Performance of DNA 600 Duroc sired pigs when split sex fed with commercial diets with or without a blend of phytonutrients (Lean Fuel)

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The objective was to evaluate the effect of a blend of phytonutrients (Lean Fuel, LF) on performance of pigs in late finishing in a commercial research barn. A total of 590 DNA 600 Duroc finishing pigs (BW=75.7±1.0 kg) were blocked by weight and sex and allocated across two dietary treatments with 6 replications per treatment and 21 to 26 pigs per pen. Dietary treatments were: barrow (B) diets with and without LF and gilt (G) diets with and without LF. Diets were formulated to split-sex requirements (CON) for each period and LF diets were control diets + 0.125% LF. The experiment was 44-d where d 0 was 98-d post-wean. All data were analyzed using the MIXED procedure of SAS as a randomized complete block design as a 2 x 2 (diet x sex) factorial arrangement. Pen served as the experimental unit. Overall (d 0-44), the B gained more weight (P=0.0282) and consumed more feed (P<0.0001) per day when compared to the G. However, the G had a higher G:F (P<0.0001) than the B. Pigs on LF had higher ADG (P=0.0230) compared to CON. Also, CON had lower G:F (P=0.0113) compared to LF. For the diet, there was no difference (P>0.10) in ADFI. There was no diet x sex interaction (P>0.10) for ADG. There was a tendency for an interaction (P=0.0545) for ADFI, where LF B consumed more feed compared to CON B and CON G consumed more feed compared to LF G. There was an interaction for G:F (P=0.0028) where G on LF had higher G:F compared to G on CON whereas G:F for B was not different to B on LF. In conclusion, LF improved ADG and G:F, but did so differently for G and B.

Key

Words: Barrow, Gilt, Performance

Table 1. Overall performance data

	Sex:	Barrow		Gilt			*P*-value		
	Diet:	CON	LF	CON	LF	SEM	Diet	Sex	Diet×Sex
Overall (D 0-44)									
ADG, g		1072	1096	1032	1061	10.4	0.0230	0.0282	0.8177
ADFI, g		3502	3595	3186	3162	37.7	0.2281	<0.0001	0.0545
G:F		0.306	0.305	0.324	0.336	0.001	0.0113	<0.0001	0.0028