

# DESERT PANICGRASS

*Panicum urvilleanum* Kunth

Plant Symbol = PAUR

**Common Names:** desert panicgrass, silky panicgrass

## Description

**General:** Desert panicgrass is a native, perennial, rhizomatous or stoloniferous grass that grows from 20 to 40 inches tall. The robust culms grow erect, either solitary or in bunches, from the rhizomes and stolons. Leaf sheaths and nodes are hairy and the leaf blades may have fine hairs on the upper surface. The inflorescence is an open panicle 10 to 12 inches long. Spikelets are covered in silvery or tawny fine hairs. Flowering time is between March and June (Abrams, 1923; Freckman and Webster, 2017; Hitchcock and Chase 1950; Kearney and Peebles 1964).

**Distribution:** Desert panicgrass is found in southern California, southern Nevada, Arizona, and northern Mexico, as well as in Argentina and Chile. Please consult the Plant Profile page for this species on the PLANTS Web site for the most current map of species distribution.

**Habitat:** Desert panicgrass is found in sandy soils and dunes, particularly in and around desert riparian areas and river channel sand dunes. It is typically found at elevations below 4000 ft.

## Adaptation

Desert panicgrass is found in riparian plant communities and sand dunes of the Mojave Desert and the southern Colorado River basin in the United States. Desert panicgrass is adapted to growing in active sand dunes. It grows quickly enough to outstrip sand accumulation, and can also survive sand excavation by the wind (Bowers, 1982). Associated plants include: Willow (*Salix* spp.), saltcedar (*Tamarix* spp.), mesquite (*Prosopis* spp.), creosote bush (*Larrea tridentata*), and Indian ricegrass (*Achnatherum hymenoides*).

## Uses

Desert panicgrass is an early seral dune stabilization species in the Mojave desert (Keeler-Wolf, 2007). It forms a sparse cover that begins to stabilize open dunes and sand deposits (Comer et al., 2012), showing promise for use in the revegetation of sandy critical areas to prevent wind erosion. Desert panicgrass also provides cover and food (seed) for wildlife.

## Ethnobotany

The seeds of desert panicgrass are edible. The Cahuilla Tribe of the Coachella Valley in southern California reportedly gathered and sined the seeds, then boiled them to make porridge (Bean and Saubel, 1972).

## Status

**Threatened or Endangered:** No.

**Wetland Indicator:** Desert panicgrass is not a wetland indicator species.

**Weedy or Invasive:** Desert panicgrass is not known to be an invasive species. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use.

Please consult the PLANTS Web site (<http://plants.usda.gov/>) and your state's Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).



Desert panicgrass, Photo by Mary Wolf, USDA NRCS Tucson Plant Materials Center

## Planting Guidelines

The recommended seeding rate for desert panicgrass is 8.5 pure live seed (PLS) pounds per acre if planted with a drill and approximately 16 PLS pounds per acre if seed is broadcast. There are approximately 100,000 seeds of desert panicgrass in a pound. Cold stratification does not improve germination or seedling vigor (Lair, 2015). For containerized production, sow desert panicgrass to a depth of 1.5 inches in a well-drained soil.

## Pests and Potential Problems

None known.

## Environmental Concerns

None known.

## Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method. Trade names and control measures appear in this document only to provide specific information. USDA NRCS does not guarantee or warranty the products and control methods named, and other products may be equally effective.



Desert panicgrass inflorescence, Photo by Heather Dial, USDA NRCS Tucson Plant Materials Center

## Seeds and Plant Production

Desert panicgrass should be planted in the early spring into a firm, weed free seedbed at a depth of 1 to 2 inches, with 24-40 inches within-row spacing. Row spacing can vary from 36-40 inches. The planting should be irrigated to maintain a moist soil surface and to avoid soil crusting. Appropriate pre-emergent herbicide may be used to control weeds after the plants have developed at least 3-5 leaves. Established fields should be irrigated approximately every four weeks during the growing season. Apply nutrients according to soil test results. Irrigated fields produce seed in the late spring, and may produce seed later in the year depending on environmental conditions and management. Mechanical seed harvest is with a seed stripper or combine. Harvested seed can be cleaned by processing with a brush machine or hammer mill and air screening equipment.

## Cultivars, Improved, and Selected Materials

No cultivars of desert panicgrass are currently available on the commercial market.

## Literature Cited

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Valley Community College, Lewis Center for Educational Research, Tucson Plant Materials Center, Mojave Water Agency, Mojave Desert Resource Conservation District, and USDA-NRCS. Lair Restoration Consulting, Hesperia, CA.

### **Citation**

Wolf, M. 2017. Plant Guide for desert panicgrass (*Panicum urvilleanum*). USDA-Natural Resources Conservation Service, Tucson Plant Materials Center. Tucson, Arizona 85705.

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