

A New Trematode From the Intestine of Kite, *Milvus migrans migrans*

FATIMA MUJIB BILQEES* AND ALY KHAN

Department of Parasitology, Faculty of Health Sciences, Baqai Medical University, Karachi-74600 (FMB)
and Crop Diseases Research Institute (PARC), University of Karachi, Karachi-75270, Pakistan (AK)

Abstract.- *Opisthorchis jonesae* new species is described and illustrated. It is distinguished by possessing a long esophagus, absence of prepharynx and an elongate body shape. It is closely related to *O. cheelis*, but differs in body size, egg size and shape of testes.

Key words: Trematode, *Opisthorchis jonesae*, Sindh, Kite.

INTRODUCTION

Examination of twelve kites (*Milvus migrans migrans*) collected from Karachi University Campus, revealed eight specimens of a new species of *Opisthorchis* Blanchard, 1895. This is the first record of this genus from bird from Pakistan.

MATERIALS AND METHODS

In May 2002, birds were collected from Karachi University Campus. The birds were killed and immediately examined for intestinal parasites. Trematodes were removed and placed in a tap water until dead, fixed in F.A.A. (formalin, acetic acid and 50% ethanol) and stained in Mayer's carmalum for light microscopy. Measurements in the description are given in millimeters. The specimens are in the possession of the first author (F.M.B.).

Opisthorchis jonesae, new species (Fig. 1a-d)

Host:	Kite (<i>Milvus migrans migrans</i> Boddaert)
Location:	Intestine
Locality:	Karachi University Campus, Sindh, Pakistan.
No. of specimens recovered:	8 from 3 hosts

Description

Body delicate, elongated, 0.93-4.74 long, 0.28-0.48 wide. Oral sucker terminal, 0.10-0.31 long, 0.06-0.27 wide. Pharynx well developed, 0.06-0.10 long, 0.03-0.07 wide. Esophagus 0.17-0.34 long. Ceca terminating near about posterior extremity. Acetabulum well developed, 0.14-0.31 long, 0.10-0.17 wide. Testes two, oblique, slightly irregular to oval or multilobed, 0.17-0.34 long, 0.10-0.34 wide. Seminal vesicle poorly developed, bordering on one side of the acetabulum. Genital pore median and pre-acetabular. Ovary either comma-shaped, bilobed or trilobed, 0.10-0.41 long, 0.06-0.14 wide. Seminal receptacle 0.10-0.34 long, 0.04-0.10 wide. Uterus convoluted, lying between acetabulum and ovary. Vitellaria postacetabular and preovarian in follicular bunches. Excretory vesicle sigmoid, passing between two testes. Eggs small, yellow in colour, 0.03-0.04 long, 0.01-0.02 wide.

Discussion

A new species of genus, *Opisthorchis* Blanchard, 1895 is being reported from the intestine of a common kite (*Milvus migrans migrans*) of Karachi. It is close to the Indian species *O. cheelis* Lal, 1939, as far as body shape and relative positions of different organs are concerned, but is separated from *O. cheelis* by having smaller body size, no prepharynx, long esophagus, in shape of testes and smaller eggs. The present species also differs in body size (smaller) as compared to other species reported from birds, namely *O. ahingii* Mehra, 1941 (in Yamaguti, 1971); *O. altaevi*

*Present address: Department of Zoology, Jinnah University for Women, Nazimabad, Karachi-74600
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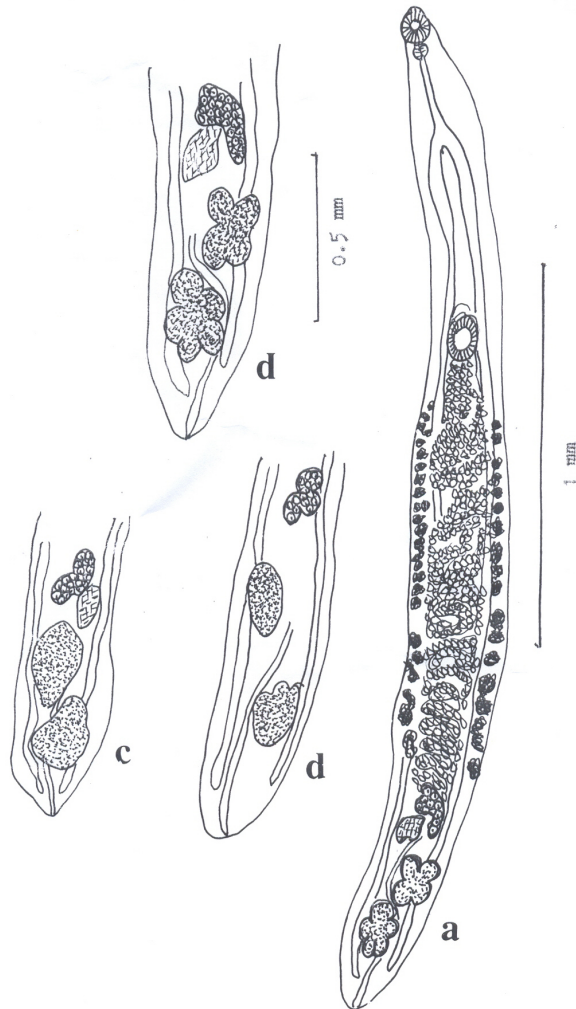


Fig. 1a. *Opisthorchis jonesae*, new species Holotype

Fig. 1 b-d. Paratypes showing variations in shape and position of ovary and testes.

Saidov, 1954; *O. asiaticus* (Skrjabin, 1913); *O. dendriticus* Morgan, 1927; *O. enlzi* Ratz, 1900 (in Yamaguti, 1971); *O. geminus* (Looss, 1896); *O. geminus falconis* Tang, 1941; *O. geminus kirghisensis* Skrjabin, 1913; *O. indicus* Mehra, 1941; *O. milvusensis* Murhar, 1959; *O. pelecani* Mehra, 1941; *O. schikhobalovi* Sultanov, 1962; *O. tenuicollis geminus* (Looss, 1896) and *O. tsingianpuensis* Hsu et Chow, 1938.

In the present species a number of variations

were noted in the shape and location of testes, shape of ovary and seminal receptacle (Fig. 2a-c).

The eggs in the present species are larger as compared to *O. altaevi* Saidov, 1954; *O. cheelis* Lal, 1939; *O. geminus* Looss, 1896; *O. geminus kirghisensis* Skrjabin, 1913; *O. giddhis* Lal, 1939; *O. indicus* Mehra, 1941; *O. pelecani* Mehra, 1941; *O. simulans* Looss, 1896; *O. tenuicollis geminus* Looss, 1896; *O. tsingianpuensis* Hsu et Chow, 1938 and *O. vitellatus* Ching, 1950.

According to the differences mentioned above the present specimens seem to be a new species. The species is named in honour of Dr. Arlene Jones, England.

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