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August 5, 2005

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Dealing with drought:

Drought-stricken corn can be grazed with caution; chopping it for feed is riskier, MU specialist warns

COLUMBIA, Mo. - With plentiful supplies of drought-stricken corn and a shortage of pasture for grazing livestock, many farmers think of green chopping their corn that won't make grain.

That is like playing with dynamite, warns a University of Missouri forage agronomist. Feeding high-nitrate greenchop to cattle is extremely risky.

"We'll be getting calls from farmers who have cattle with four legs in the air," said Rob Kallenbach, extension agronomist.

Corn that doesn't make a full ear can build nitrates in the stalks because there is no water to move nitrogen into the kernels.

For greenchop, a silage cutter is used to harvest all of the corn plant, including stalks with leaves and whatever ears develop.

Nitrates can poison livestock, Kallenbach said. However if the corn is chopped and stored in a silage wagon, even for a short time, the nitrate turns into the more deadly nitrite.

"Nitrites are about a hundred times more poisonous than nitrates," Kallenbach said. "Nitrites kill quickly by blocking oxygen in the blood stream."

He describes a typical scenario for disaster: A farmer chops a load of corn in the evening, and then allows the feed to sit on the wagon overnight before feeding it the next day. In that time, nitrates covert to nitrites.

With caution, drought corn can be used for livestock feed, Kallenbach said, if animals are allowed to do the selecting.

"This is where simpler is better," Kallenbach said. A small section of a cornfield is divided off with a single strand of electric fence and the cows are turned in to graze.

Left on their own, cows will graze the upper leaves, the husks and whatever corn is available. In most cases, the nitrate is stored in the thick lower stalks, which are less palatable.

Unless forced to eat the entire cornstalk, cows will avoid the poisonous lower part of the plant, Kallenbach said.

No great expense is involved in strip grazing a cornfield, Kallenbach said. It requires an electric fence charger, some step-in fence posts, and a roll of polywire or electric fencing.

A one-day supply of feed is fenced off, and the cattle are moved to fresh feed each day by moving the fence further down the field.

"A farmer can quickly determine the amount of feed to fence off by observing how much was eaten the first day," Kallenbach said.

Some producers limit grazing of drought corn on the first day. Cows are allowed into the corn for a couple of hours at first, then grazing time gradually is increased.

To build the grazing paddock, Kallenbach recommends running an ATV or tractor down through the cornfield, to knock down cornstalks. That makes it easier to build an electric fence without it shorting out on the corn. Downed corn also allows cows to see the hot wire.

The same grazing practice can be used for a soybean field that doesn't set pods.

Soybeans make very good forage, almost as good as alfalfa in nutrition, the forage specialist said. "Soybeans originally were brought to this country as a hay crop."

Large areas of central and northeast Missouri have crop fields that did not set seed because of heat and dry weather at pollination time.

"Often the first thought is to chop that damaged corn for feed or for silage," Kallenbach said. "But it is a lot less expensive to allow the livestock to harvest the feed." Corn fields can be grazed into winter.

Before grazing any crop fields, check the label on any herbicide used for weed control, said Kevin Bradley, MU Extension weed specialist.

For atrazine, a corn herbicide, the label reads "do not graze or feed forage from treated areas for 60 days following application." Roundup-Ready corn treated with glyphosate requires a minimum wait of 50 days.

For soybeans, the glyphosate restriction is 14 days.

Some corn postemergence herbicides require only a 30-day wait. "As always, read the label," Bradley said.

Most county MU Extension centers have nitrate test kits for checking suspect corn.

An MU guide sheet "Warm Season Annual Forages," G4661, has details on feeding high nitrate forages. Publications are available at extension centers or MU Publications at 1-800-292-0969.

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