Researchers Look For Ways To Increase Pasture Productivity

LEXINGTON, KY.

In a time of rising production costs, livestock producers are looking for cost effective ways to combat weeds and improve or increase pasture productivity. Researchers at the University of Kentucky College of Agriculture hope to help them do just that through a study on integrated weed management strategies.

"Traditionally in Kentucky, we've dealt with weeds in grazed pastures by mowing," said J.D. Green, UK extension weed scientist and the study's primary investigator. "However, mowing costs have increased as the cost of diesel has risen. So producers are looking at alternatives to mowing."

Troublesome weeds, such as ironweed, musk thistle, spiny amaranth and cocklebur, always have existed in Kentucky's pastures to some extent. But as livestock production in the state has increased, they have become more prominent and lessened the amount of desirable forage available. Livestock will not consume these weeds because they contain spines, thorns or generally are unpalatable.

Green along with fellow UK researchers Kenny Burdine, Bill Witt, and Greg Schwab and a UK graduate student, Josh Tolson, will compare the productivity of pastures that rely on mowing alone, herbicide treatment or improved soil fertility as methods of suppressing weed problems. They will also test the effectiveness of combinations of each practice and using all three strategies together.

Another component of the joint research-extension project will be the economic feasibility on each of the weed control strategies and their various combinations.

"The economic assessment will help us justify whether the cost of any of these management tactics is worth the return from improved pasture productivity," Green said.

This is the first year for the three-year project, which was funded by the U.S. Department of Agriculture Southern Regional Integrated Pest Management grant program.

Currently, researchers are applying different weed management strategies on farms with cooperating livestock producers. They will collect forage yields and weed control data in the spring and the following year for evaluation. Once enough data is compiled, researchers plan to share the results with livestock producers, county extension agents and other interested individuals through field days and training sessions across the state. These likely will occur during the project's last two years. Δ