A REPORT ON THE OCCURANCE OF Hymenolepis anatina IN DUCKS UNDER BACKYARD SYSTEM

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ABSTRACT

Two different cases of mortality in ducks reared under backyard system due to severe cestode parasitism were reported. On postmortem examination varying degrees of enteritis was also observed. The parasites were collected and identified based on morphology as Hymenolepis anatina. The present communication reports the occurrence of H. anatina for the first time in domestic ducks of Kerala.

INTRODUCTION

Reports on the occurrence of helminth infections in anseriform birds affecting their health and well-being are scant (Schiller,1951). Tapeworms of the genus *Hymenolepis* have been frequently encountered in large numbers in water fowls reared under intensive conditions (Islam et.al., 1988). The present communication reports the occurrence of a cestode parasite, *Hymenolepis anatina* in domestic ducks from Wayanad, Kerala, and its pathogenic effects.

MATERIALS AND METHODS

Two cases of mortality in domestic ducks reared under backyard system were reported.

Case number 1:- Forty out of 100 ducks of 6 month age reared by a private owner from Mananthavady died. The owner reported that the birds were brought one month before from a poultry market at Thrissur.

Case number 2: Three out of 10 ducks owned by an agricultural farmer from Kalpetta showed mortality.

In both cases, a representative number of birds were brought to the Department of Veterinary Pathology, College of at Veterinary and Animal Sciences, Pookot, Wayanad for conducting postmortem examination. Parasites were collected for routine processing and identification. Parasites were identified based on (Singh, 2003).

RESULT

It was observed that the cestode parasites were present in large numbers as to occlude the lumen of intestine which has resulted in enteritis of varying degree. The parasites were identified as *Hymenolepis anatina* based on morphological features. Each proglottid showed three testis and one bilobbed ovary within a single segment (Fig. 1)

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Vitelline gland was clearly seen behind the ovary. Genital pore was unilateral in each segment. The scolex revealed the presence of ten hooks on the rostellum, which was typical for *H. anatine* (Fig.2)



Fig. 1: Hymenolepis anatina segments



Fig. 2: Hymenolepis anatina hooks on rostellum

DISCUSSION

Cestode parasitism in wild ducks usually maintain a balance, where the host is not affected

with serious consequences. Among the helminthic infections of anseriform birds, the most commonly observed parasites were of Hymenolepidae family (Schiller,1951). Kharchenko (1960) observed that hymenolepids are most common in summer and spring season.

Usually most of the *Hymenolepis sp.* were considered to be non-pathogenic but severe infections may cause death. In the present study, *H. anatina* is reported for the first time from domestic ducks of Kerala. There were no available reports on the pathogenicity of these parasites. The mortality observed in ducks could be attributed to the severe cestode parasitism.

REFERENCES

Islam, M. R., Shaikh, H and Baki, M. A. 1988.

Prevalence and pathology of helminth
parasites in ducks of Bangladesh.

Veterinary Parasitology. 29:73-77

Kharchenko, O. N. 1960. The problem of helminth - carriers among ducks with hymenolepid infection. *J. Helminthologia*. 4: 249-253

Schiller, E. L.1951. The cestoda of anseriformes of the North Central states. *The American Midland Naturalist*. 46: 444-461

Singh, K. R. S. 2003. Veterinary Helminthology.

Directorate of information and publication, Indian Council of Agricultural Research, New Delhi. pp: 221

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