



Impact of immunological castration on the carcass quality of final hybrids in commercial Ukrainian pig farms

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Introduction. Nowadays civil society pays attention not only to increasing of the productivity of pigs and improving of the quality of livestock products, but also to creation of comfortable conditions for animals, trying to develop new technological elements like immunological castration (Weiler et al., 2016). Ukrainian producers also interested in such approach.

Aim of the research was to study the effectiveness of immunological castration as an alternative to surgical castration for application in commercial Ukrainian pig farms in order to improve carcass quality of final hybrids.

Conclusion. Introduction of immunological castration promotes the decreasing of intensity of deposition of subcutaneous fat as well as increasing of lean meat percentage in pig's carcasses.



Groups	LMP, % (Fat-o-Meat'er S71)	Backfat thickness, mm		Dressing percentage, %	Loss after cooling, %
		T I	T II		
Surgical castration	52,63±0,83	23,57±0,79	15,03±0,86	71,43	1,36±0,07
Immunological castration	54,84±0,90	18,93±0,71	12,30±1,05	73,42	1,46±0,19
RMSE	1.81	4.37	2.01	-	0.50
P-value	-	<0.001	<0.05	-	-

Material and Methods. Two groups of hybrid pigs were formed. Animals of one group were surgically castrated at the age 4 of days and other - twice vaccinated with Improvac vaccine in accordance to the instructions for use. All animals were slaughtered with live weight of 100 kg. The thickness of the backfat was measured at the level of 6-7 thoracic vertebra (TI) and at sacrum (TII). Dressing percentage was calculated as the proportion of carcass weight without head and anterior legs to the animal live weight.

Results. After comparison of the carcasses of immunological and surgical castrated males it was established, that the carcasses of immunologically castrated males had lower backfat thickness at the level of 6-7 thoracic vertebrae by 4.64 mm ($P<0.001$) and at sacrum by 2.73 mm ($P<0.05$) (Table 1), which can be explained by lower fat content and coincided with the results of other studies (Povod et al., 2017).

Application. The results of this research can be used by the pork producing farmers, which plan to introduce immunological castration of boars.

References

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