

# Influence of dried distiller grains with solubles in replacement of soybean meal in Boer goat diets

C.A. Sardella, A.R. Crane, J.M. Lattimer, and C.K. Jones



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

## Introduction

- Dried distiller grains with solubles are a co product from the ethanol industry
- Little to no research have been done with DDGS and goats
- Since the goat population has increased, many producer have started to look for new and cheaper feed alternatives such as DDGS

## Objective

To evaluate the effects of dried distillers grain with solubles in replacement of feeding soybean meal to Boer goats

## Methods

- Forty-eight meat goat kids (approximately 70 d of age) were used in completely randomized design
- All goats weighed the same in the beginning for all treatments
- All goats got weighed and vaccinated at beginning of step up rations
- 3 kids per pen (4 pens per treatment)



- Diets got fed for 47 days
- Before starting the experiment, goats were fed a 14d step up period
- All diets got made at KSU feed mill and with same DDGS to ensure consistent diets
- Every week we calculated average daily gain, average daily feed intake, and feed efficiency



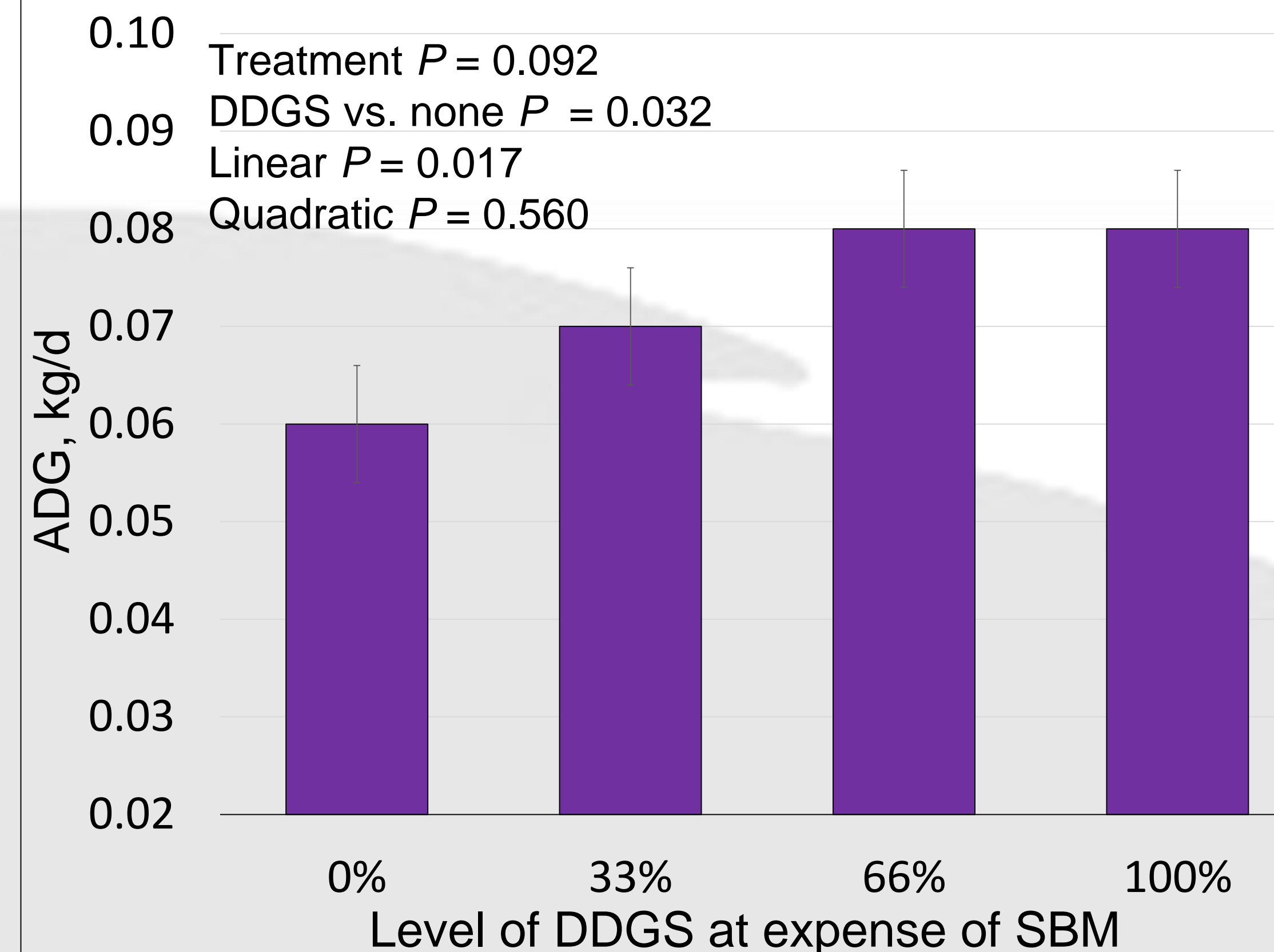
- Four experimental diets
  - 0% SBM replaced by DDGS
  - 33% SBM replaced by DDGS
  - 66% SBM replaced by DDGS
  - 100% SBM replaced by DDGS



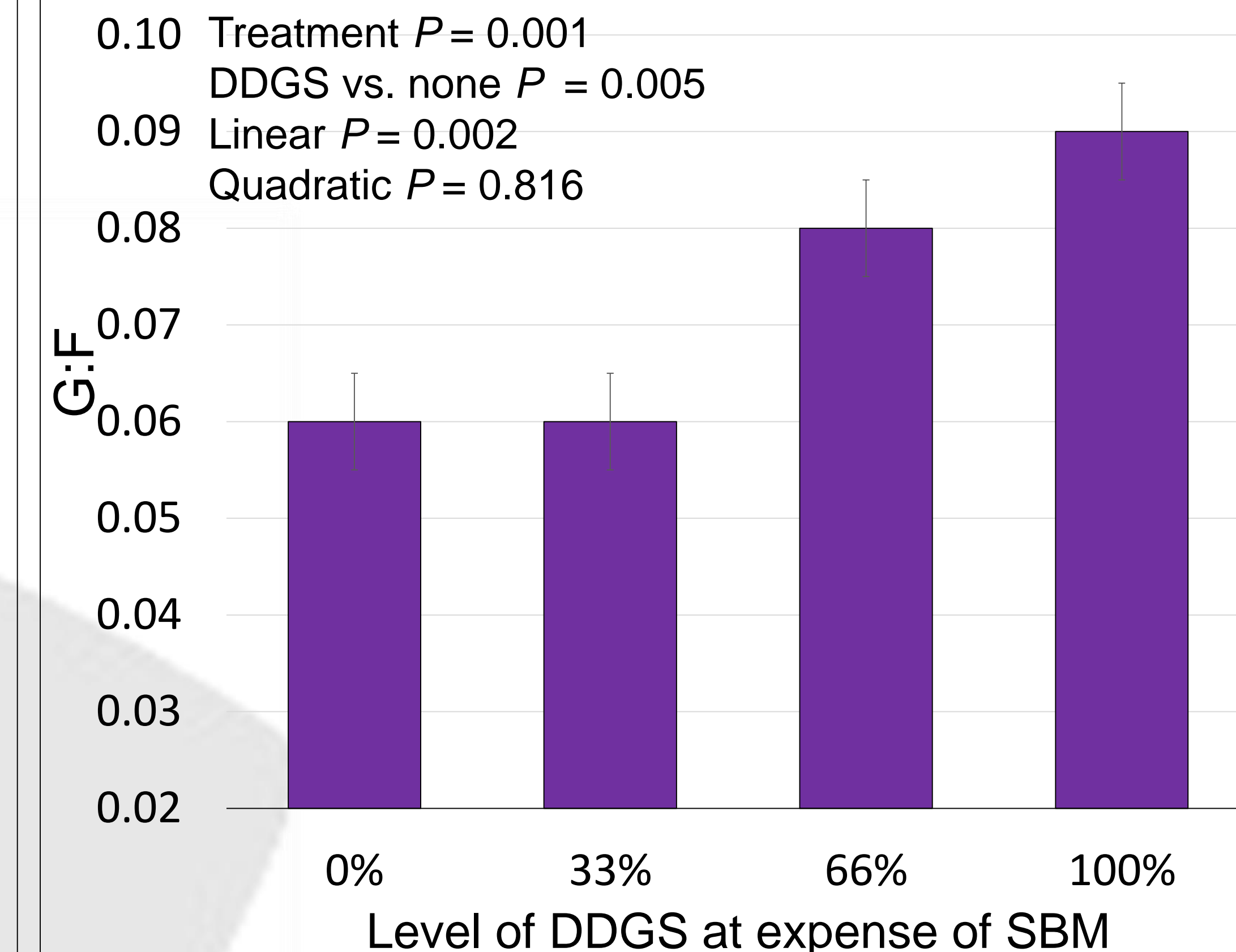
- Every two kids per pen were slaughtered at completion of experiment to collect our carcass data
  - Hot carcass weight
  - Yield
  - Loin eye area
  - Fat depth at 13<sup>th</sup> rib
- Fat samples got analysis of fatty acid profiles

## Results

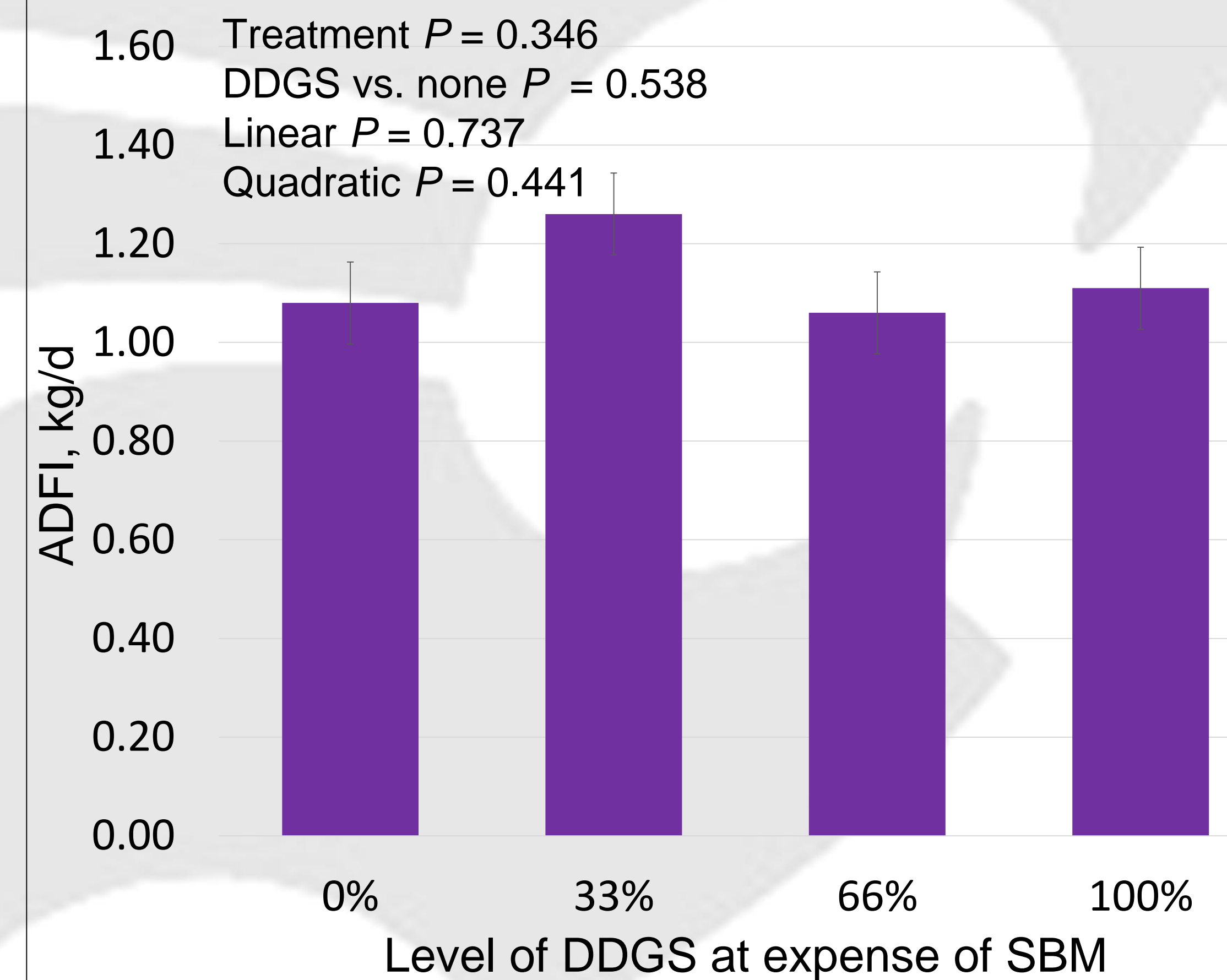
### Effect of DDGS on Boer goat ADG



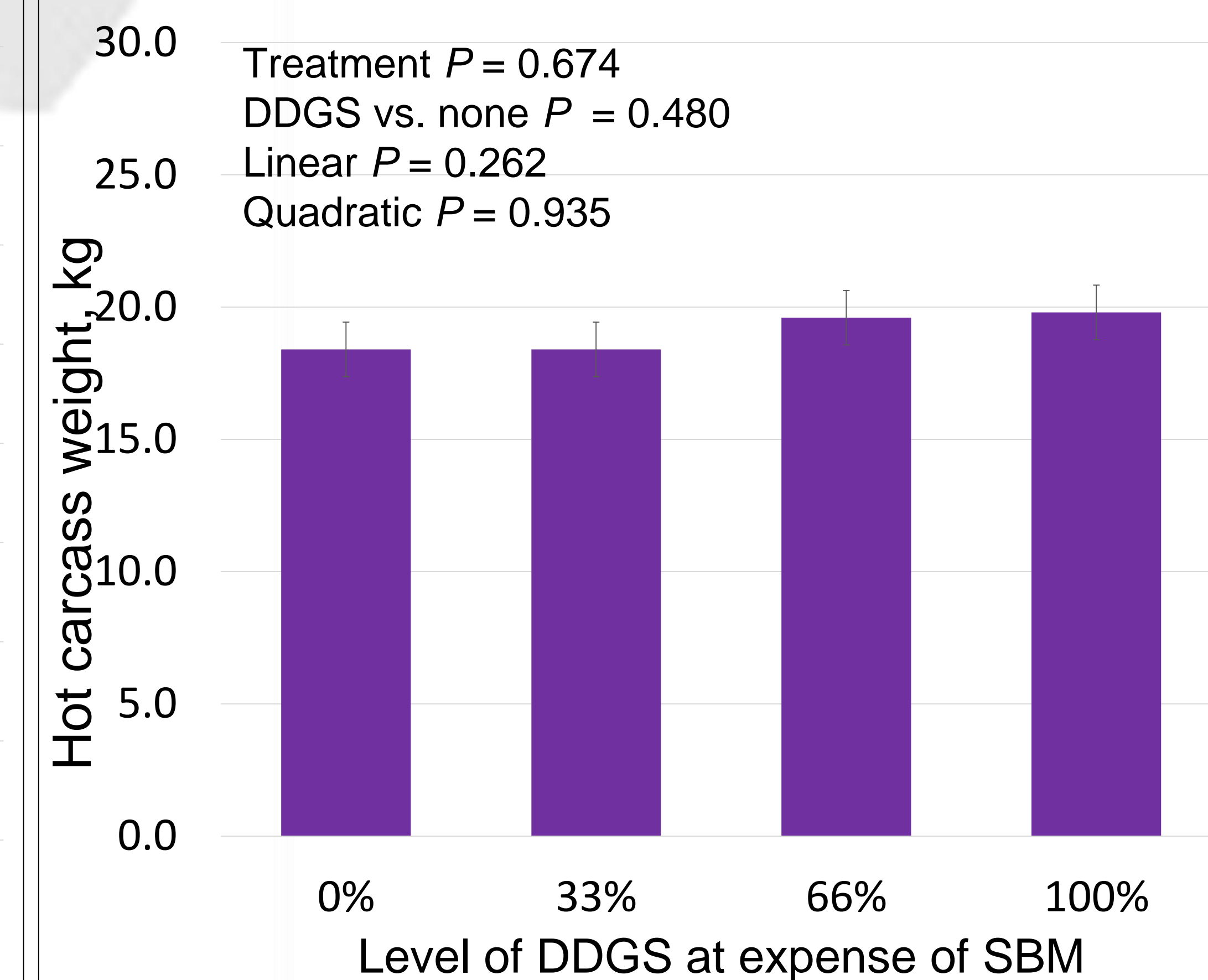
### Effect of DDGS on Boer goat G:F



### Effect of DDGS Boer goat ADFI



### Effect of DDGS Boer goat HCW



## Summary and Conclusion

- No effect on Goat's body weight, average daily feed intake, or carcass data
- There is a significant difference in the 0% DDGS vs 100% DDGS when calculated for average daily gain and feed efficiency
- This diet can cut your expense per ton on feed by \$27.27/ton

## Acknowledgements



This project received funding from the Kansas Corn Commission. We also gratefully acknowledge Joseph Hubbard and the employees at the KSU Sheep and Goat Center for their assistance.