

POINT PREVALENCE OF HAEMONCHOSIS IN SHEEP AND GOATS SLAUGHTERED AT MULTAN ABATTOIRM. A. Raza, S. Murtaza^{*}, H. A. Bachaya^{**}, G. Dastager^{***} and A. Hussain^{****}

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ABSTRACT

The present study was conducted to determine the prevalence of *Haemonchus* (H.) *contortus* in slaughtered sheep and goats at Multan abattoir. A total of 4740 animals were slaughtered and examined from 21 January 2007 to 20 February 2007 in Multan abattoir. In case of sheep, 793 out of 2133 were positive and prevalence of *H. contortus* infestation was 37.18% while 811 out of 2607 (31-10%) goats were positive. Sex wise prevalence of *H. contortus* in sheep was 34.11% (291/853) in male and 39.22% (502/1280) in female while in goats prevalence in male was 29.91% (312/1043) and in female was 31.90% (499/1564).

Key words: Point Prevalence, *Haemonchus contortus*; a nematode

INTRODUCTION

Parasitic infestations exert adverse effects on the health and productivity of animals in Pakistan (Rehman *et al.*, 2009). These effects are varied and more pronounced in sheep and goats compared to those seen in other species of livestock (Iqbal *et al.*, 1993). Many species of parasites are seen in sheep and goats and usually include *Haemonchus*, *Oesophagostomum*, *Ostertagia*, *Cchabertia*, *Nematodirus*, *Trichuris*, *Moniezia* and *Fasciola*. The most important of these is *H. contortus* (Husnain and Usmani, 2006). It is an important blood sucking parasite of the ovines and causes an insidious drain on production (Asanji and Williams, 1987; Ijaz *et al.*, 2008, Ijaz, *et al.*, 2009), weight losses and even mortality in young animals (Husnain and Usmani, 2006). The disease caused by this parasite (haemonchosis) is prevalent wherever sheep and goats are raised, but it exerts the greatest economic losses in temperate and tropical regions (Blood *et al.*, 1979; Raza *et al.*, 2007; Ijaz *et al.*, 2008). This paper describes the point prevalence of haemonchosis in sheep and goats slaughtered at Multan abattoir.

MATERIALS AND METHODS

A total of 4740 animals comprising 2133 sheep and 2607 goats were slaughtered and examined from 21 January 2007 to 20 February 2007 in Multan abattoir. Abomasa of sheep and goats were examined for the presence of adult *H. contortus*. The worms were collected in normal saline and identified based on the characteristics given by Soulsby (1982). Abomasa of total

4740 small ruminants slaughtered at Multan abattoir were examined for the presence of adult worm of *H. contortus*. Sheep (n=2133), were comprising on male (n=853) and female (n=1280) while goats (n=2607), were comprising on male (n=1043) and female (n=1564). Chi-square test was applied for the statistical analysis of the data (Petrie and Watson, 1999).

RESULTS AND DISCUSSION

Overall 1604 small ruminants out of 4740 were positive and prevalence of *H. contortus* was 33.84%. In case of sheep, 793, out of 2133 were positive and prevalence of *H. contortus* infestation was 37.18% while 811 out of 2607 goats were found positive and prevalence was 31.10%. Overall prevalence of *H. contortus* in male was 31.80% (603/1896) and in female was 35.19% (1001/2844). Sex wise prevalence of *H. contortus* in male sheep was 34.11% (291/853) and in female was 39.22% (502/1280) while in goats prevalence in male was 29.91% (312/1043) and in female was 31.90% (499/1564).

A high prevalence of *H. contortus* was recorded in sheep. There was a significant difference (P<0.05) in sheep and goats indicating that prevalence of *H. contortus* is species dependent (P<0.01). The rate of helminth infection in sheep varies from one part of the world to the other part. A variety of factors like age (Gulland and Fox, 1992), sex (Pal and Qayyum, 1992) and breed of the host (Maqsood *et al.*, 1996; Raza *et al.*, 2007), grazing habits (Liu *et al.*, 2008), level of education and economic capacity of the farmers (Jorgensen *et al.*, 1998; Komoin *et al.*, 1999), standard of management and anthelmintic used (Valcarcel and Romero, 1999; Ouattara

and Dorchies, 2001) can influence the prevalence of helminthes.

Most of the researchers have observed higher rates of nematode infection in female hosts compared with the males (Asanji and Williams, 1987; Pal and Qayyum, 1992; Iqbal *et al.*, 1993; Maqsood *et al.*, 1996; Raza *et al.*, 2007; Saiful Islam *et al.*, 2008). Higher prevalence of nematode parasites in females compared with males might be due to lowered resistance of female animals on the part of their reproductive events and insufficient/unbalanced diet against higher needs.

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