Forage/Cover Crop Blend Suggestions for East Texas

Robert A. Lane, Ph.D. Department of Agricultural Sciences Sam Houston State University

Cool season annual species suited for overseeding (or light disking before and cultipacking after seeding) in short grass or prepared seedbed:

Legumes: crimson clover, white clover, ball clover, berseem clover,

Grasses: annual ryegrass

Other: turnip, daikon radish, mustard, canola

Notes: crimson clover prefers well-drained soil. White and berseem clovers prefer poorly drained or wet-natured soils. All legumes listed here and below prefer moderate to high soil P and a near neutral pH. Soil testing is important to make sure these requirements are met. All legumes should be either planted as preinoculated seed or be inoculated with the proper inoculum.

Cool season annual species suited for drilling or disking in:

Legumes: Austrian winter pea, hairy vetch, common vetch, fava bean

Grasses: cereal rye, wheat, oat, triticale

Other: none

Notes: none of these does particularly well in wet-natured soils nor in soils that tend to be very dry

Warm season annual species suited for overseeding in short grass or prepared seedbed:

Legumes: alyceclover

Grasses: crabgrass, foxtail, proso, browntop or Japanese millet

Other: none

Notes: alyceclover and crabgrass will be a little slower to establish, but can be planted a bit earlier

than the millets.

Warm season annual species suited for drilling or disking in:

Legumes: cowpea, lablab, soybean

Grasses: pearl millet, sorghum-sudangrass,

Other: buckwheat

Notes: the legumes should be planted about an inch deep after the soil has warmed to above 65 degrees F (usually late April for us). Pearl millet should be planted about $\frac{1}{4}$ to $\frac{1}{2}$ inch deep while sorghums and buckwheat are planted from $\frac{1}{2}$ to 1 inch deep.

In general, the cool season annuals grasses and legumes are better suited to overseeding of existing pastures, but only if the vegetative cover is mowed or grazed close. A thick cover will shade the young seedlings too much and they may not survive. Seeding rates for planting alone are listed on the next page. These are approximate and may need to be adjusted up or down, depending on circumstances. If planting blends, reduce the seeding rate of each component by dividing these rates by the number of species used in the blend. See example on next page.

Crop Species	Seeding Rate (lb/A)	Preferred planting time
Alyceclover	20	mid-to late April
Crimson clover	20-25	early to mid-October
Berseem clover ^A	20-25	early to mid-October
Hairy vetch	30-35	early to mid-October
Common vetch	40-50	early to mid-October
Aus. Winter pea	70-80	early to mid-October
Fava bean	80-90	early to mid-October
Cowpea ^B	70-80	late April/early May
Soybean ^c	60-70	mid-April
Lablab	30-40	late April/early May
Sunnhemp	30-40	mid-April
Crabgrass ^D	3-5	mid-April
Forage rye	80-90	early to mid-October
Forage oat	100	early to mid-October
Forage wheat	100	early to mid-October
Ryegrass	20-25	early to mid-October
Buckwheat	60-70	mid-April
Sorghum-sudangrass	30-40	late April/early May
Pearl millet	20-25	late April/early May
Foxtail millet	20-25	late April/early May
Proso millet	20-30	late April/early May
Browntop millet	20-30	late April/early May
Japanese millet	20-30	late April/early May

Example spring blend might include: 5 lb pearl millet, 5 lb foxtail millet, 18 lb cowpea, and 9 lb sunnhemp per acre using the information above. But also consider that cowpea won't persist under heavy grazing pressure and that foxtail millet is fairy early maturing, so I would increase the pearl millet to 7-8 lb per acre, or throw in 3-4 lb/acre of a good sorghum-sudangrass hybrid. Preferred planting times are simply suggestions based on my experience. Some years are colder and wetter than others, in which case, planting delays are prudent. Check with the local or state extension specialists for cultivars and hybrids best suited to your area. Follow soil test recommendations for fertilization.

^A – Bigbee and Frosty have decent cold tolerance, but I have lost entire stands of berseem clover in extremely cold winters

^B – There are many cowpea varieties on the market, but Iron and Clay are a proven forage type of cowpea

^c – Tyrone, Laredo, and Big Fellow are good forage type soybean varieties

^D – Red River and Quick-N-Big are well-known forage cultivars. Crabgrass is a weak competitor, so I suggest planting it with a low growing summer legume, such as alyceclover to prevent excessive shading. Both need a well-prepared seedbed. Broadcast and cultipack or roll after seeding.