Comparative Study on the Productive and Reproductive Performance of Holstein Friesians Crossbred Cattle in Chattogram Metropolitan Area

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Signature of Supervisor

Gous Miah

Professor

Department of Genetics & Animal Breeding

Faculty of Veterinary Medicine

CHATTOGRAM VETERINARY AND ANIMAL SCIENCES UNIVERSITY

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Abstract

A comparative study of the productive and reproductive performance of crossbred dairy cows was conducted for a period of one month at some selected dairy farms in Chattogram Metropolitan Area. A total of 59 Crossbred dairy cows belongs to four different crosses namely Friesian × Local (n=15), Friesian× Jersey (n=15), Friesian × Sahiwal (25%) (n=15) and Friesian × Shahiwal (50%) (n =14) were selected and their information regarding milk yield and other reproductive parameters were collected from farm record for a period of last five years (2015- 2019).The milk yield differ significantly (P<0.05) among four crossbred. The highest milk yield (16.26±.64) liter was observed in Friesian × Jersey and the lowest milk yield (8.10±.32) liter in Friesian × Local. Significant difference was found within the lactation length (p<0.05), Post-partum heat period (p<0.05) and birth weight of calves (p<0.05) of different genotypes dairy cows. The lowest lactation length (244.60±1.19) days was observed in Friesian x Local and the highest (291.93±1.90) in Friesian × Jersey. The lowest post-partum heat period (64.87±.77) days was found in Friesian x Local and the lowest (91.33±1.51) days in Friesian × Shahiwal (25%). The highest birth weight of calves (15.83±.34) kg was observed for Friesian × Jersey. In case of calving interval and service per conception there were no significant differences (p>0.05). The 1st heat age and 1st calving age differ significantly (P<0.05). In Friesian × Jersey the lowest 1st heat age (14±.27) days and the lowest 1st calving age (23.73±.20) days were found in Friesian × Local. The highest 1st heat age (21.71±.32) month and 1st calving age (32.07±.35) days was exist in Friesian × Shahiwal (50%).The productive and reproductive performance of Friesian × Jersey cows was superior to the rest of the breeds under study. Friesian × Local ranked lowest and others two Friesian × Shahiwal (25%) and Friesian × Shahiwal (50%) nearly similar. Overall in intensive farming condition Friesian × Jersey crossbred cattle rearing is suitable and profitable under better management practices.

Key words: Dairy cows, crossbred, productive, and reproductive performance.