

***CIRSIUM WRIGHTII* (ASTERACEAE) IN THE TEXAS FLORA**

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ABSTRACT

Cirsium wrightii A. Gray has not been included in previous accounts of the Texas flora. Its rare occurrence in the state is documented here by a collection from Pecos County in 1849 and from Presidio County in 2003. The range of the species is primarily in New Mexico, where it also is considered rare. A two-step lectotypification of *C. wrightii* is completed here.

Charles Wright encountered *Cirsium wrightii* in Reeves County, Texas, in 1849 on a trip from the town of Pecos toward the Davis Mountains. More than 150 years later (in 2003), Jackie Poole and colleagues from the Texas Parks & Wildlife Department found it in Presidio County. These are the only known collections from Texas.

Vouchers. Presidio Co.: Chinati Mountains, Arroyo Chupadero, 30.09784° N, 104.6384° W, sandy soils over seeping sandstone, with *Cleome multicaulis*, *Anemopsis californica*, *Sorghastrum nutans*, and *Fimbristylis*, rare perennial to 2 meters, florets white, 23 Sep 2003, *Poole 4861* et al. (TEX + 2 dups). Reeves Co.: About 30 miles beyond Pecos [toward the southwest], 18 Aug 1849, *Wright 406* [field #852] (GH-2 sheets digital images, US-2 sheets digital images!).

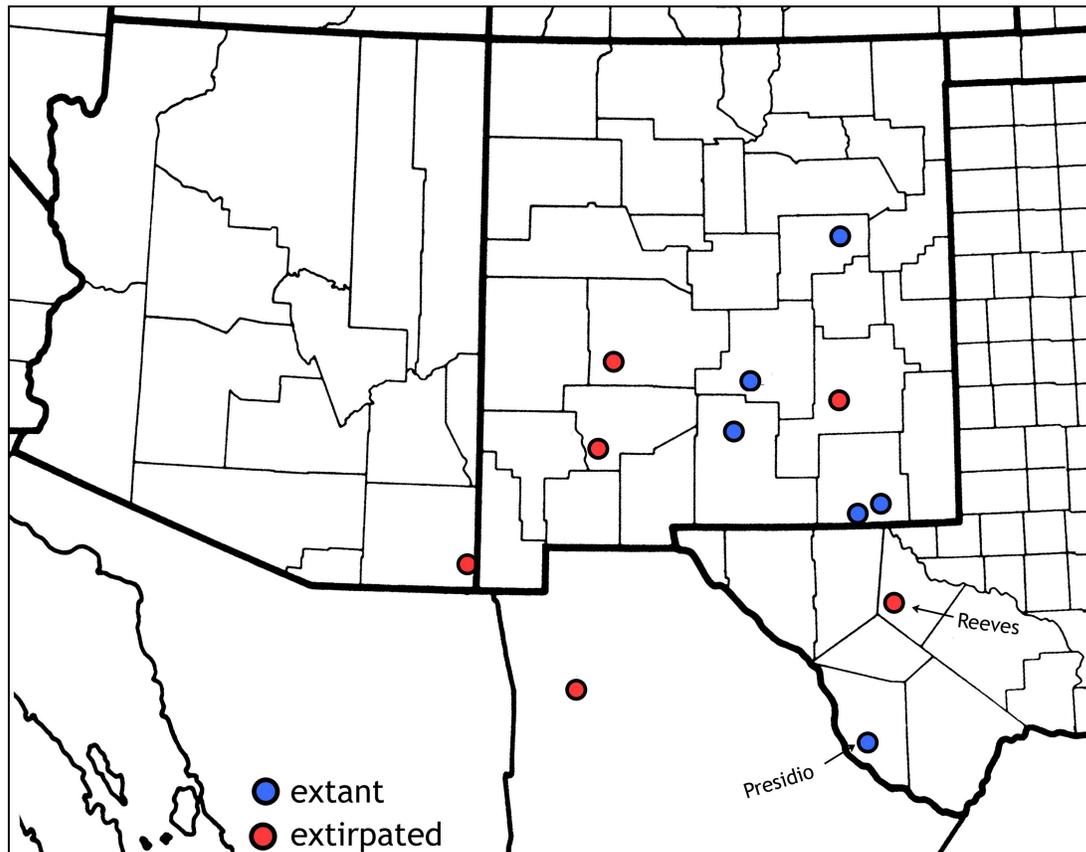


Figure 1. Distribution of *Cirsium wrightii*. No collection has been made from Reeves County since Wright's in 1849; information on the other extirpations from NMRPTC (2011).

Cirsium wrightii as a species has not been included in accounts of the Texas flora (e.g., Hatch et al. 1990; Johnston 1990; Jones et al. 1997; Turner et al. 2003). Correll and Johnston (1970) noted that the type collection of *C. wrightii* perhaps represented a hybrid between *C. texanum* and *C. undulatum*. The species surely would have been included in the account of rare Texas species (Poole et al. 2007) had the present author been more conscientious with specimens given to him at TEX for identification (including Poole 4861). Wooton and Standley (1915), Petrak (1917), Blake (1951), and Keil (2006) noted that the range of *C. wrightii* includes Texas.

Most of the occurrences of *Cirsium wrightii* are in New Mexico and the species has long been considered a member of that state's flora (Wooton & Standley 1915; Martin & Hutchins 1980; Allred & Ivey 2012). The characteristic habitat of desert springs and seeps and marshy edges of streams and ponds is uncommon and vulnerable to disruption, thus the species is widely scattered, rare, and extirpated in many of the known localities (NMRPTC 2011; summarized in Fig. 1). As noted by Sivinski (2016), "Ciénega wetlands are among the most endangered habitats in NM. All Wright's marsh thistle habitats are threatened by aquifer depletion, but some are also threatened with urbanization, agriculture and livestock grazing."

***Cirsium wrightii* lectotypified**

In the protologue, Gray cited two collections. The first is an 1849 collection from Texas that he had earlier identified (Gray 1852) as *C. altissimum* "var. lanugine deciduo" — *Wright 406* (# 852 in Wright's field notes). The second is a collection by Wright from southeastern Arizona made in 1851 — *Wright 1290*. Gerald Ownbey in 1961 annotated *Wright 406* (GH 6004, Fig. 2) as the holotype, but later annotations as a syntype (see Fig. 2) by Walter Kittredge reflect the ambiguity in the protologue (Gray 1853). Gray (1874) also later alluded to the two collections by Wright.

In 1951, however, Blake cited documentation for *Cirsium wrightii* in Arizona as "*Wright 1290*, the type collection," effectively, though inadvertently, establishing it as the lectotype. The second step in completing the lectotypification (Turland et al. 2018, Art. 9.17) follows here.

CIRSIUM WRIGHTII A. Gray, Smithsonian Contr. Knowl. 5(6) [Pl. Wright., Part 2]: 101. 1853. *Cnicus wrightii* (A. Gray) A. Gray, Proc. Amer. Acad. Arts 10: 41. 1874. *Carduus wrightii* (A. Gray) Heller, Cat. N. Amer. Pl., 8. 1898. **LECTOTYPE** (process completed here, following Blake 1951): **USA. Arizona.** [Cochise Co., see Wooton 1906]: Near San Bernardino, on the borders of New Mexico and Sonora, around springs, [3 Oct 1851], *C. Wright 1290* (GH 00006001 digital image!; isolectotypes: GH 00006001 digital image, K 000778258 and 000778259 digital images!, NY 00167537 digital image!).

On the sheet selected here (GH 6001), the heads are badly insect-damaged but the diagnostic involucre morphology is clear enough and the whole distribution (5 duplicates) provides complete and ample material. GH 6001 also is the only one of the duplicates with Gray's annotation as "n. sp."



Figure 3. *Cirsium wrightii* involucre morphology. Top: from Wright 406, GH 6004. Bottom: from K 000778258.



Figure 4. *Cirsium wrightii* involucre morphology, Poole 4861 from Presidio Co., Texas.

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