Litter weight and litter size at birth and at weaning were significantly better in the Large White sows.

Maternal abilities of the local sow must be underlined (8.5 p. 100 mortality v 21.3 for the Large White) and as a result sow productivity was almost the same for both the Large White and the local pig : 13.82 and 14.6 piglets per sow and per year respectively.

Growth and tissue composition results of the progeny of the two breeds were the following :

1) The average daily gain was significantly higher in the Large White breed (514 g v 440 for the local pig).

2) The food conversion ratio was higher (p < 0.01) in the Creole breed (4.03 v 3.33 for the Large White pigs).

3) The main characteristics of the carcass quality was a significantly (p < 0.01) higher muscle percentage in the Large White (46.96 p. 100 v 38.97 for the local pigs).

A good relationship between cut and physical dissection results on the one hand linear and ponderal carcass characteristics on the other hand was observed in both the Creole and the Large White breed.

Ham weight and growth performance was independent of the body composition.

**Utilization of roughage to produce heavy pigs.**

Interactions between genotype, sex and management system

1. - Growth performance and carcass characteristics

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Growth performance and carcass characteristics of 119 pigs, females and castrated males, were studied using a 2 X 2 factorial design : two genotypes, Large White (LW) and Corsican X Large White (C X LW) crossbred pigs ; two management systems, in pens with an ad libitum concentrated diet, and in open-air with a restricted concentrated diet and forage given ad libitum. The analysis of variance showed a favourable effect of pen-housing on food conversion ratio (— 10 p. 100 compared to pigs in open-air), daily gain (+ 20 p. 100), dressing percentage of carcass (+ 2.6 p. 100), but an unfavourable effect upon carcass characteristics (— 24 p. 100 for loin/backfat ratio) more pronounced for castrated males than for females. Growth performance of the crossbred pigs were 4 to 8 p. 100 poorer than those of LW pigs ; the carcasses of LW pigs showed a poorer dressing percentage than those of C X LW, but a higher meat content (+ 36 p. 100 for loin/backfat ratio) ; there were no significant genotype x management interactions, as the responses of the two genotypes to the management systems were similar.

V. - CARCASS AND MEAT QUALITY

The effect of an excess of tryptophan and of rearing conditions on the incidence of boar taint in young Large White boars : relationship with male reproductive tract development

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Twenty eight board of the Large White breed were reared between 25 and 100 kg live weight according to a 2 X 2 factorial design : two rearing conditions (with or without...