

***IRIS PALLIDA* (IRIDACEAE) IN THE NATURALIZED ARKANSAS FLORA**

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ABSTRACT

A third naturalized occurrence of *Iris pallida* in the Arkansas flora is reported here from Sebastian County. In 2024, a large colony of naturalized plants was discovered growing in semi-disturbed habitat on the grounds of the Janet Huckabee Arkansas River Valley Nature Center. No cultivated plants of *I. pallida* were apparent in the vicinity and the origin of the naturalized plants is unknown, although possible spread from once cultivated plants of the species is plausible. The previous records of *I. pallida* naturalized in the state are from Garland and Pulaski counties, as reported by Serviss and Peck (2023).

Iris pallida Lam. (sweet iris, pale iris) is reported here for a third naturalized occurrence in the Arkansas flora from Sebastian County. In 2024, a large, naturalized population of *I. pallida*, consisting of hundreds of plants/rhizomatous offsets, was discovered on the grounds of the ca. 69-hectare Janet Huckabee Arkansas River Valley Nature Center, within the city of Fort Smith (Figs. 1–3). Until 1997, and prior to its conversion as a state natural area, the site was part of Fort Chaffee. The plants/offsets are present in semi-disturbed, semi-wooded habitat adjacent to a walking trail. Spread and establishment appears to be mostly or exclusively via rhizomatous offsets (Fig. 2), although a small, isolated plant, presumably of *I. pallida*, also is present about 4.5 meters from the population (Fig. 5). No cultivated plants of the species were observed and the origin of the population is unknown, although establishment from once-cultivated plants is likely. The plants have the scarious, silvery-white bracts without green coloration that are characteristic of *I. pallida* (Fig. 3) and that distinguish this species from *I. germanica*, which also is naturalized in Arkansas.

Iris pallida previously was documented from the Arkansas by Serviss and Peck (2023), from open, highly disturbed roadside habitats in Garland and Pulaski counties, based on specimens collected in 2007, making our record the second report of *I. pallida* outside of cultivation in Arkansas (Fig. 4). The species is known from the naturalized floras of a few other states (Kartesz 2015; Henderson 2002; Spaulding et al. 2023; Weakley 2023). This species is native to southern Europe (Webb & Chater 1980; Mathew 1981; Henderson 2002).

In addition to *Iris pallida*, three other species of bearded *Iris* currently are known from the state's flora, including *I. flavescens* Delile (lemon-yellow iris), *I. florentina* L. (*I. albicans* Lange; cemetery iris), and *I. germanica* L. (blue flag iris). *Iris flavescens* and *I. florentina* are limited to one or two counties, respectively, whereas *I. germanica* is more widespread (Gentry et al. 2013; Serviss et al. 2023; Serviss et al. 2024). The completely scarious, silver-white bracts of *I. pallida* distinguish it from these species, as all of them have at least some green coloration on the bracts.



Figure 1. *Iris pallida* escaped in Sebastian Co., Arkansas (22 Apr 2024). This colony consists of numerous (100s) of plants/rhizomatous offsets within semi-disturbed habitat adjacent to a walking trail. Spread and establishment appears to be mostly or wholly via offsets. The colony covers several square meters. With the exception of a few flattened rocks that could have at one time been part of a structure, no evidence of prior cultivation is apparent and the origin of the plants is unknown.



Figure 2. A–B. *Iris pallida* escaped in Sebastian Co. (22 Apr 2024). A. Close-up of plant/offset with inflorescence, flowers, and leaves to show form and growth habit — notice the erect nature of the leaves — *I. pallida* seems to have a more erect, tighter growth form than the other bearded irises in the Arkansas flora. B. Small group of plants/offsets adjacent to the main population but separated by about 45 cm.



Figure 3. A–C. *Iris pallida* inflorescence, flowers, and bracts, from naturalized plants in Arkansas. A. Flower — pale blue here but the color can range from light blue or lavender to almost white. B. Inflorescence, bracts, unopened bud, and open and spent flowers. C. Close-up of bracts — scarious and silver-white, without green coloration.

Voucher specimen. Arkansas. Sebastian Co.: Large colony consisting of hundreds of naturalized plants/rhizomatous offsets on a slight slope in semi-disturbed habitat along walking trail, no cultivated plants in the vicinity or direct evidence of prior cultivation, grounds of Janet Huckabee Arkansas River Valley Nature Center, off Wells Lake Rd., Fort Smith, 27 Apr 2024, Fuller 04–27–2024–02 (HEND, ANHC).

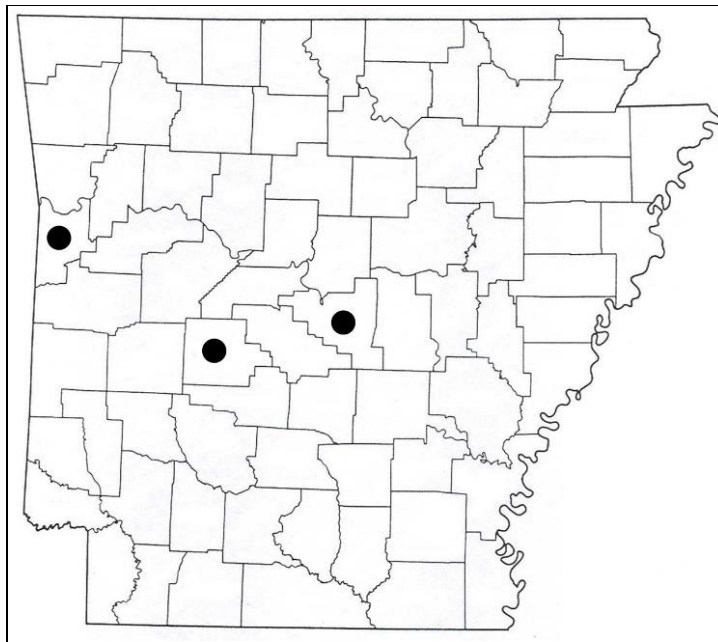


Figure 4. County distribution of naturalized *Iris pallida* in Arkansas. All three counties have large metropolitan human populations, and human-mediated introductions, in some form, likely were involved in establishment of these naturalized populations.



Figure 5. Small, isolated plant, presumably of *Iris pallida*, present on the other side of the trail and about 4.5 meters away from the naturalized population.

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