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## Production efficiency of beef cattle herd maintained in the system of free grazing grasslands of National Park „Warta Mouth”

### S u m m a r y

Analysis of efficiency of calves' rearing up to 210 days of life was performed basing on the results of 3 years of studies (2004-2006). Investigations included 1617 suckler cows: Limousine - LM (471), Hereford - HH (352), Charolaise - CH (342), Salers - SL (57), Simmental - SM (161), hybrid cows - Mw (233) and 1546 calves. Body weight of calves at birth averaged 36.35 kg ( $\pm 3.82$ ) for heifer-calves (J) and 39.87 kg ( $\pm 4.54$ ) for bull-calves (B); while at weaning (210 days of life) body weight averaged 215.9 kg ( $\pm 22.27$ ) and 292.6 kg ( $\pm 28.3$ ) for heifers and bulls, respectively. The heaviest calves were from Charolaise cows (at birth: +2.177 kg (J) and +4.313 kg (B) and at 210 days: +6.725 kg (J) and +20.193 kg (B). The poorest - significant effect of year was noticed for 2006 when body weight at 210 days was lower by - 10 kg in heifers and by 20-22 kg in bulls. Effect of calving season was observed also on 210 day body weight at weaning. The heaviest at weaning were calves born in winter season, while those born in spring (-16 kg heifers and -29 kg bulls) and summer season (-22 kg heifers and -39 kg bulls) were lighter. Interaction genotype x year x calving season was statistically significant. Production efficiency indicator showed superiority of calves born to hybrid cows in the order Mw→SL→LM→HH→CH→SM.