

**GOSSYPIANTHUS LANUGINOSUS (AMARANTHACEAE)
NEW TO LOUISIANA**

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ABSTRACT

Gossypianthus lanuginosus is reported as new to the Louisiana flora on the basis of a specimen collected in 2007 from a saline barren in northwestern Louisiana. The plant apparently represents *G. lanuginosus* var. *tenuiflorus*. Records of this taxon from Arkansas and southeastern Texas are from similar alkali habitats.

Gossypianthus Hook. (Amaranthaceae; Gomphrenoideae) consists of two species: *G. brittonii* Standl. and *G. lanuginosus* (Poir.) Moq. *Gossypianthus brittonii* is endemic to Cuba, while *G. lanuginosus* occurs from the south-central USA into northern Mexico, with a disjunction on Hispaniola (Henrickson 1987; Clemants 2003). Several sources (Henrickson 1987; Clemants 2003; Weakley 2024) recognize two varieties of *G. lanuginosus*: the typical variety and var. *tenuiflorus* (Hook.) Mears ex Henrickson. Alternatively, POWO (2024) includes *Gossypianthus* within *Guillemania* Kunth and does not recognize any varieties in *Guillemania lanuginosa* (Poir.) Benth. & Hook. f.

Clemants (2003) stated that *Gossypianthus lanuginosus* var. *tenuiflorus* (G5T4; NatureServe 2024) has been reported for Louisiana but that he has not seen specimens to substantiate reports. We cite and discuss a specimen here that establishes this taxon as a native member of the Louisiana flora. The specimen was collected on a private parcel in Sabine Parish in northwestern Louisiana, locally known as Oakley's Pasture, or alternatively as Mary Lee's Pasture, which received some botanical attention in 2007 and 2008. Most of the saline barren habitat at this site had been successfully converted to *Paspalum notatum* pasture, with the more extreme (hypersodic) soils resisting conversion and supporting plants typical of such settings (Reid et al. 2010). The *Gossypianthus* specimen was collected in 2007 from a slick on the property — it was initially identified only to genus as *Alternanthera* Forsk., then later correctly identified to species and variety by the authors.

Voucher specimen: **Louisiana**. Sabine Par.: Oakley's Pasture (aka Mary Lee's Pasture), N of LA 174, ca. 5 mi W of Converse, along E side of McDonald Bayou; NW1/4 NW1/4 Sec. 12 & SW1/4 SW1/4 Sec 1, T9N R14W1, 31° 47' 11'' N, 93° 45' 44'' W, common in small area of remnant saline prairie on the more extreme end within a larger area of former saline prairie that was long ago converted to Bahia grass [*Paspalum notatum*], with *Talinum parviflorum*, *Cynodon dactylon*, *Sporobolus pyramidatus*, *Evolvulus sericeus*, etc., remnant ca. 0.25 acres, 20 Jun 2007, Reid 6168 (LSUS, Fig. 1).



Figure 1. *Gossypianthus lanuginosus* in Louisiana, Reid 6168 (LSUS). The annotation to var. *tenuiflorus*, not evident in the image, was made on 28 June 2024 by C. Reid.

Gossypianthus lanuginosus var. *tenuiflorus* is known from a similar habitat in Franklin Co., Arkansas, ca. 400 kilometers north of the Louisiana record, based on specimens collected ca. 75 years ago (UARK – Moore *s.n.*, Moore 55-150; SERNEC 2024). Thus, *G. lanuginosus* var. *tenuiflorus* is ranked SH (historical) in Arkansas (NatureServe 2024). Records of *G. lanuginosus* var. *tenuiflorus* from Harris County in southeastern Texas were also collected from alkali slicks in prairie remnants (TEX – Carr 14193, Rosen 6162; SERNEC 2024). *Gossypianthus lanuginosus* var. *tenuiflorus* is ranked S3 (vulnerable) in Texas (NatureServe 2024).

We recommend that *Gossypianthus lanuginosus* var. *tenuiflorus* be added to the Louisiana Wildlife Diversity Program’s rare plant tracking list with a rank of “S1?” (critically imperiled with uncertainty). Relocating and assessing this population is a priority and the results of resurvey will solidify the state rank for Louisiana. Other rare plants have been documented at this site — Louisiana’s only extant population of *Grindelia lanceolata* Nutt. and Louisiana’s first and only record of *Panicum diffusum* Sw. (Reid et. al. 2008). *Panicum diffusum* has yet to be assigned a state rarity rank and its presence in Louisiana is not reflected by NatureServe (2024). Several other rare plants were documented at Oakley’s Pasture in 2007 and 2008, including *Eleocharis wolfii* (A. Gray) A. Gray ex Britt., *Phemeranthus parviflorus* (Nutt.) Kiger, *Forestiera ligustrina* (Michx.) Poir., and *Rudbeckia triloba* L.; these four taxa have state ranks of S3 (NatureServe 2024). Similar habitats and also flatwoods of *Quercus similis* Ashe adjacent to saline barren and pasture openings warrant further exploration.

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