

Clover Will Add Nitrogen to Soil

Every livestock producer is search for ways to save money. Fertilizer costs are one of the major inputs for forage production with adequate nitrogen being a critical factor.

The easiest solution, but not necessarily the least expensive, is to spread commercial fertilizer. An alternative is to establish clover in pastures and hay fields. You will also get some nitrogen from manure. For optimum grass growth, the UT Extension soil test recommendation will be 60 units of actual nitrogen per acre in the spring and fall. Clover can meet the spring nitrogen requirement if you have a 30% clover stand. Clover will also improve the nutritive quality of your pasture and hay.

When you consider adding clover to a pasture, you should first evaluate the existing weeds. According to Dr. Gary Bates, UT Extension Forage Specialist, chemical weed control required to kill most broadleaves will also kill the clover. So, you should first get the weeds under control before establishing clover in a pasture or hay field.

The best time to establish clover is in the late winter to early spring. The recommended seeding dates are February 15 through March 31. It may be frost seeded prior to March 1 when the ground is frozen and open allowing the seed to be taken down with warmer temperatures. This is usually the easiest way to seed clovers. After March 1, it is recommended that you use a seed drill or prepare a conventional seed bed.

Bates suggests grazing or mowing the pasture to a 1 inch height to minimize competition from existing grass. The seeding rate recommendation is 2 pounds white clover and 4 pounds of red clover. On droughty hillsides, you can also add 8 pounds of annual lespedeza if it is available. Make sure you inoculate the seed or use a pre-inoculated seed. Don't graze until the pasture is 6 to 8 inches tall.

The new seeding should be fertilized according to a soil test analysis. Remember to indicate that you are establishing clover on the soil test information sheet as this will change the nitrogen recommendation. Bates says that nitrogen doesn't kill the clover, but it will encourage grass growth. Heavy nitrogen fertilization can allow the grass to shade the clover and crowd it out of the pasture.

For livestock, clover will boost the protein level of forage. Research at the University of Tennessee has shown that clover can increase beef calf weight gains by almost ½ pound per day.

Summarizing, clover can improve forage yields by adding nitrogen to the pasture, reduce your fertilizer costs, and improve weight gain on your feeder calves or other livestock.