Effects of the use of Polish Landrace Breed breeding boars at the Boar Exploitation Station in Czermin. Part I

Summary

The aim of the study was to analyse the breeding value and reproductive parameters of Polish Landrace Breed breeding boars kept at the Boar Exploitation Station in Czermin between 1995 and 2014. The article presents the results of performance testing, including standardized daily weight gain, standardized meat content in the carcass, and selection index. Breeding performance results were determined by evaluating the quantitative and qualitative parameters of 45,477 ejaculates. The boars were found to have high performance results as compared to the active population of Polish Landrace boars in Poland. Particularly beneficial changes were noted in standardized daily weight gain and standardized meat content in the carcass. Analysis of the main breeding performance parameters revealed significant changes in ejaculate volume and sperm concentration, with a perceptible trend in recent years towards increased ejaculate volume accompanied by reduced sperm concentration. These changes, however, do not affect the number of insemination doses produced from one ejaculate.

KEY WORDS: boars, Polish Landrace, breeding, semen quality, insemination