

EFFECT OF SEASON ON REPRODUCTIVE PERFORMANCE OF BLACK BENGAL GOAT IN DINAJPUR DISTRICT

Dr. Lam Yea Asad*

Executive Summary

Dinajpur district is a gracious place for keeping Black Bengal goat due to favorable climatic conditions. To observe the effect of season on reproductive traits of Black Bengal goat (BBG). A study was conducted at different places of Dinajpur district from July 2017 to June, 2018. The result showed that the birth weights of kids were 0.94 ± 0.02 , 1.05 ± 0.02 and 0.90 ± 0.02 kg, respectively in summer, rainy and winter season of BBG. The birth weight of kids at 1st, 2nd, 3rd and 4th parity were 0.95 ± 0.02 , 0.97 ± 0.01 , 0.98 ± 0.02 , 0.96 ± 0.03 kg, respectively. There is no significant effect of parity on birth weight of kids. Average gestation length of BBG at summer, rainy and winter season were 142.9 ± 0.52 , 143.2 ± 0.54 and 145.6 ± 0.48 days respectively. The average litter size of goat at summer, rainy and winter season were 2.09 ± 0.10 , 2.01 ± 0.10 and 2.07 ± 0.09 , respectively. The average litter size of goat at 1st, 2nd, 3rd and 4th parity was 1.53 ± 0.09 , 1.83 ± 0.08 , 1.97 ± 0.09 and 2.17 ± 0.15 , respectively. There is no significant effect of season on litter size of goat. But there is highly significant ($p<0.01$) effect of parity on litter size of goat. Average age at puberty of BBG at summer, rainy and winter season were 185.45 ± 3.03 , 182.72 ± 3.10 and 183.95 ± 2.76 days, respectively. There is no significant effect of season on age at puberty of BBG. The average age at first kidding of Black Bengal goat at summer, rainy and winter season were 369.82 ± 1.76 , 371.92 ± 1.80 and 366.02 ± 1.60 days, respectively. There are no significant differences between season and parity on kid mortality rate but there is a significant ($p<0.05$) effect of season on birth weight of kid, gestation length, age at first kidding and weight at first kidding of Black Bengal goat. Average kidding interval of Black Bengal goat at summer, rainy and winter season were 186.97 ± 0.82 , 184.3 ± 0.84 and 190.48 ± 0.75 days, respectively. There is a highly significant ($p<0.01$) effect of kidding interval on season but there is no significant effect of season and parity on kid mortality rate of BBG. It can be concluded that better reproductive performance found in rainy season because the birth weight of kid, age at puberty, lactation length, kidding interval was better than another season. The reproductive performance was excellent in fourth parity because litter size, kidding interval, kid mortality rate was better than other parity.

* Professor, Dept. of Animal Nutrition, Genetics and Breeding, Sher-e-Bangla Agricultural University, Dhaka-1207