ABSTRACT

PLASMA CORTISOL LEVELS, MATERNAL AND LAMB BEHAVIOURS OF THE KARYA TYPE SHEEP AT PARTURITION AND SUCKLING PERIOD

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The aim of this study were to define the main maternal and lamb behaviours of Karya type sheep at the birth and early postpartum and to determine the mother' stress posed by the separation from their lambs with blood cortisol levels and some physiological parameters at birth and at suckling period. In this study, 64 heads of ewes and theirs lambs, 32 heads ewes at the first year and 32 heads ewes at the second year, were used. The length of birth, total licking time, the time of placenta dropping from the birth and the weight of placenta were found to be 96 min., 68 min., 3.5 hours and 607 grams, respectively. The mean standing up time and the start of suckling after birth in lambs was 19 min. and 50 min., respectively.

The lambs separated from their mothers for 12 hours at the third day, two weeks, four weeks and eight weeks of their ages and then the lambs found their mothers for about 30 seconds at the third day of age. The time of mother and lamb meeting was shortened as the age advanced. In addition to this the suckling activity of lambs was also decreased. The average blood cortisol level of ewes before and after birth was found to be 26.31 ng/ml and 21.53 ng/ml, respectively. The higher cortisol level at the birth was decreased at the later periods and it was found that birth caused stress in ewes. In the period of birth to 8 weeks, separation of ewe and lambs result in an increase of pulse rate

Key words: Sheep, Karya, behaviour, isolation, cortisol, stress.