

330,000 seeds per bulk pound. A seeding rate of 1-2 pounds pure live seed (PLS) per acre is recommended for pure stands. When planted as part of a mixture, the seeding rate per acre should be adjusted according to the desired percent of the plant on the site. Venado Germplasm has shown rapid emergence in most planting trials, however heavy grazing pressure by deer can limit plant establishment.

Management

Areas planted to Venado Germplasm should be deferred for 90 days to allow plants to become established. Established plants should be allowed to produce seed annually.

No disease problems have been observed in awnless bushsunflower once established. White flies have shown to be a problem in awnless bushsunflower. Cold tolerance of this germplasm beyond the area of intended use is unknown.



Availability

Seed of Venado Germplasm awnless bushsunflower will be identified by USDA NRCS accession number 9109773. First generation (G0) seed will be produced and maintained by South Texas Natives.

For More Information

South Texas Natives
CKWRI-TAMUK
MSC 218, 700 University Blvd.
Kingsville, Texas 78363
Phone: (361) 593-4525
<http://ckwri.tamuk.edu/research-programs/south-texas-natives>

or

Kika de la Garza Plant Materials Center
3409 North FM 1355
Kingsville, Texas 78363
Phone: (361) 595-1313
<http://plant-materials.nrcs.usda.gov/stpmc/>

Venado Germplasm Awnless Bushsunflower

Simsia calca
(Engelm. & A. Gray) A. Gray



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USDA  NRCS
United States Department of Agriculture
Natural Resources Conservation Service



Description

Venado Germplasm awnless bushsunflower (*Simsia calva* (Engelm. & A. Gray) A. Gray) is a perennial forb or sub-shrub that has yellow disk shaped flowers. Venado Germplasm is a blend of 4 collections made in the Rio Grande Plain of South Texas from clay loam, loam and very fine sandy loam soil types. Awnless bushsunflower begins flowering in April and will continue to produce flowers through the fall with adequate precipitation.

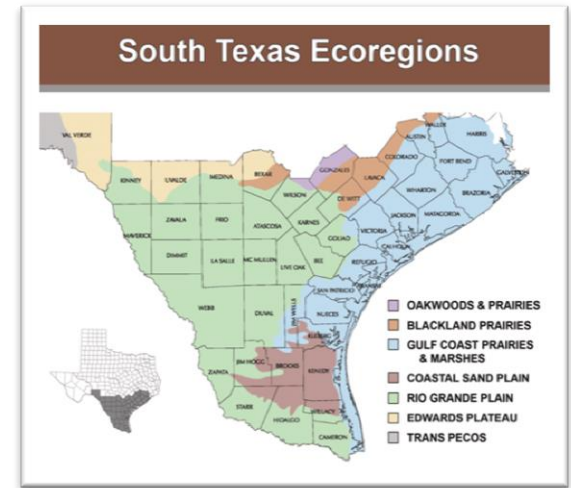
Venado Germplasm was cooperatively released in 2013 by the *South Texas Natives* Project of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville, and the USDA NRCS E. "Kika" de la Garza Plant Materials Center. This release is a selected plant material class of certified seed. No breeding, selection or genetic manipulation was carried out on the release.

Uses and Adaptation

Venado Germplasm awnless bushsunflower will be useful for upland wildlife plantings, critical site revegetation, roadside plantings, and for inclusion in range seeding mixes. Awnless bushsunflower is an excellent pollinator plant, and produces seeds eaten by bobwhite quail and Rio Grande turkey. Awnless bush sunflower is a highly sought after forage for white-tailed deer, and it is also frequently grazed by cattle.



In field plantings, Venado Germplasm has shown excellent competitive ability with many introduced exotic grasses. Best performance of this seed source has been documented on medium to fine textured soils, and naturally awnless bushsunflower generally occurs on sandy loam and caliche soils in the region. The area of known adaptation of Venado Germplasm includes the Rio Grande Plain, Coastal Sand Plain, and Gulf Coast Prairies and Marshes Ecoregions of Texas.



Planting Methods

Seedbed preparation should begin well in advance of planting. Planting can be done in late fall or spring in South Texas. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture.

Awnless bushsunflower can be seeded using a drill or broadcast planter. If broadcast seeded, some type of additional coverage such as culti-packing or light dragging is recommended to ensure good seed to soil contact.

Seed should be planted 1/8 to 1/4 inch deep. It is better to plant too shallow than too deep. For calibration purposes, Venado Germplasm awnless bushsunflower contains an average of