**PITYOPSIS OLIGANThA (ASTERACEAE) NEW TO TEXAS**

WALTER C. HOLMES  
Department of Biology  
Baylor University  
Waco, Texas 76798-7388  
walter_holmesr@baylor.edu

JASON R. SINGHURST  
Wildlife Diversity Program  
Texas Parks and Wildlife Department  
4200 Smith School Road  
Austin, Texas 78744  
jason.singhurst@tpwd.state.tx.us

**ABSTRACT**

_Pityopsis oligantha_, Large-flowered Goldenaster, is documented as new to Texas. The species was encountered and collected in the West Gulf Coastal Plain Wetland Longleaf Pine Savannah of deep east Texas (Jasper County).

**KEY WORDS:** Asteraceae, _Pityopsis_, Longleaf Pine savannah, Texas.

In the Manual of the Vascular Plants of Texas, Correll and Johnston (1970) included _Pityopsis oligantha_ (Chapm. ex Torr. & A. Gray) Small under the synonym _Heterotheca oligantha_ (Chapm.) Harms within the treatment of that genus. They mentioned that the species was “not yet noted from Tex. but possibly to be encountered [italics inserted] in extreme e. cos.” Doubtless, the “record” of this species in the state originated here and was later included in Hatch et al. (1990) and Jones et al. (1997), both being checklists of the vascular plants of the state. It is not known why Correll and Johnson would consider the species as possibly occurring in Texas, for at that time (pre-1970), the distribution of _P. oligantha_ was known to be west Florida and adjacent Alabama and Georgia (Small 1933). The lack of a supporting specimen has resulted in the species no longer being included as a part of the Texas flora (Cronquist 1980; Turner et al. 2003; Semple 2006; USDA, NRCS 2012). Recently, a specimen (Figure 1) collected by the authors in the Longleaf Pine savannah in 2000 has been determined to be _Pityopsis oligantha_. This specimen, cited following, substantiates the presence of the species in the state.

TEXAS. Jasper Co.: Kirbyville Airport, Kirbyville, flat periodically mowed area; heads yellow, 24 Sep 2000, W.C. Holmes & J.R. Singhurst 11100 (BAYLU). Figure 1.

_Pityopsis oligantha_ in Texas was documented in a globally rare (G1G2S1S2) West Gulf Coastal Plain Wetland Longleaf Pine Savanna community, occurring on saline soils (Brimstone silt loam, a Glossic Natraqualf) of the Pleistocene prairie terrace, with an open canopy of _Pinus palustris_. The dominants include _Pinus palustris_, _Sporobolus silveanus_, _Muhlenbergia capillaris_, and _Rhynchospora_ spp. Important herbaceous species include _Agalinis fasciculata_, _Andropogon capillipes_, _Arnoglossum ovatum_, _Asclepias verticillata_, _Bigelowia nuttallii_, _Chaetopappa asteroides_, _Dalea candida var. candida_, _Desmodium sp._, _Dichanthelium sp._, _Echinacea sanguinea_, _Eurybia hemisphericum_, _Eupatorium leucolepis_, _E. rotundifolia_, _Eryngium integrifolium_, _Evolvulus sericeus_, _Hedyotis nigricans_, _Pycnanthemum tenuifolium_, _Iva angustifolia_, _Liatris acidota_, _Liatris puncata_, _Liatris pycnostachya_, _Lobelia puberula_, _Marshallia caespitosa_, _Mecardonia acuminata_, _Muhlenbergia capillaris_, _Neptunia lutea_, _Panicum virgatum_, _Paspalum floridanum_, _Physostegia_
Figure 1. *Pityopsis oligantha* (Holmes & Singhurst 11100, BAYLU). Photo by Darrel Vodopich.

The major difficulty in classification of Pityopsis and related genera (Heterotheca and Chrysopsis) has been generic circumscription (see Gandhi and Thomas 1989 for an overview). However, specific recognition has seemingly been rather stable. Pityopsis oligantha is similar to P. graminifolia (Michx.) Nutt., which has two recognized varieties in Texas (Semple 2006). The latter species is widely distributed in the Pineywoods region of the state and also much of the Post Oak Savannas, while P. oligantha is known only from the specimen cited above. The specimen was identified by use of the keys in Correll and Johnston (1970), Cronquist (1980), Gandhi and Thomas (1989) and Semple (2006), all keying to species with equal facility. Following we have produced a key derived from these sources.

1. Peduncles and involucre densely stipitate-glandular; cauline leaves mostly 2–7; heads 1–6

\[ \text{Pityopsis oligantha} \]

1. Peduncles and involucres not densely glandular-hairy; cauline leaves generally 10 or more, heads mostly 10 or more

\[ \text{Pityopsis graminifolia} \]

Currently, Pityopsis oligantha has a Global Status of G3 (vulnerable) by reason of [as stated] being reported from four southern states of the USA, but with abundance not being known (NatureServe 2012). These states are Florida, where it may be locally abundant in the panhandle (western Florida), Georgia, Alabama, and Mississippi. Not cited is Louisiana, where the species has been reported in Rapides Parish by Thomas and Allen (1996) and in eight parishes by USDA, NRCS (2012). Major threats to the species are land-use conversions, habitat fragmentation, succession, and forest management practices (Southern Appalachian Species Viability Project 2002). The species is apparently native in Texas and is considered to be a rare peripheral in the state (G3S1). It is presumably limited to longleaf pine savannas in southeast Texas.

ACKNOWLEDGEMENTS

We wish to thank Garrie P. Landry of the Herbarium, Biology Department, University of Louisiana at Lafayette, for providing digital photographs of Thieret 25144 (LAF) from Rapides Parish, Louisiana, the specimen cited in Thomas and Allen (1996) as Pityopsis oligantha. Darrell Vodopich of the Biology Department, Baylor University, contributed to this study by taking the photograph of the specimen and processing it for publication.

LITERATURE CITED


Accessed Nov 2012


