hitchcock & Chase, p. 1642. = *D.*
acuminatum var. *acuminatum*
vernale A. Hitchcock & Chase, p. 1646. = *D. ensifolium*
var. *ensifolium*
vicarium Fournier, p. 1651. = *D. sphaerocarpon*
villosissimum Nash, p. 1640. = *D. acuminatum* var.
acuminatum
var. *pseudopubescens* (Nash) Fernald, p. 1641. = *D.*
acuminatum var. *acuminatum*
var. *scoparioides* (Ashe) Fernald, p. 1641. = *D. acu-*
minatum var. *acuminatum*
villosum Elliott, p. 1649. = *D. ovale*
viscidum Elliott, p. 1651. = *D. scoparium*
var. *scabriusculum* (Elliott) Beal, p. 1650. = *D. sca-*
briusculum
waltheri Poiret, p. 1643. = *D. boscii*
var. *molle* (Vasey) Porter, p. 1643. = *D. boscii*
webberianum Nash, p. 1649. = *D. portoricense*
wilmingtonense Ashe, p. 1642. = *D. acuminatum* var.
acuminatum
wrightianum Lamson-Scribner, p. 1648. = *D. leucothrix*
xalapense Kunth, p. 1647. = *D. laxiflorum*
var. *strictirameum* A. Hitchcock & Chase, p. 1648.
= *D. laxiflorum*
xanthospermum Lamson-Scribner & C. Mohr, p. 1642.
= *D. acuminatum* var. *acuminatum*
yadkinense Ashe, p. 1645. = *D. dichotomum*