

THE RELATIONSHIP BETWEEN FIXATION FRONT AND REAR TEATS, GENDER AND VALUABLE MEAT PARTS IN PIGS

Petrák J., Bučko O., Debrecéni O., Lehotayová A.

juraj.petrak@uniag.sk

University of Agriculture in Nitra, Department of Special Animal Production, Slovakia

Abstract

Young pigs fixation milk teats, which prevent against other siblings. Heavier piglets are more powerful and easier to get in front of the teats sucking, which are richer on milk. The relationship between fixation front and rear teats, sex and subsequent production of valuable meat parts is not sufficiently understood. The aim of the experiment was to investigate the pig meat production carcass with a focus on valuable and the meaty parts (neck of pork, pork shoulder, ham, chops) in relation to gender and fixation teats after birth. Experiment included 4 sows were Large White breed. After their farrowing litter was monitored. In the experiment were included barrows 15 and 16 gilts. Fixation teats piglets were observed from birth to 72 hours after birth at hourly intervals. After reaching slaughter weight of 105 kg pigs were killed. Carcass dissection was done after 24 hours post-mortem. Evaluated the average weight neck of pork, pork shoulder, ham and chops in ♂ and ♀ who occupied front or rear teats. Statistical significance was evaluated by Student's t-test. Results: Group ♂ occupying teats front and rear group ♂ occupying rear teats no significant difference in the monitored parameters slaughter although the average weight of the group ♂ occupying teats back in the pork shoulder and ham was reduced. The group ♀ occupying back teats all monitored parameters were reduced. In the neck of pork and pork shoulder, we noticed a significant difference at ($p \leq 0.01$) compared to the group ♀ occupying front teats.

Key Words: Pig, sex, valuable meat parts.

In term of the best breeding results in focusing on producing products of slaughter is necessary to clarify certain patterns of behavior in pigs shortly after birth. According Veselovský (2005) a young pigs occupy certain milk nipples which prevent against other siblings. Magic (1996) states that heavier piglets are more powerful and easier fixing front teats that are richer on milk. Choosing teats and create order in suckling begins on the first day after birth and lasts for 7 to 10 days. Pigs prefer front teats. For the first and last teat order is determined already at the 4th - 6 day. Front tits usually occupy the piglets born to a greater weight, while middle and last teats filled with piglets weighing less (Debrecéni et al., 2009). In terms of product carcass weight were recorded some differences between gilts and barrows in relation to the development of valuable meat particle (Petrak et al., 2012). The aim of our experiment was to investigate the pig meat production focusing neck of pork, pork shoulder, ham, chops in relation to gender and fixation teats after birth.

Material and Methods

The experiment was carried in the Experimental Centre for Livestock Department of Animal Husbandry, Slovak Agricultural University in Nitra. In experiment were included four sows breed large white noble. After their

farrowing litter monitored in the experiment included 32 piglets were switched to slaughter fattening and reached maturity. In experiment were evaluated 15 barrows and 16 gilts. Into our buildings housing sows were introduced 10 days before the estimated date of confinement. The sows was housed individually in foaling stall. The floor throughout the farrowing pen was slatted rubber in addition to the nest where the piglets were placed on the pad. After birth, piglets were wiped from the amniotic fluid, fetal membranes, they were cleaned mouth and nose and with a disinfectant they were disinfected umbilical stump. There were also marked by a number (marker on the back), in the order in which they were born. Occupation teats piglets were observed from birth to 72 hours after birth at hourly intervals. On the fifth day, was again observed occupation teats. In front we thought tits in the front half of a milk bar back in the backcourt. Weaning piglets was carried at 28 days. After reaching slaughter weights 105 kg were killed. Carcass dissection was done after 24 hours post-mortem. The weight of neck of pork, pork shoulder, ham and chops were evaluated. We compared the average mass of valuable meat parts between ♂ and ♀ which occupied the front teats and between ♂ and ♀ which occupied rear teats. The statistical significance of differences in the averages of the slaughter indicators was evaluated by Student's t-test.

Results and Discussion

Comparison of selected indicators of male pig occupying front and rear teats, we came to the following result Fig. 1.

The average weight of the neck of pork in a group of male occupying front teat was 3.39 kg in group fixating rear teats 3.41 kg. When comparing the average weight pork shoulder of the male fixating front teats were 4.63 kg and the group that occupying the rear teats was 4.48 kg. Average weight of ham male fixing on the front teats stood in the carcass indicator value 8.71 kg and 8.48 kg occupying rear teats. Group males fixating front teats and also a group of male fixating rear teats achieve the same average weight of 4.83 kg chops. The results obtained suggest that among groups of males' fixation front and rear teats was no significant difference in observed slaughter indicators.

Comparing selected slaughter indicators of the female pig occupying front and rear teats, we reached the results illustrated in Fig.2. When comparing weight neck of pork we

recorded the average weight for females to tribes occupied the front teats 3.75 kg and 3.38 kg rear teats. The average weight of the pork shoulder was in a group of female occupied front teats 4.71 kg and rear 4.26 kg. When comparing the average weight neck of pork and pork shoulder occupied females between front and rear teats we observed a significant difference at ($p \leq 0.01$). Statistically non significant results were measured between groups of females in the observed average weight ham and chops. The average weight of female ham occupying front teats was 9.07 kg and 8.55 kg rear teats. Average weight of chops in females occupying front teats was 5.31 kg and females occupying rear teats 4.92 kg.

The results show that the group of females occupying front teats achieves better average weight at slaughter monitored indicators compared to female fixation back teats. A similar average value of monitored parameters was recorded (Petрак, 2012 and Demo, 2002). In terms of increasing meat production in breeding pig females should be allowed to occupy the front teats these individuals because have better slaughter parameters in valuable meat parts.

Figure1. The average weight of the neck of pork, pork shoulder, ham and chops compared ♂ fixation front (n = 9) and rear (n = 6) teats

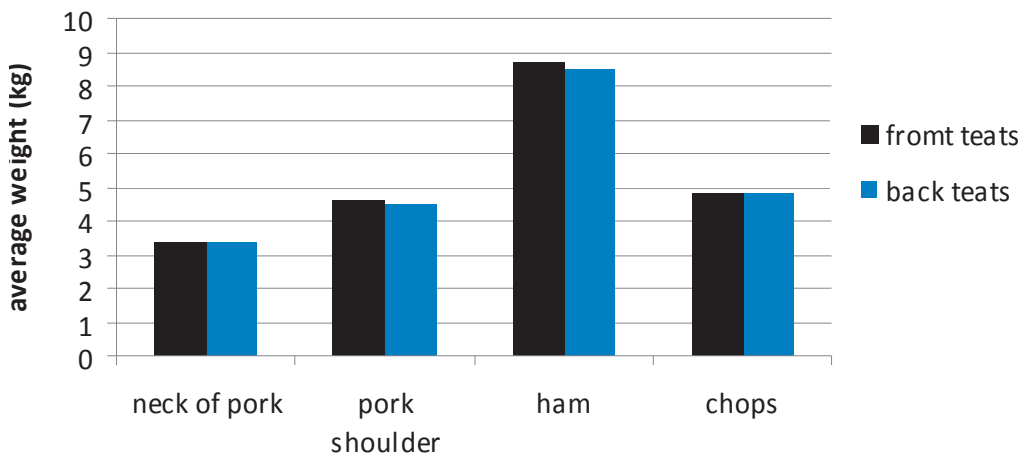
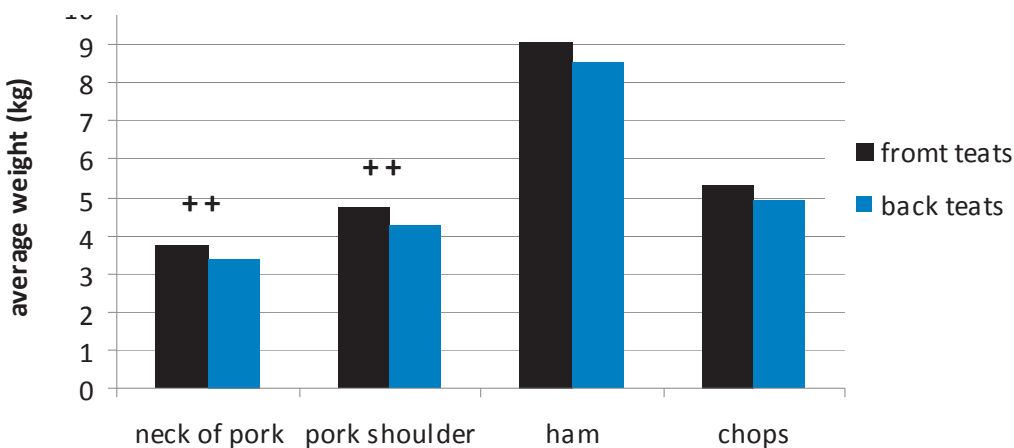


Figure 2. The average weight of the neck of pork, pork shoulder, ham and chops compared ♀ fixation front (n = 6) and rear (n = 10) teats. ($P \leq 0.01$ ++)



Conclusion

The results obtained suggest that among groups of males' fixing front and rear teats was no significant difference in the average weight of slaughtered monitored parameters. Between groups of females' fixing front teats was observed significant difference in the average weight of pork of neck and pork shoulder against females' fixing rear teats.

The average weight of the ham and chops was non significant difference but a fixation front teat achieves better average weight in these parameters than occupying rear teats. In conclusion we can say that females perform significantly better monitored carcasses parameters that occupy the front teats.

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