

Feeding Ethanol By-Products: Experiences of Porter Farms

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Rapid expansion of ethanol production in the U.S. is raising an array of issues and concerns. A primary concern centers on the impact of higher corn prices on livestock production. Feed costs are known to be a significant production factor for all livestock producers. Increasingly, livestock producers are attempting to mitigate the impact of higher corn prices by incorporating alternative ingredients in their rations. In particular, feeding of distillers grains produced as a by-product of ethanol processing are increasingly being used. Use of new feed inputs comes with its own set of issues and concerns. The purpose of this note is to present insights shared by a cattle feedlot operator with over ten years of experience with ethanol by-products.

Porter Farms and History of By-Product Use

Richard Porter operates a feedlot (Porter Farms) in Reading, KS (approximately 100 miles southwest of Kansas City, MO). Porter has been feeding ethanol by-products in his feedlot, which markets approximately 8,000 head per year, since 1995. Porter views his use of by-products as a success and graciously was willing to share his experiences and opinions for the benefit of fellow producers.

Porter Farms has been incorporating modified wet distillers grains with solubles (MWDGS) (approximately 60% dry matter) in its feedlot rations since 1995. Porter obtains MWDGS from a single ethanol plant in Iowa. A typical feed ration consists of 60% corn, 20% MWDGS, 17% silage, and 3% mineral.

Storage/Logistics

Porter Farms receives approximately 26 tons of MWDGS product delivered rather routinely on Mondays. Porter notes that accepting product on Mondays and in “full-truck” increments are appealing to his sourcing ethanol plant. Given his indifference to date of reception, Porter believes that by accommodating the ethanol plant he has developed a stronger and fruitful relationship.

Porter claims that storage of up to one month is often feasible of the MWDGS product. Experience also suggests that MWDGS should be stored in isolation if at all possible. This advice stems from Porter’s observations that contact with alternative feeds appears to accelerate decay of the MWDGS product.

Nutrient Composition

Porter believes that consistency in nutritional content of the MWDGS product he has been feeding has significantly improved during the past ten years. He does not receive nutritional profiles from the ethanol plant with each delivered load. In light of this, Porter conducts his own nutritional test approximately every six months.

Manure Management

The pasture managed by Porter Farms (approximately 8,000 acres) is primarily brome and fescue. These grasses utilize manure rich in phosphorous. As such, manure management associated with inclusion of MWDGS product in feedlot diets as resulted in

a reduction in commercial phosphorous purchases. In short, inclusion of MWDGS has led Porter Farms to more intensely use spreader trucks to better capitalize on the nutritional makeup of resulting cattle manure.

Relationships and Pricing

The inclusion rate of MWDGS, while typically being 20%, has varied from 0% to 40% depending upon pricing and supply factors. When the supplying ethanol plant experiences a drastic change (either shortages or surpluses), Porter Farms has been flexible in the quantity of MWDGS it takes delivery of to accommodate the ethanol plant.

The ethanol plant Porter Farms receives MWDGS from offers cash and contract pricing alternatives to livestock operations. Contracts are available in 3, 6, 9, and 12 month increments with specified quantities and prices. The prices are specified to be a set percentage of a specified cash corn price series, on a dry matter, per pound basis. Porter has typically used 12 month contracts. Noted incentives for using the longer contract include improvements in price risk management opportunities and better production scheduling.

Bottom Line

Producers are increasingly adopting and/or evaluating ethanol by-products in livestock rations. This short article presents several observations by a fellow producer with experience feeding these by-products. Each livestock operation is likely to face unique circumstances and hence varying economic viability regarding adoption of alternative feed ingredients. These livestock producers can utilize the information presented in this article, coupled with their own situation and opportunities, to improve feeding decisions.