

COOPERATIVE EXTENSION

STRATEGIC OPPORTUNITIES AND MEASURING EXCELLENCE

Institution

**K-State Research and
Extension**

State

Kansas

Region

North Central

K-State Helps Ranchers Manage Noxious Weed, Cattle Health

Sericea lespedeza is an invasive, noxious weed that infests approximately 625,000 acres of range and pasture in Kansas. Tannins in the weed hamper protein digestion by beef cattle and cause abdominal discomfort. So, cattle avoid eating the weed, which makes large areas of land useless for grazing. Over the past 10-12 years, chemicals have been unsuccessful in killing sericea lespedeza.

K-State Research and Extension animal scientist KC Olson is conducting research to offset the side-effects of grazing sericea lespedeza. He and his team identified corn steep liquor – a non-alcoholic by-product of corn sweetener production – as having anti-tannin properties. At the time of the study, CSL cost about \$5 per ton.

In a series of five studies with corn steep liquor, Olson’s team found that cattle readily consumed the by-product. Each trial indicated that cattle no longer suffered the digestive disorders that had been associated with consuming tannin in sericea lespedeza.

The researchers determined the proper amount of CSL supplement that would help ranchers, approximately 2 to 6 pounds of CSL per day (dry-matter basis).

The research team also determined that the ideal time for supplementation is late July through September.

K-State’s research means that cattle can now graze areas where sericea lespedeza is present, and Olson believes that grazing pressure on those areas will significantly diminish the reproductive capabilities of the plant and lead to effective biological control.

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Primary Strategic Priority:

Strengthen the profitability of animal and plant production systems

Secondary Strategic Priority:

Protecting our rich natural resources and environment

Tags:

Livestock Production, Farm Risk Management, Invasive Species, Stewardship

Year: 2013

Primary Source of Funding:
Capacity Funds

Resource Link:
<http://www.ksre.ksu.edu/sericea>

Synopsis:

Kansas State researchers have found that an inexpensive supplement fed to beef cattle will prevent digestive disorders and help ranchers control the invasive weed, sericea lespedeza.