Goliad Germplasm
orange zexmenia

*Wedelia texana* (A. Gray) B.L. Turner

Goliad Germplasm orange zexmenia [*Wedelia texana* (A. Gray) B.L. Turner] was cooperatively released in 2008 by the USDA NRCS E. “Kika” de la Garza Plant Materials Center and the Texas Native Seeds Program of the Caesar Kleberg Wildlife Research Institute at Texas A&M University-Kingsville. This release is a selected plant material class of certified seed.

**Description**
Goliad Germplasm orange zexmenia is a native, perennial sub-shrub with a mature foliage height ranging from 20 to 40 inches. It produces yellow to yellow-orange flowers from March through December (Fig. 1).

**Source**
This selection consists of a composite of seven collections from Val Verde, Starr, Goliad, Webb, Duval, Jim Hogg, and Bexar Counties, Texas in the Rio Grande Plain (MLRA 083) and Edwards Plateau (MLRA 81) ecoregions of Texas. These seven accessions were chosen from 42 accessions of orange zexmenia evaluated at the E. “Kika” de la Garza Plant Materials Center in Kingsville, Texas. Additional observations were conducted at two other locations in Texas.

**Conservation Uses**
Orange zexmenia is browsed by white-tailed deer, cattle, sheep, and goats. Northern bobwhites also eat the seeds. It is an excellent nectar source for bees and butterflies and a host plant for bordered patch butterfly caterpillars (*Chlosyne lacinia*). Goliad Germplasm is recommended for upland wildlife plantings, pollinator plantings, native landscaping, and in range seeding mixes. It can also be used in many types of conservation plantings, such as stream-side buffers and filter strips.

**Area of Adaptation and Use**
Orange zexmenia is naturally found on a variety of soil types, brushy sites, and in open spaces. It is frequent on various soils in openings and partially shaded brushy sites in the Edwards Plateau and Rio Grande Plain and on sandy loam sites in the Coastal Sand Sheet and Rio Grande Plain. It is less frequent in the Trans Pecos and southeast and north central Texas. It can also be found in northeastern Mexico, southeast to Veracruz and Hidalgo.

Goliad Germplasm has performed well at locations in MLRA 81 (Edwards Plateau), MLRA 83 (Rio Grande Plain), and in MLRA 42 (Trans Pecos). Current testing has not completely substantiated the northern and western limits of its range of adaptation.

**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. Plant Goliad Germplasm with a grass drill with a small seed box. Broadcast seeding may be used in areas not easily accessible with a drill, but some type of additional coverage such as cultipacking or light dragging will be beneficial to ensure good seed-to-soil contact.

Plant seed ⅛ to ¼ inch deep. It is better to plant too shallow than too deep. For calibration purposes, Goliad Germplasm contains approximately 140,500 seeds per bulk pound. A seeding rate of 4-6-pounds pure live seed (PLS) per acre is recommended. In seed mixes, reduce the rate according to the percent of Goliad Germplasm desired on the planting site. Do not graze Goliad Germplasm for 1 year after planting. Allow plants to produce seed annually to ensure stand longevity.
Ecological Considerations
White flies severely attacked the plants at one evaluation location; however, despite complete defoliation all plants survived. Bordered patch butterfly larvae have defoliated plants at another evaluation location. No other serious insect problems have been associated with orange zexmenia. Goliad Germplasm is a composite of naturally occurring germplasm and no breeding, selection or genetic manipulation was used in the development of this release.

Seed and Plant Production
Goliad Germplasm orange zexmenia is best started from greenhouse grown transplants and planted on bedded rows. Seedlings grow and mature quickly and will produce a marketable crop in the first year of planting. Seed harvested with a combine have averaged 60-80 lb/acre of bulk seed. Following harvesting and drying, a “Westrup” brush machine is used to dislodge the seeds from the seedheads, and an air screen cleaner and/or a gravity table used for seed cleaning. Goliad Germplasm orange zexmenia is typically harvested in June and October in South Texas. Flowering and seed production continue all season long, particularly in response to rainfall, but combine harvesting sets the vegetation back.

Availability
For conservation use:
Seed is available from native seed dealers in south Texas. Seed of Goliad Germplasm orange zexmenia is identified by USDA NRCS accession number 9093441.

For seed or plant increase:
All commercial seed fields of Goliad Germplasm must be located in Texas and isolated from other cultivated varieties and wild populations of Wedelia texana by a minimum of a half mile. Release of this variety is limited to a single grower with preference given to those who provide the proper isolation requirements.

Generation (G) 0 seed of Goliad Germplasm orange zexmenia is a composite of seven individual accessions, grown in isolation from one another, and maintained by the E. “Kika” de la Garza Plant Materials Center. Generation 1 seed is harvested from G0 and G2 seed harvested from G1. Increasing seed beyond Generation 2 is prohibited. Generation 0 seed consists of equal amounts (by percent PLS, +/-10%) of each of the seven accessions. Generation 1 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

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>

For more information, contact:
E. “Kika” de la Garza Plant Materials Center
3409 North FM 1355 Kingsville, Texas 78363
Phone: (361) 595-1313
http://plant-materials.nrcs.usda.gov/stpmc/
or
Texas Native Seeds
CKWRI-TAMUK, MSC 218, 700 University Blvd., Kingsville, Texas 78363
Phone: (361) 593-4525
https://www.ckwri.tamuk.edu/research-programs/texas-native-seeds-programs-tns

Helping People Help the Land
USDA IS AN EQUAL OPPORTUNITY PROVIDER, EMPLOYER AND LENDER