L-2264
April 1988

Plateau Awnless Bushsunflower

A native, warm-season, perennial forb

- Provides high quality browse and/or forage for sheep, goats, and deer
- Provides diversity in revegetation of surface mined lands
- Is drought tolerant

The Texas Agricultural Experiment Station
Neville P. Clarke, Director
The Texas A&M University System
In Cooperation with the U.S Department of
Agriculture-Soil Conservation Service
and the Texas Parks and Wildlife Department

'Plateau'

Awnless Bushsunflower

'Plateau' awnless bushsunflower (*Simsia calva* [Engelm. and Gray] Gray) was released by the **USDA** Soil Conservation Service in cooperation with the Texas Parks and Wildlife Departmeqt and the Texas Agricultural Experiment Station.

Origin

Plateau was collected in 1964 from a native stand in Kimble County, Texas by Sam H. Coleman of the Soil Conservation Service.

Description

Plateau is an upright, multi-branched, spreading forb 1% to 3 feet tall, which is semi-woody in South Texas, with a large woody or fleshy taproot. Leaves are opposite, somewhat triangular in shape with irregular, shallow lobes or coarse teeth and small leaf-like appendages at the base. Flowers are composites, 1% to 2 inches across, with 15-20 yellow rays that are 5-toothed on the end, and yellowish centers. Fruit is a flattened achene, sometimes with two awns. There are approximately **330,000** seed per pound.

Adaptation

Plateau desires well-drained, neutral to calcareous loam, sandy loam or clay loam sites in full sun. Primarily adapted to the Edwards Plateau area of Texas, it also performs well in the western Gulf Coast Prairies, the Central Rolling Red and Grand Prairies, and the Rio Grande Plain. Success is limited in the Trans-Pecos, extreme southern Rio Grande Plains, and extreme north-central prairies. Plateau does not tolerate heavy clays, wet or shady bottomlands, deep sands, or salinity.

Uses

Because of its protein content and digestibility, Plateau is an important forage plant for sheep, goats, and deer. Plateau is able to establish and persist, under droughty conditions and has potential for inclusion in mixtures for reseeding surface-mined lands and critically eroded areas.

Establishment

Plateau should be seeded in early spring at 0.1-0.2 pounds of pure live seed per acre broadcast in a range mix to obtain **2-3** plants per square yard. It should not be seeded as a pure stand under range conditions due to its low density and biomass, but it can persist and add cover, diversity, and aesthetics in a mixture of several materials. **A** clean, moderately firm seedbed is required and seed should never be covered more than a ½ inch.

Management

Plateau will be readily grazed so it must be protected from livestock for at least the first growing season. Thereafter, it will respond positively under properly managed grazing use with regular deferments, such as is obtained with a moderate stocking rate and rest-rotation grazing system. Plateau will not tolerate continuous grazing or heavy overuse.

Seed Production

Production fields should be seeded ¼-½-inch deep at a rate of ½-¾ pound pure live seed per acre in 36-40-inch rows under irrigation. Plateau produces two seed crops, under irrigation, with fertilizer applied at the rate of 60-20-5 in the spring and 60-0-0 following spring harvest, on sandy loam soils at Knox City. Seed can be directly combined or swathed and picked up by combine. Average seed production over a 17-year period **is** 119 pounds per acre.

Foundation Seed

Foundation seed is available to certified growers from the Soil Conservation Service, Plant Materials Center, Route 1, Box 155, Knox City, Texas 79529-9752.

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Closeup of seed, 'Plateau' awnless bushsunflower

For additional information, contact:
Soil Conservation Service
U.S. Department of Agriculture
101 South Main
Temple, Texas 76501-7682

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