USDA NRCS
Natural Resources Conservation Service
MISSISSIPPI

ESTABLISHING PERENNIAL INTRODUCED GRASSES AND LEGUMES FOR CP1

MS-CRP-327-02 (JS)
Revised August 2004

Purpose:
Perennial introduced grasses and legumes are used to reduce soil erosion and sedimentation, improve water quality and create or enhance wildlife habitat.

Wildlife:
Some areas planted to introduced grasses and legumes can be suited for wildlife food and habitat. Selection of grass species will affect what type of wildlife will utilize these acres. Supplementing the grass planting with other wildlife practices or plantings will further enhance the food and cover. Bermudagrass, Tall fescue and Sericea Lespedeza are not recommended for wildlife covers.

Grass and Legume Species:
Plant species and varieties selected are those best adapted to the climate and the soils in the field being established to permanent vegetative cover. Refer to the attached Table 1 for introduced grasses and legumes commonly grown in Mississippi and cultural specifications. Also refer to the Mississippi Planting Guide, "Legume Inoculation and Rhizobia Inoculants for Various Leguminous Species" (A.9) p. 136-138.

All seed must meet be the requirements of the Mississippi State Seed Laws. All seed must be officially tested for purity and germination to enable PLS calculations to determine the proper seeding rate. Refer to Mississippi Planting Guide, "Planting Native Grasses Using the Pure Live Seed Method" p. 123 Section 2A.

Seedbed Preparation:
Thoroughly pulverize soil to a minimum depth of 4 inches and harrow to a uniformly smooth surface. Except on heavy clays, firm with a cultipacker or allow seedbed to settle before planting.

The seedbed must be essentially free of competing vegetation. It should be firm enough to permit seed placement at the desired depth and protected against erosion. A firm seedbed should hardly reveal adult footprints. This will allow for placement of the seeds at a depth of ¼ to ¾ of an inch into the soil.

Seeding Operation:
Refer to the attached Table 1 for recommended seeding rates, dates, depths and zone adaptations.

Fertilizer and Lime:
Apply fertilizer and lime according to Extension Service Soil Lab recommendations or a nutrient budget. The application of lime and fertilizer shall be done in separate operations and incorporated into soil.

Operation and Maintenance:
Operation and maintenance will include but not be limited to the following:

1. Control annual weeds and other competition the year of establishment, with early and timely clipping before seed heads appear, or timely application of herbicides.
2. Prevent disturbance of cover during the primary nesting season for wildlife, which is April 1 through August 15. To maximize wildlife nesting success and to promote the growth or desirable plants for wildlife, maintenance activities may be delayed until October 1.
3. After the desired stand is established control all weeds to the extent they do not adversely impact the required cover or surrounding landowners by: a) treating with chemicals per label directions, or b) spot mow before seed heads form.
4. Protect the acres form haying grazing year round.
5. Reseed any areas that do not have adequate permanent cover.
6. Use all chemicals according to label instructions.

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GRASSES AND LEGUMES COMMONLY GROWN IN MISSISSIPPI*

TABLE 1

Introduced Grasses	Seeding Rate Alone	Seeding Rate Lb/A Mixtures	Planting Date	Adaptation Zone	Plants Depth	Remarks
Bahiagrass	25-30 lbs/A	15 lbs/A	March-May	(2) Central (3) South	¼ inch	Adapted to sandy soils. Tolerates drought and poor drainage. Not suited for highly alkaline or extremely wet soils.
Dallisgrass	15 lbs/A PLS	10 lbs/A PLS	Feb.-May	(1) North (2) Central (3) South	½ inch	Best adapted to heavy, fertile, moist, well drained to moderately well drained soils. Will survive periods of flooding.
Tall Fescue	20 lbs/A	15 lbs/A	Sept.- Nov.	(1) North (2) Central	¼ - ½ inch	Best adapted to fertile soils with good moisture holding capacity.
Common Bermudagrass	5 lbs/A	3 lbs/A	March-May	(1) North (2) Central (3) South	¼ inch	Adapted to sandy soils & tolerates drought. Responds well to nitrogen fertilization.
Native Grasses						
Big Bluestem	8 lbs/A PLS	2.5 lbs/A PLS	March-May	(1) North (2) Central (3) South	½ inch	Adapted to well drained, fertile soils. Will perform well on moist soils except those that are very droughty or poorly drained.
Indiangrass	7 lbs/A PLS	2.5 lbs/PLS	March-May	(1) North (2) Central (3) South	½ inch	Well drained, fertile soils. Performs well on moist soils except those that are droughty or poorly drained.
Switchgrass	6 lbs/A PLS	2.5 lbs/PLS	March-May	(1) North (2) Central (3) South	½ inch	Prefers deep, well drained, moist, fertile soils. Will produce on droughty, infertile soils. Low fertilization requirements.
Little Bluestem	8 lbs/A PLS	2.5 lbs/A PLS	March-May	(1) North (2) Central	½ inch	Prefers deep, well drained fertile soils but will perform satisfactorily on droughty soils.
Legumes						
Sericea Lespedeza	30 lbs/A	20 lbs/A	March-April	(1) North (2) Central (3) South	¼ inch	Most soils in Mississippi except alkaline soils, wet soils and deep infertile sands. Grows best on loam and heavy soils.
White Clover	3 lbs/A	3 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	¼ inch	Adapted to a wide range of soils including wet and hard pan soils. Best suited on fertile, moist bottom, second bottom or loamy soils.
Red Clover	8-12 lbs/A	5 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	¼ inch	Adapted to fertile, moderately well drained, neutral soils with high organic matter. Grows well on moist prairie soils.

*Refer to the “Mississippi Planting Guide” in the Plant Materials Resource Handbook for cultivars adapted in the north, central and south zones.

GRASSES AND LEGUMES COMMONLY GROWN IN MISSISSIPPI*
Continued

TABLE 1

Legumes (Continued)	Seeding Rate Alone	Seeding Rate Lb/A Mixtures	Planting Date	Adaptation Zone	Plants Depth	Remarks
Ball Clover	3 lbs/A	3 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	¼-½ inch	Adapted to a wide range of soils. It is better adapted to wetter and lighter textured soils than crimson clover. Will grow on less fertile soils.
Lespedeza, (Common) (Kobe)	30 lbs/A	15 lbs/A	March-May	(1) North (2) Central (3) South	¼ inch	Adapted to most soils in Mississippi except wet soils and deep sands.
Lespedeza, Shrub	30 lbs/A	15 lbs/A	March-May	(1) North (2) Central (3) South	¼ inch	Adapted to most soils in Mississippi except wet soils and deep sands.
Arrowleaf Clover	30 lbs/A	15 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	¼ inch	Suited for wide range of soils. Not suited for light textured, droughty soils, low fertility or poorly drained wet soils.
Crimson Clover	20 lbs/A	20 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	¼ inch	Best adapted to fertile, well drained soils. However, will grow on a wide range of soils in Mississippi.
Hairy of Wooly Pod Vetch	30 lbs/A	15 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	½ inch	Adapted to most well drained, medium to fertile soils in Mississippi.
Wild Winter Peas (Rough Pea)	30 lbs/A	20 lbs/A	Sept.-Oct.	(1) North (2) Central (3) South	¼ inch	Best suited for heavier soil of medium to high fertility. Not adapted to light and sandy soils.
Partridge Pea	6 lbs/A	4 lbs/A	March-May	(1) North (2) Central (3) South	½ inch	Grows naturally on practically all soils in Mississippi.
Beggarweed	10-15 lbs/A	10 lbs/A	April-May	(2) Central (3) South	¼ inch	Well drained to moderately well drained sandy loam soils.
Joint Vetch	20 lbs/A	15 lbs/A	March-June	(3) South	¼ inch	Performs well on moderately drained soils and poorly drained sites. Not adapted for droughty or deep sandy soils.

*Refer to the “Mississippi Planting Guide” in the Plant Materials Resource Handbook for cultivars adapted in the north, central and south zones.