

I. — GENETICS

Influence of genetic type and some management and slaughtering factors on killing out percentage and overnight drip loss of pig carcassesV. COUSIN ⁽¹⁾, J.P. RUNAVOT ⁽¹⁾, Geneviève LE HENAFF ⁽²⁾*(1) I.T.P., Pôle Amélioration de l'Animal, B.P. 3, 35650 Le Rheu.**(2) INRA, Station de Génétique quantitative et appliquée, 78350 Jouy-en-Josas.*

Records on 1852 female pigs tested in 1985 in four central progeny test stations were analysed for assessing the influence of genetic type (four pure breeds : Large White = LW, French Landrace = FL, Belgian Landrace = BL and Pietrain = P, as well as various crosses and some environmental factors (station-slaughterhouse, day of slaughter and body weight at slaughter), on killing out percentage and overnight drip loss of pig carcasses.

The double-muscled P and LB breeds exhibited a markedly higher killing out percentage (defined as the ratio weight of cold carcass with head/body weight at slaughter) than LW and LF breeds : 81.4, 81.4, 79.2 and 78.3 %, respectively. Records from P × LW crossbreds confirmed that killing out percentage is not affected by heterosis. The « 1/8 chinese » crossbred pigs exhibited about the same killing out percentage as European « control » pigs, in spite of a much lower lean percentage (– 2.9 %). No significant influence of genetic type on carcass drip loss was found.

The effects of station-slaughterhouse and day of slaughter were significant both on carcass killing out percentage and drip loss. In contrast, the effect of body weight at slaughter reached significance only for killing out percentage : the linear regression of killing out percentage on body weight (kg) was around .04-.05. The possible causes of these various influences are discussed.

Study on the ultimate pH of different muscles in four pig breedsB. SUTY ⁽¹⁾, J.-P. MASSON ⁽²⁾, F. DELIGNE ⁽¹⁾, J.-M. BUCHET ⁽³⁾,
M. LEMOING ⁽²⁾*(1) France Hybrides, 30, rue Paul-Claudet, 91000 Evry.**(2) INRA, Laboratoire de Biométrie, 165, rue de St-Brieuc, 35042 Rennes Cedex.**(3) Stagiaire à France Hybrides*

The ultimate pH of pig meat is used as a predictor for the technological yield of cooked ham processing (« Jambon de Paris » processing according to the method of the « Laboratoire de Charcuterie Expérimentale du Centre Technique de la Salaison »). It was important for the authors to precise at what post mortem time this ultimate pH is reached and to compare this value for different breeds of pigs.

First, we determined the time required for the pH of *Adductor femoris* muscle to reach its ultimate value. The ultimate pH is reached at 15 hours post mortem whatever the day of slaughter.

Secondly, we compared the ultimate pH of pig meat on 3 muscles from the four breeds involved in the France Hybrides breeding scheme. A total 2,214 animals were used. The effect of slaughter day was very important. The differences between males and females were not consistent and difficult to explain. The differences between breeds were low (about .1 pH unit), but the average ultimate pH of pig meat from the composite line was equal and even superior in *Longissimus dorsi* muscle to the average values of Landrace and Pietrain breeds.