

tively per kg DM). In addition to the cereal, the four diets contained soyabean meal and a mineral and vitamin mixture. They were offered to 96 animals between 23 and 103 kg liveweight according to a feed restriction plan.

The feed efficiency of the diet based on maize was similar to that of the diet based on low tannin sorghum. Conversely, it was reduced by 3.1 and 7.9 p. 100, respectively with the other two diets.

In a second trial also made in feed restriction conditions a large number of animals per diet (48) was used to determine the difference between a diet based on maize and a diet based on low tannin sorghum (2.3 g/kg DM). Maize and sorghum were supposed to have the same energy value (3 950 Kcal DE/kg DM). Similar growth performance were observed with both diets thus confirming this hypothesis.

### **Use of moist grain maize with cobs in bacon pig feeding**

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Two trials were made to compare the use of different grain maize silages including cobs or not (harvest 1982). Bacon pigs were fed according to a feed restriction plan supplying the same amount of dry matter in each diet. In the first trial, a grain maize silage (37 p. 100 moisture) was compared to two silages including cobs (CCM) (\*) and with a moisture content of 41 and 48 p. 100, respectively. Both CCM silages led to similar growth and carcass performance. As compared to the cob free diet, CCM reduced the growth rate and deteriorated the feed conversion ratio by 6.2 p. 100, decreased the carcass yield by 0.5 point and improved the lean percentage by 1.5 point.

In the second trial we compared a grain maize silage to two CCM silages including almost 50 and 90 p. 100 of the cobs and to a silage of whole ears without husks. The last two silages decreased the growth rate by 4.9 and 7.4 p. 100 as compared to the control diet, but increased the muscle percentage of the carcasses by one point. The carcass yield was the same whatever the diet.

These results were compared to those of three trials made in 1981. As compared to a grain maize silage alone, CCM (with the same moisture content) deteriorated the feed conversion ratio by 0.61 p. 100 on an average per point of cobs in the silage.

### **Utilization of hydrolysed lactose by the pig**

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The nutritive value of lactose hydrolysed at the rate of 80 p. 100 by passage on resins at 90-95 °C (La Prospérité Fermière) was studied during two experiments. Protein and energy balances were measured in 16 *Large White* castrated male pigs of about 70 kg

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(\*) CCM : Corn Cob Mix.