

THE INFLUENCE OF LITHUANIAN BLACK & WHITE BREED BULLS ON OFFSPRINGS FATTEN AND MEAT TRAITS

Česlovas Jukna, Vigilijus Jukna, Nijolė Pečiulaitienė

Lithuanian Veterinary Academy, Laboratory of Meat Characteristics and Quality Assessment, Department of Animal Breeding and Genetics, Tilžės 18, LT-47181 Kaunas, Lithuania; phone: +370-37-362772;

e-mail: jukna@lva.lt

Summary. The influence of different Lithuanian Black & White bulls on the offsprings fatten and meat traits was investigated. It was established that offsprings of bulls Bangas LBW 4473 had on 7.6 cm cornerwise longer trunk ($p<0.01$), on 6.4 cm bigger of rear half size and on 2.8 cm longer spiral measure of ham compared to the offsprings of bull Rekas LBW 4197. Furthermore, offsprings of bull Rimbas LBW 4447 had on 12.3 cm ($p<0.001$) bigger pectoral size compared to the offsprings of bull Rekas LBW 4197. Offsprings of bull Rimbas LBW 4447 used least 68.9 MJ AE for unit of makeweight kg from 120 to 500 days of age. However, carcass yield % of all offsprings of considered bulls was comparable and yield of the ham % offsprings of bulls Bangas LBW 4473 was on 3.9 % ($p<0.01$) superior compared to the offsprings of bulls Rimbas LBW 4447. In addition, meat off offsprings of bull Bangas LBW 4473 had on 2.5 % ($p<0.001$) higher content of dry material compared to the meat of offsprings of bull Rekas LBW 4197. Further, the offsprings of Rekas LBW 4197 had significantly higher ($P<0.05$) water binding capacity and cooking loss compared to offsprings of Bangas LBW 4473. Hard meat (2.41 kg/cm^2) was established in offsprings of Rimbas LBW 4447 and soft meat (1.38 kg/cm^2) in the offsprings of Rekas LBW 4197. Higher amount of fat was concentrated in offsprings of Bangas LBW 4473 compared to the offsprings of Rekas LBW 4197. This study proved our hypothesis, that Lithuanian White & Black breed bulls have marked influence on offsprings fatten and meat traits.

Key words: Lithuanian Black & White, bulls, growth speed, carcass yield, meat quality.