

## POPULATION INDEX OF SOME TREMATODED PARASITES IN ANSERIFORM BIRDS FROM AURANGABAD

B.V. JADHAV AND R.M. KHADAP

DEPARTMENT OF ZOOLOGY, DR. B.A. MARATHWADA UNIVERSITY,  
AURANGABAD - 431 004, INDIA.

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The present communication deals with population index of some trematode parasites in anseriform birds such as *Anas penelope*, *A. platyrhynchos domesticus*, *A. strepera*, and *Anser anser*. The trematode parasites are *Typhocolum indicum*, *Microparyphium kashmirensis*, *Notocotylus attenuatus*, *Echinostoma revolutum*, *Paryphostomum pentalobum*, *Opisthorchis kashmirensis*, *Pailochasmus oxyurus* and *Paramonostomum elongatum*. It shows their percentage of incidence, density and index of infection in three seasons during 1999 - 2000.

Population index of some trematode parasites in anseriform birds have been undertaken to investigate the phenological and innate factors such as seasons, habits, sex and age of the hosts and their effect upon the incidence, intensity and density of parasites. The present study includes application of statistical methods to understand and distribution of trematode parasites both at infra and supra population levels for three seasons i.e. summer, rainy and winter during the year of 1999 - 2000.

Hosts collected from different places of Aurangabad district. The hosts were dissected in mid-ventral line, various organs of the viscera such as stomach, intestine, liver, trachea and large intestine were kept in separate petri dishes containing normal saline. These organs were teased with needles and observed thoroughly under binocular microscope. After collection, the trematodes were fixed in 4% formaline for 24 - 48 hrs. Then they were taken out and washed in several changes of distilled water. The trematodes stained by Harries haematoxyline washed in distilled water, dehydrated ascending grades of alcohol and mounted in DPX.

Population index of following trematode parasites (Table I) :

*Typhlocoelum indicum* Fotedar, 1965 : It shows that the incidence, intensity, density and index of infection were maximum in rainy season and low in summer. But they were moderate in winter season.

*Microparyphium kashmirensis* Chisti & Mir, 1992 : It shows that the incidence, intensity, density and index of infection were maximum in winter season and low in summer but they were moderate in the rainy season.

*Notocotylus (N) attenuatus* Rud, 1809, Kossack, 1911 : It shows that the incidence, intensity, density and index of infection were maximum in winter season and low in summer; moderate in rainy season.

*Echinostoma revolutum* Froelion, BR, Loose, 1899 : It shows that the incidence and density were maximum in the rainy season. But intensity is maximum in winter season.

*Paryphostomum pentalobum* Verma, 1935 : As per analysis incidence and density were maximum in winter season. But intensity is moderate in rainy season.

*Opisthorchis kashmirensis* Chisti & Mir, 1992 : As per analysis incidence, intensity, density and index of infection were maximum in winter season and low in summer.

Table I : Different birds and their respective trematode parasites with their Population index.

| S.No. | Name of hosts                         | No. of host examined | No. of host infected | No. of parasite collected | Body organs | Name of parasite identified        | Incidence (%) | Intensity (%) | Density (%) | Index of infection (%) |
|-------|---------------------------------------|----------------------|----------------------|---------------------------|-------------|------------------------------------|---------------|---------------|-------------|------------------------|
| 1.    | <i>Anas crecca</i>                    | 16                   | 06                   | 06                        | Trachea     | <i>Typhlocoelum indicum</i>        | 37.5          | 0.1           | 0.375       | 0.140                  |
| 2.    | <i>Anas penelope</i>                  | 18                   | 03                   | 03                        | Intestine   | <i>Micropharyhium kashmirensis</i> | 16.6          | 0.1           | 0.166       | 0.0277                 |
| 3.    | <i>A. penelope</i>                    | 18                   | 07                   | 07                        | Caecum      | <i>Notocotylus attenayatus</i>     | 38.8          | 0.1           | 0.388       | 0.151                  |
| 4.    | <i>A. platyrhynchos domesticus</i>    | 30                   | 07                   | 14                        | Intestine   | <i>Echinostoma revolutum</i>       | 23.3          | 2.0           | 0.46        | 0.108                  |
| 5.    | <i>A. platyrhynchos domesticus</i>    | 30                   | 07                   | 10                        | Intestine   | <i>Paryphostomum pentolobum</i>    | 23.3          | 1.42          | 0.33        | 0.077                  |
| 6.    | <i>A. platyrhynchos platyrhynchos</i> | 12                   | 04                   | 02                        | Liver       | <i>Opisthorchis kashmirensis</i>   | 33.3          | 0.5           | 0.166       | 0.055                  |
| 7.    | <i>A. strepera</i>                    | 08                   | 02                   | 02                        | Intestine   | <i>Psilochasmus oxyurus</i>        | 25.0          | 0.1           | 0.25        | 0.062                  |
| 8.    | <i>Anser anser</i>                    | 14                   | 08                   | 06                        | Intestine   | <i>Paramonostomum elongatum</i>    | 57.1          | 0.75          | 0.42        | 0.244                  |

*Psilochasmus oxyrus* Crep, 1825, Lune, 1909 : It shows that intensity, density and incidence of infection was maximum in rainy season and low in winter, but moderate in summer season.

*Paramonostomum elongatum* Yamaguti, 1934 : It shows that intensity, density and incidence of infection and index of infection was maximum in winter season and low in summer season.

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