

United States Department of Agriculture

Natural Resources Conservation Service Plant Materials Program

'Eldorado' Engelmann's Daisy

Engelmannia peristenia (Raf.) Goodman & C.A. Lawson

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



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'Eldorado' Engelmann's daisy (*Engelmannia peristenia* Raf.) was released from the James E. "Bud" Smith Plant Materials Center, Knox City, TX in 1985.

Description

Engelmannia peristenia, (Raf.), Engelmann's daisy, is a native, cool season perennial forb. Plants have a rough, hairy appearance and will grow from one to three feet tall. Each plant is topped by broad clusters of showy yellow flowers. Flowering occurs from April through November. The leaves are deeply cleft or almost divided. Leaves range from three to six inches long and occur mostly around the base of the plant. The vegetation remains green throughout the year with new growth beginning in the spring. During extreme heat, the petals of the plant fold downward.

Source

Eldorado Engelmann's daisy is a composite of plants collected northwest of Eldorado, Texas, in Schleicher County.

Conservation Uses

Eldorado Engelmann's daisy is a highly palatable plant that is readily grazed by several classes of livestock and deer. Cattle, sheep, and goats benefit from its high protein and digestibility. In early spring, crude protein levels can be as high as twenty-five percent. It offers an important food source in the winter and early spring, before other native, warm season plants initiate growth. Eldorado Engelmann's daisy provides food and cover for various species of wildlife including small mammals, birds, and reptiles. It also serves as an important pollinator plant due to its long flowering period. Several

species of bees and butterflies can be seen visiting flowers throughout the year.

Area of Adaptation and Use

Eldorado Engelmann's daisy is adapted to a wide range of soil types and climate conditions, but is found most frequently throughout central and west Texas. Ideal soil types range from sandy loams to clay loams. Engelmann's daisy does not seem to tolerate heavy clay soils, salinity, or deep sands. The plant has a deep tap root which makes it a hardy, drought tolerate species.

Establishment and Management for Conservation Plantings

Planting should be done in late summer or in the fall. Sow seed ½ to ¾ inch deep in a well prepared, firm seedbed. The full seeding rate for Engelmann's daisy is fifteen pounds of pure live seed (pls) 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. Ideal plant spacing would be two to three plants per square yard. Fertilizer applications will vary depending on individual soil samples. Nitrogen, potassium, and phosphorus should be considered to bring the fertility up to a medium level. A soil sample should always be taken before applying fertilizer.

Engelmann's daisy is rarely planted as a monoculture planting but as a component of a range seeding mixture. Twelve months of grazing deferment should be planned and applied to allow plant establishment. Areas with heavy deer populations should consider the impact and added maintenance associated with attempting to establish this species.

Consult your local NRCS Field Office for assistance with planning and applying prescribed grazing.

Seed and Plant Production

Eldorado Engelmann's daisy is harvested by swathing and combining with a front-end pickup attachment, flail-vac harvester, or direct combining. Average seed yield is 252 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 Plant Materials Center, Knox City, Texas and is available to seed growers through the Texas Foundation Seed Service in Vernon, TX, phone number (940) 552-6226.



2 USDA NRCS James E. "Bud" Smith Plant Materials Center

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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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