

A Survey on Gastrointestinal Parasites in Free Range Ducks of Local Farms

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A cross sectional study was carried out in a free range duck population of different farms in the local area to assess the prevalence of gastrointestinal helminthes. Faecal examination by centrifugal sedimentation revealed an overall prevalence of 38.3 per cent. *Echinostoma* (25.0%) followed by *Capillaria*, *Strongyloides sp.* and *Trichostrongylus sp.*, and mixed infections were also observed.

Key words: Duck, Gastro intestinal parasites, Prevalence.

India has vast resources of poultry (489 million) and ducks are farmed for their meat, eggs, and down. In terms of population, India ranks fourth in ducks, globally and ducks occupy an important position next to chicken farming in India. Thus, they form about 10% of the total poultry population and contribute about 6-7% of total eggs produced in the country (Central Poultry Development Organization). In addition, ducks lay more egg/ year than chicken and the size of the duck egg is larger than hen egg by about 15 to 20 gms. The duck-fish production system contributes significantly to nutritional intake of participant households. Ducks can help correct the problem in liver fluke prevalent areas and are also used to free the bodies of water from mosquito pupae and larvae.

They are more resistant to disease than chicken (Muhairwa *et al.*, 2007). However, helminthic infections cause unthriftiness, poor

growth due to poor feed conversion rate, reduced egg production and fertility whereas acute worm infection leads to death (Pratibha Jumde *et al.*, 2011). The data on prevalence of helminthic infections was meagre. Hence, a survey was conducted to assess the prevalence of gastro intestinal helminthes in free ranging duck population.

MATERIALS AND METHODS

A total of 120 ducks from a population of about 1500 ducks ageing 3 to 4 months, from five different farms in Paramathy Velur area of Namakkal district in Tamilnadu were selected for screening. All these ducks belonging to Khaki Campbell and non-descriptive breed were maintained for meat purpose and allowed for extensive grazing near Cauveri river delta. Fresh faecal samples from the above ducks were collected in sterile vials with 10% formalin added as preservative. Centrifugal sedimentation technique was performed and the sediment was examined microscopically for the presence of eggs which were identified based on morphological characters (Soulsby, 1982).

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RESULTS AND DISCUSSION

Out of 120 representative faecal samples examined, the overall prevalence of gastrointestinal parasitic infections was 38.3 per cent (46 samples) and this was in agreement with the findings of Pratibha Jumde *et al.* (2011) who reported 32.94% positivity in Gadchiroli district of Maharashtra. The occurrence of various gastrointestinal parasitic infections with per cent positivity was: Trematodes-30 (25.0%), nematode - 8(6.7%), intestinal protozoa - 8(6.7%) and mixed double helminthes - 6(5.0%). However, Adejinmi and Oke (2011) reported a high prevalence of *Eimeria* species among intestinal protozoa and reported a mixed double infection of 21.7%. The parasitic eggs observed were: *Echinostoma revolutum*- 30(25.0%), *Eimeria sp*- 8(6.7%), *Capillaria annulata* - 5(4.2%), *Strongyloides avium* - 2(1.7%) and *Trichostrongylus tenuis* -1(1.06%).

Hence, an intensive system of management for rearing ducks is recommended with strict hygiene and periodical deworming. This would help increase duck productivity through

increased weight gain and increased feed conversion efficiency.

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