

Effect of Pietrain as terminal sire on raw ham quality

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Introduction

The aim of this paper was to evaluate the effect of crossbreeds with different proportion of Pietrain on raw ham quality and weight. There are many factors influencing the meat yield and quality (nutrition, transport, handling, age, sex, stunning ...) where breed affects the quality traits to a large extent. In Croatia there is widely present dry-cured ham production partially made from crossbreeds with Pietrain so it is necessary to determine the quality of raw material in order to predict the quality of final product.

Methods

Two groups of 12 pigs were formed: crossbreeds from Pietrain sire on Landrace x Large White dams (PxLL) and crossbreeds from Pietrain x Hampshire sire on Landrace x Large White dams (PHxLL). All pigs were fed the same diets from weaning until slaughter. Fat thickness and muscle depth was measured using two point method. Hot carcass weight was measured on the end of slaughter line. Colour (L^* , a^* , b^*) was measured 24 h *post mortem* on *M. biceps femoris*, while pH-value was measured 24 h *post mortem* (pH24) on *M. gracilis*. Raw ham weight was measured after trimming for dry-cured ham production. All data were analyzed by the GLM procedure of SAS.

Results

Table 1. Effects of different crossbreeds on carcass and raw ham traits

Trait	P x LL	PH x LL
Hot carcass weight, kg	122.0 ^c	132.2 ^d
Fat thickness, mm	17.09 ^a	20.75 ^b
Muscle depth, mm	87.72	87.25
Raw ham weight, kg	14.22	14.48
L^*	52.67	52.90
a^*	18.00	18.24
b^*	6.01	5.89
pH24	5.66 ^a	5.81 ^b

^{a,b} Within a row, means that do not have a common superscript letter differ, $P < 0.05$

^{c,d} Within a row, means that do not have a common superscript letter differ, $P < 0.001$

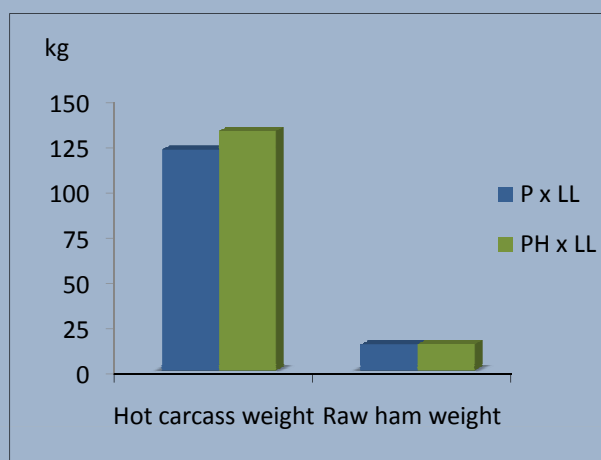


Fig. 1. Effects of different crossbreeds on hot carcass weight and raw ham weight

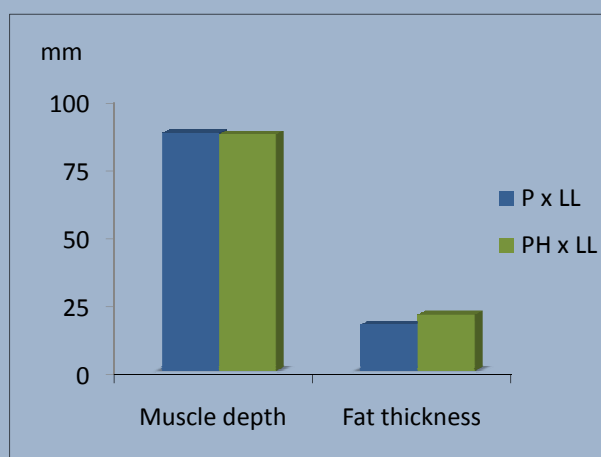


Fig. 2. Effects of different crossbreeds on muscle depth and fat thickness

Conclusions

Crossbreeds with different Pietrain proportion had effect on hot carcass weight and fat thickness, with slight effect on ham quality. There was no significant difference in raw ham weight and muscle depth between crossbreeds.