

***OXALIS HISPIDULA* (OXALIDACEAE) NATURALIZED IN LOUISIANA**

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ABSTRACT

Oxalis hispidula is reported as naturalized in the Louisiana flora and west of the Mississippi River for the first time. It occurs on roadsides, sidewalk margins, and lawns in Caddo, Bossier, Natchitoches, Lafayette, and Ouachita parishes. It appears to spread easily and grows in dense concentrations where it has become established.

A paper published in Phytoneuron nearly a decade ago (Horne et al. 2013) inspired me to seek new records for naturalized and persistent *Oxalis* species in my region. In the summer of 2020 I was given a sample from a native plant enthusiast which appeared to be *Oxalis hispidula* Zucc., but the sample was only vegetative. In the fall of 2020, I discovered multiple populations of the same entity, this time with diagnostic material, in Caddo, Natchitoches, Lafayette, and Bossier parishes and I received a trustworthy report of its occurrence in Ouachita Parish. Major floristic resources do not list Louisiana within the range of this plant, and none record it west of the Mississippi River (Kartesz 2014; USDA 2014; Nesom 2016; SERNEC 2020; Weakley 2020).

A risk assessment of *Oxalis hispidula* developed by the USDA suggested Louisiana was climatically favorable to the species and considered it a "minor invader" (USDA 2016). At this time, the plant seems to pose no threat to natural communities or imperiled species.

In Louisiana, plants occur in large colonies (up to 0.5 hectares loosely), the height often reduced by mowing, in wet ditches and roadbanks, along park trails, and in suburban lawns. Multiple small populations are known in the five parishes, and the plant is likely widespread and unrecognized in other urban and suburban areas. It frequently occurs with lawn grasses and other invasive and weedy species such as *Wisteria sinensis*, *Cynodon dactylon*, *Paspalum urvillei*, and *Axonopus fissifolius*. All areas receive frequent mowing or foot traffic.

Allen Weakley (pers. comm.) observes that this species is widespread and forms large colonies in neighborhoods of Monroe, Ouachita Par., Louisiana. Photos from iNaturalist suggest that it is likely present in Texas, but the observations do not give enough evidence for me to declare its naturalization there or in Louisiana parishes other than the ones noted above.

The species is perennial by nature, and detritus at observed stations suggested that plants have been established in Louisiana for multiple seasons. They are acaulescent with villous flowering scapes and petioles, abaxially strigose leaflets with their conjoined bases densely pubescent and margins consistently ciliate, purple corollas accented by deep purple veins, acute sepal apices with elongated orange tubercles, and few-nerved bulb scales.

Vouchers. Louisiana. Caddo Par.: Shreveport, along South Lakeshore Drive, large patch in an apparently non-domestic site, with other non-natives and weeds, 32.5015, -93.8772, 11 Nov 2020, *Kelley* 621 (LSUS, LSU). **Bossier Par.:** Bossier city, lawn N of Brookshires Grocery W of US-71, with Bermuda grass, covering ~1/20 ha. in near carpet density, 11 Nov 2020, *Kelley* 622 (LSU). **Natchitoches Par.:** Natchitoches, Henry Ave and East 3rd, lawns and along roadsides in large clumps, 12 Nov 2020, *Mcelwee* s.n. (LSU). **Lafayette Par.:** Lafayette, lawn of ULL Online Programs facing Johnston St. and between Ira Nelson Horticulture Center and Coliseum Rd, plants in patches up to thousands with other non-natives and weeds near building, 22 Nov 2020, *Vincent* 97 (LSU).



Figure 1. *Oxalis hispidula* sepals with tubercles (top left), leaflets with ciliate margins and strigose

laminae (top right), and general habit in a lawn of about 0.1 ha (bottom).

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