

Rapeseed meal detoxification in moist maize silage : utilization of this feed in growing pigs

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The effect of incorporating rapeseed or soyabean oil-meal into moist maize silage (60 % D.M.) in the proportion of 27 and 23 per cent, respectively was studied from a biochemical and nutritional point of view.

- silage fermentation only slightly affected meal protein degradation, but the lactic fermentation increased as compared with maize silage alone;
- as compared to dry feed of the same composition, silage gave higher growth rates in castrates or female Large White pigs restricted between 25 and 100 kg live weight;
- the detoxification of rapeseed meal, evidenced by a much lower thyroid weight in the castrates, resulted in the same growth rates during the finishing period as those obtained with soyabean, but the carcasses of the animals fed with rapeseed were leaner.

Protein sparing effect of a growth promotant (Carbadox) used in growing pigs

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Three successive experiments were conducted in the same piggery according to the same design using an "optimum" and a "sub-optimum" protein diet. The pigs were divided into 2 groups, the one did not receive any supplement (controls) and the other was offered 50 ppm carbadox until 35 kg live weight, 25 ppm until 70 kg liveweight and then no supplement. The "sub-optimum" diet was qualitatively and quantitatively protein deficient.

The pigs were fed *ad libitum* from 15-20 to 100 kg live weight. As compared with the controls, utilization of 50 ppm carbadox up to 35 kg live weight led to a highly significant increase of growth performance and a significantly improvement of feed conversion ratio and protein efficiency. The analyses made at 100 kg showed that the improvement obtained with carbadox was similar for the two types of diets. The fattening length was reduced by 9 days (due to a higher daily mean gain), the feed intake decreased by 4 kg and the consumption of crude protein by 600 g. Utilization of carbadox resulted in a financial gain of 7 F for the pigs fed with the "sub-optimum" diet and of 10 F for those receiving the "optimum" diet. Consequently, this growth promotant allows to improve biological feed efficiency and management economy.