

ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDPHR01200

Data Sensitivity: No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Erythranthe plotocalyx*

**COMMON NAME:**

**SYNONYMS:**

**FAMILY:** Phrymaceae

**AUTHOR, PLACE OF PUBLICATION:** Nesom, G.L. 2020. *Erythranthe plotocalyx* (Phrymaceae), a new species from Arizona and New Mexico. *Phytoneuron* 2020-40:1-9.

**TYPE LOCALITY:** Clanton Draw, Peloncillo Mountains, Hidalgo County, New Mexico, United States.

**TYPE SPECIMEN:** HT: ASU 259598. R.D. Worthington 32511, 2004. IT: NMC, SRSC, UNM, UTEP.

**TAXONOMIC UNIQUENESS:** The genus *Erythranthe* is diverse, containing approximately 110 species. *Erythranthe* was originally described as a separate genus, then generally regarded as a section within the genus *Mimulus*, and was restored to genera level. Eighteen species, including *E. plotocalyx* are treated as members of *Erythranthe* sect. *Mimulosoma* in North America north of Mexico (Nesom, 2012).

**DESCRIPTION:** Fibrous-rooted herbaceous annual, with erect to ascending erect stems 6-30 cm (2.4-11.8 in) high. Stems, pedicels, and calyces villous-glandular with gland-tipped hairs. Leaves cauline, basal mostly deciduous by flowering, oblanceolate to elliptic or elliptic-lanceolate, basally attenuate to sessile or subsessile, epetiolate, 11–27 mm x 3–10 mm, primarily palmately 3–5-nerved, sometimes with an additional 1–2 smaller lateral pairs, margins entire to shallowly serrate or dentate with 1–3 pairs of teeth. Fruiting pedicels 20–45 mm long. Fruiting calyces distinctly inflated, suburceolate, 5–8 mm long, greenish or purplish, not red-dotted, villous-glandular, lobes subequal, triangular-acuminate. Corollas yellow with floor of tube red-dotted, exerted 2–4 mm beyond the calyx, tube-throats funnelform-cylindric, 5–6 mm long, limbs essentially radially symmetric, expanded 3–4 mm across (pressed), lobes broadly oblong-obovate, apically notched. Style and stigma exerted 1–2 mm beyond calyx margin (Nesom, 2020).

**AIDS TO IDENTIFICATION:** Similar to *E. floribunda*, but combination of erect habit, epetiolate leaves, long, ascending-erect peduncles, inflated calyces, and cleistogamous flowers with small corollas distinguish *E. plotocalyx* (Nesom, 2020).

**ILLUSTRATIONS:** Color Photo (Carnaham, *in* Nesom 2020: Fig 1, Fig 2).  
Color Photo of Isotype (SRSC)  
Color Photo of Isotype (UNM 65428)  
Color Photo of specimen (NMC 75440)  
Color Photo of specimen (ARIZ 437989)

**TOTAL RANGE:** Southern Arizona and southwestern New Mexico.

**RANGE WITHIN ARIZONA:** Cochise, Coconino, Pima, and Santa Cruz Counties.

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous annual.

**PHENOLOGY:** Flowers from April to July

**BIOLOGY:** Found in grasslands associated with water

**HABITAT:** Grassland cienegas and seasonal drainages, wet meadows, sandy washes, wet soil in marshes, pond and creek edges.

**ELEVATION:** 3,000 to 5500 feet (915-1677 m).

**EXPOSURE:**

**SUBSTRATE:**

**PLANT COMMUNITY:**

**POPULATION HISTORY AND TRENDS:** Less than 10 known occurrences; population trends unknown.

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:**

**STATE STATUS:**

**OTHER STATUS:**

**MANAGEMENT FACTORS:** Very little is presently known about this species, as it has only recently been described.

**PROTECTIVE MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Review herbarium material for additional specimens. Survey suitable habitat to gain knowledge of current distribution, abundance, and identify threats.

**LAND MANAGEMENT/OWNERSHIP:****SOURCES OF FURTHER INFORMATION****REFERENCES:**

- Nesom, G.L. 2012. Taxonomy of *Erythranthe* sect. *Mimulosma* (Phrymaceae). *Phytoneuron* 2012-41:1-36.
- Nesom, G.L. 2020. *Erythranthe plotocalyx* (Phrymaceae), a new species from Arizona and New Mexico. *Phytoneuron* 2020-40:1-9.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

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**ADDITIONAL INFORMATION:**

**Revised:** 2020-09-03 (KSL)

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