

# **Growth performance of nursery pigs fed diets containing increasing levels of high-protein corn distillers dried grains (HP-DDG)**

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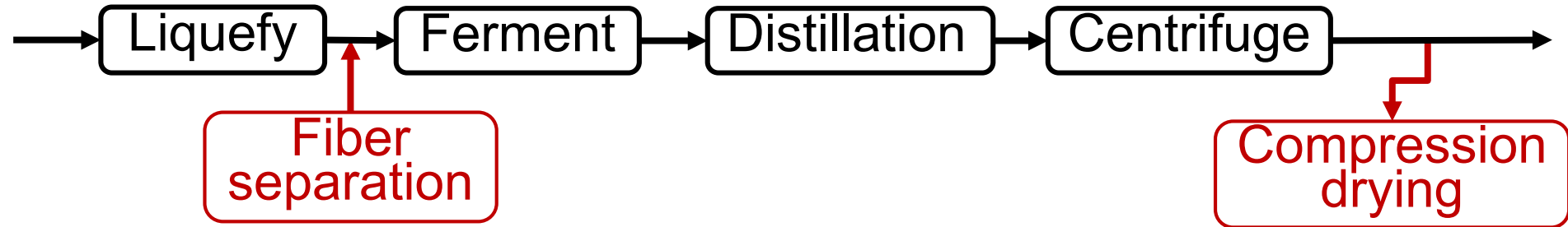


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# Introduction

- New technologies to improve production efficiency and generate novel co-products
  - High protein DDG



- Espinosa et al. (2018) suggested greater amino acid and energy digestibility in HP-DDG than DDGS
- Potential use in nursery pig diets?

# Objectives

To determine the optimal dietary inclusion rate of a high protein distillers dried grains source in phase 2 and 3 nursery diets based on pig growth performance



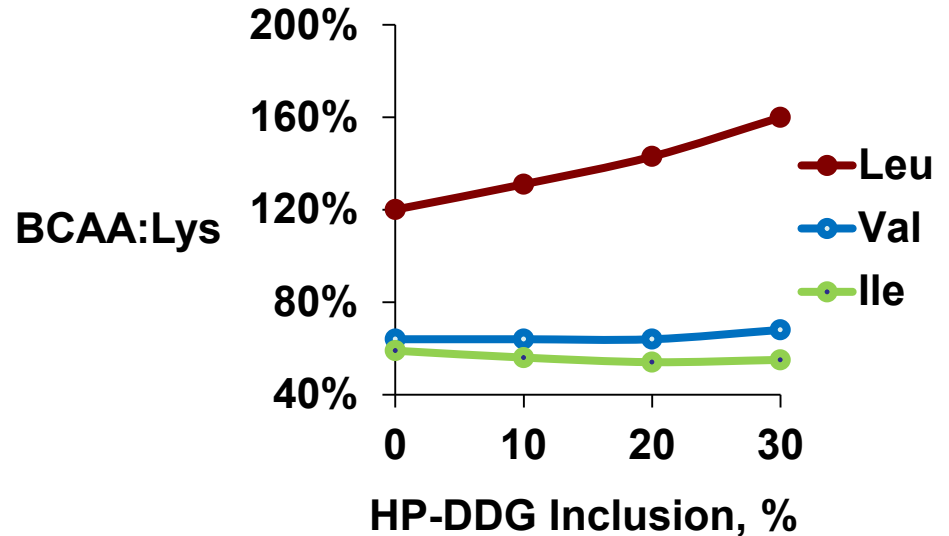
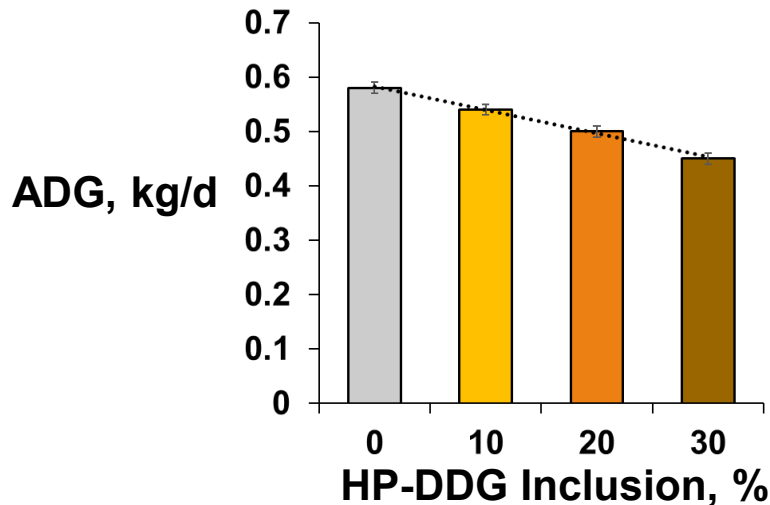
# Materials and Methods

- Mixed sex pigs (n = 360; Body weight =  $6.79 \pm 0.02$  kg)
- Randomized complete block design
  - 40 pens, 9 pigs/pen, 10 pens/trt
  - Four dietary treatments (0, 10, 20, 30% HP-DDG)
- Diets contained the same ME and SID Lys, Met, Thr, Trp content

Phase 1 (d 0-7)	Phase 2 (d 7-21)	Phase 3 (d 21-42)
Common diet	0	0
	10%	10%
	20%	20%
	30%	30%

# Results

- Linear reduction in ADG, ADFI, and G:F
- Possibly due to branched-chain amino acid (BCAA ) antagonism



# Conclusions

Increasing dietary levels of HP-DDG up to 30% caused a linear decrease in ADG, ADFI, and G:F, which is likely due to excess dietary Leu reducing Val and Ile utilization