

Effects on how corn distiller grains with soluble (DDGS) as a replacement for soybean meal (SBM) in a Boer goat diet can improve profitability for producers by saving \$0.17 per pound of feed

Introduction

- Corn distiller grains with soluble (DDGS) are a inexpensive feed product compared to soybean meal (SBM)
- Feeding DDGS can meet all the nutrient requirements relating to growth performance, diet digestibility, and carcass traits in Boer goats
- With evaluating these traits, the outcomes can influence profitability for feed producers

Objection

Assessing the ability of corn dried distiller grains with soluble (DDGS) as a replacement for soybean meal (SBM) in a Boer goat diet

Material & Methods

- Forty-Eight Boer goats were fed a DDGS diet that replaced the common SBM diet through 4 separate treatments (Exp. 1 to 4)
 - Exp. 1: contained 0% DDGS (none)
 - Exp. 2: 33% replace SBM with DDGS
 - Exp. 3: 66% replaced SBM with DDGS
 - Exp. 4: 100% DDGS (full)
- Each treatment had 4 dedicated pens (16 pens total) with 3 goats in each pen. These goats were fed twice a day along with weighing how much was added to the feeder each time. Each individual goat was weighed and each pens feeder was weighed weekly (d 0, d 7, d 14, d 21, d 28, d 35, d 42, d 46, d 47)
- On d 47, the lowest and highest weight goats were removed out of each corresponding pen and were taken for carcass evaluations on d 48
- Evaluation of growth performance, diet digestibility, carcass traits, and how these outcomes influence profitability for feed purchases
 - The strongest comparisons were between Exp. 1 (0% DDGS replacement) and Exp. 4 (100% DDGS replacement)
- Calculated how Exp. 4 is \$0.17 cheaper per pound than Exp. 1

A.H. Budinas*, A.R. Crane, J.M. Lattimer, C.K. Jones Kansas State University, Manhattan, Kansas



Summary & Conclusion

- Comparing Exp.4 and Exp.1, the carcass traits, growth performance, and feed efficiency had ideal results with acute change in numbers, indicating DDGS lacked the opportunity to cause unnecessary weight gain or loss in goats.
- Exp. 4 showed no significant negative differences in the goats compared to the usual soybean meal diet in Exp. 1. When balancing Exp. 4's diet distinguished from Exp. 1; there is a
- \$56.23/ton saving in formulating the feed; \$0.17/lbs. basis For this experiment, we took the \$0.17 times the average weight for
- all the goats per treatment; saving \$1.76 per goat if you fully replace SBM with DDGS
- Furthermore, if a producer had 500 head of goats, they would save \$881.45 on feeding with the 100% DDGS diet

Acknowledgments

This brand new study was funded by the Kansas Corn Commission. Also, we would like to thank Kansas State University's Sheep and Goat Unit, managed by Joseph Hubbard.

100%



Results



Overall savings if SBM is replaced by DDGS in **Boer goat diet**

Per lbs. of feed	
Per goat in this experiment	
5,000 goat feedlots	

500 goat feedlots



