



Native Prairie Restoration in the Lower Rio Grande Valley of Texas

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Native prairie restoration has been successfully utilized to convert vegetation of previously cultivated lands to native species. South Texas prairie restoration is less successful due to non-native species, primarily guinea grass, buffelgrass, and old world bluestems. Changes in landowner goals and the Farm Bill programs increased demand for restorative native seed mixes. Recent release and ongoing development of several native plant germplasms for the region make it possible to test the theory that areas seeded with a diverse native seed mix withstand invasion from non-native species. Our goal is to determine which combination of native species withstand invasion and fit the criteria of the Farm Bill. The resultant mix may be implemented in revegetation of previously cultivated lands in the Lower Rio Grande Valley of south Texas. The 3 treatments evaluated are, 1) control, 2) disked only, and 3) Disked and seeded. Treatments were randomly allocated in a complete block design with 4 replications. Canopy cover and basal cover will be collected using a 20 x 50 cm. frame in March, June, and October. Seedling counts will also be conducted at 30, 60, and 90 days following the first rain. Seedling count data was collected on disked and seeded and disked only treatments during the second weeks of June and July, 2008. No significant difference was observed during the June sample period. During the July sample period, disked and seeded plots had a higher number of native plant seedlings ($P < .0001$), and greater species richness ($P < .0001$) than disked only plots.

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