

Feedstock makes a difference in feeding distiller's grains

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When it comes to using distiller's grains in finishing rations of High Plains cattle, a Texas AgriLife Research scientist says the type of grain used makes all the difference.

Dr. Jim MacDonald, AgriLife Research beef nutritionist at Amarillo, said there's been some skepticism about using distiller's grains in this region. Distiller's grains are a by-product of ethanol processing that can be used for animal feed.

"I believe we can do it successfully, provided we have distiller's grains that are equivalent in quality to those used in the North Plains states," he said.

Two years ago, MacDonald began investigating the dramatically different animal performance responses observed in the Northern Plains and Southern Plains, and to determine how to successfully incorporate distiller's grains into this region's finishing rations.

"There are two obvious differences in research conducted in those two regions," he said. "Researchers in the Northern Plains tend to use dry-rolled corn, and in the Southern Plains, they use steam-flaked corn-based diets."

Additionally, researchers in Nebraska and other Northern Plains states utilized distiller's grains derived from corn; whereas the southern research included distiller's grains derived from sorghum, he said.

MacDonald conducted three performance trials, two using corn-based distiller's grain shipped in from a Nebraska plant, and the third utilizing sorghum-derived distiller's grains that were similar to those used in research previously conducted in this region.

“Our study in feeding sorghum distiller's grain at 25 percent of dry matter, showed the energy value for that product was 73 percent of the value of steam-flaked corn,” MacDonald said. “In general, that fits with previously conducted research at Texas Tech and West Texas A&M.”

Alternatively, he said, the research conducted with corn-derived distiller's grains from Nebraska would suggest the energy value was roughly equivalent to steam-flaked corn, which agrees with the northern data where distiller's grains were fed in steam-flaked diets.

“So what our observations are showing us is there are large variations in the energy value of distiller's grains derived from different cereal grain sources, similar to the differences in energy values of the cereal grains themselves,” MacDonald said.

There will be a place for all of the different types of distiller's grains produced, but the producer needs to know what the energy value is and the product needs to be priced appropriately, he said.

“Additionally, our work with distiller's grains in different corn processing methods would indicate producers are able to retain the energetic advantage of flaking corn in diets containing distiller's grains,” he said.

For decades, feed yards in the Southern Plains have flaked corn to increase the amount of energy, MacDonald said.

He said the question was, “If you add distiller's grains to the diet, will

there still be an advantage to flaking the corn?” His research shows there is still an advantage.

MacDonald said another important thing for producers to understand is that distiller’s grains from each plant may be different, so it is important to have a relationship with the provider of distiller’s grains.

“Make sure they are willing to make you aware if they are making any changes to the process,” he said.

Data is being developed by MacDonald and other researchers concerning the effects of changes in the distiller’s grain processing.

“The more they understand what goes on in that ethanol plant, the better chance they’ll have of accurately valuing the product,” he said. “Clearly the most important question is what cereal grain is being used. But they also need to know about control measures for things like sulfur content and are the solubles being added back at a consistent rate.”

Source: Texas A&M University

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