

Tomasz Grodzicki, Anna Litwińczuk,  
Joanna Barłowska, Piotr Domaradzki

## Slaughter value and physicochemical properties of skeletal muscles of domestic Black-and-White bullocks and commercial crosses after Limousine breed bulls

### Summary

The research objective was to evaluate slaughter value and physicochemical properties of the *longissimus lumborum* and semitendinosus muscles of Black-and-White bullocks and commercial crosses with Limousine breed. The studies included 46 Limousine bullocks aged 18 months. The commercial crosses after Limousine bulls were found to have higher pre-slaughter body weight, higher hot dressing percentage as well as higher hot slaughter yield. Carcass assessment according to the EUROP system indicated better conformation and lower adiposis of the commercial crosses. Muscles from this group of animals showed more favorable chemical composition (lower water content and higher protein and mineral levels). Analysis of pH changes in muscles has revealed its appropriate course over 48 h in both genetic groups. The muscles of Black-and-White bullocks appeared to be darker with more red colour ( $a^*$ ).

**KEY WORDS:** commercial crossbreeds / black and white young bulls / slaughter value / beef / physico-chemical traits