Abstract

This study was conducted from October, 2009 to June 2010 with the aim of identifying tick’s genera on cattle in and around Mekelle. In the current study, a total of 370 cattle were examined and a total of 1480 ticks were collected for identifying its genera. The major tick genera identified from the survey were Rhipicephalus, Boophilus, Hayalomma and Amblyomma with the prevalence of 46.5%, 12.2%, 5.4% and 4.1%, respectively. Age and sex specific prevalence of the different genera of this ticks showed it was 8.1 % for Rhipicephalus and 0.8% for Amblyomma in young cattle and 38.4% and 3.2% in adult, respectively where statistical significance was observed in sex (p<0.05) but not in age (p>0.05). Similarly, the prevalence of Rhipicephalus in male and female animals was 23.2% but the prevalence of Amblyomma was 3.2% and, 0.8% in male and female, respectively. In addition, the prevalence of the same genera in extensive and intensive production systems also showed that it was higher in extensive than intensive production systems with the prevalence of 36.8% and 4.1% and 9.7% and 0% for Rhipicephalus and Amblyomma, respectively. This showed statistically significant difference (p<0.05) between the two production systems. Similarly, the presence of the ticks in local and exotic breeds for Rhipicephalus and Amblyomma was 34.9% and 3.8% in local breeds and 11.6% and 3% in exotic breeds. This result also showed significant difference (p<0.05). In addition, animals having good and poor body condition were not much affected compared to moderate body conditioned animals with the prevalence of 26.2% and 0.8%, for Rhipicephalus and Amblyomma, respectively. The result of the present study showed the existence of these ticks in the study area as a result the participation of the stakeholders with the government was mandatory to reduce the infestation rates of the different tick genera.

Keywords

Ticks, identification, prevalence, risk factors, cattle, Mekelle, Ethiopia.