

Investigation of Ectoparasites in Goats and Sheep Farming Systems in Addalaichenai DS Division

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Abstract

The ectoparasites can affect productivity, hide quality and be a source of secondary infection in goats and sheep. This study investigated the prevalence of ectoparasites infestation in goats and sheep in Addalaichenai DS division in Sri Lanka. Goats (n=95) and sheep (n=83) were sampled and ectoparasites were collected from identified body regions. The data were analysed using Chi-Square test. The results showed that 89.33% of sampled animals were infested with one or more ectoparasites. The ectoparasites in goats were *Haemaphysalis longicornis*, *Ctenocephalides felis*, *Linognathus stenopsis* and *Bovicola ovis* with a prevalence of 65.25%, 6.31%, 65.26% and 0% respectively whereas the prevalence in sheep were 60.24%, 0%, 4.81% and 44.57% respectively. The association of age and sex of goats and sheep with ectoparasites infestation was not significant ($p < 0.05$). The presence of *Haemaphysalis longicornis*, *Linognathus stenopsis* in different body regions of goats and sheep was significantly different ($p < 0.05$), however, the presence of *Bovicola ovis* in sheep and *Ctenocephalides felis* in goats in different body regions was not significantly different ($p < 0.05$). The comparison of the infestation in goats and sheep showed that the association of *Ctenocephalides felis*, *Linognathus stenopsis* and *Bovicola ovis* was significantly different, however, the association of *Haemaphysalis longicornis* was not significantly different ($p < 0.05$). It is concluded that *Haemaphysalis longicornis* was highly prevalent in goats and sheep, whereas, *Linognathus stenopsis* highly prevalent in goats only which could affect the wellbeing and productivity of goats and sheep in the study area. Farmer education on the management of the highly prevalent ectoparasites are recommended in the study area.

Keywords: *Body regions, Ectoparasites, Farmer education, Prevalence, Small ruminant*