

# MESSENGER-INQUIRER



January 28, 2023

## 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 that is 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. Yet this is one of the few times where a crop is planted with the expectation of obtaining a 50% or less final stand. This would be considered a failure if planting corn or soybeans. 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 that is pH 6.5 to 7 and medium or better in P and K. Do not apply additional N except

# MESSENGER-INQUIRER

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 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 there is bare ground showing prior to 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 the 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.

# MESSENGER-INQUIRER

## **Census of Agriculture**

The USDA is currently conducting the 2022 Census of Agriculture. Paper versions were mailed in December and everyone who received a copy is required by law to complete it by February 6, 2023. Completing the census online is an option to the paper version. Go to [www.agcounts.usda.gov](http://www.agcounts.usda.gov). You will need to enter the unique survey code found on the envelope of the census you received in the mail. For assistance or questions contact the USDA at 888-424-7828.

## **Private Pesticide Applicator Training**

There are two pesticide applicator training opportunities this coming week. Monday, January 30 from 6:00 to 8:00 p.m. or Friday, February 3 from 8-10 a.m.

## **Beef Quality & Care Assurance Certification**

A beef quality and care certification will be Wednesday, February 1 from 6-8 p.m.

Educational programs of Kentucky Cooperative Extension serve all people regardless of economic or social status and will not discriminate based on race, color, ethnic origin, national origin, creed, religion, political belief, sex, sexual orientation, gender identity, gender expression, pregnancy, marital status, genetic information, age, veteran status, or physical or mental disability. UNIVERSITY OF KENTUCKY, KENTUCKY STATE UNIVERSITY, U.S. DEPARTMENT OF AGRICULTURE, AND KENTUCKY COUNTIES, COOPERATING