

SPOROBOLUS JUNCEUS (POACEAE) IN OKLAHOMA

JEFFREY N. MINK
Department of Biology
Baylor University
Waco, Texas 76798-7388
J_Mink@baylor.edu

JASON R. SINGHURST
Wildlife Diversity Program
Texas Parks and Wildlife Department
4200 Smith School Road
Austin, Texas 78704

WALTER C. HOLMES
Department of Biology
Baylor University
Waco, Texas 76798-7388

ABSTRACT

Sporobolus junceus, Piney Woods dropseed, a native of the contiguous southeastern states from Virginia to Texas, has been discovered in Oklahoma in sandhills bordering the Harrison/Doshier Bog in Pushmataha County.

Key Words: Poaceae, *Sporobolus*, Oklahoma, oak-pine savanna, sandhills

A cosmopolitan genus of at least 160 species, *Sporobolus* is widely distributed in warm-temperate, sub-tropical, and tropical habitats (Clayton & Renvoize 1986). Seventy three species are native to the Western Hemisphere (Peterson et al. 2003), with 27 species native to the United States (Peterson et al. 1997).

Fourteen species of *Sporobolus* (sensu lato) are documented as occurring in Oklahoma (McGregor & Barkley 1977, 1986; Oklahoma Biological Survey 2012; USDA/NRCS 2012). The discovery of a 15th species is reported here. Studies on the flora of sandy prairies and sandhill bogs in Pushmataha County have resulted in the collection of *Sporobolus junceus* (P. Beauv.) Kunth.

Voucher specimen: OKLAHOMA. Pushmataha Co.: Sandhill above Harrison/Doshier Bog, 5.16 miles W (at 266°) from Antlers; 34° 13' 34.33" N, 95° 42' 34.60" W; deep sandhills, 13 August 2006, J.R. Singhurst and E. Bridges 14408 (BAYLU). Figs. 1&2.

The sandhills surrounding Harrison and Doshier bogs contains sandy land graminoid and herbaceous species such as *Aristida desmantha*, *Triplasis purpurea*, *Phemeranthus rugospermus*, *Paronychia drummondii*, *Stillingia sylvatica* subsp. *sylvatica*, *Dalea phleoides* var. *microphylla*, *Evax candida*, *Eragrostis secundiflora*, *Croptilon divaricatum*, *Hypericum drummondii*, *Chamaecrista fasciculata*, *Cnidoscolus texanus*, *Froelichia floridana*, *Pediomelum* sp., *Scutellaria cardiophylla*, and *Matelea cynanchoides*, found in association with *Sporobolus junceus*.

Sporobolus junceus is distributed in the lower Atlantic and Gulf coastal plains from Virginia and Tennessee to Florida and west to eastern Texas and Arkansas (Peterson, Hatch, & Weakley 2003; USDA, NRCS 2012). It is native and occurs in openings of hardwood forests, sandy prairies, pine

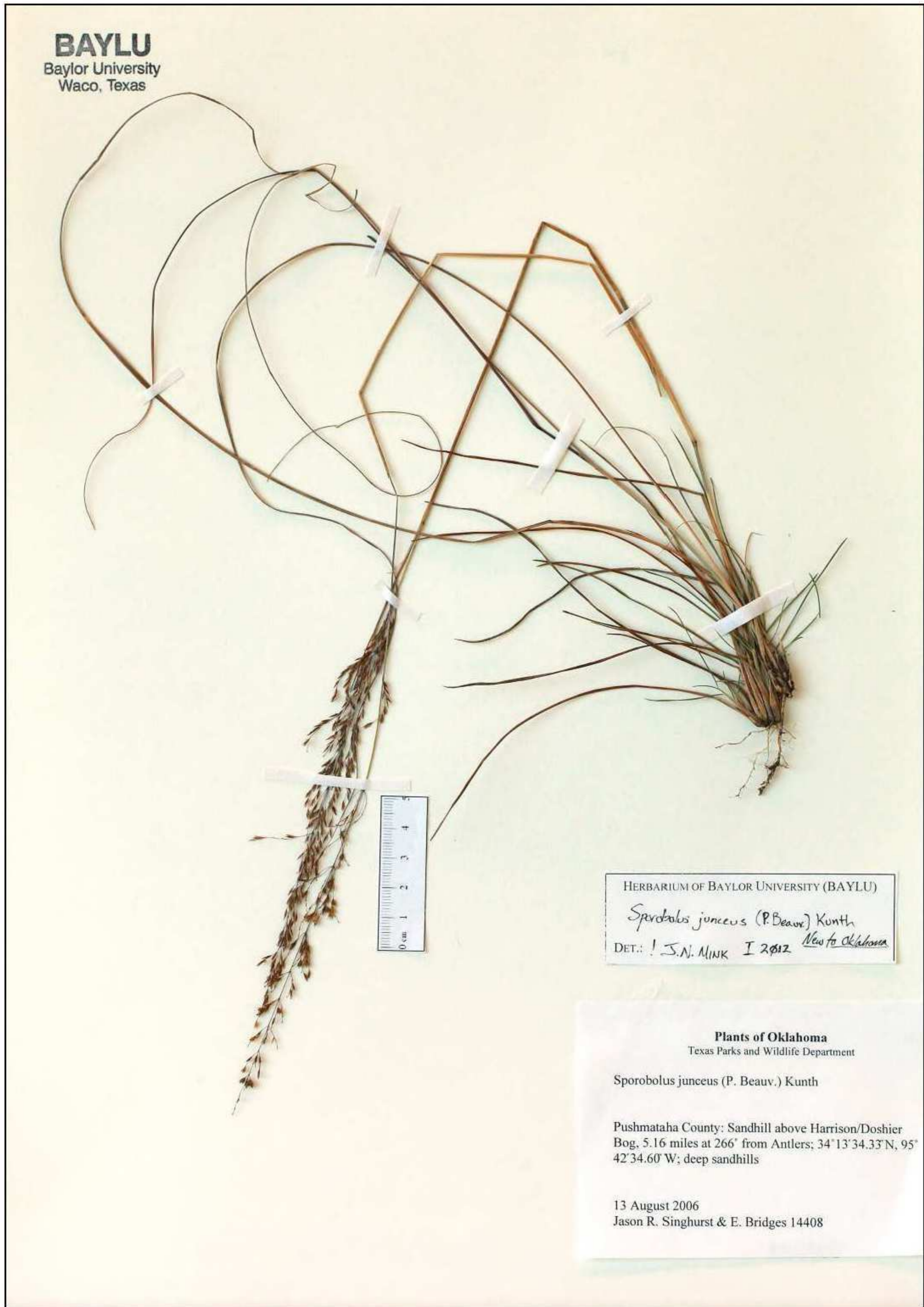


Figure 1. *Sporobolus junceus*. Pushmataha Co., Oklahoma (Singhurst & Bridges 14408, BAYLU).



Figure 2. Close-up of *Sporobolus junceus* panicle (Singhurst & Bridges 14408, BAYLU).

barrens, and savannas within its distribution. The Oklahoma locality is isolated from several known distributions in other states. Within Texas, *S. junceus* is known from coastal prairie areas and interspersed in scattered locations throughout east Texas. The nearest site to the Pushmataha Co., Oklahoma, collection is Upsur Co., Texas (Turner et al 2003) approximately 155 km south. A Louisiana collection from Caddo Parish (Allen 1992) is about 190 km southeast of the Pushmataha Co. record. Locations in Bradley Co. and Drew Co., Arkansas, are about 330 km distant from the Oklahoma location.

Among the Oklahoma *Sporobolus* both *S. cryptandrus* and *S. pyramidatus* appear similar to *S. junceus*. However, *S. junceus* can be distinguished from the other species by a whorled panicle (3 or more branches per lower node), long spikelets (>2.5mm) and lack of tufted sheath apex (see Figs. 1&2). *Sporobolus cryptandrus* lacks a whorled panicle, has distinct white tufts of trichomes at the distal part of the sheath and shorter spikelets (<2.5 mm). *Sporobolus pyrimadatus* has a distinctly whorled (5 or more branches per lower node) pyramidal-shaped panicle, lacks a distinct tuft of trichomes at the sheath apex and shorter spikelets (<2.5 mm).

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