

Incidence of Gastrointestinal parasitism of Captive Wild Pigeons at Nagpur

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Abstract

Present study was planned to investigate the helminthic infection in captive wild pigeons (*Columba livia*) at Maharajbagh Zoo Nagpur. All the 30 samples examined were found positive either with single or mixed helminthic infections. The result showed that the incidence of *Capillaria sp.*, *Ascaridia sp.* and *Heterakis sp.* were 56.66%, 76.66%, 16.66% respectively. Mixed parasitic infection was recorded in around 17 samples with either *Ascaridia sp.* and *Capillaria sp.* or with *Ascaridia sp.* and *Heterakis sp.* One of 30 samples examined were found with the cysts of *Balantidium coli*.

Keywords: Captive, Wild Pigeon, Zoo, Helminth, Incidence.

Introduction

Large populations of captive wild animals and birds are exposed to many parasitic diseases. Particularly helminthic infections can frequently be a major problem causing even mortality in captive animals. Inadequate information on parasites of zoo birds is a major limiting factor in many zoos. Keeping this view in mind present study was planned to investigate the helminthic infection in captive wild pigeons (*Columba livia*) at Maharajbagh Zoo, Nagpur.

Materials and Methods

Fresh group faecal samples of 30 birds were collected cage wise in clean sterile containers. A part of each sample was fixed in 10% formalin and brought to the laboratory for direct examination. Using concentration method (sedimentation technique) of faecal examination, the samples revealed a variety of parasitic ova and cyst, which were identified as described by Soulsbey (1982).

Results and Discussion

All the 30 samples examined were found positive either with single or mixed helminthic infections. The result showed that the incidence of *Capillaria sp.*, *Ascaridia sp.* and *Heterakis sp.* were 56.66%, 76.66%, 16.66% respectively. Mixed parasitic infection was recorded in around 17 samples with either *Ascaridia sp.* and *Capillaria sp.* or with *Ascaridia sp.* and *Heterakis sp.* One of 30 samples examined were found with the cysts of *Balantidium coli*.

The results of investigation are found in accordance with the findings of Begum and Sheikh (1982), Jayagopala Reddy *et al* (1992), Parsoni, H.R. *et al* (2002) and Shinde, (2004). The occurrence of cyst of *Balantidium coli* would be through the contaminated water. But, since this parasite is not having any parasitic effect on the pigeons, it is not of pathogenic importance. To prevent the parasitic infections at Zoos stringent hygiene should be followed while feeding, watering and general management of cages of such captive wild birds

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