International Journal of Science, Environment and Technology, Vol. 13, No 4, 2024, 301 - 303
ISSN 2278-3687 (O)
2277-663X (P)

Short communication

GASTROINTESTINAL HELMINTHS IN INDIAN ROCK PIGEON (*Columba livia*) OF NAGPUR, MAHARASHTRA

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Abstract: A total of 84 pigeons (*Columba livia*) were examined to observe helminth parasitic infection. All the birds were found to be positive for five species of nematodes (*Syngamus* spp., 25% *Capillaria* spp. 12.5% *Ascaridia* spp. and 12.5% *Subularia* spp., *Heterakis* spp. 25%) and one species of trematode (*Prosthogonimus* spp., 100%) infection.
Keywords: Fecal samples, Indian Rock Pigeon, Helminth, Nagpur, *Columba livia*.

INTRODUCTION

This study was a preliminary survey for identification of parasites (endoparasites and ectoparasites) and their prevalence in domestic pigeons (*Columba livia*). Pigeon belongs to family Columbidae consist of about 300 species of primarily granivorous and fructivorous birds with a cosmopolitan distribution. Population of blue rock pigeon and feral pigeons are increasing in urban areas, recently contraceptives used in Hollywood city. Pigeons play an important role in transmission of various diseases of various species of birds and animals, (Weber et al. 1979, Alexander et al. 1982, Hagg and Gurdani 1990). They are also important from aspect of environmental hygiene and epizootic risk. Hence, pigeon population becoming threat for established poultry farm and industries. Pigeon's blood found to be very effective against earlier stages of arthritis in human. They may transmit mycotic diseases like Histoplasmosis. Pigeon is the important part of ecological chain.

MATERIALS AND METHODS

Fresh fecal samples were collected just after defecation in disinfected sample bottles. All samples were processed by using double sedimentation and floatation techniques. Fecal smears were examined under microscope and eggs of helminths were identified based on morphology.

*Received July 27, 2024 * Published August 5, 2024 * www.ijset.net*

RESULT AND DISCUSSION

Out of 84 samples 21% samples were found positive for helminthic infection. Out of which 6.25% samples were found positive for egg of *Prosthogonimus* spp. Which is in agreement with Soulsby (1973) and Mandal (2004). Remaining 93.75% samples were found positive for 5 species of ova of *Syngamus* spp. (6.25%), *Capillaria* spp. (37.5%), *Heterakis* spp. (25%), *Ascardia* spp. (12.5%), *Subularia* spp (12.5%).

According to results obtained, 37.5 % samples were found to be positive for *Capillaria* spp. Occasionally they found in intestine of wild birds and oftenly in intestine of rock pigeon, which akin to Soulsby (1982).

Samples found positive for *Ascaridia* spp. infection i.e. (12.5%) may cause peritonitis in pigeon, which may lead to heavy mortality, which is in consonance with Rao et al. (2004).

Subularia spp. (12.5%) infection which may be from wild animal source which is also observed by Manuel Tantalean and John Chavez (2004) in wild animals from Peru.

Heterakis spp. (25%) infection also akin to O. R. Tmplins et al. which is also observed by Dulal Krishna Roy in free range of chickens in Bangladesh.

Syngamus spp. (6.25%) was found as rare helminth infection which was found to be common disease of urban wildlife birds by K. Rose (2004) and also occurred in Tundra Voles by Hiroshi Sato and Prusso Kamiya (1999) in Japan.

Ascaridia spp. and *Subularia* spp. infections occurred in similar percentage (12.5%).

ACKNOWLEDGMENT

The authors are thankful to Associate Dean, Nagpur Veterinary College, Nagpur for providing necessary facilities.

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