

COMPARATIVE PRODUCTION AND REPRODUCTION PERFORMANCE OF NATIVE AND EXOTIC CROSS BUFFALOES IN COASTAL AREA OF BANGLADESH

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Executive Summary

In Bangladesh, the buffalo breeding program would definitely be a logical development strategy to make such an “Indigenous genetic resource” more productive and more efficient by breeding. Considering the above point in view the study was undertaken with the objectives of to compare the productive and reproductive performances of native and cross buffaloes. The study was carried out at Fakhirhat Upazila in Bagerhat district known as Buffalo Breeding and Development Farm with the aid of the Department of Animal Nutrition, Genetics and Breeding, Sher-e-Bangla Agricultural University, Dhaka during the period from July 2021 to June 2022. In this study, Indigenous, Murrah × Indigenous, Nili-Ravi × Indigenous buffalo breeds was used. Total 300 data were collected from different parameters growth performance traits (Birth weight, weight at 6 months, adult body weight) for both sexes; productive performance (daily milk yield-liter, lactation milk yield-liter, lactation length-days) and reproductive performance (age at sexual maturity, age at first calving, calving interval and service per conception). The mean birth weight for females was found higher in Nili-Ravi × Indigenous (25.02 ± 0.31) followed by Murrah × Indigenous (23.92 ± 0.36) and Indigenous (23.27 ± 0.37) breed groups, respectively with significant ($P < 0.05$) difference. The mean weight for males and female at 6 months of age was found significantly ($P < 0.05$) higher in Murrah × Indigenous (92.66 ± 0.53 for male and 86.36 ± 0.65 for female) followed by Nili-Ravi × Indigenous (90.46 ± 0.65 for male and 81.46 ± 0.70 for female) and Indigenous (83.22 ± 0.65 for male and 74.56 ± 0.69 for female) breed groups, respectively. The mean adult body weight for males and female was found significantly ($P < 0.05$) higher in Murrah × Indigenous (560.52 ± 1.06 for male and 451.8 ± 1.04 for female) followed by Nili-Ravi × Indigenous (503.86 ± 1.11 for male and 409.22 ± 1.08 for female) and Indigenous (455.16 ± 1.13 for male and 355.92 ± 0.95 for female) breed groups, respectively. The mean of daily milk yield (liter) was higher in Murrah × Indigenous (2.66 ± 0.06) followed by Nili-Ravi × Indigenous (2.51 ± 0.04) and Indigenous (2.39 ± 0.04) respectively with significant ($P < 0.05$) difference. The lactation lengths (days) in Nili-Ravi × Indigenous (351.06 ± 7.31) was significantly ($P < 0.05$) different from Indigenous (326.62 ± 9.71). The mean age at sexual maturity (months) Murrah × Indigenous (35.23 ± 0.22) and Nili-Ravi × Indigenous (35.51 ± 0.24) were significantly ($P < 0.05$) different. The overall means of the production parameters estimated in this study indicates that Murrah × Indigenous and Nili-Ravi × Indigenous crossbred buffaloes perform well in comparison to Indigenous buffaloes, but the reproductive performance was not significantly different.

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