MEAT QUALITY OF DIFFERENT GENOTYPES PIGS

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Increasing the competitiveness of pork production requires the transition to more intensive level of pig breeding. This causes the need for further breeding to increase the meatiness of carcasses. This is due to an increase in the demand of the population for lean pork [1-6].

The goal of research was finding the most high-performance matching combinations of boars and sows of meat genotypes for observing the manifestation of heterosis.

The research aim was to evaluate production traits in pigs of different genotypes. The research was conducted under the conditions of Freedom Farm Bacon LLC, Kherson region. The pigs were fed with special mixed fodder according to their age, live weight and physiological condition.

We used thoroughbred pigs ♀LW×♂LW (control) and cross animals of two variants of crossbreeding: ♀(LW×L)×♂(D×P♀) and ♀(LW×L)×♂(P×D). Pig productivity was estimated by conventional methods.

The results of the control slaughter of pigs indicate the highest slaughter yield in the ♀(LW×L)×♂(D×P) (73,77%) group of pigs that exceeded the control group of large white pigs by +3,60%, and the ♀(LW×L)×♂(P×D) group by+0,83% (Table 1).

Table 1

Slaughter quality of pigs

Показники	♀LW×♂LW	♀(LW×L)×♂(D×P♀)	♀(LW×L)×♂(P×D)
Slaughter yield,%	70,17	73,77	72,94
The thickness of pork fat, mm	22,25±2,29	16,00±0,71*	15,75±0,85*
Loin eye area, cm^2	31,40±0,90	42,05±1,14***	42,65±1,42***
The carcass length, cm	99,75±2,17	99,50±1,04	97,25±1,11
Weight of the posterior third of half carcass, kg	11,55±0,48	12,90 ±0,25*	13,35±0,55*

Note: * - P<0,05; ** - P<0,01, ***- P<0,001

The findings show that pigs of the ♀(LW×L)×♂(P×D) group exceeded purebred animals and animals of the ♀(LW×L)×♂(D×P) genotype in the loin eye area by 11,25 cm^2 (P<0,001) and 0,6 cm^2, respectively, and by the weight of the posterior third of half carcass by 1,80 kg (P <0,05) and 0,45 kg.

We have determined the lowest thickness of pork fat in pigs of the ♀(LW×L)×♂(P×D) combination (15,75 mm), which was significantly lower than in the control group (by 6,5 mm) and in the ♀(LW×L)×♂(D×P) combination (by -0,25 mm). The carcass length of pigs of the large white breed was 0,25 cm more than in the ♀ (LW×L)×♂(D×P) group, and 2,25 cm more than in the ♀(LW×L)×♂(P×D) group. The results of the slaughter of pigs produced through a combination of different pork breeds indicate the possibility of obtaining meat yield ranging between 64,26 and 65,48%.

We have determined a positive impact of boars of the ♀P×♂D genotype on slaughter traits of pigs produced from mating them to cross sows. Thus, pigs of the ♀(LW×L)×♂(P×D) group had better slaughter characteristics by most indicators.

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