

# Distillers' Grains for Range Cattle

11 a.m. session, Wednesday, Dec. 7, 2005

Presenter: Ivan Rush, University of Nebraska-Scottsbluff

RAPID CITY, SOUTH DAKOTA (Dec. 7, 2005) — The dramatic increase in corn ethanol production has led to increased availability of corn byproducts for use as cattle feed. They have gained popularity for use in finishing rations, but University of Nebraska beef specialist Ivan Rush told attendees of the 2005 Range Beef Cow Symposium that relatively high protein, energy and phosphorus values make corn byproducts ideal range supplements.

“Because the starch has been removed (in ethanol production) it doesn’t lower forage digestibility, as is the case with grain supplements,” Rush explained. “So corn byproducts make an excellent supplement for cows on low-quality forage diets.”

Rush said the two primary types of corn-milling processes yield quite different products. The byproduct of the ethanol industry’s dry-milling process is distillers’ grains. The less common wet-milling process produces corn syrup, oil and starch, with corn gluten feed as the byproduct.

The process differences make corn gluten feed variable among plants and by season. Therefore, Rush warned, it is important to evaluate product analysis prior to purchase and feeding.

In general, about one-third of the dry matter of corn remains as feed products after the starch has been removed for alcohol production, Rush explained. In other words, corn is about two-thirds starch and nearly all of that is removed. The nutrient values for protein, fat and minerals are tripled in the remaining distillers’ grains. More nutrients are extracted during wet milling, so corn gluten feed is usually lower in energy and protein than distillers’ grains.

Rush called distillers’ grains an excellent source of supplemental energy or supplemental protein. An added advantage is that the product is often very competitively priced.

A disadvantage is that the dried product comes from the plant in meal form or as a small, soft pellet, Rush said. Feeding these on the ground to cows results in some waste. It is difficult to formulate a quality range cube without adding other ingredients such as sunflower meal or wheat midds, which increases the cost.



**Ivan Rush of the University of Nebraska-Scottsbluff described differences between the ethanol industry’s dry-milling and wet-milling processes and the resulting corn byproducts.**  
[PHOTO BY LYNN GORDON]

“When buying as a commodity, the price generally runs from \$110 to \$130 per ton — higher if bagged as a cube. There is considerable variation in price,” Rush said. “It’s an excellent feed for some, but it won’t fit everybody. Just make sure you check the nutrient composition and make good decisions regarding the use of any corn byproducts.”

— by Troy Smith, field editor, Angus Productions Inc.  
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