

Establishment and Management of Clover in Tall Fescue Sods

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Why Plant Clover with Tall Fescue?

Clover in tall fescue pastures provides several advantages:

1. Improves the average daily gain of grazing animals.
2. Increases weaning weights of calves.
3. Improves conception rate of cows.
4. Reduces likelihood of grass tetany in cows.
5. Provides nitrogen from the atmosphere through fixation, thus reducing or eliminating the need for nitrogen fertilization.
6. Reduces fescue toxicity problems, which occur with endophyte -infected tall fescue.

Establishment of Clover Along With Tall Fescue

White clover (including ladino types) and red clover are desirable companion species to tall fescue whether the fescue is endophyte -infected or endophyte free. To establish new tall fescue-clover pastures on prepared land:

1. Destroy all existing vegetation, level, then prepare and firm the seedbed before planting.
2. Apply lime, phosphorus, and potassium according to soil test recommendations and incorporate during seedbed preparation.
3. Plant in September to October. Drill tall fescue at 10 to 15 lb/acre in 14-inch rows to reduce competition with clover. Broadcast seed of white clover at 1 to 3 lb/acre or red clover at 5 to 10 lb/acre (other clovers commonly grown in Alabama are not as suitable for seeding with fescue because of their annual growth habits). Seeding depth should be no more than 1/2 inch. Use of a cultipacker -seeder for planting, or a cultipacker after planting is important because it helps ensure getting a stand.

4. Inoculate clover seed with proper inoculum before planting.

Establishment of Clover in Existing Tall Fescue Sods

1. If broadleaf weeds are present, apply 1 to 4 pints/acre of 2,4-D and, if dogfennel or smartweed are present, also use 0.5 to 2 pints/acre of Banvel .

2. Apply lime and fertilizer according to soil test recommendation.

3. Graze or clip closely, to remove excess growth.

4. Plant during October, November, or February.

5. Plant clover seed with a no-till planter at 1 to 3 lb/acre of white clover or 5 to 10 lb/acre of red clover in drill rows 9 to 10 inches apart. Be sure clover is inoculated with fresh inoculum . Some seed is pre-inoculated, but if not, use a commercial sticker or a small quantity of syrup mixed with water to slightly dampen the seed before applying the inoculant to the seed.

6. Just before planting, control grass competition by close grazing, mowing, or chemical suppressants to allow the young legume plants to become established.

7. Keep a close watch for various feeding insects, especially crickets, and apply a labeled insecticide (a granule formulation is preferable) at the first sign of their presence. If a substantial cricket population is evident prior to planting, the insecticide should be applied before the clover plants emerge. These foliage-feeding insects can completely destroy small clover seedlings in sod if not controlled.

8. An alternative low-cost method is to broadcast-plant clover seed in closely-grazed pastures during January or February. Hoof action by grazing animals provides some seedbed preparation and suppresses the grass. Although stands may be more erratic with this method, the low cost makes it attractive.

Management of Established Tall Fescue-Clover Pastures

1. Fertilize annually according to soil test recommendations. Clovers require adequate fertility for good growth.

2. Excessive nitrogen fertilization causes the grass to crowd out the clover. If growth is inadequate in autumn, low rates of nitrogen (30 to 40 pounds/acre) will provide additional tall fescue growth until clovers are growing adequately.

3. Maintain an adequate stocking rate in spring and utilize heavy pasture growth,

otherwise tall fescue may crowd out or shade out the clover. Close grazing favors white clover.

4. If the clover stand is approaching 50% of the ground cover, provide poloxolene blocks to prevent bloat of grazing animals.

5. Reseed pastures as needed (usually every 2 to 3 years).