MESSENGER-INQUIRER

January 31, 2026

Maximizing Success with Frost Seedings of Clover

Legumes are an essential part of a strong and healthy forage grazing field. Legumes are able to partner with Rhizobium bacteria in which the bacteria fix nitrogen from the air into a plant available form and share it with the legume. Clover also increases forage quality and quantity and helps to manage tall fescue toxicosis. In the past, the positive impact of clover on tall fescue toxicosis has always been thought to simply be a dilution effect, but new research from the USDA's Forage Animal Production Unit in Lexington shows that compounds found in red clover can reverse vasoconstriction caused by the ergot alkaloids in toxic tall fescue. The primary compound found in red clover is a vasodilator called Biochanin A. Clover stands in pastures thin over time due to various factors and require reseeding every three to four years.

Thousands of acres of Kentucky pasture and hay fields are overseeded with clover, much of it frost-seeded in late winter. This is one of the few times a crop is planted with the expectation of obtaining a 50% or less final stand. Here are a few tips to ensure you have the best chance of getting clover established from a frost-seeding.

Address soil fertility needs. Get a current soil test and apply the needed nutrients. Clovers need soil with pH 6.5 to 7 and medium or better in P and K. Do not apply additional N except for that supplied from diammonium phosphate (DAP) if used to supply the needed P. But get the soil test; anything else is just a guess.

Select a good variety. Choose an improved variety with known performance and genetics. Choosing a better red clover variety can mean as much as three tons of additional hay and longer stand life. Spread enough seed. UK recommends 6 to 8 pounds of red and 1 to 2 pounds of

MESSENGER-INQUIRER

white/ladino clover per acre. Apply higher rates if using only one clover type. Applying the minimum (6 lb. red and 1 lb. white) will put over 50 seeds per square foot on the field (37 red, 18 white).

Make sure seed lands on bare soil. Excess grass or thatch must be grazed and/or disturbed until bare ground shows before overseeding. The biggest cause of seeding failure with frost seedings is too much ground cover. Judicious cattle traffic or dragging with a chain harrow can accomplish this.

Get good seed-soil contact. With frost seeding, we depend on rain and snow or freeze-thaw action of the soil surface to work the clover seed into the top ¼ inch of soil. A corrugated roller can also be used soon after seeding to ensure good soil contact.

Control competition next spring. Do not apply additional N on overseeded fields next spring, and be prepared to do some timely mowing if grass or spring weeds get up above the clover. Clover is an aggressive seeding, but will establish faster and thicker if grass and weed competition is controlled.

Clover can be reliably established into existing grass pastures with a little attention to detail. Soil fertility, variety, seeding rate, seed placement, and competition control are the major keys to success.

Grain Day Legacy Series

The Grain Day Legacy Series continues next Wednesday, February 4, at 8:30 at the Daviess County Cooperative Extension office. Soils Extension Specialists Dr. John Grove and Edwin Ritchey will address soil fertility, recently conducted research on biological nitrogen fixation products, efficiency of various nitrogen products, and their timing and sulfur use in

soybeans. Come and listen to the experts discuss where you may reduce some input expenses without sacrificing yield.

Other meetings happening this week:

Winter Wheat Meeting on Tuesday, February 3. Attendees will hear from a range of UK wheat production specialists covering topics such as pest management, marketing, and the use of new precision agriculture tools. The event runs from 9 a.m. to 3 p.m. CST at the James E. Bruce Convention Center in Hopkinsville. Registration begins at 8:30 a.m.

The Kentucky Crop Health Conference is next Thursday, February 5, in Bowling Green. A lineup of national and local experts will provide the latest research and practical strategies for protecting the region's corn, soybeans, and wheat. Tickets are available at https://kchc2026.eventbrite.com.

This Institution is an Equal Opportunity Provider.