

FORAGE RESEARCH UPDATES

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NORTH DAKOTA

Dried Distiller's Grains as Forage Supplement for Beef Cows

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Now is the time to begin planning for winter-feeding and beef cow herd supplementation. An option to consider is dried distiller's grains (DDG), a byproduct of the ethanol industry. During ethanol production, corn starch is fermented to produce ethanol. The remaining byproduct, DDG, is relatively high in protein and fat and is an excellent nutrient source for beef cattle.

As a protein supplement, DDG can be included at 10-15% of the diet. When used as a source of energy in the diet, DDG can be fed at higher levels. Because of the fat content, however, distiller's grains should be limited to less than 30% of diet dry matter (DM). DDG is usually priced competitively, which makes it attractive as a supplement for low-quality forage diets.

Table 1. Nutrient analysis of dried distillers grains (DDG), corn, and soybean meal.

Item ^a	DDG	Corn	Soybean Meal
CP, % DM	30.4	9.8	49.9
TDN, %	90.0	90.0	84
NE _m , Mcal/lb	0.99	1.02	0.94
NE _g , Mcal/lb	0.68	0.70	0.64
Fat, %	10.7	4.0	1.6
NDF, %	46.0	10.8	14.9
Calcium, %	0.26	0.03	0.40
Phosphorus, %	0.83	0.32	0.71

^aCP, crude protein; TDN, total digestible nutrients; NE_m, net energy for maintenance; NE_g, net energy for gain; NDF, neutral detergent fiber.