

SCRATCHGRASS

Muhlenbergia asperifolia
(Nees & Meyen ex Trin.)
Parodi

Plant Symbol = MUAS

Contributed by:
USDA NRCS Tucson Plant Materials Center



Mary Hershdorfer, USDA, NRCS,
Tucson Plant Materials Center

Alternate Names

Alkali muhly

Uses

Restoration: With reproductive characteristics of rhizomes, stolons and seed, scratchgrass is a desirable species for the purpose of riparian area restoration and erosion. Scratchgrass may also be a good competitor with invasive species such as salt cedar.

Ornamental: Scratchgrass grows as a sod and may provide a native alternative to Bermuda grass for lawns and landscaping.

Status

Scratchgrass has facultative wetland status, but is occasionally found in non-wetlands. Scratchgrass is

currently less common throughout much of its native range, likely due to overgrazing in riparian areas. Please consult the PLANTS Web site and your State Department of Natural Resources for this plant's current status (e.g. threatened or endangered species, state noxious status, and wetland indicator values).

Description

Scratchgrass is a warm season perennial rhizomatous grass, growing in moist alkaline meadows, sandy washes, grassy slopes, seeps and hot springs at elevations of 55-3000m (180-9840 feet). It grows up to 2 feet tall and spreads easily with adequate water. Scratchgrass is well adapted to fine to medium textured soils, and highly tolerant to shade, salts, calcium carbonate, and fire.

Adaptation

Scratchgrass grows in moist alkaline meadows, sandy washes, grassy slopes, seeps and hot springs at elevations of 55-3000m (180-9840 feet). It is well adapted to fine to medium textured soils, and highly tolerant to shade, salts, calcium carbonate, and fire.

Its native range centers in the western U.S. states, but spans from northern Mexico to British Columbia and Ontario. For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Establishment

Scratchgrass is a small-seeded grass with approximately 1,500,000 seeds per pound. Seed is produced from summer to fall, but this species also propagates by rhizomes and stolons. The broadcast seeding rate ranges from 0.05 to 0.75 PLS (pure live seed) per acre.

Seed should be broadcast onto a firm, weed-free seedbed. Broadcast seeding should be followed lightly with a cultipacker or harrow to provide seed with a shallow covering of soil. When used as part of a mix the seeding rate should be adjusted to the desired percentage of the mixture.

Management

Little maintenance is required after establishment. Mature scratchgrass forms a dense sod and is relatively resistant to weed infestation. Its active growth period spans from early spring to late fall. Grazing should occur while actively growing in the spring and summer, but should be managed to

prevent loss of stand. **Scratchgrass is not tolerant to 2,4-D amine, therefore it should NOT be used to control broadleaf weeds.**

Pests and Potential Problems

Scratchgrass is highly palatable to both livestock and wildlife and at risk of overgrazing.

Seed and Plant Production

Plant in early spring into a firm, weed-free seedbed at 24 to 40" spacing. Plants require 30 lb/ac available nitrogen during the establishment year and 45 lb/ac available nitrogen on established fields. Apply phosphorus according to soil test recommendations. For establishment, irrigate to maintain a moist soil surface and to avoid soil crusting. On established fields irrigate until seed formation.

Harvest may be done by direct combining or using a Woodward Flail Vac Seed Stripper. Yields for irrigated production fields average 50 to 75 lb/acre but may vary from year to year. Seed from scratchgrass has very good viability.

Plant Production can be done from seed or by sprigging stolons. Stolons may be removed from vigorous stock plants and rooted by layering. After root establishment the plants can be transferred to pots.

Seed with attached rachillas may be put through a hammer mill to break up stems and remove seedheads from the rachillas. Seed may then be separated from the chaff. Using an office type Clipper cleaner a 1/16 top screen and a 60x60 bottom screen produces pure seed. Little to no blower is needed.

Cultivars, Improved, and Selected Materials (and area of origin)

Selected releases:

Moapa germplasm *Muhlenbergia asperifolia*, was developed by the USDA-NRCS Tucson Plant Materials Center, BLM-Las Vegas Field Office and High Desert RC&D. Origin of this material is Moapa National Wildlife Refuge and Lake Mead National Recreation Area, Clark County, Nevada.

Westwater germplasm *Muhlenbergia asperifolia* was developed by the USDA-NRCS Los Lunas Plant Materials Center. Origin of this material is near Fruitland, New Mexico.

References

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USDA, NRCS. 2007. The PLANTS Database (<http://plants.usda.gov>, 19 June 2007). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Gould, F.W. 1977. Grasses of Southwestern United States. The University of Arizona Press, Tucson, Arizona

Prepared By: *Mary Hershdorfer, Ramona Garner, Leslie Wood*, Tucson, Arizona

Species Coordinator: Mary Hershdorfer

Edited: Jim Briggs

For more information about this and other plants, please contact your local NRCS field office or Conservation District, and visit the PLANTS Web site <<http://plants.usda.gov>> or the Plant Materials Program Web site <<http://Plant-Materials.nrcs.usda.gov>>

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