

A. Steinwider, J. Frickh, K. Luger, T. Guggenberger, A. Schauer, J. Huber und L. Gruber (2003): **Effect of ration, sex and slaughter weight on feed intake and fattening performance of Simmental cattle** (in German). Züchtungskunde, 74, (2), 104-120.

Summary

The effect of ration, sex and slaughter weight was examined using 81 Simmental cattle. According to the experimental design different animal categories (heifers, steers and bulls) were compared at different feeding intensities (high, low, extensive) using grass or corn silage as forage. With heifers and steers, each of the three feeding intensities was tested in a two-factorial design using grass silage as forage. In order to compare on-farm fattening practises also bulls were examined together with heifers and steers at a high feeding intensity on corn silage basis. In the groups at high feeding intensity the concentrate level was increased during the fattening period from 1.5 to 3.5 kg DM, whereas at low feeding intensity the amount of 1.5 kg DM concentrate was kept constant during the whole fattening period. In the extensive experimental group heifers and steers received only forage (no concentrate) up to a live weight of 400 and 450 kg, respectively and 3.5 kg DM concentrate in the finishing period. In all three animal categories on corn silage basis the concentrate level was increased from 1.5 to 3.5 kg DM during the fattening period. The live weight at the beginning of the experiment was 185 kg, the medium final weight at slaughter was 530, 570 and 640 kg for heifers, steers and bulls, respectively. In order to measure the effect of final weight on fattening performance the animals were serially slaughtered within a range of 120 kg in 30 kg-steps.

The bulls reached the highest daily gains (1519 g), followed by the steers on corn silage basis (1224 g), the steers at high feeding level on grass silage (1166 g) and the heifers on corn silage basis (1128 g). Within the grass silage groups the daily gains of the steers, as an average value of the high and low feeding intensity, were by 100 g higher than those of the heifers. On the other hand in the extensive feeding groups daily gains did not differ significantly between steers and heifers (866 and 883 g respectively). The daily gains decreased significantly with reduced concentrate level (1100, 960 and 870 g, respectively). With the exception of the groups which were extensively fed in the growing phase, the feed and energy intake of the steers increased to a higher extent with increasing live weight than that of the heifers. With decreasing feeding intensity as well as increasing final live weight the feed and energy requirements per kg gain increased considerably.

Keywords: fattening performance, bulls, heifers, steers, ration

Zitat (Deutsch):

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