

## VII. — GENETICS

**Results of ten commercial product tests performed in France  
from 1970 to 1983**

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This paper gives a survey of ten commercial product tests performed between 1970 and 1983. The purpose of these tests was to compare growth, body composition and meat quality traits of pigs from the commercial level of breeding schemes recognized or approved by the Ministry of Agriculture. They were carried out in central progeny testing stations according to an experimental design similar to that of the incomplete balanced blocks. A total of 22 schemes were evaluated, most of them several times. On an average, each scheme was evaluated on the basis of a sample of 116 terminal products born from 40 sires and 58 dams. The overall survey shows that there is a rather large variation between schemes, which justifies the usefulness of such a system of evaluation. The satisfactory repeatability of the successive scheme results shows that the reliability of this system in France is rather good. The difference between the performance of the purebred *Large White* population (UPRA) used as a control in all tests and the mean performance of the breeding schemes tends to decrease indicating a better control of selection and crossbreeding procedures in the latter schemes.

**Effect of the choice of the terminal boar on fattening,  
carcass performances and meat quality**H. PELLOIS \*, Y. HYRIEN \*, Catherine CALVAR \*, C. PERROCHEAU \*,  
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Fattening and carcass performances as well as meat quality of 500 pigs born from five types of boars : LW (*Large White*), LR (*French Landrace*), P × LW (P : *Pietrain*), LRB × LW (LRB : *Belgian Landrace*) and P77 (*Pen Ar Lan*) and from crossbred LW × LR sows, were tested in field conditions during 4 trials (3 genotypes per trial). Pigs were slaughtered (2 slaughters per trial) and cut in the same place. Hams from the same genotype were processed into first quality "Paris Ham" (measurement of the anatomical and technological yields).

The main results obtained show that :

— The fattening performances (average daily gain, food conversion ratio) were lower in LR backcrosses as compared to the other genotypes.

— The carcass yield was slightly higher in P × LW and LRB × LW. The commercial grading and muscle percentage were higher in P × LW and P77.

— The lean tissue growth rate was highest in P77 and P × LW, followed by LW backcrosses.

— The meat quality was the poorest in P77, and the best in LR backcrosses. As regards the processing into "Paris Ham", the higher anatomic yield of P77 did not compensate for its markedly lower technological yield.

This confirms the interest of using crossbred P × LW and P77 boars for their better carcass yield : + 10 F per pig as compared to LW backcrosses. However, only P × LW kept its superiority when considering the effect of the meat quality on ham depreciation.