Valeur nutritionnelle d'un concentré de protéines de luzerne chez le porc en croissance

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Nutritional value of alfalfa protein concentrate for growing pigs

Alfalfa is a naturally high source of proteins. The aim of this study was to obtain some new references about the nutritional value of alfalfa protein concentrates (APC) for pigs. The experimental data were collected in three trials on growing pigs fed with dietary incorporation rate of APC up to 20 %. Ten castrated male pigs were used for the faecal digestibility assay (two diets x five pigs) and ten others, surgically ileo-rectal termino-terminal anastomosed for two ileal digestibility trials performed in 2009 and 2010. The faecal digestibility of proteins, energy and fat were measured as well as the standardised ileal digestibility (SID) of proteins and amino acids. The faecal digestibility of APC is quite high concerning the protein value (81.5 %), but lower than expected for fat (39.7 %) and energy values (64.9 %). However, the digestible energy content (DE, 3766 kcal/kg DM) is only 6 % lower than that of soybean meal. The SID of proteins and amino acids of the batches of APC collected in 2009 and 2010 were similar: 76.3 and 76.5 % for proteins, respectively, 82.2 and 81.7 % for lysine, respectively, and 80.4 and 80.7 % for all the amino acids, respectively. With regard to the high protein content (57.8 % DM) and the SID of the amino acids (> 80 % in most cases), the APC evaluated in this study brings to the animals an amount of amino acids close to that of soybean meal. Its energy value is relatively high, but lower than soybean meal.