

## **United States Department of Agriculture**

Natural Resources Conservation Service Plant Materials Program

# **Hondo Germplasm Velvet Bundleflower**

Desmanthus velutinus Scheele

A Conservation Plant Release by USDA NRCS James E. "Bud" Smith Plant Materials Center, Knox City, TX



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Hondo Germplasm velvet bundleflower (*Desmanthus velutinus* Scheele) was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 2003.

#### Description

Velvet bundleflower is a native, warm season perennial legume. This plant is composed of several widely spreading, smooth stems that grow up to two feet tall. Velvet bundleflower produces white "powder-puff" cluster shaped flowers, one inch in diameter, between the months of April to June. The leaves are three to four inches long with a bluish-green tint. Seed is produced in straight pods that average two to three inches long. Seed matures from mid-July to late August. There are approximately 59,474 seeds per pound. The average seed yield is 500 pounds per acre.

#### Source

Hondo Germplasm was originally collected from native plants located in the eastern part of Medina County, approximately eight miles from Hondo, Texas.

### **Conservation Uses**

Hondo Germplasm may be used as a component in seed mixtures for pasture and range plantings to provide diversity to plant communities. Young foliage provides high nitrogen foliage for livestock, primarily sheep and goats. Velvet bundleflower is also browsed by deer. The seed provides a good food source for small mammals, quail, and other grassland birds. Velvet bundleflower also attracts a wide variety of bees and butterflies during its blooming stage. It is also used to prevent soil erosion from water and wind along field borders, railroads, and other critical erodible areas.

#### Area of Adaptation and Use

Hondo Germplasm is widely adapted throughout central, south and west Texas, as well as southern Oklahoma. It prefers calcareous and limestone soils. It is not adapted to heavily wooded areas or areas that tend to remain wet for extended periods of time.

# **Establishment and Management for Conservation Plantings**

The full seeding rate for velvet bundleflower is 4.5 pounds of seed per acre. When planting this as a component of a seed mixture, the seeding rate should be adjusted to the desired percent of the mix. Seed should be placed ¼ inch deep. Hondo Germplasm should be inoculated with Desmanthus Spec 1. Inoculum should be applied to seed before planting at the rate recommended by the manufacturer. To maximize seed adhesion, apply inoculum to damp seed. Applying to dry seed is also recommended, but is generally not as effective. Mix seed thoroughly to ensure even distribution on all seed. Once seed has been inoculated, plant as soon as possible. Keep inoculated seed out of direct sunlight and hot, drying winds. Re-inoculation is required if seed is not planted within 24 hours of application.

Seedbed preparation should begin the year prior to a scheduled spring seeding of Hondo velvet bundleflower. This will help increase the chances of not having severe weed problems the first year of establishment. Plow and work the site as necessary during the summer or early fall prior to establishment to create a firm, weed-free seedbed. Work should be completed in the fall to allow time for the soil to settle and accumulate moisture. Planting should be made in the spring; Hondo germplasm will usually flower within the first year.

Plantings should be well established before livestock grazing is permitted. Twelve months of grazing deferment should give plants enough time to become established. Established stands of Hondo Germplasm should not be grazed lower than 6 inches on pastures that are grazed all season long. In a rotational grazing program, Hondo Germplasm can be grazed to 4 inches. Contact your local U.S. Department of Agriculture-NRCS field office for assistance in planning and applying prescribed grazing plans.

Soil tests should be conducted to determine the amount of fertilizer applied to sustain a medium level. Nitrogen should not be used during the establishment year when planted in a mixture with grasses and forbs because it will encourage weed growth. Weeds may be controlled by mowing or certain chemical applications if they become a problem.

#### **Seed and Plant Production**

Hondo Germplasm is harvested by direct combining. Average seed yield is 500 pounds per acre.

#### **Availability**

For conservation use: Commercial seed is available from several commercial seed companies.

For seed or plant increase: Generation Zero (G0) seed (equivalent to Breeder seed) will be maintained by the USDA-NRCS Plant Materials Center, Knox City, Texas. Field production (G1) seed for grower increase is available to seed growers through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.



2USDA-NRCS James E. "Bud" Smith PMC

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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 <<a href="http://www.nrcs.usda.gov/">http://www.nrcs.usda.gov/</a>, and visit the PLANTS Web site <<a href="http://plants.usda.gov">http://www.plant-materials.nrcs.usda.gov</a>



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