

(133)

Discomfort Behaviour and Hair Coat Density of Muurah × Nili-Ravi Cross-bred Buffaloes as Affected by Louse (*Haematopinus tuberculatus*) Treated with Acaricides

Senaratna D. *, Wijethilake K.W.M.A.U., Atapattu N.S.B.M.

Department of Animal Science, University of Ruhuna, Matara, Sri Lanka

**dulcy@ansci.ruh.ac.lk*

Abstract

Buffalo farming is an important component of Sri Lankan dairy industry. Ecto-parasites live on the surface of epidermis cause irritation and associated discomfort behaviours leading to energy loss and finally affect to reduce the performance of buffaloes. Objective of the study was to investigate the significance of Louse (*Haematopinus tuberculatus*) infestation on discomfort behavior and hair coat density of Muurah × Nili-Ravi cross-bred buffaloes reared under semi-intensive farming in Kamburupitiya area in Southern Province in Sri Lanka. Lactating female buffaloes (n=5) represented from parity 1 to 5 were purposively selected to the study. Lice count (LC) and lice egg count (LEC) per unit body area and the hair coat density (HCD) were measured periodically at 5,10,15,20 and 25 days after application of acaricides. Six random samples were taken. Direct focal observations were made to understand the discomfort behaviors (scratching, rubbing, licking, tail wagging and ear wagging) using an ethogram. Variation of LC after treatment was tested using repeated measure ANOVA. Main effects and interaction effects were tested. Correlations between LC and LEC with the HCD were tested. A strong positive correlation ($r=0.909$) was observed between LEC and the HCD whereas a weak positive correlation ($r=0.439$) was observed between LC and the HCD. With the prolongation of treatment time, the LC was increased and from day 15 to 25 it was significantly ($p<0.05$) increased. With the age advancement, the HCD was decreased. All the discomfort behaviors were significantly ($p<0.05$) increased with the prolongation of days after acaricide treatments. It is concluded that irrespective of the age, with the increased duration after applying acaricide treatment, lice infestation also simultaneously increased causing discomfort to the animals. Application of acaricides again at 15 days is recommended to control lice and to free the buffaloes from discomfort.

Keywords: Acaricides, Buffalo, Discomfort behaviors, Hair coat density, Lice infestation