Productive and Reproductive Performance of Dairy Cattle Herd in Melsiripura Farm with Special Reference to Girolando Crossbreds

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Productive and reproductive performances of dairy cattle are crucial in profit maximization of dairy operations. Crossbred dairy cattle herd in National Livestock Development Board (NLDB) farm in Melsiripura was evaluated to determine the effect of their genotype on growth, productive and reproductive performances. Records of 44 crossbred cows (Jersey x Sahiwal (JxS), Jersey x Friesian (JxF), and Jersey x Australian Friesian Sahiwal (JxAFS) crosses), and weight records of 17 Girolando crossbred calves and 23 other crossbred calves were included in the study. The parameters assessed for the study were milk yield (MY), lactation length (LL), standardized (305 days) milk yield (SMY), daily milk yield (DMY), age at first calving (AFC), number of inseminations per conception (NIC), calving interval (CI), dry period (DP), and calf birth weight (CBW). The daily weight gain (DWG) and growth rate (GR) of Girolando crossbred calves were evaluated separately. General Linear Model and Duncan's New Multiple Range Tests were employed for data analyses and comparison. There was no significant effect of cow genotype on MY, LL, SMY, DMY, AFC, NIC and CBW ($P>0.05$). JxAFS cross had significantly ($P<0.05$) lower DP (71.59±41.14 days) than all the other crosses, and lower CI (13.84±2.09 months) than JxS cross (20.25±5.38 days). Moreover, crossbred calves of Girolando x (JxF) cross, reported significantly ($P<0.05$) lower DWG (0.29±0.02 kg/day) than the other Girolando crossbred calves. There was a significant ($P<0.05$) effect of calf genotype of Girolando crossbreds on GR. Furthermore, calves of Girolando x (JxF) cross reported low mean GR (13.62 kg/month) compared to other Girolando crossbred calves. It was concluded that there was a significant effect of the type of crossbred on reproductive performance of cows. The best growth performance was shown by Girolando x (JxAFS) and Girolando x (JxS) crossbred calves.

Keywords: Breed effect, Crossbred cattle, Girolando calves, Productive performance, Reproductive performance

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