Impact du tourteau de colza incorporé à 15 % dans l'aliment et du degré de compétition sur les performances de 2ème âge

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Influence of a 15 % rapeseed meal inclusion in phase 2 diets, and of the competition degree, on piglet performance

Glucosinolates (GLS) and fibre content of rapeseed meal (RSM) are the main factors that could influence pig feed intake. In a post-weaning experiment, a phase 2 control diet with a high fibre proportion (49 g/kg ADF) coming from wheat bran and corn gluten feed and with 5% RSM was compared to a diet with 15% of RSM (72 g/kg ADF and 2.25 µmol/g GLS) from 12 kg to day 40 post-weaning. A standard feeding space allowance and a higher degree of competition (respectively 62 vs. 35 mm trough length and 0.34 vs. 0.26 m^2 per pig) were also compared using a factorial design. All treatments were balanced for the number of female and male castrated piglets, for three live weight classes (light, medium and heavy) and diets were fed *ad libitum*. During the phase 2 period, piglets reared in competition had lower feed intake (-11%, *P*<0.001). An interaction between competition and sex effects (*P*<0.01) resulted from castrated piglets tending to eat more than females housed in a conventional situation (1144 vs. 1096 g/d; *P*=0.06), whereas there was no difference for high competition (mean: 998 g/d). Additionally, feed intake of piglets offered 15% RSM diet tended to be lower in the light weight class (1009 vs. 1076 g/d; *P*=0.06), which was not observed in medium and heavier classes (interaction: *P*=0.03). This could be explained by the higher daily intake of the highly digestible phase 1 diet observed in light weight piglets before switching to the phase 2 diets. As a consequence, daily gain was decreased by competition (- 12%; *P*<0.001), and an interaction between diet and weight class effects was observed. For the light weight class, piglets fed 15 % RSM feed had lower daily gain (583 vs. 639 g/d; *P*<0.001) although no difference was observed for medium (-3%; *P*=0.13) and heavier piglets (+4%; *P*=0.17). Feed efficiency was unaffected by treatments. It was concluded that the maximum inclusion level for RSM in phase 2 diets was not affected by the degree of competition. GLS and fibre content of the diet are important considerations in feed formulation.