

**NATURALIZED OCCURRENCE
OF *RUELLIA DIPTERACANTHUS* (ACANTHACEAE)
IN THE USA**

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ABSTRACT

Ruellia dipteracanthus (Nees) Hemsl. is reported as naturalized in the USA, from Broward Co., Florida, and Harris Co., Texas. The Texas population occurs along an ephemeral drainage in a secondary successional pine-hardwood forest. The population of ten plants probably has been introduced from garden plants in adjacent residential areas. This species can be distinguished by its low-growing, ground-covering habit, exhibiting simple, lanceolate and pubescent leaves with arcuate venation.

The present paper documents the first recorded occurrences of *Ruellia dipteracanthus* outside of cultivation in the USA (USDA, NRCS 2017; Kartesz 2017; Turner 1991; Turner et al. 2013). The Texas plants, from Harris Co., occur approximately 950 miles north of the nearest known wild populations in Mexico (Hemsley 1882). The population consisted of ten flowering plants growing in the bottom of an ephemeral drainage. The Florida voucher is a specimen at the University of South Florida herbarium (USF) (Wunderlin et al. 2017). This species can be easily distinguished by other species of *Ruellia* in Texas by its low-growing, ground-covering habit and pubescent leaves with arcuate venation (Mowat 2017) (Figure 1).

Ruellia dipteracanthus (Nees) Hemsl. (syn. *Ruellia pohlii* Lindau)

Florida. Broward Co.: Secret Woods Nature Center, Dania Beach, T50S, R42E, Sec. 20, 19 May 2001, *Howell 413* (USF, digital image!). **Texas.** Harris Co.: Piney Point Village (west Houston), drainage S of intersection of Memorial Dr. and Briar Forest Dr., 29.75086162° -95.52580442, bottom of a drainage over sandy soil mixed with concrete and bricks, secondary successional forest under a canopy of *Quercus virginiana*, *Celtis laevigata*, *Ulmus alata*, *Acer negundo*, *Sapium sebiferum*, *Quercus nigra*, and *Ilex vomitoria*, 15 Apr 2017, *Keith 1123* (SHST). Figure 1.

The Texas collection locality is in Piney Point Village, part of a collection of residential communities in west Houston known as Memorial Villages, an area of over ten square miles. Buffalo Bayou, a slow-moving, natural spring-fed river and the principal river of Greater Houston, runs through Memorial Villages. The area consisted of large country estates and farmland until the construction of the Addicks Reservoir in the 1940s and the Barker Reservoir in the 1950s. Buffalo Bayou was channelized soon after, and the region was gradually annexed into Houston (TSHAonline 2010).

Ruellia dipteracanthus is likely introduced from cultivated plants in adjacent residential areas from home gardens or other parts of the community. It is a popular cultivated ornamental plant in Mexico and is a native of Cerrado vegetation in Brazil (Mowat 2017; Nees 1847). A second specimen from Florida appears to be cultivated (Wunderlin et al. 2017).

Wild petunias of the genus *Ruellia* include approximately 150 species found mainly in tropical areas of the world. BONAP and The Plants Database show 19 native species of *Ruellia* in the USA; *Ruellia dipteracanthus* brings the list of non-native, invasive wild petunias recorded outside of cultivation in the USA to 3, also including *R. caerulea* Morong (syn. *R. simplex* C. Wright) and *R. ciliatiflora* Hook. (Turner 1991; Kartesz 2017; USDA, NRCS 2017).



Figure 1. *Ruellia dipteracanthus* at the collection site in Harris County. Photo by Eric Keith.

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