were obtained when using the different CW criteria (crude fibre, ADF, NDF, AD lignine) which were highly correlated with each other. In particular, DE varied curvilinearly with the level of crude fibre according to the relation :

DE (kcal/g DM) = 4 027 + 13.4 CF (% DM) — 2.5 CF^2
(R^2 = 0.972 ; RSD = 149 ; RSD % = 4.7)

This study emphasized the interest of dehulling to improve the energy value of oilmeals. Our results enable to correct easily the digestible energy content of oilmeals from their crude fibre content.

Utilization of different varieties of peas and of a spring peas-field beans association by the bacon pig

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In a *first trial* three diets containing about 30 p. 100 peas of different varieties were compared to a control diet without peas. The three varieties tested were a spring variety *(Amino)* and two winter varieties *Vendevil* and *Frisson*. All of them exhibited a low trypsin inhibitor content (4.4 ; 6.5 and 10.9 TUI/mg DM).

The diet including the *Amino* variety led to the same fattening performance as the control diet. This confirms our previous results and shows that it is possible to incorporate 30 p. 100 peas into bacon pig diets. The diet including the *Frisson* variety led to lower performance than the *Amino*-based diet. This confirms the results of the previously made comparison between spring and winter varieties. The diet including the *Vendevil* variety led to performance half between those obtained with *Amino* and *Frisson* diets. This confirms our hypothesis on the role of trypsin inhibitors on the performance reduction in pigs fed diets with high levels of winter peas. Accordingly, *further studies should be made by plant breeders so as to reduce the trypsin inhibitor content of winter peas.*

Two other trials were made to compare a wheat-based control diet, a diet with 25 p. 100 winter peas (*Amino* variety with 4.2 TUI/mg DM), a diet with 10 p. 100 field beans (*Alfred* variety with 4.5 p. 100 TUI/mg DM), and a diet including field beans and peas at the same level of incorporation.

The diets including both 25 p. 100 peas and 10 p. 100 field beans led to similar performance as the control diets. Both trials showed that it was possible to associate peas with field beans. They also showed that the first limiting factor of winter peas is a deficiency in secondary amino acids.

Effect of lysine supplementation and reduction of protein level on growth performance of pigs fed maize or wheat based diets

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The effect of a reduction in the dietary protein level after supplementation with L-lysine HCl on growth performance and carcass characteristics was studied in an experiment involving 144 *Large White* pigs between 27 and 100 kg live weight. Four treatments were compared in 3 groups of 6 animals of both sexes (females, castrated males). They were fed diets based on maize or wheat, in combination with soyabean meal, at two protein levels