

### **United States Department of Agriculture**

Natural Resources Conservation Service Plant Materials Program

# 'Van Horn' Green Sprangletop

Leptochloa dubia (Kunth) Nees

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



USDA-NRCS James E. "Bud" Smith PMC

'Van Horn' green sprangletop [*Leptochloa dubia* (Kunth), Nees]was released from the James E. "Bud" Smith Plant Materials Center in Knox City, Texas in 1988.

#### **Description**

Leptochloa dubia, (Kunth) Nees, green sprangletop, is a native, perennial warm season bunchgrass with fibrous roots. Mature plants are short-lived and average 2-5 feet in height. The leaf blade is 6-8 inches long and will be either flat or folded. The seed head is an open, spreading penicle 4-12 inches long. Green sprangletop can produce two seed crops per year with adequate moisture. There are approximately 538,000 seeds per pound.

#### Source

Van Horn green sprangletop was collected from a native stand near Van Horn, Texas.

#### **Conservation Uses**

Van Horn green sprangletop may be used in pure stands but is typically used as a component in seed mixtures. It can be used for range seeding, pasture and hayland plantings, revegetation of mined lands, and critical area plantings. Green sprangletop provides quick ground cover and early forage, which will take the grazing pressure off of other slower developing species. Over time, slower establishing and longer lived species will start to dominate the site and green sprangletop will decline in population. It has good forage value for livestock and fair value for wildlife. Green sprangletop also provides nesting and cover for birds and small mammals.

#### Area of Adaptation and Use

Van Horn green sprangletop is adapted to a variety of soils, but will favor soils that are drained. It is adapted to rocky hills, canyons, and sandy soils. It may be found throughout Texas and Oklahoma, except the East Texas Timberlands and the Northern Canyon Prairies. Van Horn is also adapted to areas with various precipitation levels.

## **Establishment and Management for Conservation Plantings**

The full seeding rate for Van Horn green sprangletop is 1.7 pounds of pure live 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 ½ 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 Van Horn green sprangletop should not be grazed lower than 6-8 inches, depending upon the prescribed grazing system. 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 because it will encourage weed growth. Weeds may be controlled by mowing or with herbicides. Consult your local extension weed specialist for recommendations on herbicides for green sprangletop.

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

Van Horn green sprangletop seed is harvested by direct combining or with a seed stripper. Average seed yield at Knox City is 375 pounds per 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 James E. "Bud" Smith 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.



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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.plantsusda.gov</a> or the Plant Materials Program Web site <a href="http://www.plant-materials.nrcs.usda.gov">http://www.plant-materials.nrcs.usda.gov</a>



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