

Weanling Pig Field Trial

Introduction

In a 3-week nursery trial conducted by a Midwest feed company, DPS 50RD was evaluated to determine its effectiveness in pigs weaned at 16 to 21 days of age. Pigs fed DPS 50RD had significantly better weight gain and feed efficiency than the pigs fed Select Menhaden fishmeal, days 12 to 22 and 0 to 22 post weaning. There were no differences in feed intake in pigs fed either DPS 50RD or fishmeal. These results suggest an improvement in gut health in pigs fed DPS 50RD.

Materials and Methods

The trial used a 2-room, mechanically ventilated nursery barn. A total of 32 pens were used with approximately 25 pigs/pen. Since two pens shared one feeder, paired pens utilizing the same feeder served as the experimental unit. Therefore, 16 pens were assigned to each treatment for a total of 8 replications/treatment. A total of 800 PIC pigs weaned at 16 to 21 days were delivered to the nursery at weaning. The pigs were blocked within each room by gender, average weight in and pig numbers/pen.

Each trial lasted five weeks: first two weeks on separate treatments and last three weeks on common diets. Even when the birds were on the common diets, the data collected was maintained separately for each treatment. The two Chick Booster Feeds were formulated to be isocaloric (similar in metabolizable energy) and isonitrogenous (similar in crude protein content) and similar in all other nutrients (individual amino acids, etc.).

Materials and Methods

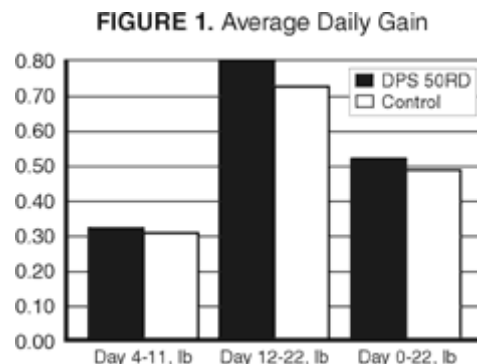
1. Days 0-4, post-weaning — Common S.E.W. diet, 1.7% lysine
2. Days 5-11, post-weaning, the following diets were fed:
 - Control diet - Feed company's standard Transition diet
 - DPS 50 diet - 3.0% DPS 50RD included at the expense of Select Menhaden fishmeal and soybean meal
3. Days 12-22, post-weaning, the following diets were fed:
 - Control diet - Feed company's standard phase 2 diet
 - DPS 50 diet - 3.12% DPS 50RD included at the expense of Select Menhaden fishmeal and soybean meal

Data Analysis

Data were analyzed using the Statistix program, 2 treatments, 8 replications.

Results of the Experiment

Days 4-11, no significant differences in weight gain or feed intake were detected. However, an advantage in improved feed efficiency for the DPS 50RD fed pigs approached significance, ($P < .10$). Days 12-22, pigs fed DPS 50RD had significantly ($P < .01$) better weight gain and feed efficiency compared to the pigs fed fishmeal. Additionally, the pigs fed DPS 50RD had significantly ($P < .05$) better weight gain and feed efficiency, days 0-22, than the pigs fed fishmeal. No significant differences in feed intake were detected in any of the phases throughout the trial. The results of this trial suggest that the improvements in weight gain and feed efficiency were the result of improved intestinal health.



Average Daily Gain (Figure 1)			
	DPS® 50RD	Control	P-Value
Day 4-11, lb	0.33	0.31	
Day 12-22, lb	0.80	0.73	P<.01
Day 0-22, lb	0.52	0.49	P<.05

Feed to Gain Ratio (Figure 2)			
	DPS® 50RD	Control	P-Value
Day 4-11	1.48	1.57	P<.10
Day 12-22	1.39	1.48	P<.01
Day 0-22	1.43	1.51	P<.05

Average Feed Intake			
	DPS® 50RD	Control	P-Value
Day 4-11, lb	0.48	0.48	
Day 12-22, lb	1.11	1.08	
Day 0-22, lb	0.75	0.73	

