



A Conservation Plant Released by the Natural Resources Conservation Service, James E. “Bud” Smith Plant Materials Center, Knox City, Texas and E. “Kika” de la Garza Plant Materials Center, Kingsville, Texas.

Guadalupe Germplasm white tridens

Tridens albescens (Vasey) Woot. & Standl.

Guadalupe Germplasm white tridens [*Tridens albescens* (Vasey) Woot. & Standl.] was cooperatively released in 2019 by the Texas Native Seeds Program of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville; USDA Natural Resources Conservation Service (NRCS) James E. “Bud” Smith Plant Materials Center, Knox City, Texas; USDA NRCS E. “Kika” de la Garza Plant Materials Center, Kingsville, Texas; Sul Ross State University, Borderlands Research Institute, Alpine, Texas and Texas AgriLife Research, Stephenville, Texas. This release is a selected plant material class of certified seed.

Description

White tridens is a native, warm season, perennial bunchgrass with short rhizomatous bases. The inflorescence is a dense panicle of spikelets with white to pinkish tinged. White tridens grows primarily on clay or loamy soils that periodically receive an abundance of water.

Source

This selection is made up of five different populations originating from the Cross Timbers, Blackland Prairie, Edwards Plateau, Trans Pecos, and South Texas Plains ecoregions. These five accessions were chosen from thirty-three accessions evaluated at five locations in south, central, and west Texas. No breeding, selection or genetic manipulation was used in development of this selected class release.

Conservation Uses

Guadalupe Germplasm is recommended for upland wildlife plantings, critical area revegetation, right-of-way plantings, and inclusion in range seeding mixes. Guadalupe Germplasm can provide forage for cattle, wildlife habitat, and conservation cover on saline soils.

Area of Adaptation and Use

Guadalupe Germplasm is likely to perform best in the Rio Grande Plains (MLRA 083A-D), Gulf Coast Prairies and Marshes (MLRA 150A & B), Edwards Plateau (MLRA 081A-D), Rolling Plains (MLRA 78A-C), Cross Timbers (MLRA 084B & C), Southern Desert Basins, Plains, and Mountains (MLRA 042), and Blackland Prairies (MLRA 086A & B).

Establishment and Management for Conservation Plantings

Planting can be done in late fall or spring in Texas. White tridens should be included in warm-season planting mixtures with other adapted native grasses, forbs, and legumes. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture. White tridens can be seeded using a drill or broadcast seeder. If broadcast seeded, some type of additional coverage such as cultipacking or light dragging is recommended to ensure good seed to soil contact. Seed should be planted $\frac{1}{8}$ to $\frac{1}{4}$ inch deep. Due to the small seed size, it is better to plant too shallow than too deep. Guadalupe Germplasm 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. Guadalupe Germplasm has shown rapid emergence in most planting trials.

Areas planted to Guadalupe Germplasm should be deferred until plants become established and allowed to produce seed annually because of its reseeding ability with minimal disturbance.



Guadalupe Germplasm white tridens ©
Texas Native Seeds

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Ecological Considerations

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

Seed and Plant Production

Guadalupe Germplasm averaged 60% PLS from well managed seed increase fields. Seed yields per acre have been estimated at 95 PLS pounds per acre per year on 36" bedded rows with a plant population of 14,000 plants per acre.

Guadalupe Germplasm seed production fields can be established from greenhouse grown transplants, planted on bedded rows. Seedlings grow and mature quickly and produce a marketable seed crop the first year.

Seed harvest is possible using a variety of methods and implements. Accessions used in the development of Guadalupe Germplasm ripens indeterminately. A Flail-Vac Seed harvester or Shelbourne header can collect the ripe seed crop without damaging or eliminating the ability to make subsequent harvests of the stand. The seed holds well on the inflorescence after the plants mature, which allows the seed to be combine harvested. Two to 3 seed harvests per year is possible with well managed fields under irrigation. The first harvest is made in May with the last harvest occurring in October in south Texas.

Availability

For conservation use: Seed will be available from licensed native seed dealers in Texas. Guadalupe Germplasm will be identified by USDA NRCS accession number 9112221.

For seed or plant increase: All commercial seed fields of Guadalupe Germplasm must be grown in Texas and isolated from other cultivated varieties and wild populations of *Tridens albescens* by a minimum of 300 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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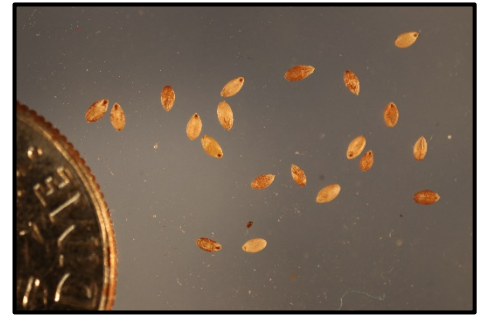
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Citation

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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 Guadalupe Germplasm white tridens © South Texas Natives

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