CROSSBREEDING INFLUENCE OF DAIRY BREEDS CATTLE ON AVERAGE OF LACTATION LENGTH AND ON AVERAGE OF PRODUCTIVITY

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Abstract. This paper provides records of average milk production, and average lactations length of 1849 pure Holstein cows, 240 Danish Red cows, 455 Red Holstein cows, 155 Swedish Red cows, 113 crosses of Holstein cows with Danish Red sires (HxDR), 325 and crosses of Holstein cows with Swedish Red sires (HxSR), 150 crossbreds of Holstein cows with Red Holstein sires (HxRH) (total 7939 lactations records). Productivity performance of crossbred cows was worse than that of the purebred cows. The highest average milk yield (kg), fat (kg) and protein (kg) were determined in the purebred Holstein and purebred Red cows. Significant differences in milk yield (kg), fat (kg) and protein (kg) between the purebreds and crossbreds were obtained ($p<0.001$). Also the yield of recalculated milk was higher in purebred cows compared with the crossbreds; the differences were statistically significant ($p<0.001$). However, crossbreds HxDR and HxSR have distinguished higher milk fat percentage, than Holstein animals. This trait was higher by 2.3 % in the HxDR crossbreds ($p<0.01$) and by 2.0 % in the HxSR crossbreds ($p<0.05$) than pure Holstein cows.

The obtained results showed that crossing had no positive effect on average productivity and average lactation length (days) if compared with the purebred cows. According to assay data we could to affirm that hybridization is not applicable for optimization of lactation length and productivity of cows.

Keywords: crossbreeding, milk production, lactation, cattle.