



United States Department of Agriculture  
Natural Resources Conservation Service  
Plant Materials Program

## 'Plateau'

# Awnless Bushsunflower

*Simsia calva* (Engelm. & A. Gray) A. Gray

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



USDA-NRCS James E. "Bud" Smith PMC

'Plateau' awnless bushsunflower (*Simsia calva*) was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 1987.

### Description

Awnless bushsunflower is a native, semi-woody perennial forb. Plants stand 1 ½ to 3 feet tall with multiple branches and a large woody or fleshy taproot. The leaves have an arrowhead appearance with jagged edges. Older leaves at the bottom of the plant measure about 2 inches in length; while the newer leaves at the top of the plant are much shorter. The stem splits into three separate stalks, each with its own flower. The flower is 1 to 1½ inches wide with yellow petals and a yellowish center. Flowering occurs from April through the fall. There are approximately 330,966 seeds per pound.

### Source

Plateau awnless bushsunflower is a composite of plants that were collected in Kerr County, Texas.

### Conservation Uses

Plateau is a highly palatable plant that is utilized by several classes of livestock and wildlife. Sheep and goats benefit from its high protein and digestibility. It also provides a browse for deer and seed for songbirds. The dense foliage from Plateau provides cover for small mammals, reptiles, and birds. Awnless bushsunflower foliage is also eaten by Border Patch butterfly caterpillars. The flowers attract other different species of pollinators.

### Area of Adaptation and Use

Plateau is primarily adapted to the Edwards Plateau, but it also performs well in the Western Gulf Coast Prairies, Rio Grande Plain, and Central Rolling Red and Grande Prairies. It grows best in full sun and well-draining soils

such as sands and clay loams. It does not tolerate salinity, deep sands, heavy clays, or wet bottomlands.

### Establishment and Management for Conservation Plantings

The full seeding rate for awnless bushsunflower is 2.6 lbs PLS/acre. When planting 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 to ½ inch deep.

Seedbed preparation should begin the year prior to spring planting to reduce weed problems during the first year of establishment. 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. Minimum and no-till operations should use herbicide applications to control weeds. 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 Plateau cannot tolerate continuous or heavy grazing. Contact your local U.S. Department of Agriculture-NRCS field office for assistance in planning and applying prescribed grazing plans.

A soil test should be conducted to determine the amount of fertilizer to apply to maintain a medium soil test level. Nitrogen should not be used during the establishment year when planted in a mixture because it will encourage weed growth. Weeds may be controlled by mowing or with herbicides. Consult your local extension weed specialist service for recommendations on herbicides for awnless bushsunflower.

### Seed and Plant Production

Plateau seed can be harvested using a conventional combine or by swathing the plant and using a special header attachment for combining the seed. Average seed yield at Knox City is 119 lb/acre.

### Availability

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

*For seed or plant increase:* Breeder seed will be maintained by the USDA-NRCS Plant Materials Center, Knox City, Texas and is available to seed growers through the Texas Foundation Seed Service in Vernon, Texas, phone number (940) 552-6226.

*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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