EFFICIENCY OF BREEDING PIGS SELECTION ACCORDING TO PHENOTYPIC EVALUATION OF MEATINESS

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Summary. Analysis of meatiness traits (backfat and loin lean thickness, lean meat percentage) of purebred pigs, raised in Lithuanian breeding centres during 1996-2002, by ultrasonic apparatus Piglog 105 was performed. Leanness of breeding progeny in the year 2002 ranged from 51.96% (for purebred Lithuanian Whites) to 59.95% (for Danish Landraces). According to this indicator progeny of other cultural breeds and types occupied intermediate place (55.07 – 59.89%). In comparison with purebred Lithuanian Whites the differences were highly statistically significant (P<0.001). It was indicated that selection of breeding progeny in Lithuanian breeding centres, applying phenotypic method of meatiness evaluation (Piglog 105), is highly effective. During analyzed period leanness of Finish and Norwegian Landraces, German Large Whites and Hampshires breed pigs was not statistically significant (P>0.1 – 0.5). However, for remaining investigated genotypes this indicator increased on 1.67-5.07% (P<0.05-0.001) and muscularity of Pietrain pigs decreased on 1.77% (P<0.05).

Analysis of correlation between meatiness indicators of progeny of different breeds (n=7620) showed that lean meat percentage of pigs is more related to their backfat thickness (r= from –0.78 to –0.95, P<0.001), than to loin lean thickness (r= from 0.11 to 0.47). Gaining of backfat thickness in one point of the back was followed by analogous process in the other point of the back (r= from 0.62 to 0.84, P<0.001). It was also indicated, that live weight of pigs has more influence on mentioned meatiness traits than age.

Obtained results of investigation are used for a new grouping of pig breeds, bred in Lithuania.

Keywords: pig breeds, Piglog 105, meatiness traits, selection, correlation.