

Group 1 : control diet : cereals + soyabean meal.

Group 2 : replacement of 50 p. 100 soyabean meal by 4 p. 100 untreated « keratin ».

Group 3 : replacement of 50 p. 100 soyabean meal by 4 p. 100 ultraground « keratin ».

For the experiments on «gelatin», only 2 treatments were applied, *i.e.* 2 groups of 28 *Large White* pigs (14 castrated males, 14 females) for the lot trials between 30 and 100 kg live weight and 2 groups of 4 growing male pigs for the digestibility study. The diets used were the following :

Group 1 : Control diet : cereals + soyabean meal.

Group 2 : Replacement of 50 p. 100 soyabean meal by 4 p. 100 gelatin.

For the lot trials, the pigs were kept in collective pens including 7 animals of the same sex fed according to the following feeding schedule : a 17 p. 100 protein diet during the growing period (30-60 kg live weight) and a 15 p. 100 protein diet during the finishing period (60-100 kg live weight).

The pigs used in the digestibility study received only the « growing diet » (paired feeding) and were subjected to a collecting period of 10 days.

With diets relatively rich in crude protein, replacement of half of the soyabean meal by 4 p. 100 horn or gelatin meal did not bring about any marked lowering of the animals' performances.

Although pig skin meal has a well balanced amino acid composition for the pig, its digestibility is low (about 60 p. 100) and definitely lower than that of soyabean protein. Ultragrinding did not improve digestibility and retention of these proteins.

Conversely, in the case of gelatin digestibility was high, but its supplementation value was low because of severe amino acid imbalances.

The fact that under our experimental conditions the influence of partial replacement of soyabean meal by 4 p. 100 horn meal or gelatin meal was almost non existent was probably due to the low performances recorded and to the relatively high protein level of the diets masking the amino acid imbalances of the latter.

Rapeseed meal for the growing pig. Preliminary results of a detoxification process in silage

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Rapeseed meal, despite the high quality of its proteins, is of little use in pig feeds, because of its unpalatability and toxicity even at low levels.

The undesirable substances, *i.e.* vinylthioazolidone (VTO) and isothiocyanates (ITC) can be economically eliminated by fermentation. Mixing of ear corn with husks (50 p. 100 D.M.) and rapeseed meal (2:1 D.M. basis) leads to a strong lactic fermentation with a limited protein and aminoacid degradation (2 p. 100 of the nitrogen content as ammonia) a total ITC and high VTO elimination.

Fed to 55 kg pigs, this silage rich in crude fiber was ingested at the same DM level as an isonitrogen isocellulose mixture of corn silage, soyabean meal and straw provided semi *ad libitum*. Growth rate (500 g/d) and thyroid weight measurements showed no ill effect of a 16 p. 100 (DM basis) rapeseed meal level in the ration of growing-finishing pigs.
