

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDAST700D1

Data Sensitivity: No

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Perityle gilensis* var. *gilensis*
COMMON NAME: Gila rock daisy, Fish Creek rock daisy
SYNONYMS: *Lamphamia gilensis*
FAMILY: Asteraceae

AUTHOR, PLACE OF PUBLICATION: *Perityle gilensis* (M.E. Jones) J.F. Macbride, Contributions from the Gray Herbarium of Harvard University 56: 39. 1918. *Lamphamia gilensis* M.E. Jones, Zoë 2: 15. 1891.

TYPE LOCALITY: Putnam's Ranch, near Gila River, Arizona, USA.

TYPE SPECIMEN: IT: US, M.E. Jones s.n., 23 May 1890.

TAXONOMIC UNIQUENESS: NatureServe (2019) list 35 species of *Perityle*, and another 14 varieties. Eighteen of these species occur in Arizona, with nine being found only within the state. Genus is "characterized by a high degree of endemism accentuated by a rapid rate of evolution in part allowed (or promoted) by polyploid tendencies" (Fletcher 1978). *Perityle* and *Laphamia* have had taxa transferred from one to the other for over 100 years. *Perityle gilensis* has two varieties: *gilensis* and variety *salensis*. It is an Arizona endemic.

DESCRIPTION: For the species, *Perityle gilensis*: Perennials or subshrubs, 22–70 cm (often in dense clumps, stems upright to pendent or spreading); glabrous or puberulent, often glandular. Leaves: petioles 9–45(–80) mm; blades usually pinnately 3-foliolate (proximal) or 3-lobed, 14–30 × 4–20 mm, lobes much broadened distally, often cruciform, sometimes 3-lobed to divided, ultimate margins entire or lobed. Heads borne singly or (2–4) in corymbiform arrays, 8–11 × 9–12 mm. Peduncles 1–4 mm. Involucres broadly campanulate to hemispheric. Phyllaries 20–30, linear-lanceolate to oblanceolate, 4–7 × 0.8–1.5 mm. Ray florets 8–18; corollas yellow, laminae oblong to subovate, 4–10 × 2–4 mm. Disc florets 70–200; corollas yellow, tubes 1.5–2 mm, throats subtubular to narrowly funnellform, 2.5–3.5 mm, lobes 0.7–0.8 mm. Cypselae narrowly oblanceolate to narrow oblong-elliptic, 2.6–4 mm, margins notably calloused, sparsely short-hairy, sometimes glandular; pappi of 1(–3) bristles 3–4.6 mm, sometimes plus hyaline scales (Flora of North America). *P. g.* var. *gilensis* upright to spreading, as opposed to trailing.

AIDS TO IDENTIFICATION: Proximal leaves of vars. *gilensis* and *salensis* may appear similar; lobes of the mid and distal leaves are elliptic to ovate in var. *gilensis* and linear to long-spatulate in var. *salensis*. Also, petioles 9–25 mm in *gilensis*; 25–45 mm in *salensis*.

ILLUSTRATIONS:

Herbarium mounts: <http://swbiodiversity.org/seinet/taxa/index.php?tid=13677>.

Color photos: http://www.arizonensis.org/sonoran/fieldguide/plantae/perityle_gilensis.html.

Color photos: https://calphotos.berkeley.edu/cgi/img_query?enlarge=0000+0000+0516+0646.

TOTAL RANGE: South-central Arizona

RANGE WITHIN ARIZONA: Maricopa, Pinal and Gila counties. From Apache Lake and the Superstition Mountains southeast to the Pinal and Dripping Springs Mountains; north of the Gila River.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Perennials or subshrubs.

PHENOLOGY: Arizona collections have noted flowers present from January through May, and again in September, October and November

BIOLOGY:

HABITAT: The species may be found in crevices in rocks and small pockets of soil in vertical and near vertical cliffs and canyons; also desert slopes and rocky hillsides.

ELEVATION: 1,529 – 4,170 feet (466 – 1,271 m) based on HDMS collection records.

EXPOSURE: Based on collection record notes, the plant can be found on all exposures.

SUBSTRATE: Rhyolite and other porous igneous rocks; one collection mentioned conglomerate rock and another limestone

PLANT COMMUNITY: Arizona Upland Sonoran Desert and Chaparral zone just below Pinyon pine. Associated species from collection notes include: *Encelia farinosa*, *Viguiera deltoidea*, *Descurainia*, *Ericamerica laricifolia*, *Carnegia gigantea*, *Opuntia acanthocarpa*, *O. engelmannii*, *Agave chrysantha*, *Hymenothrix wrightii*, *Eriogonum fasciculatum*, *E. wrightii*, *E. abertianum*, *Mirabilis bigelovii*, *Echinocereus engelmannii*, *Bernardia incana*, *Crossosoma bigelovii*, *Cercocarpus montanus*, *Heterotheca villosa*, *Ceanothus greggii*, *Gutierrezia sarothrae*, *Populus fremontii*, *Platanus wrightii*, *Cephalanthus occidentalis*, *Morus microphylla*, *Frangula californica*, *Platanus wrightii*, *Fraxinus*, *Ziziphus obtusifolia*, *Celtis pallida*, *Juglans major*, *Colubrina californica*, *Oenothera*, *Sapindus saponaria*, *Ambrosia ambrosioides*, *Anisacanthus thurberi*, *Arabis peramoena*, *Bowlesia incana*, *Brickellia baccharidea*, *Bromus rigidus*, *Camissonia californica*, *Crossosoma bigelovii*, *Cryptantha muricata*, *Eragrostis lehmanniana*, *Eriogonum fasciculatum*, *Euphorbia eriantha*, *Galium*

aparine, *Gilia sinuata*, *Hyptis emoryi*, *Lesquerella purpurea*, *Marina parryi*, *Mimulus guttatus*, *Nicotiana glauca*, *Parietaria pensylvanica*, *Pennisetum ciliare*, *Penstemon eatonii*, *Phacelia distans*, *Phlox tenuifolia*, *Salix gooddingii*, *Simmondsia chinensis*, *Thysanocarpus curvipes*, *Vauquelinia californica*, *Vulpia octoflora*, *Pinus monophylla*, *Quercus turbinella*, *Baccharis sarothroides*, and *Artemisia ludoviciana*

POPULATION HISTORY AND TRENDS: Unknown. There are 19 documented occurrences of this Arizona endemic subspecies. Collection record notes indicate that the plant ranges from rare to common, and sometimes very common. NatureServe ranks the plant as imperiled.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.
STATE STATUS: None.
OTHER STATUS: Not Forest Service Sensitive (USDA, FS Region 3 2007)
[Forest Service Sensitive, USDA, FS Region 3 1999]

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None. The subspecies was listed as a Forest Service Sensitive plant in 1999, but removed in the 2007 update. There is no Federal or State status.

SUGGESTED PROJECTS: None specified.

LAND MANAGEMENT/OWNERSHIP: USDI Bureau of Land Management (Tucson Field Office); USDA Forest Service (Tonto National Forest); Arizona State Trust lands and Arizona State Parks, and private land holdings.

SOURCES OF FURTHER INFORMATION

REFERENCES:

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- Welsh, S.L., N.D. Atwood, S. Goodrich, and L.C. Higgins, eds. 1993. A Utah Flora. Second Edition, revised. Print Services, Brigham Young University, Provo, Utah, U.S.A. p. 243.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

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ADDITIONAL INFORMATION:

Revised: 2002-12-20 (AMS)
2003-02-12 (SMS)
2019-11-12 (BDT)

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Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.