Changes in fattening and slaughter performance of young breeding boars from 2005 to 2009

Summary
The aim of the study was to determine changes in fattening and slaughter traits included in the new methodology for assessing young breeding boars that has been used since October 2004. The study covered 86,743 Polish Large White (PLW), Polish Landrace (PL), Hampshire, Duroc and Pietrain boars, which were performance tested between 2005 and 2009. Fattening and slaughter performance was evaluated in accordance with the modified performance testing procedure. Data were analysed statistically to determine differences between means of traits in different years within each breed and to estimate average annual progress for each trait. During the five-year period when the modified performance testing method was used, considerable improvements in all analysed traits were found for boars of all breeds. Backfat thickness decreased while the height of m. longissimus dorsi, daily gains and carcass meat percentage increased. Phenotypic trends and the magnitude of these changes were as expected and highly significant. The analysis also shows that breeding and selection work was carried out systematically for all the breeds, as evidenced by directional phenotypic trends and the mean annual rate of changes, which were consistent for traits used in performance testing of all the breeds except Hampshire. The Hampshire breed was characterized by the highest mean annual rate of changes and the non-directionality of these changes over successive years of testing, possibly due to the small population of these animals and relatively high imports of boars of this breed.

KEY WORDS: young breeding boars / performance evaluation