

Hermetia illucens partially defatted meal in piglets' nutrition: preliminary results

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The aim of this trial was to investigate the effects of different inclusion level of *Hermetia illucens* (HI) defatted meal on the growth performance of piglets. Forty-eight newly weaned piglets were individually weighted (initial body weight: 6.09±0.16 kg) and allocated in 12 different boxes to have a homogeneous initial live weight. Three different diets were formulated with increasing inclusion levels of HI (0%, 5% and 10%) in substitution of conventional protein sources. All diets were isonitrogenous and isoenergetic. Each diet was assigned to 4 replicates. Two phases feeding program (I from day 0 to day 23; II from day 24 to day 61) were studied. Piglets were individually weighted at the feed changing and at the end of the trial. Average Daily Gain (ADG), Average Daily Feed Intake (ADFI) and Feed Conversion Ratio (FCR) were calculated for each feeding phase and for the whole trial. The weight gain (WG) was calculated for the whole period. Data were analyzed by One-way ANOVA and differences of means by Duncan's test (p≤0.05).

No significant differences were observed on the individual final BW (kg) (31.88-HI0; 32.23-HI5; 33.06-HI10), on the WG (kg) (HI0: 25.78; HI5: 26.14, -; HI10: 26.96) and on the ADG (phase I, phase II and total). The ADG (kg) total ranged from 1.66 (HI10) to 1.72 (HI5). The FCR (phase I, phase II and total) and ADFI (phase I, phase II and total) showed no significant differences among the three treatments (FCR total: 1.86-HI0; 1.84-HI5; 1.92-HI10. ADFI total (kg): 3.14-HI0; 3.16-HI5; 3.17-HI10). These results are in line with other trial on piglets' nutrition. These results showed that the use of a partially defatted HI meal could replace the conventional protein sources up to 10 % inclusion without adverse effect on growth performances.

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