

## Herbaceous Mimosa Potential as a Pasture Legume

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Herbaceous mimosa (*Mimosa strigillosa*) is a perennial, warm-season, native legume adapted to a wide range of soil types across the Gulf Coast region of the southeastern USA. Low, dense growth from spreading stolons is supported by a deep, extensive root system. Crockett Germplasm was released for conservation uses by the USDA-NRCS East Texas Plant Materials Center in Nacogdoches, Texas, and landscape use has been recommended for the species by the University of Florida Environmental Horticulture Department (IFAS Extension Publication ENH 1075). Evaluations at multiple locations across Texas and Louisiana demonstrated wide adaptation, and, despite the low growth, forage production exceeded that of selected upright-growing native legume species with forage nutritive value comparable to available warm-season forage legumes. Recent evaluations provide preliminary assessments of seed production, stand establishment, and response to grazing by beef cattle. Seed increase at the East Texas Plant Materials Center has provided insights for production, harvest, and processing seed. Plantings on 5 ha of pasture area on clay bottomland in northwestern Louisiana have allowed preliminary assessments of stand establishment, seedling response to irrigation, and plant response to grazing. Some key aspects of seed production include requirements of a level soil surface and weed-free production fields because of cutting heights near the soil surface and limited available herbicides for selective weed control. Cattle readily grazed the herbaceous mimosa, and selective grazing within bermudagrass pasture resulted in gradual defoliation of herbaceous mimosa to only 2 to 3 cm above the soil surface. In 2012 and 2013, irrigation of seedling stands enhanced seedling survival and plant spread compared to non-irrigated areas during extended dry periods on clay soil. In 2014, irrigation increased weed competition which was detrimental to herbaceous mimosa seedling survival compared to non-irrigated areas with less weed competition. Even though wide adaptation and forage characteristics of this native legume indicate usefulness as a pasture species, stand establishment and grazing management require appropriate strategies. Planting approaches to minimize both drought hazards and excessive weed competition are needed. Grazing management will require appropriate stocking rates and perhaps periods of grazing deferment to maintain plant vigor.

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