

# Effects of Replacing Soybean Meal with Dried Distiller's Grain with Solubles on Boer Goat Performance and Carcass Characteristics.

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## Introduction

- There is very little research on feeding goats dried distiller's grains with solubles (DDGS).
- Feeding DDGS instead of the traditional soybean meal as a protein source offers significant cost savings to producers.
- DDGS are a by-product of the ethanol industry and are widely available.
- With the large increase in the goat herd across the globe, being able to feed DDGS would greatly help producers.

## Objective

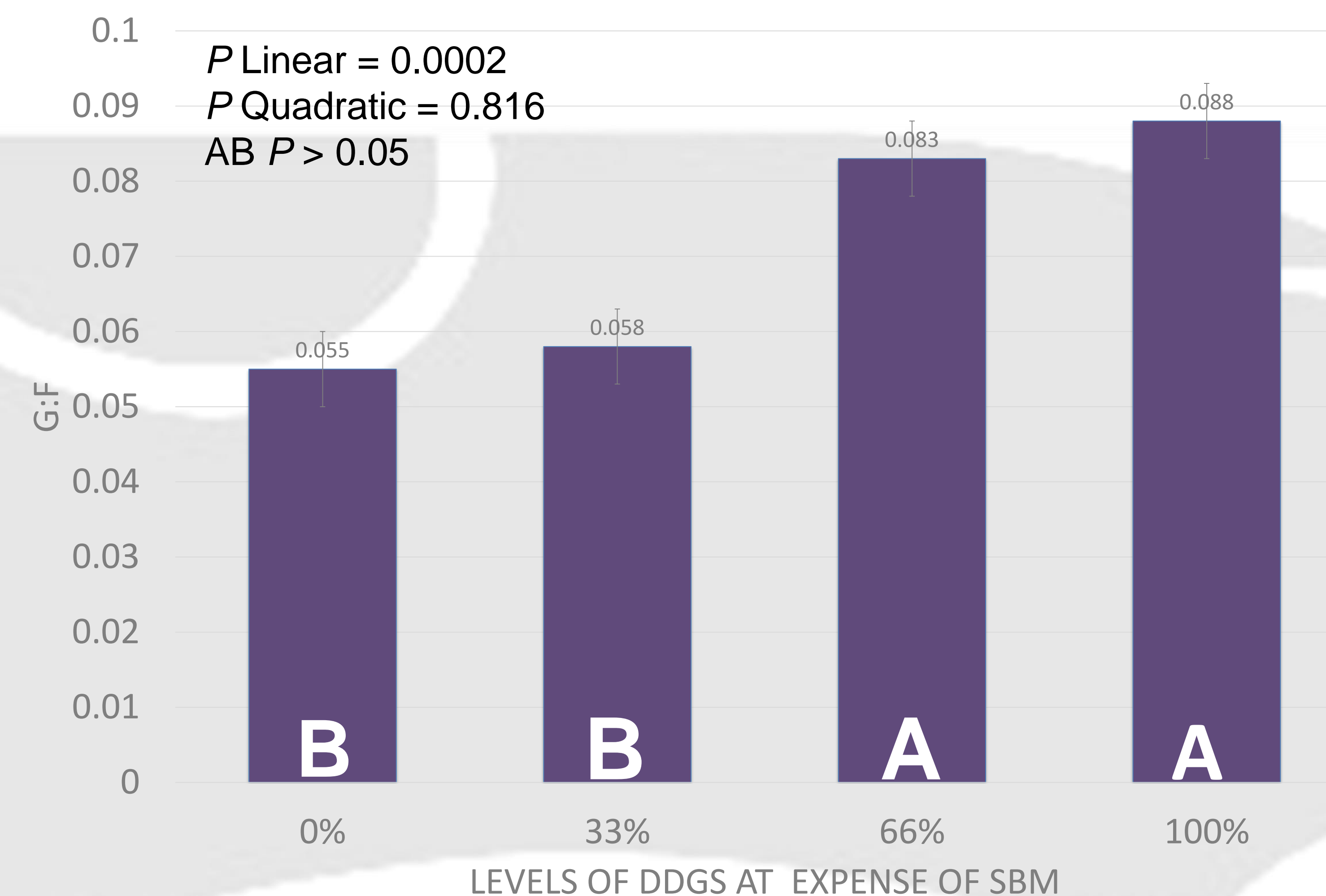
- To evaluate the efficacy of DDGS as a replacement for SBM in a Boer goat diet.

## Experimental Procedures

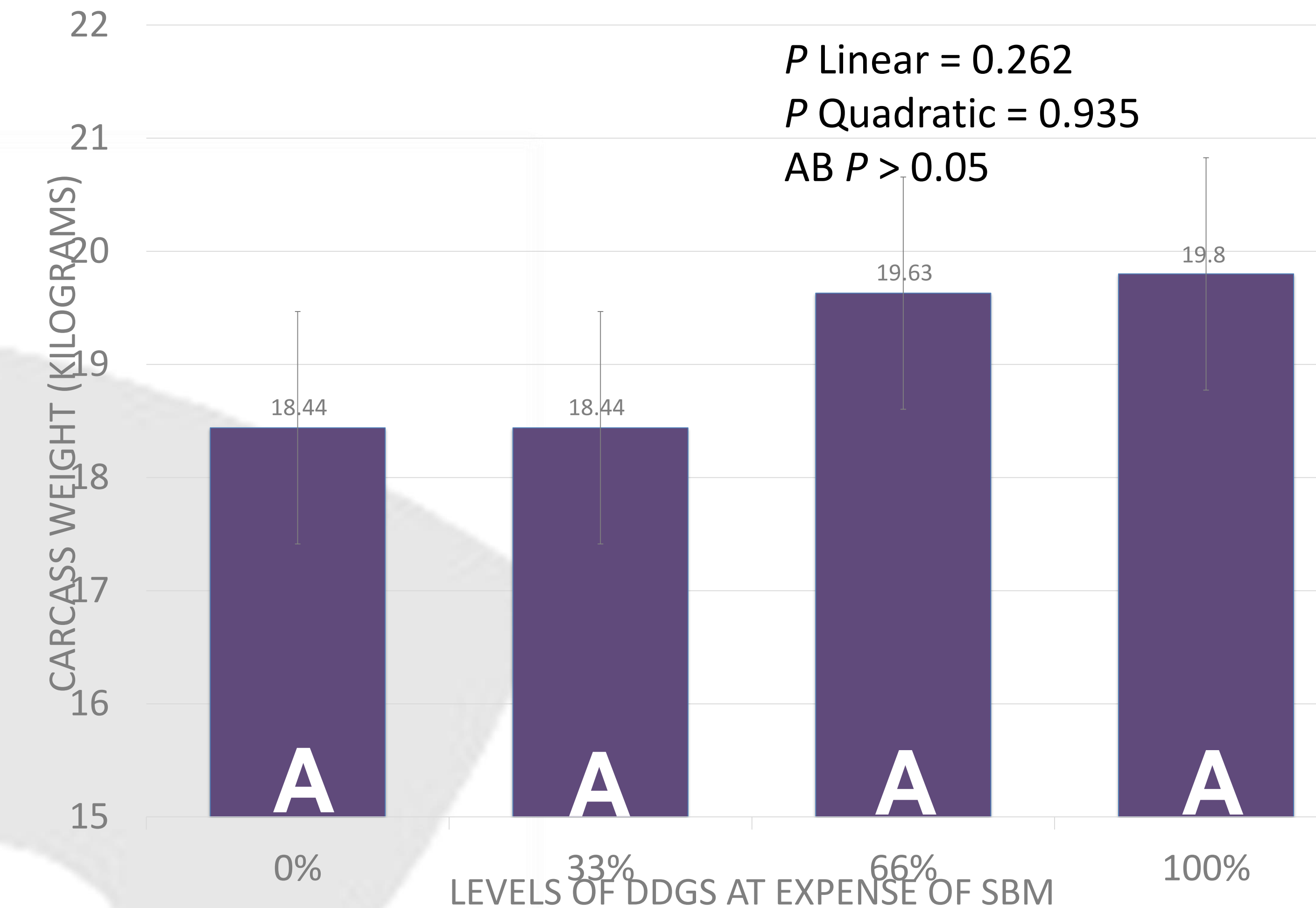
- Forty-eight meat goat kids were used in a completely randomized design.
- There were 3 kids per pen (4 pens per treatment) and were housed at the KSU Sheep and Meat Goat Center
- Kids housed allotted into one of four experimental diets: 1.) 0% SBM replaced by DDGS; 2.) 33% SBM replaced by DDGS; 3.) 66% SBM replaced by DDGS; and 4.) 100% SBM replaced by DDGS.
- All diets were pelleted containing roughage, so that no supplemental forage was needed.
- Diets were fed for 47 days, with a 14 day step up period prior to beginning the experiment and data collection.
- Weights were taken every week on goats to measure ADG, ADFI, and G:F and feeder weights were taken to measure ADFI and G:F.
- At the completion of the experiment, two goats per pen were harvested at a USDA inspected slaughter facility with hot carcass weight, yield, loin eye area, and fat depth at the 13<sup>th</sup> rib measured.

## Experimental Period Results

### Gain:Feed D 0-47



### Hot Carcass Weight



## Conclusions

- There was no statistical difference in hot carcass weight, carcass yield, loin eye area, loin eye depth, backfat depth, body wall thickness, body weight, or ADFI. Goats fed DDGS had great ( $P < 0.05$ ) G:F than those fed only SBM. While not significant ( $P > 0.10$ ) goats fed DDGS had a nearly 1 kg. greater HCW than those fed the control diet, which could lead to greater profit margins for producers. It can be concluded that replacing DDGS for SBM in a Boer goat diet does not affect performance or carcass characteristics and could potentially lead to higher feed conversion rates and more profitability for producers.