

EFFICACY OF DDGS-SUPPLEMENTED DIETS IN THE INTENSIVE FATTENING OF YOUNG BULLS

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Abstract. The study involved 114 young Polish Holstein-Friesian bulls, divided into two groups, experimental and control. Experimental group animals were fed concentrate diets supplemented with corn DDGS. The bulls were slaughtered at approximately 570 kg BW, and carcass quality traits were determined. It was found that DDGS added to complete diets for young bulls fattened to 570 kg BW had a significant effect on higher daily gains and lower feed intake at the first stage of feeding, from 251 kg to 400 kg BW. At the second stage of fattening, from around 401 kg to 570 kg BW, daily gains were similar in the control group and in the experimental group. Carcass dressing percentage was high (above 55%) in both groups, and the majority of carcasses were classified to conformation class O (ca. 90%), and to fat classes 2 and 3 (ca. 98%). The percentage share of retail cuts in the carcass was comparable in both groups, except for the best end of the neck and sirloin, whose proportions were higher in the experimental group. The market value of cuts per 100 kg beef carcass was about 0.5% higher in the control group than in the experimental group. The meat of bulls from both groups was characterized by good quality. As many as 95% of beef samples had pH below 5.80 and could undergo ripening. The meat of bulls fed DDGS-supplemented diets had a lower intramuscular fat content, lower shear force values, higher concentrations of protein and ash, and a higher contribution of the red component.

Keywords: young bulls, fattening, DDGS, slaughter value, meat quality.