

COMPARISON OF THE RESULTS OF FATTENING STEERS AND HEIFERS MEAT HYBRIDS HFxLM FED WITH RATIONS BASED ON GRASS SILAGE AND MIXTURE OF TRITICALE AND RAPESEED MEAL

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Abstract. The research was conducted on growing steers and heifers, hybrids of HFxLM, the aim was to compare the results of fattening of steers and heifers, hybrids of limousine and hf breed fed with unlimited grass silage complemented with limited mixture of triticale and rapeseed meal as well as to analyze the impact of sex and age of animals on the structure of feed intake. The observation was conducted on 15 steers and heifers, hybrids of HFxLM, aged from 210 to 450 days, kept in a free-stall barn, fed individually with unlimited grass silage and limited ration of triticale and rapeseed meal (30-25 g/kg $W^{0.75}$), which contained 170 g/kg of general protein (<300 kg of body weight) and 155 g/kg of general protein (>300 kg body weight) respectively. Preliminary and final body weight of steers was higher ($p<0.01$) as compared to heifers, however, mean daily gain and feed conversion did not differ. DMI and DMI of silage per 1 kg of metabolic body weight (g/kg $W^{0.75}$) were higher in heifers than steers, apart from age there was impact of sex of fattened animals ($p<0.01$) in particular periods as well as interaction ($p<0.01$) between sex and age. No impact of sex in analyzed periods of fattening on daily body weight gain, conversion of dry matter, general protein, PDI and net energy was observed. Yet, an impact of age of steers and heifers of LM hybrids on daily gains ($p<0.05$) and feed conversion ($p<0.01$) was noted. What is more, with respect to daily body weight gains there was interaction ($p<0.05$) between the sex and age of fattened animals. The pace of growth of heifers was faster in comparison to steers only in the first 60 days of fattening and maximum values were reached between 271–330 days of life. Steers grew faster than heifers after 270 days of life; the maximum pace of gains was reached between 331 and 390 days of fattening.

In reaction to similar rations of concentrates heifers had higher silage intake which lowered the content of concentrate in total intake. The age in particular periods of fattening influenced the effect of substitution, particularly in steers. On the basis of the results one may conclude that heifer hybrids of HFxLM may obtain pace of growth similar to steers if they are fed rations with smaller content of concentrate.

Keywords: limousine hybrids, steers, heifers, grass silage, triticale, rapeseed meal.