FATTENING RESULTS, SLAUGHTER VALUE AND MEAT QUALITY OF HEIFERS AND YOUNG BULLS FED DIFFERENT DIETS IN THE LAST FOUR MONTHS BEFORE SLAUGHTER

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Abstract. The aim of the present study was to determine the effects of various feeding systems applied in the last four months before slaughter on the fattening results and slaughter quality of heifers and young bulls. The experiment was performed on 53 heifers of various genotypes (Black-and-White heifers and crossbred heifers produced by commercial crossing of Black-and-White cows and Limousine bulls) and 80 growing crossbred bulls (Black-and-White cows x Limousine, Charolaise or Simental bulls).

All heifers and bulls were fed the same diet, i.e. haylage ad libitum and 2 kg concentrate containing ground barley (72%), wheat bran (25%) and premix (3%), to approx. 300 kg and 345 kg body weight, respectively. Furthermore, the animals were randomly allocated into two feeding groups. The control group (25 heifers and 40 bulls) continued on the above diet, and the experimental group (28 heifers and 40 bulls) was fed the above diet supplemented with 0.4 kg feed concentrate.

Differentiated feeding in the last four months before slaughter, aimed at preparing slaughter animals for further handling, increased daily gains of heifers and young bulls by 56 g and 128 g, respectively. However, diet supplementation with the concentrate had no considerable effect on the carcass dressing percentage, weight loss during pre-slaughter handling or percentages of culinary cuts in the carcasses of heifers and young bulls. It did not affect the mean parameters of chemical composition and physico-chemical properties of heifer meat, either. Only better tenderness of meat from heifers given the feed concentrate during fattening was confirmed by a statistical analysis. Meat from bulls of the experimental group contained less dry matter and fat, and was lighter in color than meat from bulls of the control group.

Keywords: heifers, young bulls, fattening, slaughter value, meat quality, carcass dressing percentage.