

## Reproductive performance of Jamnapari goats in the Intermediate Zone of Sri Lanka

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This study compares the genetic and non-genetic factors affecting the reproductive performance of Jamnapari goats at Imbulanthanda and Nikawaretiya farms. The reproductive traits of Jamnapari goats kept at Imbulanthanda and Nikawaretiya farms over a period of six years (1997- 2002) were studied. The data for this study was obtained from the history sheets of 79 and 186 does at Imbulanthanda and Nikawaretiya farms, respectively.

Traits studied were birth weight (BW), age at first kidding (AFK), kidding interval (KI) and litter size (LS). The over all least square means for the above traits were  $2.957 \pm 0.446$  kg,  $21.569 \pm 4.172$  months,  $9.975 \pm 2.44$  months,  $1.167 \pm 0.357$  for BW, AFK, KI and LS respectively. Birth weight was significantly influenced ( $P < 0.01$ ) by farm, month of kidding, year of kidding, sex of kid, type of birth and parity. When data were analyzed separately for both farms a significant impact of month of kidding was observed only at Imbulanthanda farm. Farm difference, month of kidding, year of kidding and year of birth of doe was significantly ( $P < 0.01$ ) affected age at first kidding. Kidding interval was significantly ( $P < 0.01$ ) influenced by month of kidding, year of kidding and parity whereas the influence of sex of kid was not significant. Parity and year of kidding were significantly ( $P < 0.01$ ) influenced the litter size while the effect of year of birth of doe on litter size was not significant.

Based on the results of this study it was concluded that Jamnapari goats perform better for the traits of birth weight, age at first kidding and kidding interval except for the trait of litter size in Sri Lanka compared to other tropical countries.