

Evaluating Native Windmillgrasses For Revegetating Texas Right-of-Ways

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Roadsides are commonly seeded with vegetation to reduce erosion, which typically includes introduced species. The Texas Department of Transportation (TxDOT) published the revision of their standard mixture for revegetating soils on Texas right-of-ways in their manual, *A Guide to Roadside Vegetation Establishment*. Although many introduced species were replaced with native species, some required seed mixtures still include aggressive, exotic grasses such as bermudagrass.

The focus of this study is to compare the standard mixture of species required by TxDOT to native hooded and shortspike windmillgrasses (WMGs). The study will take place on sandy and clay soils in Andrews, Baylor, and Kleberg counties. Each study site will consist of 4 standard mixture plots, 4 plots containing native species only, and 4 additional plots combining both standard and native mixes. The point intercept method will be used to evaluate ground cover of each plot at 30, 60, and 90 days, to guarantee TxDOT's standard of 70% of the adjacent land cover is obtained at the study sites within 90 days.

Because WMGs germinate quickly, spread vegetatively, and survive in xeric conditions, we predict that hooded and shortspike WMGs will out-compete introduced species, particularly bermudagrass. Data were collected in 2006 and additional evaluations will be conducted during summer 2007. Information from this research will help facilitate changes to TxDOT's current standard mixture used to revegetate roadside right-of-ways throughout Texas by replacing introduced grass species with native species that can establish and succeed along the harsh roadway conditions in Texas.

*Cooperative funding provided by the Texas Department of Transportation and Kika de la Garza
Plant Materials Center, USDA – Natural Resources Conservation Service.*