PRELIMINARY INVESTIGATION ON THE PREVALENCE OF SELECTED EXTERNAL PARASITES ON DIFFERENT BREEDS OF NEAT CATTLE

10 MAR 2016
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EASTERN UNIVERSITY

SRI LANKA

2015

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ABSTRACT

Cattle farming is a key component in Sri Lankan agriculture. Primarily, it provides high quality protein by producing milk, milk products and meat. Growing population need more improvement in the dairy production level in Sri Lanka.

External parasites transmit a wider variety of pathogens to their host, such as babisiosis, Q fever, anaplasmosis, bovine leucosis virus, anthrax, cost fever, heart water disease *etc.* Diseases transmitted by external parasites to livestock constitute a major factor which limits animal production in many tropical and sub tropical areas of the world and have been reviewed elsewhere.

External parasites represent a major obstacle to development and utilization of cattle resources and causes huge livestock production loss. In this regard a research was conducted to study the prevalence of selected external parasites on different breeds of neat cattle in Batticaloa district. Selected main parasites were ticks and lice and other available external parasites also observed during the study.

Study was carried out in four Veterinary ranges namely Kiran, Vaharai, Karadiyanaru and Kokkaddichcholai in Batticaloa district. A number of 200 cattles in 100 farms were examined for this study. And other relevant data were collected by interviewing the farmer.

According to the survey, Prevalence of external parasites in dairy cattle is 73 % in Batticaloa district. Prevalence of tick is also 73 %. Prevalence of lice is 5%. The tick species infests on cattle in the area are belong to the genus *Ixodes* (10%), *Amblyoma*

(20%), *Rhiphicephalus* (60%) and *Hyalomma*(10%). At the same time 100 percent lice belongs to the *Linognathus vituli.*

The prevalence of ticks was 86%, 72%, 61% in poor, medium and good body condition scores.

In farming system, intensive rearing system showed no prevalence and semi intensive system showed 73% prevalence of external parasites. And also the farms where only cattle is reared showed lower prevalence (68%) than the mixed farms (78%).
In this investigation local cross breed animals showed lower prevalence (40%) to external parasites than exotic breeds Jersey (60%), Sahiwal (60%), and Friesian (80%).

The correlation analysis indicated that, there was a negative significant correlation ($P< 0.01$) between Body condition Score of the animal and the prevalence of External parasites. Chi square analysis showed significance association with Body condition score of the animals ($P<0.05$ and $X^2 = 49.72$) and different farming system ($P < 0.05$ and $X^2 = 24.2$) with prevalence of ticks.

Local cattle is well adopted to the dry zone. Therefore, knowledge on the breed resistance for external parasites also vital in implementing effective control strategies such as through proper breed selection and management.

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