Natural Resources Conservation Service

RED LOVEGRASS

Eragrostis secundiflora J. Presl ssp. oxylepis (Torr.) S.D. Koch

Plant Symbol = ERSEO

Alternative Scientific Name: Eragrostis oxylepis (Torr.) Torr.

Description

General: Red lovegrass [Eragrostis secundiflora J. Presl ssp. oxylepis (Torr.) S.D. Koch] is a tufted perennial with culms ranging from 30-75 cm tall. Blades are flat with long hairs above the ligule. Blades are usually 10-15 cm long and 2-2.25 mm wide with green to blue green coloration (Gould 1975).

Red lovegrass panicles are usually contracted, but sometimes open ranging from 5-30 cm long and 1-45 cm wide. The spikelets are in dense clusters on branches and branchlets. Spikelets are pedicellate, linear-oblong to ovate, strongly compressed with 10-26 florets, laterally flattened, pale green or violate to reddish in color (Gould 1975; Hatch et al. 2003). Caryopses are dark red to brown with 3,759,533 seeds per pound.



Red Lovegrass (c) South Texas Natives

Distribution: Red lovegrass is native to North America and grows in the southern US and into northern Mexico particularly on sandy soils and along beaches (Barkworth et al. 2007). For current distribution, please consult the Plant Profile page for this species on the PLANTS Web site.

Habitat: Red lovegrass is commonly associated with slender grama, purple threeawn, hooded windmillgrass, and common sand bur. These habitat areas are also associated with a number of annual and perennial forbs including Sida spp. and Ipomoea spp. (Everitt et al 1981 & Judd and Sides 1983).

Adaptation

Red lovegrass is adapted to open spaces on sand, loamy sand, and sandy loam soils.

Uses

Red lovegrass is recommended for use in range seeding mixtures, upland wildlife plantings, roadside plantings, and conservation plantings. Red lovegrass is an early successional plant well adapted to colonizing openings. Hatch and Pluhar (1993) state red lovegrass is poor forage for cattle.

Status

Weedy or Invasive: This plant may become weedy or invasive in some regions or habitats and may displace desirable vegetation if not properly managed. Please consult with your local NRCS Field Office, Cooperative Extension Service office, state natural resource, or state agriculture department regarding its status and use.

Please consult the PLANTS Web site (http://plants.usda.gov/) and your State Department of Natural Resources for this plant's current status (e.g., threatened or endangered species, state noxious status, and wetland indicator values).

Planting Guidelines

Seedbed preparation should begin well in advance of planting. Establish a clean, weed-free seedbed by either tillage or herbicides. Prior to planting, the site should be firm and have accumulated soil moisture. Red lovegrass can be seeded using a drill or broadcast seeder. If broadcast seeded, some type of additional coverage such as culti-packing or light dragging is recommended to ensure good seed to soil contact. Seed should be planted 1/8 to 1/4 inch deep. It is better to plant too

shallow than too deep. For calibration purposes, red lovegrass contains approximately 4,000,000 seeds per bulk pound. A seeding rate of 0.5-1 pounds pure live seed (PLS) per acre is recommended.

Management

Areas planted to red lovegrass should be deferred for 90 days to allow plants to become established. Established plants should be allowed to produce seed annually, because red lovegrass readily reseeds itself with minimal soil disturbance.

Pests and Potential Problems

There are no potential problems or pests associated with red lovegrass.

Environmental Concerns

There are no environmental concerns associated with red lovegrass.

Control

Please contact your local agricultural extension specialist or county weed specialist to learn what works best in your area and how to use it safely. Always read label and safety instructions for each control method.

Seeds and Plant Production

Red lovegrass is best started using greenhouse grown transplants, planted on bedded rows. Seedlings grow and mature quickly and will produce a marketable crop in the year of planting. When cleaned to caryopses seed quality and active germination are very high ($\geq 90\%$) because of this only small amounts of seed is needed to produce a sufficient number transplant to establish production fields.

Seed harvest is possible using a variety of methods and implements. Seed ripens indeterminately, and a Woodward Flail-Vac Seed Stripper (Ag-renewal, Inc., Weatherford, Oklahoma) can collect the ripe seed crop without damaging or eliminating the ability to make subsequent harvests of the stand as later flowering florets mature. However, majority of the seed crop will hold well on the plants after complete maturity allowing for combine harvest. An additional benefit of combining is the removal of unfilled florets which increases seed harvest purity. In well managed, irrigated fields, 2-3 harvests can be expected per year. The first harvest is typically in May, with the last harvest in October. Potential seed yields per acre have been calculated at 10 PLS lbs. per acre on 36" bedded rows with a plant population of 14,000 plants per acre.

Cultivars, Improved, and Selected Materials (and area of origin)

Duval Germplasm red lovegrass was collaborate released in 2016 by *South Texas Natives* and the E. "Kika" de la Garza Plant Material Center in Kingsville, TX. This release is made up of four collections originating from MLRAs 150B, 83E, and 083C. Duval Germplasm is recommended for use in range seeding mixes and for critical site revegetation and rights-of-way plantings in South Texas. Generation 0 seed is maintained by *South Texas Natives*.

Literature Cited

<u>Insert text here</u>

Barkworth, M.E., L.K. Anderton, K.M. Capels, S. Long, and M.B. Piep. 2007. Manual of Grasses for North America. Utah State University Press, Logan, UT.

Everitt, J.H., C.L. Gonzalez, G. Scott and B. E. Dahl. 1981. Seasonal Food Preferences of Cattle on Native Range in the South Texas Plains. Journal of Range Management 34:384-388.

Gould, F.W. 1975. The Grasses of Texas. Texas A&M University Press, College Station, TX.

Hatch, S.L. and J. Pluffer. 1993. Texas Range Plants. Texas A&M University Press, College Station, TX.

Hatch, S.L., J.L. Schuster, and D.L. Drawe. 1999. Grasses of the Texas Gulf Prairies and Marshes. Texas A&M University Press, College Station, TX.

Judd W. F., S. L. Sides. 1983. The Effect of Hurricane Allen on the Near-Shore Vegetation of South Padre Island. The Southwestern Naturalist 28:365-369.

Citation

Maher S., and J. Reilley. 2016. Plant guide for red lovegrass (*Eragrostis secundiflora*). USDA-Natural Resources Conservation Services, E. "Kika" de la Garza Plant Materials Center. Kingsville, Texas 78363.

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http://plant-materials.nrcs.usda.gov.

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