

THE EFFECTS OF LINSEED CAKE SUPPLEMENTATION ON THE GROWTH AND QUALITY OF CARCASS AND MEAT OF FATTENING BULLS

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Abstract. In March–May, 2010, a trial with Lithuanian Black-and-White bulls was carried out at the LUHS Institute of Animal Science to determine the chemical composition of the compound feed containing the same amounts of rapeseed and linseed cakes, weight gains of fattening bulls, feed intake per kg gain and the quality of carcasses and meat. In the production of compound feed, replacement of rapeseed cake with linseed cake results in higher content of dry matter, crude fat, crude fibre and by 4 % higher energy value of the feed. The study indicated that bulls fed linseed cake consumed by 7.27 % less metabolizable energy, but by 9.10 % more crude protein than the bulls fed compound feed containing rapeseed cake. The growth rate of the treated bulls fed compound feed with linseed cake was by 9.8 % ($P < 0.05$) higher than that of the control bulls fed compound feed with rapeseed cake. However, different feeding had no influence on the carcass yield, muscle content and fatness grade, and the chemical composition of ground meat. All the differences between the groups were statistically insignificant. Feeding of bulls with compound feed containing linseed cake increased DM content in the *M. longissimus dorsi* by 1.39 % ($P < 0.05$) but had no effects on the other physicochemical indicators of *M. longissimus dorsi*. The differences between the groups were statistically insignificant.

Keywords: linseed cake, fattening bulls, carcass quality, meat quality.