

Plant Fact Sheet

Three-Flower Melic (*Melica nitens*)

Kika de la Garza PMC
Kingsville, Texas

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INTRODUCTION

Three-flower melic (*Melica nitens*) is a native, cool-season, perennial bunchgrass. It can grow two to three feet in height. Three-flower melic is a member of the Festuceae tribe of the grass family (Hitchcock, 1971). Gould (1975) notes that the common name three-flower melic is inappropriate for most Texas accessions because the plants' spikelets commonly have only two perfect florets.



ADAPTED AREA

Three-flower Melic is found from Pennsylvania to Iowa and Kansas, and south to Virginia, Arkansas, Oklahoma, and Texas (Hitchcock, 1971). In Texas, it is most often found in the Edwards Plateau and the North Central regions, but can also be found west to the Trans-Pecos and East to the western portion of East Texas (Correl & Johnston, 1996). It is usually found in open woods, on moist canyon slopes, in canyon bottoms, and on rocky grasslands (Gould, 1975), as well as along streambanks, and along roadsides (Correl and Johnston, 1996). Three-flower melic tends to prefer partial shade, and calcareous or sandy loam soils (Correl & Johnston, 1996).



USES

Three-flower melic can be a good, native, cool-season grass for restoration of riparian or wooded pastures in central Texas. It does not appear to be suited to south Texas conditions where it will survive, but does not thrive or produce seed (Kika de la Garza PMC, 1999).

ESTABLISHMENT

Three-flower melic can be grown from seed. It has small, hard, shiny, dark brown seeds that are easy to work with. Germination testing at Kika de la Garza Plant Materials Center in the fall of 1998 yielded germination percentages ranging from 51% to 70% for different accessions. Sixteen hours of darkness at 15°C and eight hours of light at 30°C appeared to produce the best germination. No treatments were applied to seeds used for this study.

MANAGEMENT

Seed should be planted at approximately a ¼ inch depth. A seeding rate of four pounds of pure live seed (PLS) per acre is recommended. In planting mixtures, reduce the rate according to the amount of three-flower melic in the mixture. There are approximately 235,700 melic seeds per pound.

Seedbed preparation should begin well in advance of planting. Establish a clean, weed-free seedbed by either tillage or herbicide. Prior to planting, the site should be firm and have accumulated soil moisture.

Planting should be scheduled for late summer or early fall. Planting is best done with a seed drill. Broadcast seeding may be used, but some type of additional soil coverage will be beneficial to ensure good seed to soil contact. Soil analysis should be performed prior to planting to determine the necessary fertilizer applications.

Although touted as a cool-season grass, three-flower melic put on growth throughout the summer at a field site in South Central Texas. It may be better classified as a year-round forage grass for riparian-savannah pastures in the Texas Hill Country. A planting of three-flower melic in Bandera, Texas yielded up to 140 pounds of seed per acre.

REFERENCES

Correll, D. S., and Johnston, M.C., (1996). *Manual of the Vascular Plants of Texas*. Richardson, TX: The University of Texas at Dallas

Gould, F. W. (1975). *The Grasses of Texas*. College Station, Texas: Texas A&M University Press.

Hitchcock, A. S. (1971). *Manual of the Grasses of the United States, Volumes 1&2, 2nd Edition*. Revised by Agnes Chase. New York: Dover Publications.

Kika de la Garza PMC (1999). Second year forage production of wildrye accessions in south Texas. *Technical Note*. v.2 (1).

WHERE TO GET HELP

Contact your local Natural Resources Conservation Service (formerly Soil Conservation Service) office for more information. Look in the phone book under "United States Government". The Natural Resources Conservation Service will be listed under the subheading "Department of Agriculture".

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