

Effects of including field peas in diets fed to weanling pigs

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Two experiments were conducted to measure effects of including field peas in diets fed to weanling pigs. Pigs that were weaned at 20 d and fed a common starter diet for 2 weeks post-weaning were used in both experiments. In Exp. 1, 120 pigs were randomly allotted to 5 treatments with 3 or 4 pigs per pen and 7 replicate pens per treatment. The control diet was based on corn (56.8%), soybean meal (16.0%), and extruded full fat soybeans (21.0%). Two additional diets were formulated by including 24.5 or 49.0% raw field peas in the control diet at the expense of corn and soybean meal. The last 2 diets were similar to these diets with the exception that 24.5 or 49.0% extruded field peas were used rather than raw field peas. All diets were provided on an ad libitum basis during 25 d. There were no differences among pigs fed the 5 treatment diets in ADG (574, 559, 548, 598, and 549 g/d), ADFI (1,013, 1,024, 962, 1,003, and 914 g/d) or G:F (0.57, 0.55, 0.58, 0.60, and 0.61 g/g). Experiment 2 used 168 pigs that were randomly allotted to 6 treatments with 4 pigs per pen and 7 replicate pens per treatment. A control diet containing corn (57.1%), soybean meal (27.0%), and dried whey (10.0%) was formulated. Five additional diets were formulated by including, 12, 24, 36, 48, or 60% field peas in this diet at the expense of corn and soybean meal. Pigs were fed experimental diets on an ad libitum basis during 4 wk and results showed that there were no differences in ADG, ADFI, or G:F among treatment groups (Table 1). It is concluded from these experiments that up to 60% raw field peas may be included in diets fed to pigs from 2 weeks post-weaning. Use of extruded field peas does not improve pig performance compared with raw field peas.

Table 1: Increasing concentrations of field peas in diets fed to weanling pigs (Exp. 2)

Field peas, %:	0	12	24	36	48	60	SEM	P-value	
								Linear	Quadratic
Initial wt, kg	8.94	8.92	8.92	8.92	8.95	8.94	0.729	0.99	0.98
ADFI, kg	0.930	0.933	0.944	0.913	0.884	0.915	0.058	0.61	0.97
ADG, kg	0.551	0.574	0.530	0.548	0.494	0.532	0.034	0.28	0.92
G:F, kg/kg	0.59	0.61	0.56	0.61	0.56	0.59	0.017	0.28	0.86
Final BW, kg.	24.36	24.99	23.78	24.27	22.80	23.85	1.618	0.53	0.94