

STUDIES ON INCIDENCE OF CESTODE PARASITES OF *CAPRA HIRCUS*

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The present study deals with the preliminary survey of cestode parasites collected from the intestine of *Capra hircus* at different collection sites of Osmanabad district (M.S.) India during June, 2015 to May, 2016. The seasonal variation of gastro-intestinal helminthic infection shows the higher prevalence occurs in Winter (72.50%) followed by Summer (43.75%) and Monsoon (22.50%) because of easy dispersal of larvae in pasture resulting is increased in contact with the host and the parasites. Among the Cestode parasites found the maximum incidence occurs is of *Moniezia* sp. in all seasons (27.91%) followed by *Stilesia* sp. (11.66%) and *Avitellina* sp. (6.66%) respectively. Results of present study clearly indicate that environmental factors and feeding habitat are influence the seasonality of parasitic infection either directly or indirectly.

Key words- Cestode parasites, *Capra hircus* , Incidence of infection, Osmanabad.

INTRODUCTION

Common internal parasitic infections occur in Goat include cestodes, trematode and nematodes. Infections of these worms may cause considerable damage and great economic loss to the livestock industry due to malnutrition, decreased feed conversion ratio, weight loss, lowered milk production, and death in young ones. The present investigation deals with the study of incidence of Cestode parasites of goat *Capra hircus* of Osmanabad District.

MATERIALS AND METHODS

In the present study 240 intestine of *Capra hircus* were examined for Cestode infection during period of June, 2015 to May, 2016 from Osmanabad District, Maharashtra State India. Collected Cestodes were preserved in hot 4% formalin, stained with Borax carmine, dehydrated in ascending grades of alcohol, cleared in xylene, mounted in D.P.X. These Cestodes were identified by standard methods(Schmidt G. D.,1934; Wardle, Mcleod and Radinovsky,1974; Yamaguti S., 1959 and Khalil ,Jones and Bray,1994. On taxonomic observations the Cestodes are identified as *Moniezia* sp., *Stilesia* sp. and *Avitellina* sp. Obtained data were recorded; processed for study of seasonal variation.

RESULTS AND DISCUSSION

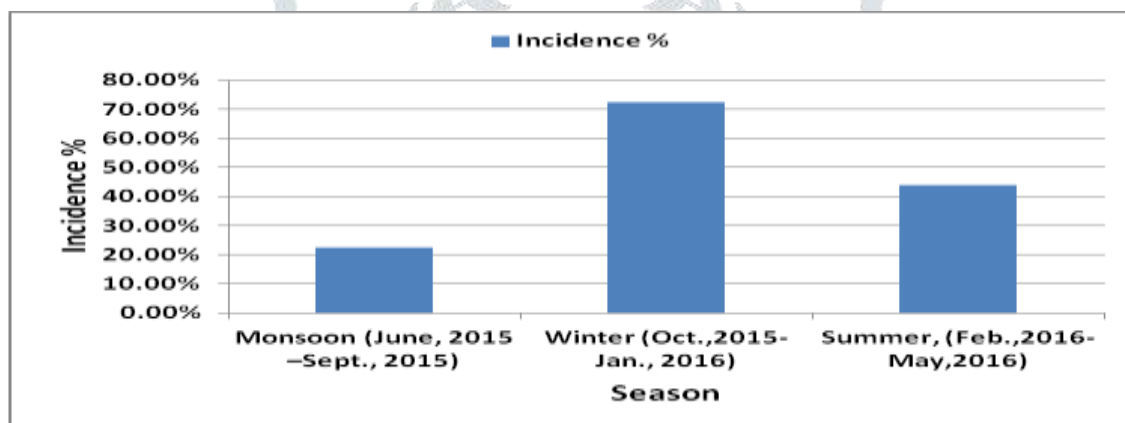
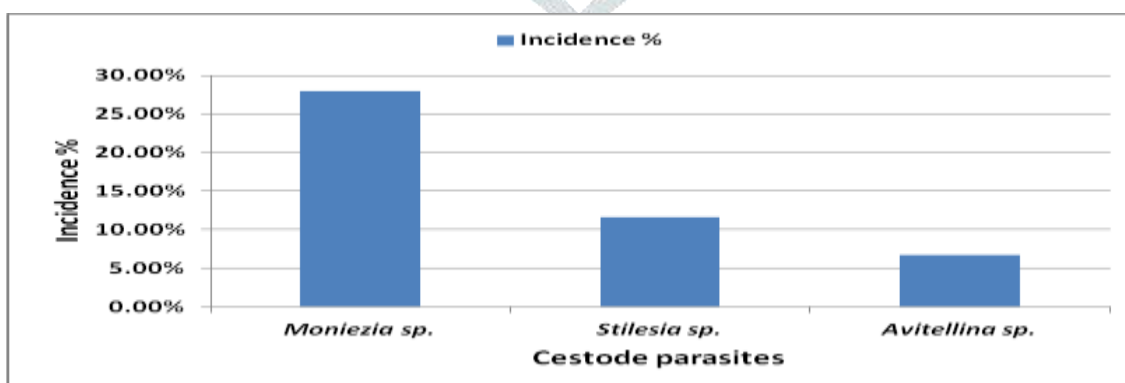
Results of present study on incidence of Cestodes of *Capra hircus* are presented in Table 01& 02; Figure 1&2. Three species of cestode parasites were recorded as *Moniezia* sp., *Stilesia* sp. and *Avitellina* sp. It was found that, the higher prevalence occurs in Winter (72.50%) followed by Summer (43.75%) and Monsoon (22.50%) because of easy dispersal of larvae in pasture resulting is increased in contact with the host and the parasites. Among the Cestode parasites found the maximum incidence occurs is of *Moniezia* sp. in all seasons (27.91%) followed by *Stilesia* sp. (11.66%) and *Avitellina* sp. (6.66%) respectively. Results of present study clearly indicate that environmental factors and feeding habitat are influence the seasonality of parasitic infection either directly or indirectly.

Table 1-Incidence of *Cestode Parasites* of *Capra hircus* during June, 2015 to May,2016.

Seasons	No. of the host Examined	No. of the host Infected	Incidence %
Monsoon (June, 2015 –Sept., 2015)	80	18	22.50%
Winter (Oct.,2015- Jan., 2016)	80	58	72.50%
Summer, (Feb.,2016-May,2016)	80	35	43.75%

Table 2- Incidence of Different Cestode Parasites of *Capra hircus* during June, 2015 to May,2016.

Name of Cestode Parasites	No. of the host Examined	No. of the host Infected	Incidence %
<i>Moniezia</i> sp.	240	67	27.91%
<i>Stilesia</i> sp.	240	28	11.66%
<i>Avitellina</i> sp.	240	16	06.66%

Figure1: Showing Incidence of Cestode Parasites of *Capra hircus* during June, 2015 to May, 2016.Figure2: Showing Incidence of different Cestode Parasites of *Capra hircus* during June, 2015 to May, 2016.

Similar finding were recorded by Padwal 2011. He recorded the high prevalence of *Trichuris* sp. are recorded in the month of December, 2008 and November, 2009 i.e. 82.8% and 85.0% respectively followed by in the

month of March, 2009 and February, 2010 i.e. 60% and 70% respectively where as low prevalence are recorded in the month of August, 2008 and July, 2009 i.e. 50% and 31.5% respectively. Shukla *et. al.* (2011), studied the seasonal variation of tapeworms in *Gallus gallus domesticus* at Ahmednagar region, her finding focus on high prevalence of *Raillietina* parasite are occurred in winter season followed by summer season and low in rainy season. Bhure and Nanware, 2014 studied high prevalence of *Moniezia* sp.is 83.12% in winter (83.12%), followed by summer (61.87 %) where as low in Monsoon (32.50 %).

CONCLUSION

In the present study, recorded data shows high incidence of infections of all the cestode species were recorded in winter (Oct., 2015- Jan., 2016) followed by summer (Feb., 2016-May, 2016) where as low in monsoon season (June, 2015 –Sept., 2015). The results clearly indicate that environmental factors and feeding habitat are influence the seasonality of parasitic infection either directly or indirectly.

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