



ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDONA030K0

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Camissonia gouldii* Raven
COMMON NAME: Gould's evening primrose, Diamond Valley suncup, Gould camissonia
SYNONYMS: *Oenothera gouldii* (Raven) Welsh & Atwood
FAMILY: Onagraceae

AUTHOR, PLACE OF PUBLICATION: P.H. Raven, Contrib. From the U.S. Nat. Herb.
37(5): 368. fig. 70. 1969.

TYPE LOCALITY: USA, Utah, Washington County, Diamond Valley, 12 miles north of St.
George; 3500 feet.

TYPE SPECIMEN: HT: ? F.W. Gould #1423, 15 October 1941. IT: F, GH, NY, US.

TAXONOMIC UNIQUENESS: Distinct species in genus of about 58-60 species.

DESCRIPTION: Annual caulescent herbs from taproots; stems simple or branched from near the base, mainly 6-20 cm tall (2.4-8 in); herbage glandular hairy throughout. Leaves petiolate, the blade mostly 1-1.5 cm long and 0.5-1 cm wide, elliptic to almost rhombic, usually denticulate. Flowers (self-pollinated) few to many in terminal, nodding spikes, inconspicuous; hypanthium 1.5-3 mm long; sepals 1-1.5 mm long; petals white, fading pink, 1.5-3 mm long; stamens subequal; anthers 0.4-0.9 mm long; style exserted 1.5-2.5 mm beyond the hypanthium. Capsules sessile, 8-12 mm long; seeds in 1 row per locule, ca 1 mm long, smooth. Flowers opening near sunrise.

AIDS TO IDENTIFICATION: A unique annual easily recognized by its mainly cauline denticulate leaves and small white flowers (1.5-3 mm long) in terminal nodding spikes. Also this plant is allied to *C. boothii* var. *villosa* (= *C.b.* ssp. *alyssoides*, alyssum evening-primrose) but is easily distinguished by the sessile capsules and tiny flowers.

ILLUSTRATIONS: Line drawing (Raven 1969)
Line drawing (Cronquist et al. 1997)
Color photos of plant and habitat (C. Delmatier, *in* Utah Rare Plant Society 2003-2005, <http://www.utahrareplants.org>)
Line drawing (*In* Utah Rare Plant Society 2003-2005, <http://www.utahrareplants.org>)

Color photo of Isotype specimen (NY-231274, NYBG, in
<http://207.156.243.8/emu/vh/specimen.php?irn=397861>)

Color photo of Isotype specimen (US-1921032, USNM, in
<http://ravenel.si.edu/botany/types/fullRecords.cfm?myFamily=>)

TOTAL RANGE: South-central Washington County, Utah, and Mohave and east-central Coconino counties, Arizona.

RANGE WITHIN ARIZONA: See “Total Range.”

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Annual herb.

PHENOLOGY: Flowers mid-May to early July; flowers open near sunrise.

BIOLOGY: Autogamous, monomorphic seeds.

HABITAT: Volcanic cones: on steep slopes, volcanic scree or cinder flats.

ELEVATION: 3,443 - 5,410 ft. (1050-1650 m). In Utah, elevation from 3,500-4,600 feet (UNPS 2003-2005).

EXPOSURE:

SUBSTRATE: Restricted to volcanic ash deposits including volcanic scree and cinder flats.

PLANT COMMUNITY: In Arizona associated species include: *Eriogonum* (buckwheat), *Gaura coccinea* (scarlet gaura), *Mentzelia pterosperma* (wing-seed blazing-star), *Nicotiana trigonophylla* (desert tobacco), and *Phacelia* (scorpion-weed). (SEINet accessed 2005). In Utah, in pinyon-juniper and big sagebrush communities; type with *Phacelia palmeri* (Palmer’s scorpion-weed). (Utah Rare Plant Society 2003-2005).

POPULATION TRENDS: Unknown.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None (USDI, FWS 1996)
[Category 3 USDI, FWS 1985]
[Category 3 USDI, FWS 1980]

STATE STATUS: None

OTHER STATUS: None

MANAGEMENT FACTORS:

PROTECTIVE MEASURES:

SUGGESTED PROJECTS:

LAND MANAGEMENT/OWNERSHIP: BLM – Arizona Strip Field Office; NPS – Wupatki National Monument; Private. In Utah: BLM – St. George Field Office; State – Snow Canyon State Park; Private.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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MAJOR KNOWLEDGEABLE INDIVIDUALS:**ADDITIONAL INFORMATION:**

Revised: 1989-11-09 (ANHP)
1991-10-20 (BKP)
1994-02-15 (DBI)
1995-05-23 (DBI)
2003-08-29 (AMS)
2005-09-22 (SMS)

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