Progesterone profiles in breeding and non-breeding season of does goat

Anas A. Salem, Nasrat AbdelAti and Gamal B. Mahmoud

Abstract:

Abstract Progesterone (P4) is an essential agent in the transition from non-breeding to breeding season, without P4, the behavioral centre of brain is not primed to be sensitive to estrogen and the estrous behavior becomes invisible. The aim of the study was to determine P4 concentrations in breeding and non-breeding seasons and to calculate the differences among them. This may be useful in finding the normal amount of P4 required for minimizing the non-breeding season. A total of 18 healthy adult Damascus does were used in this study to determine blood serum P4 concentrations in the estrous cycle (EC) during the transition from one season to another. Results of this study confirmed that the estrus activity and P4 concentrations were significantly higher in autumn and winter than spring and summer. P4 concentrations were 9.5 %, 23.5 % and 72.3 % in spring, summer and autumn and the maximum level was in winter. P4 concentrations in the short and long EC represented 44.5 % and 7.4 % of that observed in the normal EC. P4 concentration was significantly higher in the EC transferred from late-autumn to early-winter than the transferred from late-winter to early-spring, late-spring to early-summer, and late-summer to early-autumn. Further, P4 concentration in the transitional period from anestrous to estrus or vice versa was

Keywords:

Does goat, Estrus cycle, Progesterone, and breeding and non-breeding seasons

Published In:

The journal of veterinary science, in press, In press