

A NEW TREMATODE, *MEHRAORCHIS CRIBBI* N.SP., FROM THE SMALL INTESTINE OF FROG

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ABSTRACT

A new trematode species *Mehraorchis cribbi* is being described from the small intestine of frog from Karachi, Pakistan. The new species is characterised by possessing small ovoid body, oral sucker subterminal, prepharynx not-obvious, pharynx well developed; caeca reaching posterior end; testes symmetrical, cirrus pouch claviform; uterus occupying most of the hind body; vitellaria mostly in shoulder region; acetabulum elongated in mid region; genital atrium well developed almost circular glandular structure; and eggs small, numerous, measuring 0.026 – 0.032 by 0.011 – 0.012.

Key Words: Trematode, *Mehraorchis cribbi*, frog, Pakistan.

INTRODUCTION

Only few reports are available on occurrence of trematodes of frogs from Pakistan (Bhutta and Khan, 1975; Bilqees and Kaikobad, 1976; Khan and Mohiuddin, 1982; Farooq and Khan, 1994; Bilqees and Khan, 2003). During a survey of trematode parasites of frogs from Karachi, a single specimen of this particular taxon was collected. In the present paper this trematode is being described, which is new to science belonging to genus *Mehraorchis* Srivastava, 1934.

MATERIALS AND METHODS

Living worm was fixed in F.A.A. fixative for 24 h using slight pressure of cover glass. The specimen was stained with Mayer's carmalum, dehydrated in graded series of alcohols, cleared in clove oil and xylol and mounted permanently in Canada balsam. Photographs were taken by a Nikon (Optiphot-2) photomicroscope. Diagrams were made with the aid of camera Lucida. The measurements in the texts are given in millimetres unless otherwise indicated.

Mehraorchis cribbi, n.sp.
(Fig. 1-3)

Host: Frog (*Rana tigrina* Daudin, 1803)
Location: Small intestine
Locality: Karachi, Pakistan
Number: One specimen from a single host of 6 examined.

Description:

Body small, ovoid measuring 3.64 by 2.24; oral sucker large sub-terminal, measuring 0.40 by 0.32; prepharynx not obvious; pharynx well developed, measuring 0.17 by 0.16. Esophagus of moderate length; measuring 0.12 by 0.09; caeca 0.2 wide terminating near posterior end. Testes symmetrical at a distance of 0.72 from each other, the left rounded measuring 0.6 by 0.41, the right oval measuring 0.49 by 0.42. Cirrus pouch claviform, elongate measuring 0.91 by 0.30, anterior to left testis containing winding seminal vesicle and well developed prostatic complex. Genital pore marginal. Genital atrium well developed; almost circular glandular structure, close to anterior extremity. Ovary anterior, dorsolateral to acetabulum measuring 0.35 by 0.32. Vitellaria in shoulder region mostly surrounding testes. Acetabulum elongated in mid-region of the body measuring 0.80 by 0.44. Distance between acetabulum and ovary 0.20. Uterus occupying most of the hind body, pre-reaching caeca laterally. Excretory arms reaching to equator. Eggs oval to elongate, small, numerous, light brown in colour, without polar prolongations measuring 0.026 – 0.032 by 0.011 – 0.012.

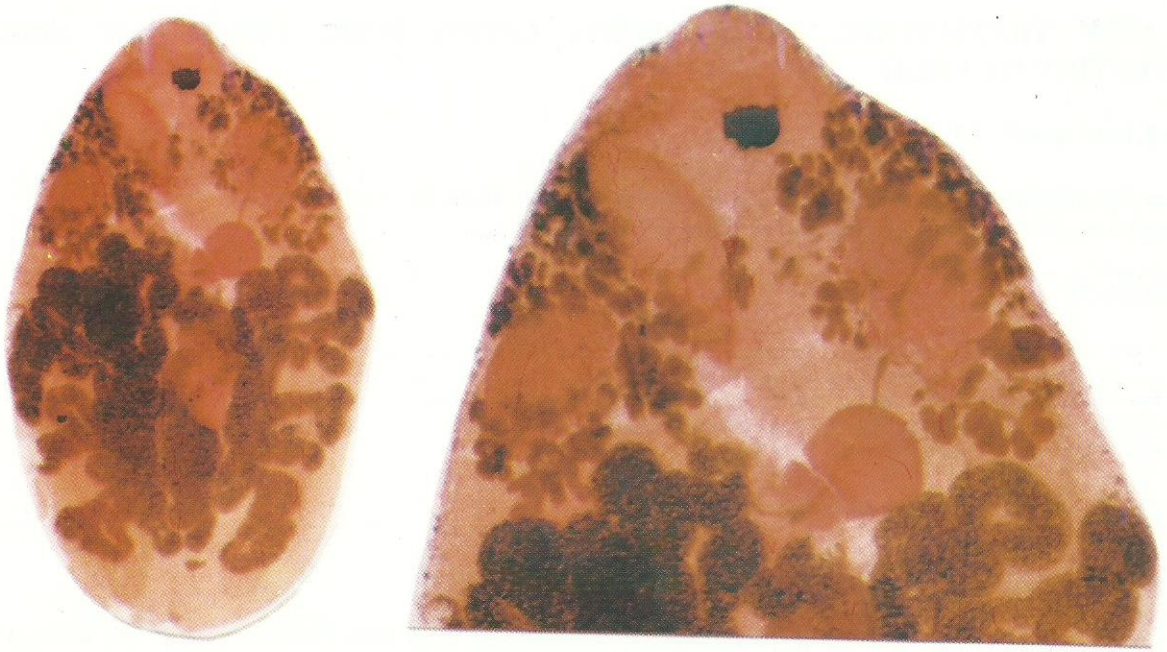


Fig. 1. *Mehraorchis cribbi* n.sp. holotype, entire (X 10).

Fig. 2. Portion of the same at higher magnification showing large oral sucker, large genital opening surrounded by genital atrium, vitellaria and its extent in the fore body (X 25).

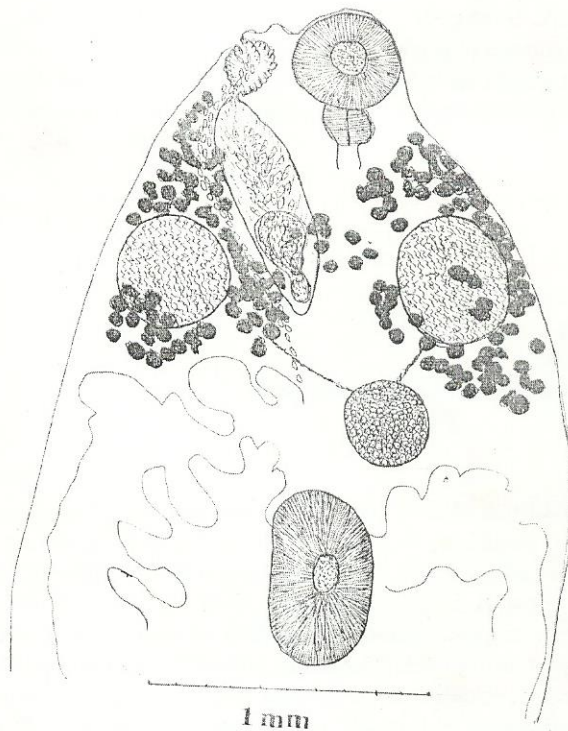


Fig. 3. Camera Lucida drawing of anterior portion showing details of cirrus sac, position of ovary and vitellaria and oral sucker associated with structures.

DISCUSSION

Srivastava (1934) described the genus *Mehraorchis* with *M. ranarum* as its type species from *Rana cyanophlyctis* from India and Ceylon.

The present species is smaller in size as compared to *M. jainiformis* Bhardwaj, 1963 (4.08 by 1.84) and *M. tigrinarum* Gupta, 1954 (5.08 by 2.84). It further differs from *M. tigrinarum* in the ovary size; from *M. ranarum* Srivastava, 1934 in smaller size of oral sucker as compared to ventral sucker.

The present species can be differentiated from all the previously described species in having a prominent glandular genital atrium.

Therefore, the present specimen is regarded as a new species. The species is named in honour of Dr. Tom Cribb, Australia in recognition of his contribution to Parasitology.

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