Feeding Value of Wet Sorghum Distillers Grains for Growing and Finishing Beef Cattle

Ethanol production from cereal grains can generate a variety of potential cattle feeds, depending on the presence of kernel fractionation that may occur before starch digestion by yeast. The most common feeds produced include the flowable liquid known as condensed distillers solubles and wet or dry distillers grains. The vast majority of grain-derived ethanol is produced from corn, but sorghum grain is commonly either blended with corn before use or used as the sole grain for ethanol production in the southern High Plains.

Wet distillers grains represent a unique feed ingredient for cattle feedlots in the southern High Plains that possesses novel chemical and physical attributes, compared to other feed ingredients historically used in the region. Precise estimates of the nutritive value and practical implications of feeding corn and sorghum wet distillers grains to growing and finishing cattle in the southern High Plains are needed to allow cattle feeders to accurately assess the economic implications of feeding wet distillers grains.

Process
- Quantify the influence of feeding wet corn and sorghum distillers grains on growth performance and carcass merit of pens of cattle reflecting the types of cattle fed in the southern High Plains.
- Assess the nutritive profile and physical characteristics of wet corn and sorghum distillers grains.
- Evaluate the influence of feeding wet corn and sorghum distillers grains on nutrient excretion and fertilizer value of manure.

Outcomes
- Two experiments have been conducted involving 800 cattle in 80 pens. Yearling heifers and steer calves fed 15% of ration dry matter as wet sorghum distillers grains had similar feed conversion efficiency as cattle not fed sorghum distillers grains.
- The net energy value of wet sorghum distillers grains based on cattle performance was approximately equal to that of dry-rolled sorghum grain.
- Replacing steam-flaked corn with wet sorghum distillers grains was projected to result in needing to transport 23% more feed to cattle due to changes in ration moisture and feed consumption.

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