

## **ANDROPOGON GLAUCOPSIS (POACEAE) IN TEXAS**

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### **ABSTRACT**

*Andropogon glaucopsis*, purple bluestem or coastal bluestem, is documented by two collections as occurring in southeastern Texas at the westernmost extension of its range.

**KEY WORDS:** Poaceae, Andropogoneae, *Andropogon*, Pineywoods, Texas

*Andropogon glaucopsis* Elliott (Poaceae, tribe: Andropogoneae), purple bluestem or coastal bluestem, has long been treated as a variety (or referred to synonymy) of *A. virginicus* L. or *A. glomeratus* (Walt.) Britton, Stearns, & Poggenb. (Fernald 1950; Radford et al 1968; Campbell 2003; and others). In 2011, Weakley et al. resurrected the species based upon its distinct morphology, distribution, and apparent lack of intergradation with *A. glomeratus*. The species is mentioned in the Illustrated Flora of East Texas, Vol. 1 (Diggs et al. 2006), where it is treated as *A. virginicus*, presumably in synonymy. This mention is based upon the Shinners specimen (Fig. 1) cited below, which was originally identified as *A. virginicus*. In 2001, Sorrie annotated the specimen as *A. glaucopsis* with the notation that it is a state record. Unfortunately, this information was never published. Weakley (2011) has cited the distribution of *A. glaucopsis* as “Se. VA south to c. peninsular FL and west to e. TX. The extent of the western Gulf Coastal Plain distribution (to the West Gulf Coastal Plain of w. LA and e. TX) is based on specimens (at BRIT) and sight records (B. Sorrie, pers. comm.).” USDA, NRSC (2012) does not include Texas as part of the distribution of the species.

Recent field studies in the longleaf pine area of the Pineywoods vegetational region of Texas have resulted in the discovery and collection of an additional specimen of *Andropogon glaucopsis*, hence our interest in the species. The purpose of this paper is not to report the presence of the species within the state, for that has been previously noted, but to document, under the name we are following, its occurrence in two counties of Texas by citation of specimens and additional remarks.

Voucher specimens: **Texas.** Hardin Co.: 0.3 mi W of jct of Paula Road and U.S. Hwy 69 on W side of Paula Road, wetland savanna with pimple mounds, 19 Oct 2009, *Singhurst 17778* (BAYLU). Jasper Co.: 3 miles SSE of Buna, border of pine-hardwood stand, sandy loam, 6 Nov 1966, *Shinners 31669* (SMU). Figure 1.



Figure 1. *Andropogon glaucopsis* (Shinners 31669, SMU). Used with permission of BRIT Virtual Herbarium. Atrium Biodiversity Information System for the Botanical Research Institute of Texas. <<http://atrium.brit.org>>. Accessed February 2012.

The longleaf pine area of Texas is the western edge of a forest of similar character that extends eastward to Virginia (Bray 1906; Frost 1993; Diggs et al. 2006). Both the Texas and the western and northern Louisiana longleaf pine areas are, due to the Mississippi River embayment, discontinuous (disjunct) from the longleaf pine regions east of the Mississippi River. The *Andropogon* collected by Singhurst occurred in a “wet pine savanna,” which is characterized by poorly drained sandy-loam soils and periodic occurrences of fires (Diggs et al 2006). The number of woody species is limited by fluctuating water levels, while those that tolerate the wet conditions are limited by fire. Characteristic species included *Rhynchospora divergens*, *R. elliotii*, *R. filifolia*, *R. plumosa*, *Scleria georgiana*, *S. reticularis*, *Schizachyrium scoparium*, *Eriocaulon decangulare*, *Aletris aurea*, *Drosera capillaris*, *Pinguicula pumila*, *Arnoglossum ovatum*, *Fuirena breviseta*, *Hypericum galioides*, *Hyptis alata*, *Liatris acidota*, *Liatris pycnostachya*, *Ludwigia linearis*, *Lycopodiella appressa*, *Marshallia tenuifolia*, *Mitreola sessilifolia*, *Myrica cerifera*, *Panicum tenerum*, *Pinus palustris*, *Polygala ramosa*, *Rhexia lutea*, *Xyris ambigua*, and *X. louisianica*. Wet pine savannas are overgrown by *Nyssa sylvatica*, *Liquidambar styraciflua*, *Acer rubrum*, and *Magnolia virginiana* when fire is excluded. Nothing other than what is on the label is known about the Shinners specimen.

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