

## PERFORMANCE CHARACTERISTICS OF DIFFERENT STRAINS OF LARGE WHITE AND YORKSHIRE PIGS BREED IN LITHUANIA BY PURE BREEDING AND ROTATIONAL CROSS

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**Summary** The objective of this study was to examine the performance characteristics of different strains of Large White (Yorkshire) pigs bred in Lithuania and their commercial crosses with Lithuanian White pigs from improved open population. Data were obtained from the State Pig Breeding Station databank and subjected to the analysis according to the General Linear Model (GLM) procedure using MINITAB. Yorkshire sows had a higher total number born per litter (0.28 piglet;  $P < 0.001$ ) than Large White sows but the performance of Large White for litter traits was higher. No significant differences for field performance between purebred Large White and Yorkshire strains were found, but Yorkshire showed higher field performance in their rotational cross with Lithuanian White pigs from the open improved population compared to Large White pigs. Estimated farm environmental effects for reproductive and litter traits ranged from 4.9 % to 82.8 %, for field performance from 14.7% to 69.5%. Under so high farm environmental influence on pig performance, the differences between the groups were not fully pronounced. The study results suggest that unification of farm conditions should result in more accurate evaluation of genetic differences.

**Key words:** swine, breed, performance characteristics, crossing.