

## Going native with legumes in rangeland restoration, cultivated pasture and prairies

J.P. Muir<sup>1</sup>, T.J. Butler<sup>2</sup>, W.D. Pitman<sup>3</sup>, J. Lloyd-Reilley<sup>4</sup>, and P.D. Maywald<sup>5</sup>, R.T. Cragar<sup>4</sup>

<sup>1</sup>Texas AgriLife Research TX USA E-mail: [j-muir@tamu.edu](mailto:j-muir@tamu.edu). <sup>2</sup>The Noble Foundation, OK USA <sup>3</sup>Louisiana Agricultural Experiment Station, LA USA <sup>4</sup>Natural Resource Conservation Service, TX USA <sup>5</sup>Texas A&M Kingsville, TX USA

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**Introduction** Commercially available ecotypic (defined as locally or at least regionally native) herbaceous and semi-woody legumes are few in sub-humid and semi-arid regions of North America. There is a growing demand for native germplasm in the region as a new generation of landowner attempts to return grasslands to a semblance of their original native species composition and diversity. Stable grasslands that incorporate at least a portion of the originally ubiquitous legumes constitute more sustainable rangeland, pasture, biofuel, right-of-way, and wildlife habitat than the currently predominant monocultures based on introduced (exotic) germplasm. The objective of this paper is to enumerate the herbaceous and semi-woody legume germplasm being developed for possible commercial use in drier climates of south-central North America.

**Materials and methods** Initial efforts focused on native legume germplasm collections in relic prairies, understocked grasslands, and protected woodlands. Subsequent selection screened for hardiness, herbage yields, seed production (ease of harvest), and survival under grazing, mowing or haying.

**Results** The list of species being developed is growing. Few are yet commercially available, but seed companies are interested in a nascent and potentially lucrative market. Table 1 contains a partial list of species currently being developed in the south-central United States.

Table 1. Native herbaceous legumes being developed as ecotypic seed in south-central USA.

Latin binomial	Availability <sup>1</sup>	Environment	Use	Habit <sup>2</sup>
<i>Acacia angustissima</i> var. <i>hirta</i>	D	Grassland	Grazing	P, U
<i>Amorpha canescens</i>	D	Grassland	Wildlife	P, U
<i>Amorpha fruticosa</i>	D	Grassland	Wildlife	P, U
<i>Cassia fasciculata</i>	C	Grassland	Wildlife	A, U
<i>Dalea aurea</i>	D	Grassland	Wildlife	P, U
<i>Dalea multiflora</i>	D	Mixed	Wildlife	P, U
<i>Dalea obovata</i>	D	Grassland	Wildlife	P, U
<i>Dalea purpurea</i> var. <i>purpurea</i>	R	Grassland	Grazing	P, U
<i>Dalea scandens</i>	D	Savannah	Wildlife	P, U
<i>Desmanthus bicornutus</i>	C	Savannah	Wildlife	P, U
<i>Desmanthus illinoensis</i>	C	Savannah	Grazing	P, U
<i>Desmanthus leptolobus</i>	D	Mixed	Wildlife	P, U
<i>Desmanthus velutinus</i>	D	Grassland	Wildlife	P, U
<i>Desmanthus virgatus</i>	D	Disturbed	Wildlife	P, L
<i>Indigofera miniata</i>	D	Disturbed	Soil Stab.	P, L
<i>Leucaena retusa</i>	R	Mixed	Browse	P, U
<i>Lespedeza stuevei</i>	D	Mixed	Wildlife	P, U
<i>Mimosa strigillosa</i>	R	Disturbed	Wildlife	P, L
<i>Rhynchosia latifolia</i>	D	Disturbed	Wildlife	P, U
<i>Strophostyles helvula</i>	D	Disturbed	Wildlife	A, V
<i>Strophostyles leiosperma</i>	D	Disturbed	Wildlife	A, V

<sup>1</sup>D=developing, R=released, C=commercialized

<sup>2</sup>P=perennial, A=annual, U=upright, V=viney, L=low growing