

## A NEW SPECIES OF TREMATODE GENUS *SCHWARTZITREMA* PEREZ VIGUERAS, 1941 (STRIGEIDAE) FROM A BIRD (CATTLE EGRET, *BUBULCUS IBIS* L.) IN SINDH, PAKISTAN

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### ABSTRACT

Examination of five Cattle Egret (*Bubulcus ibis* Linn.) revealed two trematodes from the small intestine of a bird. Morphometric studies specify that the trematode being reported is new to Science and named as *Schwartzitrema bilqeesae*. The new species differs from its congeners in a number of characters.

**Keywords:** Trematode, *Schwartzitremae bilqeesa*, new species, bird, *Bubulcus ibis*, Pakistan.

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### INTRODUCTION

Several trematodes have been reported from birds of Pakistan (Begum *et al.*, 1997; Bhutta and Khan, 1975; Bilqees, 1970; Bilqees, 1980; Bilqees and Jehan, 1971, 1977; Bilqees and Khan, 2005, 2006; Bilqees and Sultana, 1974; Birmani *et al.*, 2008; Dharejo *et al.*, 2007a; 2007b; Khan *et al.*, 1984; Unar *et al.*, 2008).

In the present study a new trematode species belonging to the genus *Schwartzitrema* Perez Vigueras, 1941 is being reported from the bird Cattle Egret (*Bubulcus ibis*) (Linn.). The genus *Schwartzitrema* Perez Vigueras, 1941 is being reported first time from Pakistan.

### MATERIALS AND METHODS

Five Cattle Egret (*Bubulcus ibis* Linn.) were trapped from Sarwasti farms, District Matiari, Sindh, Pakistan. On dissection from a single bird two trematodes were recovered. The trematodes were fixed in F.A.A. fixative under slight pressure of cover glass for 24 hrs. Later the parasites were removed washed well with 70% ethanol, stained with Mayer's carmalum, dehydrated in graded series of alcohol, cleared in clove oil, rinsed in xylene and mounted permanently in Canada balsam. All measurements are in millimeters, unless otherwise indicated. The holotype and paratype are in the collection of the senior author.

#### *Schwartzitrema* Perez Vigueras, 1941 *Schwartzitrema bilqeesae* n.sp.

Host	Cattle Egret <i>Bubulcus ibis</i> (Linn.)
Location	Small intestine
Locality	Saraswati farms, District Matiari, Sindh, Pakistan.
No. of specimens recovered	2 from a single host
No. of hosts examined:	5

Body small measuring 2.80 – 2.84 by 0.88 divided into forebody and hindbody. Oral sucker well developed smaller as compared to acetabulum measuring 0.15 – 0.16 by 0.18 – 0.19. Acetabulum measuring 0.19 – 0.21 by 0.22 – 0.24. Pharynx well developed measuring 0.09 by 0.05 – 0.06; esophagus present; ceca long; Tribocytic organ cylindrical and elongated. Testes lobed, the anterior measuring 0.15 – 0.16 by 0.20 – 0.22, while the posterior 0.15 – 0.16 by 0.30. The distance between oral sucker and posterior end of the posterior testis ranges from 1.24 – 1.26. Ovary small, pretesticular, roughly oval to spherical, measuring 0.075 – 0.105 by 0.075 – 0.090. Cirrus sac absent. Eggs few, large measuring 0.077 – 0.091 by 0.060 – 0.064. Vitelline follicles numerous confined to hindbody.

## DISCUSSION

Perez Vigueras, 1941 erected the genus *Schwartzitrema* with *S. schwartzi* as its type species in *Anhinga anhinga* from Cuba.

The present specimens are larger (2.80 – 2.84 by 0.88) in body size as compared to *S. dumbeti* Nath et Gupta, 1964, (0.08 by 0.087); *S. pandubi* (Pande, 1939) Dubois et Pearson, 1965 (1.35 – 2.0) and *S. seamsteri* Chandler, 1951 (1.64 – 2.57). The eggs are smaller in size as compared to *S. seamsteri* (0.095 – 0.10 by 0.067 – 0.073); and *S. schwartzi* (0.108 – 0.117 by 0.072 – 0.081).

Besides the present species differs from *S. dumbeti* in which the ovary is overlapping anterior testis while in *S. schwartzi* the two testis are well separated from each other; from *S. novaehollandiae* Dubois and Pearson, 1967 in the shape of testes. Due to these above mentioned morphological and morphometric difference between present and previously described species of the genus *Schwartzitrema* Perez Vigueras, 1941, a new species *S. bilqeesae* is proposed.

The new species is named in honour of Prof. Dr. Fatima Mujib Bilqees, Jinnah University for Women, Nazimabad, Karachi.

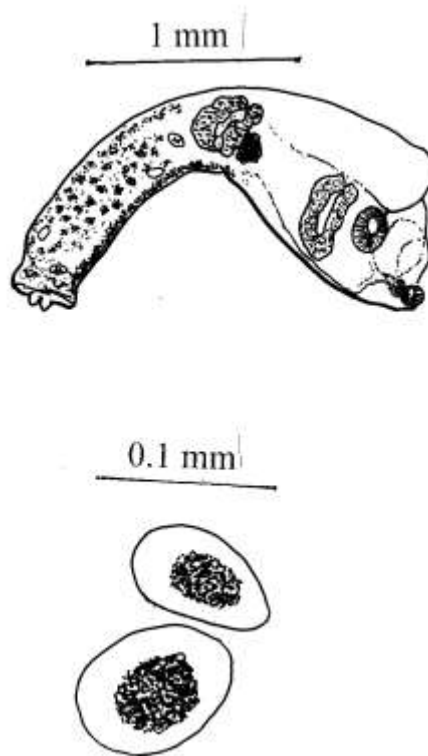


Fig. 1 *Schwartzitrema bilqeesae* sp.n. entire worm, lateral view.

Fig. 2 Eggs enlarged.

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