

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PMPOA4K1G0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Panicum mohavense*  
**COMMON NAME:** Mohave panicgrass, Mohave Panicum  
**SYNONYMS:** None  
**FAMILY:** Poaceae

**AUTHOR, PLACE OF PUBLICATION:** Reeder, J. R. 1991. Phytologia 71(4):300-303.

**TYPE LOCALITY:** Main Street Valley, Mohave County, Arizona.

**TYPE SPECIMEN:** ARIZ. J. R. Reeder and C. G. Reeder #8630. 1991-10-11.

**TAXONOMIC UNIQUENESS:** The genus *Panicum* contains approximately 500 species, distributed throughout the tropical and temperate regions of the world. *Panicum* is the largest genus of North American grasses, with over 150 species found in the United States alone (Gould 1951). There are approximately 20 species of *Panicum* in Arizona (Lehr 1978).

**DESCRIPTION:** A small annual, 2-6 (-8) cm tall, with much-branching at the base. Culms erect, 1 noded, papillose-pillose, mostly obscured by the leaves. Leaves papillose-pillose, with prominently veined sheaths; ligule 0.2 mm long, membranous, with short hairs; blades 1-4 cm long, 1-3 cm wide, flat, tapering to an acuminate apex, glabrous on both surfaces or sometimes papillose-pillose abiaxially, margins ciliate with long papilla. Inflorescences short congested panicles, partially included in sheaths, never exceeding the tips of the longest leaves. Spikelets approximately 2 mm long, plump; lower glume uninerved, approximately 0.6-0.7 mm long, clasping, apex rounded, obtuse or acute; upper glume and sterile lemma equal, 7 nerved, covering, and barely exceeding the apex of the upper floret, the lemma lacking a palea; upper floret approximately 1.5 mm long, smooth, yellow to brownish when mature; stigmas and anthers purple, anthers approximately 1 mm long (Reeder 1991).

**AIDS TO IDENTIFICATION:** This species appears to be most similar to species of *Panicum* in the Capillária group. It can easily be distinguished from species in this group by its size (<10 cm tall), by having panicles which do not surpass the leaves, and by the upper glume and sterile lemma scarcely covering the upper floret (Reeder 1991).

**ILLUSTRATIONS:**

Photograph of specimens from type collection (Reeder 1991:302)

**TOTAL RANGE:** Coconino and Mohave Counties, Arizona, and Oscura Mountains, Socorro County, New Mexico.

**RANGE WITHIN ARIZONA:** In Coconino County, found in Monument Wash, Rabbit Canyon, on the Mogollon Plateau in vicinity of Wildcat Canyon. In Mohave County, occupies several areas including Main Street Valley, Hurricane Cliffs, vicinity of Parashant Canyon, vicinity of Sunshine Ridge, and on the Unikaret Plateau.

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

**GROWTH FORM:** Small herbaceous annual graminoid.

**PHENOLOGY:** August-October.

**BIOLOGY:** Little is known about the biology of this species.

**HABITAT:** In Arizona, this species is most often found on limestone benches, and terraces of cliffs and hills in grassland sagebrush dominated Great Basin Desertscrub communities, and pinyon-juniper and juniper woodland communities. In New Mexico, this species was found on thin limestone soil trapped in flat pockets at the edge of limestone cliffs within Great Basin Conifer Woodland communities (Reeder 1991, Spellenberg et al. 1993).

**ELEVATION:** 1300 - 6450 ft (1370 - 1966 m).

**EXPOSURE:** Northwest, west, and southwest.

**SUBSTRATE:** Rocky loam from limestone (typically). One specimen was collected half covered with silt in a wash.

**PLANT COMMUNITY:** In Arizona, this species is found in Great Basin Desertscrub, Bouteloua grasslands, and Pinyon-Juniper and Juniper woodland communities. In New Mexico, it occupies Great Basin Conifer Woodland communities. In Arizona, associated species at a site in Coconino County included *Pinus edulis*, *Juniperus monosperma*, *Gutierrezia sarothrae*, *Bouteloua gracilis*, *Chamaebatiaria millefolium*, *Atriplex canescens*, *Mahonia fremontii*, *Muhlenbergia depauperata*, *Talinum validulum*, *Erigeron concinnus*, *Eragrostis mexicanus*, and *Sphaeralcea parvifolia*. In Mohave County, it was found with *Cowania*, *Mahonia*, *Artemesia*, *Gutierrezia*, *Bouteloua*, *Bromus*, *Sporobolus*, *Sphaeralcea*, *Muhlenbergia*, and *Enneapogon*. (SEINet accessed 2013). Associated species in New Mexico include *Bouteloua sp.*, *Juniperus monosperma*, *Pinus edulis*, and *Thelesperma sp.* (Brown 1994, Spellenberg et al. 1993).

**POPULATION TRENDS:** Overall population trends are unknown, but new populations have been recently discovered in Coconino County, Arizona. New Mexico's only known population consisted of 3 individuals in 1988. In 1990, no plants could be found at the same site (Spellenberg et al. 1993).

## **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** None  
**STATE STATUS:** None  
**OTHER STATUS:** None

**MANAGEMENT FACTORS:** This species is most often found on limestone benches and terraces associated with cliffs, and therefore there are probably few threats to its existence. However, its limited distribution does merit some attention. Direct impacts should be avoided but little management is probably required.

**CONSERVATION MEASURES TAKEN:** None

**SUGGESTED PROJECTS:** Known populations should be monitored to some extent. Areas with suitable habitat should be searched for the presence of this species, especially those areas adjacent to known populations.

**LAND MANAGEMENT/OWNERSHIP:** Shivwits Resource Area and Vermillion Resource Area, Arizona Strip District, Bureau of Land Management, Apache-Sitgreaves National Forest, Private, State Trust Land; White Sands Missile Range, Department of Defense.

## **SOURCES OF FURTHER INFORMATION**

### **REFERENCES:**

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- Lehr, J. H. 1978. A catalogue of the flora of Arizona. Desert Botanical Garden, Phoenix, Arizona. 203 pp.
- Missouri Botanical Garden. 2013. Tropicos: *Panicum mohavense* Reeder. <http://www.tropicos.org/>
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Spellenberg, R., D. Anderson, and R. Brozka. 1993. Noteworthy Collections. *Madroño* 40(2):136-137.

USDA, NRCS. 2013. The PLANTS Database (<http://plants.usda.gov>, 10 September 2013). National Plant Data Team, Greensboro, NC 27401-4901 USA.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

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Richard Spellenberg, Biology Department, New Mexico State University, Las Cruces, NM.

**ADDITIONAL INFORMATION:**

**Revised:** 1998-12-10 (DJG)  
1999-01-04(DJG)  
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