

New records of *Iris orientalis* (Iridaceae) in eastern Missouri

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ABSTRACT. — *Iris orientalis* has been documented to occur outside of cultivation in Missouri since 1967. Here a new occurrence and the total observed occurrences are reported to collate the data on its adventive presence in the Missouri Flora.

INTRODUCTION & DISCUSSION

Iris orientalis Mill., native to Greece and Turkey (Mathew 1981, 1984), is widely cultivated for its yellow and white flowers which bloom later than those of other commonly cultivated bearded irises (Mathew 1981). It is a rhizomatous perennial that prefers saline soils (Khan et al. 2014); there are numerous cultivars (Austin 2005). In Missouri this species was first reported outside of cultivation in 1967 from a roadside in Platte County (Henderson 1980). It has since been documented from several western Missouri counties also by Henderson (see specimens below), and it apparently has persisted at the Platte County location (MDC 2025). Flora of North America reports it from California, Connecticut, and Missouri (Henderson 2002).

Public databases that support citizen science, like iNaturalist, are a source for new records of native and exotic species, and also new species discoveries. For exotic species that spread to new locations, these documentations of distributions may be particularly useful. Combined with herbarium specimens, they provide early detection of species that may become harmful invasive species. *Iris orientalis* is confirmed to occur outside of cultivation in additional parts of the state, based on several iNaturalist reports from counties in central Missouri, the Ozarks, and northeastern Missouri (see observations cited below).

While performing fieldwork north of Troy in Lincoln County, I encountered a large number of flowering stems of *Iris orientalis* in the median of Highway 61 (**Figure 1**). Plants occurred on the upper east bank of the median for approximately 80 meters and contained ca. 300 flowering stems that showed differences in intensity of the yellow on the falls between individual clumps, suggesting high seedling recruitment rather than asexual spread.

Iris orientalis has shown an increase in occurrences in Missouri. It was first reported in 1967 from a location that has persisted [although Yatskiewych (1999) noted a date of 1980]. It has since been documented in seven additional Missouri counties, with over half of these being reported in the last six years. The increased number of occurrences of this species in widely disparate locations across the state shows that it has adaptive potential to different physiographic regions and is spreading into new sites. The Lincoln County site has a large number of fertile

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clumps and seed production appears to be extensive, with immature plants at the margins of the subpopulation. It is unclear from where these populations originated given the plant's uncommon presence in horticulture in the region (I have not seen *I. orientalis* for sale at St. Louis area nurseries in the past eight years). This report of the known occurrences, with a newly documented location, brings attention to the established presence of this exotic species in the state.



Figure 1. *Iris orientalis* population in Lincoln County, MO along Highway 61, flowering 23 May 2025. The yellow arrow indicates the northern edge of the population. (Photo by the author)

It is likely that this species will continue to increase in abundance. *Iris orientalis* is known for its preference or tolerance of saline soils (Mathew 1981, Khan et al. 2014) and all reported Missouri occurrences are on roadsides that are often treated with salt during winter. Vegetative long-distance spread is likely uncommon, but with its high fecundity, as observed at the Lincoln County location, spread by seed and mowing will likely lead to frequent, but local, spread at established locations. Steyermark (1963) reported the exotic *I. pseudacorus* from just two locations; now it occurs across Missouri in at least five counties (Yatskievych 1999). Both species are vigorous, with the potential to crowd out native species.

Voucher specimens: U.S.A. MISSOURI. CLINTON CO.: along U.S. 169, ca. 1 mi S of Grayson, roadside embankment, 8 June 2002, N.C. Henderson 02-15 (MO, UMKC). LINCOLN CO.: along U.S. 61 north of Troy, about 300 flowering stems, 23 May 2025, A. Floden s.n. (MO). PETTIS CO.: about 3 mi W of La Monte along U.S. 50, in fencerow, 15 June 1996, N.C. Henderson 96-356 (MO, UMKC). PLATTE CO.: along U.S. 71, about 8 mi N of Platte Woods, escaped from cultivation but well established in roadside clumps, 7 June 1967, N.C. Henderson 67-687 (MO, UMO).

Additional Missouri observations:

- <https://www.inaturalist.org/observations/47907961> [Warren County, 2020]
- <https://www.inaturalist.org/observations/176595637> [Montgomery County, 2023]
- <https://www.inaturalist.org/observations/47654655> [Ralls County, 2020]
- <https://www.inaturalist.org/observations/118740796> [Taney County, 2022]

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