

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.