

Central Texas Native Seed Project Collection, Evaluation, Increase, and Release

John R. Bow, Forrest S. Smith, Keith A. Pawelek, Anthony D. Falk, Colin S. Shackelford, James P. Muir, and Chase A. Murphy

The goal of the *Central Texas Native Seed Project* (CTNSP) is to develop locally adapted native seed sources for the central portion of Texas. This is accomplished through collecting, evaluating, selecting, increasing, and eventually releasing native plant seed sources that can be commercially produced. The CTNSP collects native seed from over 67 counties encompassing several ecoregions. Evaluations are conducted at the Texas A&M AgriLife Research Center in Stephenville, the USDA Natural Resources Conservation Service James E. “Bud” Smith Plant Materials Center in Knox City, and the Sandbrock Ranch near Aubrey.

Sideoats grama and seep muhly were established at all 3 locations in 2018. Data collection includes growth measurements, plant characteristic rankings, seed production potential, and seed quality. Collections in 2018 were focused on Indiangrass and gayfeather. In May 2019, new evaluation plots of these species were established from greenhouse transplants. These evaluations consisted of 60 populations of Indiangrass and 22 populations of gayfeather.

Evaluations completed in 2018 resulted in 2 additional grass species being selected for release: hairy grama and tall grama. Transplants of these selections were established in isolated field plots to increase seed at the Stephenville location. Seed harvested will be released as a select native germplasm by *Texas Native Seeds* in 2020. These future releases and 3 additional releases being grown (little bluestem, silver bluestem, and meadow dropseed) will provide much needed seed sources for reclamation and restoration in Central Texas.

Cooperative funding provided by the Texas Department of Transportation, USDA Natural Resources Conservation Service, Stillwater Foundation, Sandbrock Ranch, Rod Sanders, and Texas AgriLife Research Station-Stephenville.