## Productive and Reproductive Performance of Holstein Friesian Cattle in the Hill Country of Sri Lanka

Krishantan, G. And Sinniah, J.

Department of Animal Science, Faculty of Agriculture, University of Jaffna, Sri Lanka

## Abstract

The objective of the study was to assess the productive and reproductive performance of Holstein Friesian dairy cows over a period 11 years (1999-2010) at Bopaththalawa National Livestock Development Board farm. The least square means of total milk yield per lactation (TMY), lactation length (LL), calving interval (CI) and birth weight (BW) were 2704Kg, 342days, 15months and 33Kg, respectively. Age at first calving (AFC), birth weight (BW), lactation length (LL), dry period (DP), calving to service period (CSP) and season of calving (SOC) had significant effect on TMY. The cows calved during the wet season showed significantly higher total milk yield compared to those calved during the hot and humid season. The effect of lactation number (LN), DP, CSP and SOC on LL was significant while none of the factors influenced CI. Sex of the calf and lactation number showed significant effect on birth weight. The average AFC, gestation length (GL), DP and CSP were 41±6 months, 280±5 days, 78±28 days and 101±53 days, respectively. The study reveals that the values for TMY, BW and number of services per conception fall within the average values observed in other tropical countries, though higher values for TMY and BW and lower values for number of services per conception are also reported in the literature. For the traits LL, CI, CSP and AFC the values recorded were higher than the optimal values expected for these traits to maintain high reproductive efficiency. It could be concluded that the factors influencing each and every trait identified in the current study could be used to improve the above traits.