

Be Informed Before Using Soybeans For Livestock Forage

SEDALIA, MO.

Many Missouri producers are asking if it is safe to use soybeans for livestock forage. The topic was brought up repeatedly by attendees at the Missouri State Fair in Sedalia.

Tim J. Evans, toxicology specialist at the University of Missouri College of Veterinary Medicine, answered inquiries on the subject by researching the chemical mechanism of action of a commonly used herbicide, Cobra.

“Current drought conditions have caused farmers to consider grazing, baling or ensiling soybeans for livestock consumption,” said Evans. “As is routine, much of the soybean crop has been sprayed with herbicides, especially Cobra, which contains lactofen and petroleum distillates. It is important that farmers be aware of what is known and what is unknown about this product before letting animals consume soybean plants to which this product has been applied.”

Lactofen is classified as a diphenyl ether (nitrophenyl ether) contact herbicide, which acts by destroying plant cell membranes. Lactofen is considered slightly toxic following ingestion and has been associated with liver disease and other abnormalities in rodents following chronic exposure to relatively high doses. Naphthalene and other compounds in Cobra can also be associated with animal illness.

“With the information currently available, and apparently without specific testing for the safety of feeding Cobra-treated soybeans to animals, the manufacturer must include information on the label pertaining to the consumption by livestock of treated crops,” said Evans. “The label states that animals should not be allowed to graze on previously treated green forage or stubble. It states that treated soybean silage (ensiled soybeans), as well as treated hay and straw, should not be fed to cattle.”

Evans emphasized that the label also clearly states that hay or straw from treated plants should not be used for animal bedding.

Farmers, livestock producers and veterinarians are encouraged to be familiar with the manufacturer’s label instructions and livestock withdrawal times, as well as the material safety data (MSDS) sheets, for Cobra and all other commonly used, commercially available herbicides. It should also be noted that some herbicides can enhance some plants’ palatability and ability to accumulate nitrate.

Producers can read about the effects of other herbicides and pesticides on crops that may eventually be used as animal feed on the MU Integrated Pest & Crop Management website at ipm.missouri.edu/IPCM/index.cfm?ID=388. Δ