

ARIZONA GAME AND FISH DEPARTMENT
HERITAGE DATA MANAGEMENT SYSTEM

Plant Abstract

Element Code: PDLOA030G0

CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE

NAME: *Mentzelia eremophila*
COMMON NAME: Pinyon Blazingstar, Solitary Blazingstar
SYNONYMS: *Mentzelia lindleyi* var. *eremophila*, *M. nitens* var. *eremophila*
FAMILY: Loasaceae

AUTHOR, PLACE OF PUBLICATION: Thompson, Henry Joseph and Joyce E. Roberts (nee Zavortink). *Phytologia* 21(4): 281. 1971.

TYPE LOCALITY: California: Kern County: near Randsburg.

TYPE SPECIMEN: Univ. Cal. UC 129558 (Holotype of *Mentzelia lindleyi*). H.M. Hall and H.P. Chandler, #6680. May 7, 1906.

TAXONOMIC UNIQUENESS: The family Loasaceae has about 15 genera and 250 species, mostly in the New World. Arizona has four genera. The genus *Mentzelia* has 26 (Christy 1998) or 27 (NatureServe 2014) species in Arizona (two are found only in the State) plus another nine varieties.

DESCRIPTION: Annual 8–43 cm. Stem: erect, glabrous to hairy. Leaf: 1–15 cm, lower lobed, upper entire to lobed. Inflorescence: bracts lanceolate to ovate, entire to 2-toothed at base, green. Flower: sepals (7)9–16 mm; petals 12–24 mm, obovate, yellow; stamens 3–10 mm; style 7–15 mm. Fruit: generally curved < 270°, 19–40 mm, 2–3.5 mm wide, obconic. Seed: ± 1 mm, irregular-rounded above mid-fruit, ×-section occasionally triangular with grooves along longitudinal edges below mid-fruit, tan, ± dark mottled; recurved flap over attachment scar conspicuous; seed coat cells domed, < 1/2 tall as wide in age. (Jepson E-Flora 2014)

AIDS TO IDENTIFICATION: Annual herb producing an erect light brown to nearly white stem up to about 43 centimeters in maximum height. The leaves are divided deeply into lobes, the longest in the basal rosette approaching 10 centimeters long and those higher on the stem reduced in size. EOL 2014.

ILLUSTRATIONS:

Photos: http://calphotos.berkeley.edu/cgi/img_query?where-taxon=Mentzelia+eremophila.

TOTAL RANGE: Southern California, very southern Nevada, and west-central Arizona.

RANGE WITHIN ARIZONA: Western edge of Mohave County. Known from only two collections.

SPECIES BIOLOGY AND POPULATION TRENDS

GROWTH FORM: Annual herb.

PHENOLOGY: Mar-May (Jepson E-Flora 2014). Both collections made in Arizona had flowers in early April.

BIOLOGY: Intergrades with *M. nitens* (Jepson E-Flora 2014).

HABITAT: Canyons, rocky slopes and washes, roadsides, flats; also disturbed areas. Mohave Desert creosote-bush scrub.

ELEVATION: 1970 – 4100 feet (600-1250m). One of the Arizona collections was made at 760 feet (230 meters). This significantly lowers the elevation range reported in Jepson E-Flora 2014).

EXPOSURE: Not specified, although one of the Arizona collections noted a south facing slope.

SUBSTRATE: Sandy scrub or dunes, disturbed areas.

PLANT COMMUNITY: Mohave Desert, creosote bush scrub. Plants associated with Arizona collections include: *Hesperocallis undulata*, *Calochortus nuttallii*, *Eriogonum fasciculatum*, *Larrea tridentata*, *Ambrosia dumosa*, *Coleogyne ramosissima*, *Lycium*, *Acacia greggii*, *Ephedra fasciculata*, *Krameria erecta*.

POPULATION HISTORY AND TRENDS: Unknown for Arizona. Only two collections have been made in 2001 and 2008. These may indicate an expanding range from the Mohave Desert in California, or the initial discoveries of a species rare in Arizona.

SPECIES PROTECTION AND CONSERVATION

ENDANGERED SPECIES ACT STATUS: None.

STATE STATUS: None.

OTHER STATUS: None.

MANAGEMENT FACTORS: None specified.

PROTECTIVE MEASURES TAKEN: None specified.

SUGGESTED PROJECTS: Conduct additional surveys in western Mohave County to determine if *M. eremophila* is more widely distributed.

LAND MANAGEMENT/OWNERSHIP: Both Arizona collections were made from USDI BLM lands.

SOURCES OF FURTHER INFORMATION

REFERENCES:

Encyclopedia of Life (EOL), accessed 12-19-2014, <http://eol.org/pages/595366/details>.
Jepson E-Flora, accessed 12-19-2014, http://ucjeps.berkeley.edu/cgi-bin/get_IJM.pl?tid=33238.
JStorGlobal Plants, accessed 12-19-2014,
<http://plants.jstor.org/stable/10.5555/al.ap.specimen.uc129558>.
Tropicos, accessed 12-19-2014, <http://www.tropicos.org/Name/18900209>.

MAJOR KNOWLEDGEABLE INDIVIDUALS:

ADDITIONAL INFORMATION:

Revised: 2014-12-23 BDT

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