

News Column

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Study: Combining ear tags, implants stimulates cattle growth

Research shows large increase in protection against pesky horn flies

A Kansas State University study has shown that cattle producers can improve their profits and add another layer of safety for their herds by using ear tags in combination with growth implants.

Beef cattle specialist Dale Blasi said using the two treatments reduces horn flies, a nuisance that costs the U.S livestock industry approximately \$1 billion in losses each year, according to a recent study from Oklahoma State University.

The Kansas State University study showed that when using the two treatments separately in stocker cattle grazing for 90 days, those animals increased live weight gain by 15 or 16 pounds.

But when the treatments were used together, “our gains were incredible,” Blasi said.

“We were picking up 30 or 40 pounds of live animal gain relative to doing one or the other alone.”

Though the actual benefit to producers’ profits will vary, Blasi said the added value could be about \$25 per animal. “And after you remove the cost of the products, you’re still several dollars ahead.”

The university’s work was a follow-up to an earlier study in which researchers looked at the effectiveness of ear tags in reducing horn flies, which slow cattle’s growth due the stress and resulting energy loss they cause.

Ear tags contain insecticides that reduce the fly populations and allow the cattle to graze stress-free. The K-State study showed that cattle with one ear tag gain an additional nine pounds of live weight, and those with two ear tags gained 12 pounds.

The newer study tested the use of ear tags and an injectable growth implant called Long Range, a product that was not known previously to be a deterrent to flies. Blasi and his colleagues used a digital camera and software to count flies in a field where cattle were grazing.

“What we observed was a significant decline in the number of flies compared to another product,” he said. “There was a dramatic difference.”

The injectable implant provided about 10 weeks of control for horn flies, and a single ear tag provides about eight weeks of protection.

Growth implants are used in beef production systems throughout the United States to increase growth efficiency and stimulate the development of lean muscle.

The research was presented recently at Kansas State University's Cattlemen's Day and is available online at www.asi.k-state.edu/research-and-extension/beef/research-and-extension/2017CattlemensDay-2-24-2017.pdf. An audio interview with Blasi on K-State Research and Extension's Agriculture Today radio show is available at <http://www.ksre.k-state.edu/news/radio-network/agtoday-mp3/032717-biasi.mp3>.

Blasi also will be talking about this study at the Beef Research Roundup, taking place April 20 at the Agricultural Research Center in Hays. Registration and a trade show will begin at 9:00 a.m. Lunch will be provided and there is no cost to attend.

The following presentations will begin at 10:00 a.m:

- Beef cattle market outlook Update & Summary of Factors Impacting Cow-Calf Profits of Individual Ranches –Dr. Glynn Tonsor, KSU Agricultural Economics
- A classic stocking rate study revisited – Dr. Keith Harmony, Range Scientist, KSU WKARC
- Horn fly control and management strategies – Dr. Dale Blasi, Extension Beef Specialist, Stocker Nutrition and Management, KSU Dept. of Animal Science and Industry
- Effects of calf weaning age and subsequent management system on age at puberty and reproductive performance of replacement heifers – Dr. John Jaeger, Beef Cattle Scientist, KSU WKARC
- Weaning calves earlier than traditionally – Dr. Justin Waggoner, Extension Beef Systems Specialist, KSU SWREC
- Current weed control: Herbicide resistance – Dr. Phillip Stahlman, Weed Scientist, KSU WKARC. For more information, contact John Jaeger, jrjaeger@ksu.edu, 785-625-3425 ext.211.