

Public Abstract

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Evaluation of Soy Hulls as the Principal Ingredient in a Beef Cattle Receiving Ration

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Adjusting cattle to grain based diets from predominately forage diets remains one of the production problems facing beef cattle producers. When cattle are introduced to grain based diets they have a tendency to experience health problems such as acidosis, founder, and bloat. This study used statistical and economic analysis methods to evaluate soy hulls as the principal ingredient in a beef cattle receiving ration.

Results showed that weight and average daily gain of beef steers fed 0 % soy hulls and 25 % soy hulls were statistically similar. Animals fed 0 % soy hulls yielded slightly higher net benefits due to lower cost of purchasing the animals. Feed costs for animals fed 0 % soy hulls were slightly higher than those fed 25 % soy hulls. Net benefits per pound of gain showed 25 % soy hull as the most economic ration. Rations containing 50 % soy hulls or 75 % soy hulls performed poorly.

This study has demonstrated that a ration containing 25 % soy hulls is a potential alternative choice in the formulation of beef cattle receiving rations. Although its effect in the feedlot phase is unknown, the implications of the study includes: First, producers will have greater flexibility of choosing ingredients for formulating receiving rations. Second, demand for soy hulls may increase and this could also increase its price. Thus, soy hulls could become a driver of farm-gate soybean prices received by farmers.