

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDEUP01130

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Acalypha californica* Benth.

COMMON NAME: California Copperleaf, Pringle threeseeded mercury

SYNONYMS: *Acalypha pringlei* S. Wats., *Ricinocarpus californicus* (Benth.) Kuntze,
Acalypha stokesiae Pax & K. Hoffm.

FAMILY: Euphorbiales

AUTHOR, PLACE OF PUBLICATION: Benth., Bot. Voy. Sulph. 51. 1844.

TYPE LOCALITY: Mexico, Lower California [Baja California], Magdalena Bay, hills.

TYPE SPECIMEN: LT: BM [photos DS!, NY!, POM!]. G.W. Barclay 3138, Oct-Nov 1839.
IT: K, LE, MIN!, MO!, RSA!, U.

TAXONOMIC UNIQUENESS: The species *californica* is 1 of 15 in the genus *Acalypha* in North America. "The *Acalypha californica* complex (Euphorbiaceae) of the southwestern United States and northwestern Mexico has been treated as up to three species, *A. californica* Benth., *A. pringlei* S. Watson, and *A. stokesiae* Pax & K. Hoffm. Most recent authors, however, have recognized only two or one species, without offering supporting evidence. Study of herbarium specimens and population samples from throughout the range of the complex shows that most characters used to segregate the species cannot be used taxonomically because they vary either within individuals or within populations with no geographic pattern. In contrast, the frequency of plants with two distinct lengths of eglandular stem trichomes varies clinally. A different and weaker cline is followed by the number of teeth on the bracts subtending the carpellate flowers. Though in both clines the geographic extremes are different, no gaps in the clines are statistically recognizable. Only a single variable species, *A. californica*, should be recognized." (Levin, 1994).

DESCRIPTION: Hairy shrub < 1.5 m (4.9 ft) tall, about 0.9 m (3 ft) wide, often glandular and sticky, with red stems. Leaf is linear with stipules 2-5 mm long; petiole < 1.5 cm; blade is 1-2 cm long, ovate to deltate, base truncate to lobed, margin crenate. Staminate inflorescence is slender, 1.5-4.0 cm (0.6-1.6 in) long. Pistillate inflorescence is < 2 cm; bracts together cup-like, hairy, margin glandular. Staminate flowers with sepals about 0.5 mm in length, puberulent; stamens greater than sepals. Pistillate flowers with sepals about 1 mm, puberulent; ovary about 1 mm in diameter, puberulent, styles reddish. Flower color red. Fruit 1-3 mm in diameter, puberulent.

AIDS TO IDENTIFICATION:

ILLUSTRATIONS: B&W line drawing (Hickman, 1993: p. 575).
Color photos (Saint Mary's College in CA, 1994, *in* CalPhotos).
Color photo (<http://www.laspilitas.com/plants/10.htm>, 2001).
Color photo (Ken Gilliland 2003, *in* California Native Plants Gallery,
http://www.theodorepayne.org/gallery/pages/acalypha_californica.htm)
Color photo (*in* <http://www.calflora.net/bloomingplants/californiacopperleaf.html>)
Color photos (*in* http://www.sci.sdsu.edu/plants/Acalypha_californica.html)
Color photos (Henriette Kress, *in* <http://www.ibiblio.org/herbmed>)

TOTAL RANGE: Southwestern California (San Diego area), southwest Arizona, down into Baja California, Mexico.

RANGE WITHIN ARIZONA: Southwestern Arizona in Pima County, including: Ajo Mountains, Ajo Range, Little Ajo Mountains, Pozo Redondo Mountains, Puerto Blanco Mountains, Sonoyta Mountains, southwest of Diablo Mountains, northeast of Burro Gap, north of Lukeville, and south of Ajo.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennial evergreen shrub.

PHENOLOGY: Flowers from January to June.

BIOLOGY: A fast growing, drought tolerant plant that is hardy up to 4000 feet. Shrubs have separate male and female flowers on the same plant.

HABITAT: Dry rocky granite slopes in chaparral, oak woodland. Found in arid coastal habitats in Mexico, up to 700 m (Martin et al., 1998).

ELEVATION: 656 – 4,265 ft (200 – 1300 m). Based on unpublished records in the Heritage Data Management System (AGFD, accessed 2002), elevation ranges from 1,580 – 4,500 ft (482-1373 m).

EXPOSURE: Sun to part sun.

SUBSTRATE: Dry granite slopes.

PLANT COMMUNITY: Chaparral, Southern Oak Woodland. In Arizona, associated with *Ambrosia ambrosioides* (Ambrosia-leaf bursage), *Cercidium* (*Parkinsonia*) *microphyllum*

(little-leaf paloverde), *Celtis pallida* (spiny hackberry), and *Encelia farinose* (white brittle-bush).

POPULATION HISTORY AND TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None
STATE STATUS: None
OTHER STATUS: Bureau of Land Management Sensitive (USDA, BLM 2000).

MANAGEMENT FACTORS:

PROTECTIVE MEASURES TAKEN:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: BIA – Tohono O’Odham Nation; BLM – Phoenix Field Office; FWS – Cabeza Prieta National Wildlife Refuge; NPS – Organ Pipe Cactus National Monument.

SOURCES OF FURTHER INFORMATION

REFERENCES:

- CalFlora. CalFlora taxon report: *Acalypha californica* Benth. (Euphorbiaceae). www.CalFlora.org, accessed 4/3/2002.
- California Native Plants Gallery: *Acalypha californica*. Accessed 2/23/2004 from http://www.theodorepayne.org/gallery/pages/acalypha_californica.htm.
- CalPhotos. 1995. Saint Mary’s College of California photos of *Acalypha californica*; California Acalypha. <http://elib.cs.berkeley.edu/cgi/>, accessed 4/3/2002.
- Hickman, J.C., ed. 1993. The Jepson Manual, Higher Plants of California. University of California Press, Berkeley, CA. pp. 568, 575.
- Integrated Taxonomic Information System (ITIS). Retrieved 2/23/2004 from ITIS, <http://www.itis.usda.gov>.
- Levin, G.A. 1994. Systematics of the *Acalypha californica* complex (Euphorbiaceae). Madrono, Vol. 41, No. 4, pp. 254-265, 1994.
- Martin, P.S., et al. 1998. Gentry’s Río Mayo Plants, the tropical deciduous forest and environs of Northwest Mexico. The Southwest Center Series. The University of Arizona Press, Tucson, AZ. P. 308.
- Missouri Botanical Garden. Nomenclatural Data Base, *Acalypha californica* Benth.

- http://mobot.mobot.org/cgi-bin/search_vast, accessed 03 Apr 2002.
- NatureServe Explorer: An online encyclopedia of life [web application]. 2001. Version 1.6. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: April 3, 2002).
- USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- USDI, Bureau of Land Management. 2000. BLM Sensitive Species List for Arizona. Information Memorandum No. AZ-2000-018.

MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

“*Acalypha*: from the Greek *akalephes* for “nettle,” being an ancient name for a kind of nettle but applied by Linnaeus to this genus because of the nettle-like appearance of the leaves (ref. Genus *Acalypha*). *californica/californicum/californicus*: of or from California (too many references to list).” (<http://www.calflora.net/bloomingplants/californiacopperleaf.html>, accessed 2/23/2004).

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