

# Highland Rim AgResearch and Education Center

## Discovery

Highland Rim is facilitating world-class research involving estrous synchronization, timed breeding and embryo transfer protocols, including a current investigation of uterine pH on embryo transfer recipients. These studies have led to improved pregnancy rates in cows, which has led to more calves weaned by producers. Our research is also improving the protein composition and quality of crops, which adds value to the producer and the consumer. We're providing measured field data for molecular marker assisted breeding projects in soybeans. And we've made considerable progress in reducing Tobacco Specific Nitrosamine content in tobacco by reducing nicotine.

## Innovation

We're investigating the effects of different feed and forage varieties on cattle performance. Fescue grazing studies indicated that steer and bull performance was improved when cattle grazed MaxQ rather than KY-31 endophyte-infected tall fescue, enabling beef producers to make more informed decisions on managing their forage resources. Our research on supplementing fescue grazers with native warm-season grasses has led to a boost in summer gain rates in cattle. And we've added value to steers with rye baleage plus commodity feeds, demonstrating the potential for Tennessee beef producers to add value to their cattle.

## Application

The information we collect from our studies is invaluable to Tennessee farmers. It allows them to optimize their resources, make the best decisions for their operations, and often provides significant cost savings. We share our research findings with area producers through UTIA publications or public field days, like Tobacco, Beef and More. Not only do we improve the profitability of some of Tennessee's top agricultural commodities, but the Highland Rim AgResearch and Education Center also has a profound economic impact on our community, with studies estimating that we pump more than \$2 million into our local economy annually.



# Highland Rim AgResearch and Education Center



## About Us

With more than 600 acres of cropland and pasture, the Highland Rim AgResearch and Education Center in Springfield may look like a traditional farm, but we're actually harvesting solutions for Tennessee farmers. Nestled in the heart of Tennessee tobacco country, this center conducts studies that support the state's tobacco, beef and row crop industries. Our research has led to the development of the most widely grown burley tobacco varieties in the world, and our work has improved the profitability of beef and crop producers across Tennessee.

## Location

"Highland Rim" is a geographical term that describes the elevated plain that surrounds the Central Basin in Middle Tennessee. The Highland Rim AgResearch and Education Center is located on Experiment Station Road, just off Highway 41, in Springfield, Tenn. This area is deeply rooted in agriculture and it remains an important industry. Robertson County ranks number one in the state for overall tobacco production, as well as number one for dark tobacco. Robertson County also ranks first in wheat production. Additionally, our county is 5th in corn production and in the top 15 for beef cattle, milk cows, soybeans and hay.

**The Highland Rim AgResearch and Education Center contributes more than \$2 million to the local economy.**

Since the opening of Highland Rim in 1943, we have been

air-cured and burley tobacco varieties. The combination of environment and soil properties in this region produces dark tobacco that has not been equaled in any other part of the world. Today our research concentration is in production and curing efficiencies.

We are also well known for our work with cow-calf management. With one of the only commercial beef herds in the

UT AgResearch system, our cattle research is vital to producers of the state's top agricultural commodity. Thanks to studies in cattle reproduction, fertility rates in cattle have increased, leading to more calves weaned by producers. Our feed and grazing projects have enabled beef producers to make informed decisions when it comes to managing forages.

In addition to tobacco and beef research, we typically evaluate more than 80 varieties of corn, soybeans, wheat and forages. Current projects focus on value-added and improved nutrition for humans and animals.

Our center is the site for public field days, 4-H and UT Extension events, as well as agriculture industry meetings. We employ 12 full-time workers, along with four seasonal workers and four summer interns. Together we carry out the work-plans from five departments and 25 principal investigators with the UT Institute of Agriculture.

Visit the AgResearch website at <http://agresearch.tennessee.edu>.

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Programs in agriculture and natural resources, 4-H youth development, family and consumer sciences, and resource development.  
University of Tennessee Institute of Agriculture, U.S. Department of Agriculture and county governments cooperating.  
UT Extension provides equal opportunities in programs and employment.