

A Conservation Plant Released by the Natural Resources Conservation Service
E. "Kika" de la Garza Plant Materials Center, Kingsville, Texas

Lavaca Germplasm Canada wildrye

Elymus canadensis L.

Lavaca germplasm Canada wildrye (*Elymus canadensis* L.) was released by the USDA NRCS E. "Kika" de la Garza Plant Materials Center in 2000. It is a selected plant material class of certified seed.

Description

Canada wildrye is a native, cool-season perennial bunchgrass that grows 2.5 to 5 feet tall. In south Texas, plants flower from March to June with seed maturing in July (Fig. 1).

Source

Lavaca Germplasm Canada wildrye was originally collected in Lavaca County, Texas. This single population chosen from a comparison with sixty-two other collections because of its survival, seed production, and good seed germination. It also exhibited significantly earlier green-up and more cool season forage production.

Conservation Uses

Lavaca Canada wildrye can be used as a cool-season component in native seed mixtures for range restoration. It also can be used as a cool-season pasture planting, especially for shaded, wooded, riparian areas.

Area of Adaptation and Use

Canada wildrye is found throughout the U.S. except the Southeast. It occurs in all vegetative regions in Texas except the extreme southern portion of the South Texas Plains. It can be found growing on shaded stream banks, along fence rows, and in open woodlands.

Lavaca Germplasm has performed well at locations in the Rio Grande Plain (MLRA 83A, B, C and D), Gulf Coast Prairies and Marshes (MLRA 150A & B), Rolling Plains (MLRA 78), Edwards Plateau (MLRA 81), and Pineywoods (MLRA 133B) regions of Texas. Lavaca Germplasm may be adapted to other regions of Texas, but this has not been verified through field testing.

Establishment and Management for Conservation Plantings

Begin seedbed preparation well in advance of planting. Plant in early fall (August) in south Texas. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture. Lavaca Germplasm is best seeded using a grass drill to ensure even seed distribution over the planting area. Broadcast seeding may be used in areas not easily planted with a drill, but additional practices to encourage good seed-to-soil contact, such as cultipacking and harrowing, may be necessary after planting. There are approximately 87,560 seeds per pound of Canada wildrye. Plant seed ¼ to ½ inch deep on clay soils and up to 1 inch deep on coarse textured soils. A minimum seeding rate of 10 pounds of pure live seed (PLS) per acre is recommended. This corresponds to planting 20 live seeds per square foot. When planting a mixture, reduce the rate of Lavaca Germplasm according to the total percentage desired in the mixture. When broadcast seeding or planting critical areas where a dense cover is desired, double the recommended seeding rate.

Defer areas planted to Lavaca Germplasm until plants establish and have set seed. Allow plants to produce seed annually to ensure stand longevity.



Figure 1. Lavaca Germplasm Canada wildrye



Figure 2. Lavaca Germplasm seed increase field

Ecological Considerations

Canada wildrye can be damaged by grubworms and stands may be treated in the summer with an appropriate pesticide to control damage.

Lavaca Germplasm performs best when planted in wooded pastures where aggressive warm-season species are not encountered. Do not plant adjacent to pastures with large concentrations of grasses like KR bluestem or buffelgrass. Lavaca Germplasm is a naturally occurring germplasm and has undergone no breeding, selection or genetic manipulation in the development of this release.

Seed and Plant Production

Lavaca Germplasm has produced as much as 250 lb/acre of clean seed but averages around 150 lb/acre (Fig. 2).

Lavaca Germplasm produces one seed crop per year when grown in south Texas. The quantity and quality of seed harvests vary greatly depending on location and field conditions. Harvest mature seed with a combine equipped with a grain style header in July in south Texas. After seed is dry, use a brush machine brush to remove awns and an air screen cleaner to remove stems and chaff from the harvest.

Availability

For conservation use:

Seed is available from native seed dealers in south Texas. Seed of Lavaca Germplasm Canada wildrye is identified by PI-613134.

For seed or plant increase: First generation (G0) seed is produced and maintained by the E. “Kika” de la Garza Plant Materials Center. All commercial seed fields of Lavaca Germplasm must be isolated from other cultivated varieties and wild populations of *Elymus canadensis*. G1 and G2 seed fields have a 7-year production limit, after which time, fields must be replanted using the appropriate seed generation (G0 or G1).

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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