**MORPHOMETRIC MEASUREMENTS, PRODUCTIVE AND REPRODUCTIVE PERFORMANCE OF DESHI BLACK AND DESHI WHITE DUCK**

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**DECEMBER 2017**

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**DECEMBER 2017**

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**DECEMBER 2017**

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**ABSTRACT**

The present study was conducted to measure morphometric, productive and reproductive performances of Deshi black and Deshi white duck under intensive condition. The study was conducted at Central Duck Breeding farm at Hajiganj in Narayanganj and encompassed about 50 duck (25 Deshi black and 25 Deshi white). Body length, head length, bill length, neck length, feather length, shank length of mature male and female in Deshi black and Deshi white duck were 59.56±0.87 and 61.87±0.48 cm, 2.25±0.12 and 3.4±0.06 cm, 5.86±0.12 and 6.23±0.06 cm, 19.21±0.47 and 21.08±0.26 cm, 21.85±0.53 and 26.71±0.29 cm, 9.93±0.29 and 10.81±0.16cm, respectively. Females were significantly (*p<0.01*, *p<0.05*) higher than their male counterparts for all morphometric traits but no significant differences (p*>0.05)* were found between two types of duck except body length, head length and feather length (p*<0.01*, *p<0.05*). The body weight of male and female in Deshi black and Deshi white duck at day old, 4th week, 8th week and 12th week of age were 42.65±0.35 and 43.40±0.35 gm, 318.00±9.13 and 319.04±9.13 gm, 835.85±8.94 and 794.20±8.94 gm, 1345.80±2.67 and 1347.90±2.67 gm, respectively. Females were significantly heavier than males 8th week of age ( *p < 0.*01) but no significant difference ( *p> 0.05* ) were observed for body weights between two types of duck except 12th week of age ( *p < 0.01*). The age at sexual maturity, fertility% and hatchability% of Deshi black and Deshi white duck were 136.0±0.52 and 139.0±0.52 days, 67.62±0.83 and 63.18±0.83%, 63.63±0.56 and 59.42±0.56%, respectively. The age at sexual maturity, fertility% and hatchability% of Deshi black duck were significantly (*p <0.0*) higher than that of Deshi white duck. The egg weight, female weight at 1st lay and egg weight at 1st lay were 66.69±0.49 and 66.78±0.49 gm, 1439.55±6.98 and 1422.0±6.98 gm, 48.90±0.18 and 47.12±0.18 gm, respectively for Deshi black and Deshi white. Egg weight at 1st lay of Deshi black duck was significantly (*p<0.01*) higher than that of Deshi white duck. The egg production per year of Deshi black and Deshi white duck were 214±2.65 and 211.40±2.65 (*p>0.05*). The result of this study provided some baseline information on Deshi black and Deshi white duck of Bangladesh which could be useful for conservation and future improvement programs in Bangladesh.

*Keywords:*  Deshi black duck, Deshi white duck, Morphometric, Productiveand Reproductive.