

# Oso Germplasm Hall's panicum

*Panicum hallii* Vasey  
*var. filipes* (Scribn.) Waller

A Conservation Plant Release by USDA NRCS E. "Kika" de la Garza Plant Materials Center, Kingsville, Texas



Figure 1. Oso Germplasm Hall's panicum plants in a seed increase field. Photo by Shelly Maher, STPMC, Kingsville, TX.

Oso Germplasm Hall's panicum [*Panicum hallii* Vasey var. *filipes* (Scribn.) Waller] is a selected plant material cooperatively released in 2011 with Texas A&M University-Kingsville, Caesar Kleberg Wildlife Research Institute, *South Texas Natives*.

## Description

Hall's panicum is a short-lived, native, perennial bunch grass with stiffly erect stems. Mature foliage height ranges from 20 to 80 centimeters (.5 to 2.5 feet) tall. Leaves are mostly in a basal clump, curling with drying and age. The leaf blades are flat, 2-10 mm broad and 4-30 centimeters (2 to 12 inches) long. The inflorescence is an open panicle 6 to 20 centimeters long. The lemma is usually dark brown and shiny. The plants produce seed from April through November.

## Source

Oso Germplasm is a blend comprised of two natural populations of Hall's panicum collected in the South Texas Counties of Nueces and Cameron. It is a selected plant material class of certified seed (natural track). These two populations were chosen for release from

comparisons of twenty-nine collections. The selected accessions have superior active seed germination, greater overall seed production, and higher plant vigor ratings than other collections evaluated. No intentional breeding, selection or genetic manipulation was carried out within these populations.

## Conservation Uses

Oso Germplasm Hall's panicum is recommended for upland wildlife, highway rights-of-way, and range plantings.

## Area of Adaptation and Use

Soil types of the populations included in this release include a clay loam and a gullied, clay soil. The best performance of Oso Germplasm will be predominantly in the Gulf Prairies and Marshes and the eastern portions of the Rio Grande Plain and Coastal Sand Plain and Coastal Sand Plain eco-region of Texas.

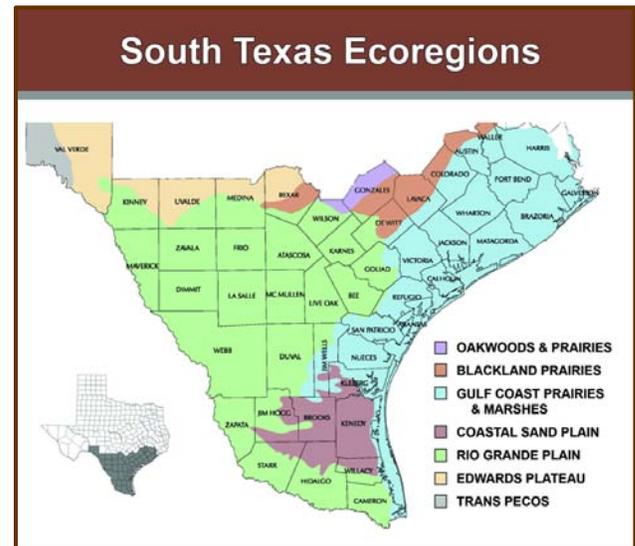


Figure 2. Map of South Texas Ecoregions.

## Establishment and Management for Conservation Plantings

Seedbed preparation should begin well in advance of planting. Planting can be scheduled for early spring or, where there are few cool-season weeds, Hall's panicum can be planted in the fall. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture.

Hall's panicum is best seeded using a native-grass drill to ensure a good planting of the small seed. Broadcast

seeding may be used in areas not easily planted with a drill, but some type of additional coverage such as culti-packing or light dragging will be beneficial 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, Oso Germplasm Hall's panicum has an average of 855,566 seeds per bulk pound. A seeding rate of 1 pound of pure live seed (PLS) per acre is recommended. In planting mixtures, reduce the rate according to the percent of Hall's panicum desired in the mixture.

Newly planted stands of Oso Germplasm should not be grazed for 1 year after planting to allow establishment and development of adequate rootstock. Plants can be grazed to a 4" stubble height with no adverse affects. Hall's panicum plants should be allowed to produce seed annually to ensure stand health. Hall's panicum is a short-lived perennial that is extremely drought and fire tolerant once established. Contact your local NRCS Field Office to develop a grazing management plan.

### Ecological Considerations

No severe insect or disease problems have been observed in Hall's panicum. It is a short-lived perennial, but readily reseeds itself.



Figure 3. Hall's panicum seeds. Photo by Shelly Maher, STPMC, Kingsville, TX.

### Seed and Plant Production

Both populations included in this release have similar growth rates and seed maturity dates. Seed increase plots have been planted on 36" bedded rows, however flat plantings may be possible with frequent weeding. Hall's panicum generally produces seed two times during the growing season. Seed is harvested with a combine. Harvesting with a Flail-Vac or similar brush-type

harvester is not recommended. To clean stems and chaff from harvests, seed is run through a Westrup Laboratory brush machine and then through a Clipper seed cleaner.

Irrigated seed fields of the two selected accessions of Hall's panicum were evaluated at Rio Farms, Hidalgo County, TX in 2010. Plantings were established using transplants spaced at one foot apart on 36 inch bedded rows. Fields were harvested with a plot combine. Two harvests were made in 2010 and yielded an average of 114 pounds of pure live seed (PLS)/acre/harvest.

### Availability

*For conservation use:* At this time, release of the germplasm will be limited to a single commercial grower who will establish the Hall's panicum within the Rio Grande Plain Ecoregion.

*For seed or plant increase:* Seed of the Oso Germplasm Hall's panicum release will be identified by USDA NRCS accession number 9093601. Generation 1 seed will be produced and maintained by the USDA-NRCS E. "Kika" de la Garza Plant Materials Center, Kingsville, Texas in conjunction with the Texas Foundation Seed Service. Generation 1 seed of Oso Germplasm Hall's panicum will be made up of equal amounts (by percent PLS, +/-10%) of each of the two accessions. Generation 2 seed is that which is grown from plantings of the Generation 1 seed blend. Generation 3 seed is that which is grown from plantings of the Generation 2 seed. Increase using Generation 3 seed is prohibited.

*For more information, contact:*  
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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/>>

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