Evaluation of Windmillgrasses For Sustainable Long-term Results

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The Texas Department of Transportation (TxDOT) selects its standard seed mixtures based on specific criteria for each district in Texas. A determining factor in the selection process is the capability of a species to control erosion and withstand a mowing height of 7 inches. The objective of this study will be to evaluate impacts of mowing on established plots of native hooded and shortspike windmillgrasses (WMGs).

The mowing regimen is based on TxDOT's *Roadside Mowing Specifications* manual and will be incorporated at the study sites located in the following districts: Wichita Falls, Odessa, and Corpus Christi. The dates of mowing and mowing height will be recorded throughout summer 2007. During autumn 2007, the point intercept method will be used to estimate bare ground, rock, litter, or canopy coverage of plant species within each experimental plot (10 feet by 20 feet). One hundred data points will be measured per plot, and a total of 300 plots will be evaluated between the 3 districts.

Because native WMGs can spread vegetatively and survive xeric conditions, we predict that the WMGs will adapt to the regular maintenance mowing regimens conducted by TxDOT and provide sustainable long-term results along Texas right-of-ways. Data obtained in this experiment will help to quantify these long-term results, allowing TxDOT to incorporate another native alternative into their future standard seed mixtures.

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