Overseeding Perennial Grass Sods with Clover

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Overseeding perennial grass sods with clover is commonly done by many cattle producers. More cattlemen could benefit by trying this relatively cheap practice which can be used on both warm season and cool season perennial grass sods. The benefits are improved pasture quality for better cattle performance and some cheap nitrogen to stimulate grass growth.

Bermudagrass and bahiagrass sods

Unfortunately, the dates for overseeding bermudagrass and bahiagrass sods are over for this year but it might be a good idea to have a look at someone else's pastures where annual clovers have been seeded and make plans to do this next fall. Planting should be done after the grass sod has become dormant. This will generally be early October in north Georgia, late October in central GA, and early November in the Coastal Plain of south GA. Prior to planting, necessary phosphate and potash fertilizer should be applied according to soil test results. Removal of ungrazed grass residue is essential to obtain good clover stands. Research trials have shown that arrowleaf clover overseeded on a 1-inch stubble of bahiagrass produced 2290 lb/are of dry forage, but only 1620 lb on a 3-inch stubble, and 1350 lb on a 6-inch stubble. Similar results were obtained with crimson clover. Broadcast plant inoculated seed of the following recommended varieties: arrowleaf (Yuchi) at 5 to 9 lb/acre or crimson (Dixie, AU Robin, AU Sunrise, and Flame) at 15 to 20 lb/acre. The latter three crimson clover varieties will furnish more winter growth than Dixie. Light tillage of the grass sod is desirable, especially for bahiagrass, and will have little or no adverse effect on the sod. However, tillage sometimes increases weed populations in pastures.

Tall fescue sods

Red and white (ladino) clovers can be planted in tall fescue sod during October and November but stands may be substantially reduced by a number of factors such as autumn drought, insects, and possibly soil-borne diseases. Application of insecticides has not given consistent improvement in stands of white clover planted in tall fescue, according to research by A.E. Smith and G.D. Buntin at the Georgia Station, Griffin. Similar results were obtained with red and white clovers in research over a 3-year period by C.S. Hoveland, R.G. Durham, and J.H. Bouton at the Northwest Branch Station, Calhoun, and the Mountain Station at Blairsville. In all of these experiments, the most important factors contributing to getting good clover stands were (1) close grazing or close cutting to remove grass residue, and (2) planting during late January or February although in the Mountain and Limestone Valley regions November was also satisfactory.

As with bermudagrass and bahiagrass sods, soil testing and application of needed phosphate and potash before planting is essential. Some pastures may require lime for good clover growth. Grass residue must be removed. Planting with a no-till drill is the best method, particularly when planting is done in autumn. However, broadcast application of clover seed in late January or February on closely grazed tall fescue can give fair to good stands if large numbers of animals are concentrated on an area for a short time to trample seed into the ground. Broadcast seeding in October is worthless but much better in January or February when pastures are normally closely grazed, moisture is good, and insect populations very low.

Red clover is the best overseeding legume because of its large, vigorous seedlings and is generally successful with broadcast seeding. White clover seedlings are smaller but also fairly dependable for broadcast seeding while alfalfa generally fails with this method. Plant inoculated seed of red clover (Acclaim, Cinnamon, Redland III, Royal, Rudolf varieties) at 10 to 12 lb/acre or white (ladino) clover (Regal, Will, or Osceola varieties) at 2 to 3 lb/acre. Osceola should not be planted in the Limestone Valley and Mountain regions as it may be damaged by cold. Red and white clovers can be planted together with seeding rates of each cut in half.

It should be kept in mind that none of the currently available red or white clover varieties rarely survive more than two years in a pasture. Red clover stands are lost from a number of diseases and poor tolerance to close continuous grazing. White clover will tolerate close grazing but stands generally thin because of susceptibility to drought, nematodes, and several diseases. In spite of this, the low cost of broadcasting red and white clovers on tall fescue (and orchardgrass) pastures every two years can give good returns in higher quality forage and free nitrogen from the clover. Most of our tall fescue pastures are infected with the fungal endophyte that reduces cattle performance. Even a small amount of clover in these infected pastures can do a lot to reduce this toxicity. Use this winter opportunity to plant more clover in tall fescue!