

United States Department of Agriculture

A Conservation Plant Released by the Natural Resources Conservation Service Los Lunas Plant Materials Center, Los Lunas, NM

'Nogal' black grama *Bouteloua eriopoda* (Torr.) Torr.



'Nogal' black grama

'Nogal' black grama (*Bouteloua eriopoda*) (Torr.) Torr. was released in July 1971 by the New Mexico State University Los Lunas Agricultural Science Center and the USDA-Natural Resources Conservation Service Los Lunas Plant Materials Center.

Description

'Nogal' black grama is a native, long-lived, warm-season, low-growing, stoloniferous range grass. It attains a height of 61 cm (24 inches) in irrigated seed production blocks. The plants are less erect than 'Sonora' black grama. Stems range from upright to decumbent. Natural propagation establishment on range land is mainly by relatively aggressive stolons.

'Nogal' black grama produced more forage than other black grama strains evaluated at the Los Lunas Plant Materials Center. Black grama is palatable and nutritious forage for livestock all year-round. During the winter, its relatively high protein and carotene content contribute considerably to the value of the grass.

Source

The original seed was collected in 1957 from a native stand 72.5 km (45 miles) south of Socorro, New Mexico.

Conservation Uses

'Nogal' black grama is a principle component in warmseason mixes for rangeland improvement plantings. It is well-suited for erosion control, and for use as a reclamation species for disturbed sites. As a warm-season grass, it becomes dormant in the fall and greens up in mid-spring.

Area of Adaptation and Use

'Nogal' black grama is an important forage grass over much of the drier desert grassland range of the Southwest. It provides sustained forage production and soil stability where the range condition is good and the grass is the predominant species. It grows mostly in open grasslands and on dry-gravelly, sandy, or sandy-loam soils. In New Mexico, this is in the southern desert at elevations below 2 km (7,000 feet).

Establishment and Management for Conservation Plantings

Weed control is necessary during establishment, as well as monitoring for thrips that also reduce seed yields. Scouting for the presence of pests prior to the onset of inflorescence is necessary for optimum seed yields.

Delay the first irrigation on established fields until mid-July so the grass will flower, pollinate, and seed in late summer when temperatures begin to decline. Apply 80 kg of available nitrogen per hectare (70 pounds per acre) at the time of first irrigation.

Consult your county extension agent or a reliable pesticide dealer for recommended herbicides and insecticides, and any precautions when handling and applying them.

Ecological Considerations

Serious problems with insects or diseases have not been encountered in range plantings or under cultivation of 'Nogal' black grama. However, thrips (*Chirothrips simplex* Hood and *C. falsus* Priesner) can limit seed production.

Seed and Plant Production

The average seed yield from 'Nogal' black grama at the Los Lunas Plant Materials Center was 10.9 kg (24 pounds) pure-live-seed per acre, with a high of 25 kg (55 pounds). Inherently, black grama produces less seed than many other species.

Seedling vigor of 'Nogal' is good under both cultivated and range conditions. Stolon spread is above the average of other strains tested. Irrigation and intensive management is necessary for dependable seed production in New Mexico. Level seed beds are necessary so that the seeds receive adequate moisture for germination. Irrigation water can pond in low spots and kill seedlings or retard growth. Best stands are generally obtained on beds which can be sub-irrigated by corrugations. Irrigation water should not cover seedlings until they become well established.

At the Los Lunas Plant Materials Center, the best stands are obtained from plantings done between early July and mid-August. Seedlings emerge within three or four days.

Plant 2.5 to 3.75 kg of pure-live-seed per hectare (2 to 3 pounds per acre) about 0.6 cm (0.25 inch) deep. The rows should be spaced from 0.75 to 1.0 m (30 to 40 inches) apart for ease of cultivation and irrigation.

Seed can be direct-combined with a small-grain combine with all air shut off. At the Los Lunas Plant Materials Center, seed is ready to collect during the last half of October to the first week in November. Combine-run material can be cleaned using a hammermill with a 0.48 em (3/16-inch) screen and speed of 500 RPM, and processing through a 4-screen fanning mill using screen sizes 10,8, and 7 round and a blank on the bottom.

Availability

Breeder and foundation seed of 'Nogal' black grama is produced and maintained at the Los Lunas Plant Materials Center. Seed is available to certified growers through New Mexico State University Seed Certification. For more information, contact: Los Lunas Plant Materials Center 1036 Miller Road Los Lunas, NM 87031 Tele: 505-865-4684 FAX: 505-865-5163 http://plant-materials.nrcs.usda.gov/nmpmc/

Citation

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This is a joint release between New Mexico State University's Los Lunas Agricultural Science Center and the USDA Natural Resources Conservation Service Los Lunas Plant Materials Center.