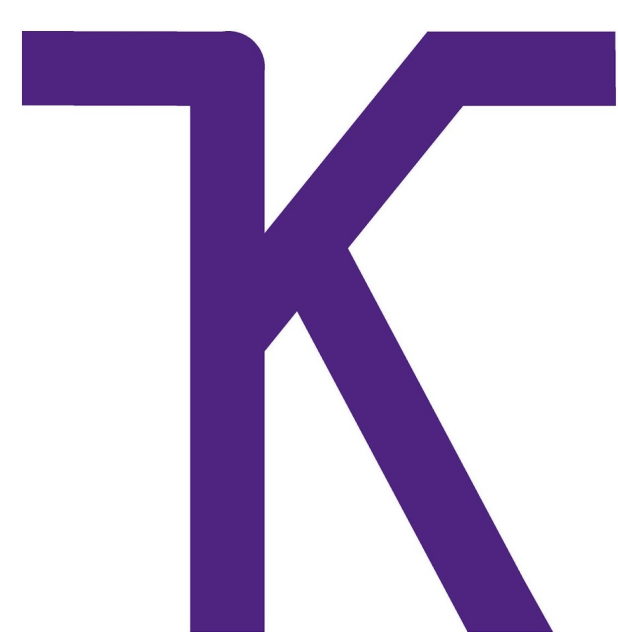




Effects of Varying Protein Source and Ammonium Chloride Inclusion on Feedlot Goat Growth and Carcass

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Introduction

- Global goat population has risen 34% in the last 10 years
- This project is a continuation off of last Spring’s project
- There are no known peer-reviewed DDGS studies in goats
- Soybean meal has 28% bypass protein, DDGS has 62% bypass protein, and SoyPlus has 60% bypass protein.

Objective

- To evaluate the impact of varying protein and acid source on feedlot goat growth and carcass traits.

Experimental Procedures

- 75 goats, 3 goats assigned randomly per pen, 5 pens per treatment. After the 3 week step up period the goats will be switched to their respective treatments. There were 5 treatments, and they consisted of:
 - 1) SBM and NH4Cl
 - 2) DDGS and NH4Cl
 - 3) SoyPlus and NH4Cl
 - 4) SBM and SoyChlor
 - 5) SoyPlus and SoyChlor
- The goats were weighed at the beginning of treatment and were weighed every Friday after that.
- The self-feeders and feed added were weighed every Friday.
- Fresh water was added every day during the experiment.
- BW, ADG, ADFI, G:F were calculated every week
- Carcass traits were collected at the end of the experiment.

Conclusions

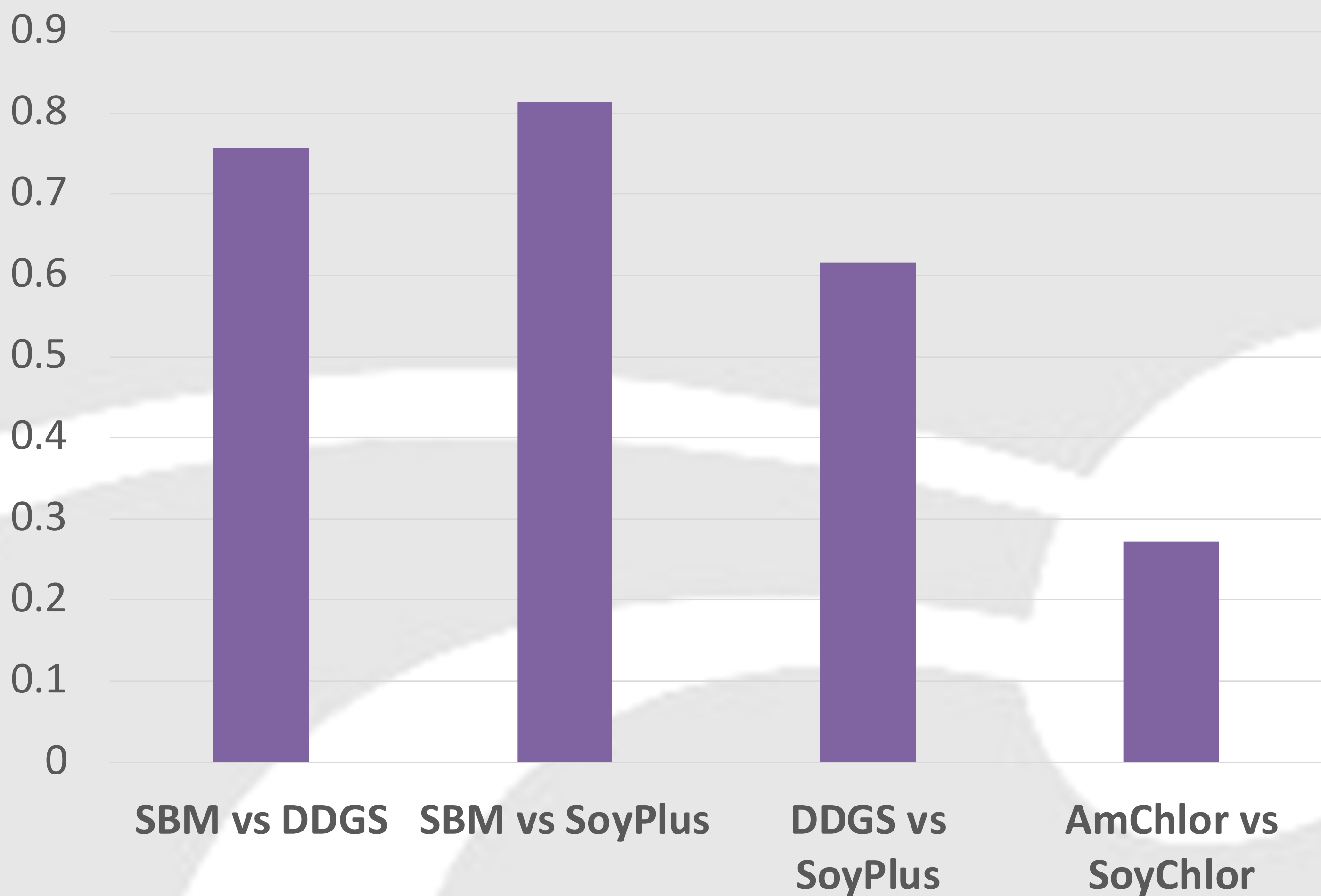
- Overall there was no significant ($P>0.05$) difference between goat growth and carcass traits between the different treatments.

Acknowledgements

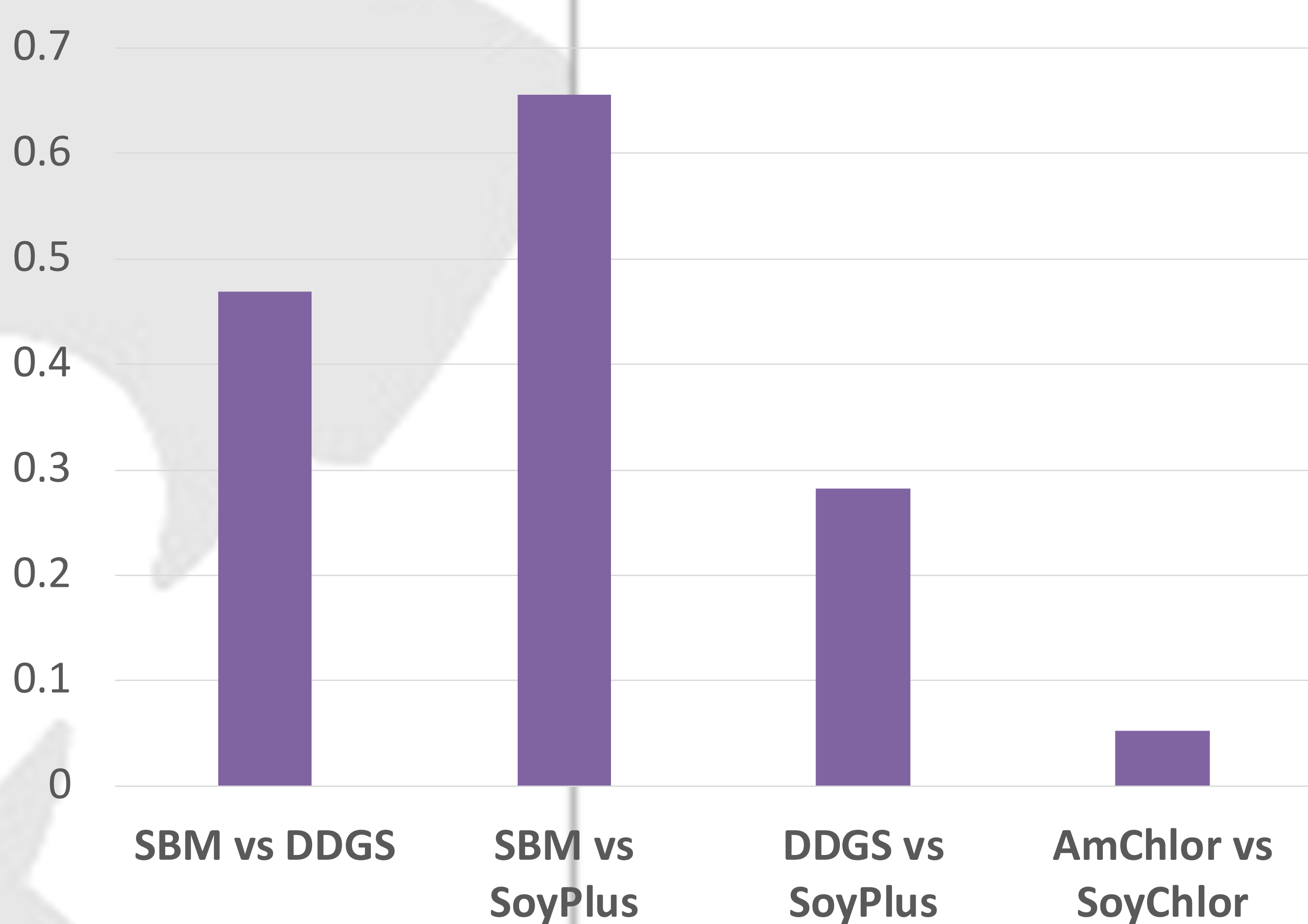
This project received funding from Kansas Corn Commission. We also acknowledge Joe Hubbard and the employees at the KSU Sheep and Meat Goat Center.

Experimental Period Results

D 28-35 Average Daily Gain



D 0-42 Gain: Feed



Carcass Trait Results

Protein Source	SBM	DDGS	SoyPlus	SBM	SoyPlus						
Chloride Source	AmCl	AmCl	AmCl	SoyChlor	SoyChlor	SEM	Treatment	SBM Vs DDGS	SBM Vs SoyPlus	DDGS Vs SoyPlus	AmCl Vs SoyChlor
Hot Carcass weight, kg	15.6	14.5	13.1	16.4	14.7	1.09	0.264	0.252	0.058	0.672	0.231
Carcass yield, %	50.7	49.4	48.3	50.7	49.6	1.11	0.519	0.344	0.122	0.742	0.231
Loin eye area, cm2	10.8 ^a	9.4 ^{ab}	9.5 ^{ab}	11.4 ^a	8.8 ^b	0.66	0.046	0.040	0.005	0.781	0.778
Loin area depth, cm	2.6	2.4	2.4	2.6	2.3	0.11	0.135	0.120	0.021	0.719	0.778
Backfat depth, mm	0.9	1.2	1.0	1.1	1.2	0.17	0.710	0.379	0.513	0.727	0.461
Body wall thickness, cm	1.5	1.6	1.5	1.7	1.5	0.13	0.756	0.928	0.515	0.534	0.437