

Effects of Replacing Soy Bean Meal with Dried Distillers Grain with solubles in a Boar Goat Diet

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P.L Lewis*, A.R. Crane, J.M. Lattimer, and C.K Jones

Department of Animal Sciences and Industry, Kansas State University, Manhattan

Introduction

- The goat industry in the U.S. has risen 211% in the last fifteen years and globally 34% in the last 10 years.
- Distillers grains is an inexpensive and highly available feed alternative derived from the by product of ethanol production.
- Replacing soybean meal with distillers grain with solubles can save money on a cost/lb. basis.

Objective

• To evaluate the efficacy of different level of distillers grains with solubles as a replacement for soy bean meal in a Boer goat diet.

Experimental Procedures

- In a 47d experiment, forty-eight Boer goat kids around the same age were randomly assigned to sixteen pens with three goats a pen.
- Four treatment options of soy bean meal replaced by 0% DDGS, 33% DDGS, 66%, and 100% DDGS were randomly assigned. A fourteen day step up ration was utilized to prevent any palatability and digestive complications.
- Goat weights and feeder weights were collected every 7 days for a 47d period.
- On day 47 with the conclusion of the experiment, two goat kids were selected randomly to go to slaughter for carcass parameters (Hot carcass weight, loin eye area, loin eye depth, back fat, body wall thickness).

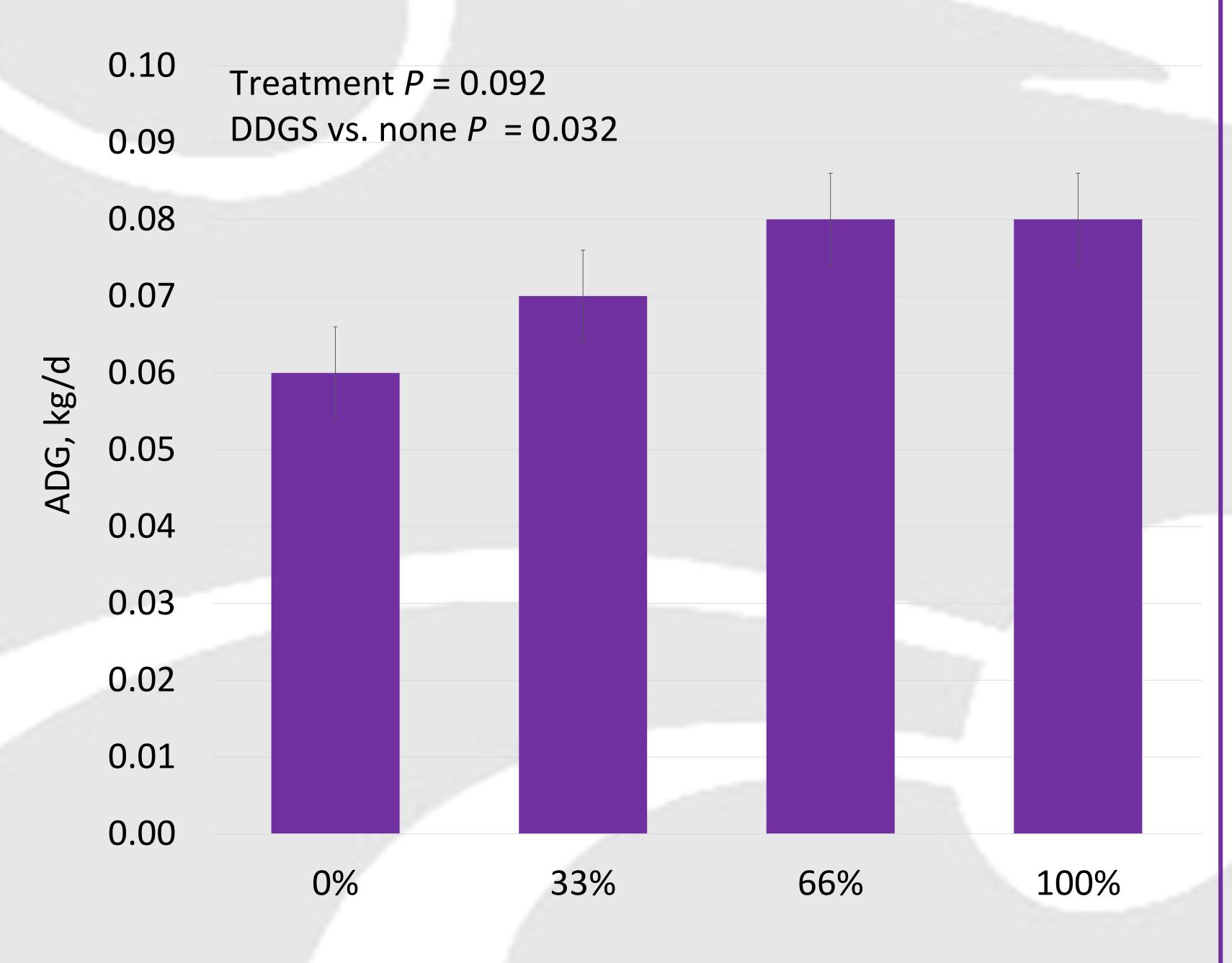
Conclusions and Summary

- The goats that were fed 66% DDGS and 100% DDGS had greater feed efficiency then those on the diets of 33% DDGS or 0%.
- Carcass traits collected yielded no statistical differences (*p-value* 0.478).
- Average daily gain yielded no statistically significant results (*p-value* 0.092) across treatments.
- goats can effectively be feed a diet of up to 100% DDGS with solubles as a replacement for soy bean meal with no notable statistical differences in the carcass traits collected.

Results

ADG

Impact of DDGS vs. Soybean Meal on Boer goat ADG



Level of DDGS at expense of SBM

Feed Efficiency

Impact of DDGS vs. Soybean Meal on Boer goat G:F

