

## 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.