



A Conservation Plant Released by the Natural Resources Conservation Service, James E. “Bud” Smith Plant Materials Center, Knox City, Texas and *Texas Native Seeds*, Caesar Kleberg Wildlife Research Institute, Texas A&M University-Kingsville, Texas

Menard Germplasm purple threeawn

Aristida purpurea Nutt.

Menard Germplasm [*Aristida purpurea* Nutt.] was cooperatively released in 2020 by the *Texas Native Seeds* program of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, USDA NRCS James E. “Bud” Smith Plant Materials Centers, The Borderlands Research Institute at Sul Ross State University, Texas AgriLife Research Center Stephenville, TX, and Tarleton State University, Wildlife, Sustainability and Ecosystem Sciences, Stephenville, Texas. This release is a selected plant material class of certified seed.

Description

Purple threeawn is a warm season, perennial bunchgrass with culms 9.5 to 35.5 inches (25 to 90 cm) tall and dense basal leaves 1.0 to 9.5 inches (3 to 18 cm) long. The glumes are purple when mature and ripen to light brown. The seed is easily recognizable by its three long awns.

Source

This selection originated from plants collected in the Blackland Prairies, Cross Timbers, Rolling Plains, Edwards Plateau, Rio Grande Plains, and Gulf Coast Prairies and Marshes ecoregions. No breeding, selection, or genetic manipulation was used in the selection process.

Conservation Uses

Menard Germplasm is recommended for critical site revegetation, roadside plantings, erosion control, wildlife plantings, and for inclusion in range seeding mixes on well drained soils.

Area of Adaptation and Use

Menard Germplasm is likely to perform best in the Rio Grande Plains, Gulf Coast Prairies and Marshes, Edwards Plateau, Rolling Plains, Cross Timbers, and Blackland Prairies ecoregions based on origin and observations at the Caesar Kleberg Wildlife Center in Kingsville, Texas; Rio Farms near Monte Alto, Texas; the USDA NRCS Plant Material Center near Knox City, Texas; and the Texas AgriLife Research Center near Stephenville, Texas. Based on similarity of distribution of ecotypes and distance from their origin. Menard Germplasm is likely to perform well in the Trans Pecos and Post Oak Savannah ecoregions, but additional plantings are needed to determine its full range of adaptation. Menard Germplasm is low growing, establishes readily from seed, and performs well on poor soil conditions. The best use of Menard Germplasm is in poor soils such as road rights-of-way, and as an early successional component in range seed mixes.

Establishment and Management for Conservation Plantings

Seedbed preparation should begin well in advance of planting. Plant in late fall or spring into a clean, weed-free seedbed by either tillage or herbicides. Firm the planting site and check for soil moisture prior to planting. Menard Germplasm is seeded with a drill or broadcast planting. If broadcast planted, some type of additional coverage such as culti-packing or light dragging is recommended to ensure good seed-to-soil contact. Seed is 1/8 to 1/4 inch deep. It is better to plant too shallow than too deep. For calibration purposes, Menard Germplasm purple threeawn contains approximately 4,500,000 seeds per bulk pound. A seeding rate of 0.5-1 pounds pure live seed (PLS) per acre is recommended for pure stands. If planted in a mix, adjust the rate of Menard Germplasm to the desired percentage of the mix.



Menard Germplasm purple threeawn ©
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Avoid grazing of new plantings for 90 days to allow plants to become established. Established plants should be allowed to produce seed annually to maintain stand health.

Ecological Considerations

No insect or disease problems have been observed in Menard Germplasm once established. Cold tolerance of this germplasm beyond the area of intended use is unknown.

Seed and Plant Production

Seed yields of 10 PLS lb/acre are likely when planted on 36-inch bedded rows with a plant population of 14,000 plants per acre. Menard Germplasm averaged 15% PLS in seed increase fields.

Seed production of Menard Germplasm is best started using greenhouse grown transplants planted on bedded rows. Seedlings grow and mature quickly and produce a marketable seed crop in the same year of planting.

Seed harvest is possible using a variety of methods and implements. Seed ripens indeterminately. A Flail-Vac seed harvester or Shelbourne header is ideal for harvesting ripe seed because they do not damage or eliminate the ability to make subsequent seed harvests. Another method of harvesting mature seed is direct combining which can remove unfilled florets increasing seed purity. In well managed, irrigated fields, 2-3 harvests per year is possible. The first harvest is usually early May with the last harvest in October in south Texas.

Availability

For conservation use: Seed is available from licensed native seed dealers in Texas. Menard Germplasm is identified by USDA NRCS accession number 9112388.

For seed or plant increase: G0 seed of Menard Germplasm is maintained and supplied by Texas Native Seeds. All commercial seed fields must be grown in Texas and isolated from other cultivated varieties and wild populations of *Aristida purpurea* by a minimum of 900 feet. G1 and G2 seed fields have a 7-year production limit, after which time, fields must be replanted using generation G0 or G1 seed.

For more information, contact:

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<https://www.nrcs.usda.gov/wps/portal/nrcs/main/plantmaterials/pmc/central/txpmc/>

or

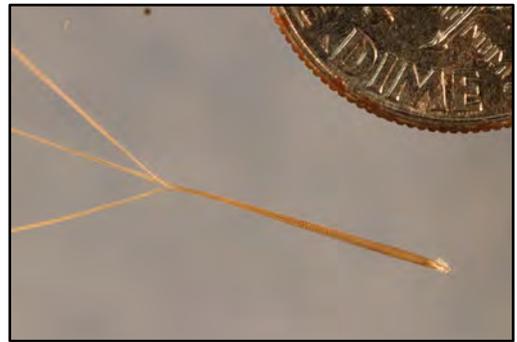
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Citation

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



Seed of Menard Germplasm purple threeawn © South Texas Natives

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