

TWO NEW ACANTHOCEPHALA FROM THE FISH,  
*SCATOPHAGUS ARGUS* (BLOCH), FROM INDIA

By

M. N. DATTA

(Retired) Senior Zoologist

and

T. D. SOOTA

Zoological Assistant

Zoological Survey of India, Calcutta

(With 2 Text-figures)

Five Acanthocephalan species, all from fishes, are so far known of the genus *Filisoma* van Cleave (1928), as follows :—

Species	Host (Fishes)	Locality
1. <i>Filisoma indicum</i> van Cleave, 1928 (Generi-type of <i>Filisoma</i> )	<i>Scatophagus argus</i> (Bloch)	Chilka lake (Orissa, India)
2. <i>F. microcanthi</i> Harda, 1938	<i>Microcanthus strigatus</i> (Cuv. & Val.)	Taiwan (Formosa), China
3. <i>F. bucerium</i> van Cleave, 1940	<i>Kyphosus elegans</i> (Peters)	Socorro Is. (off Pacific coast of Mexico)
4. <i>F. rhizaliu</i> m Tubangui & Masilungan, 1946	<i>Scatophagus argus</i> (Bloch)	Manila Bay (Philippines)
5. <i>F. fidum</i> van Cleave & Manter, 1947	<i>Kyphosus sectatrix</i> (Linn.)	Dry Tortugas (Florida, U. S. A.)

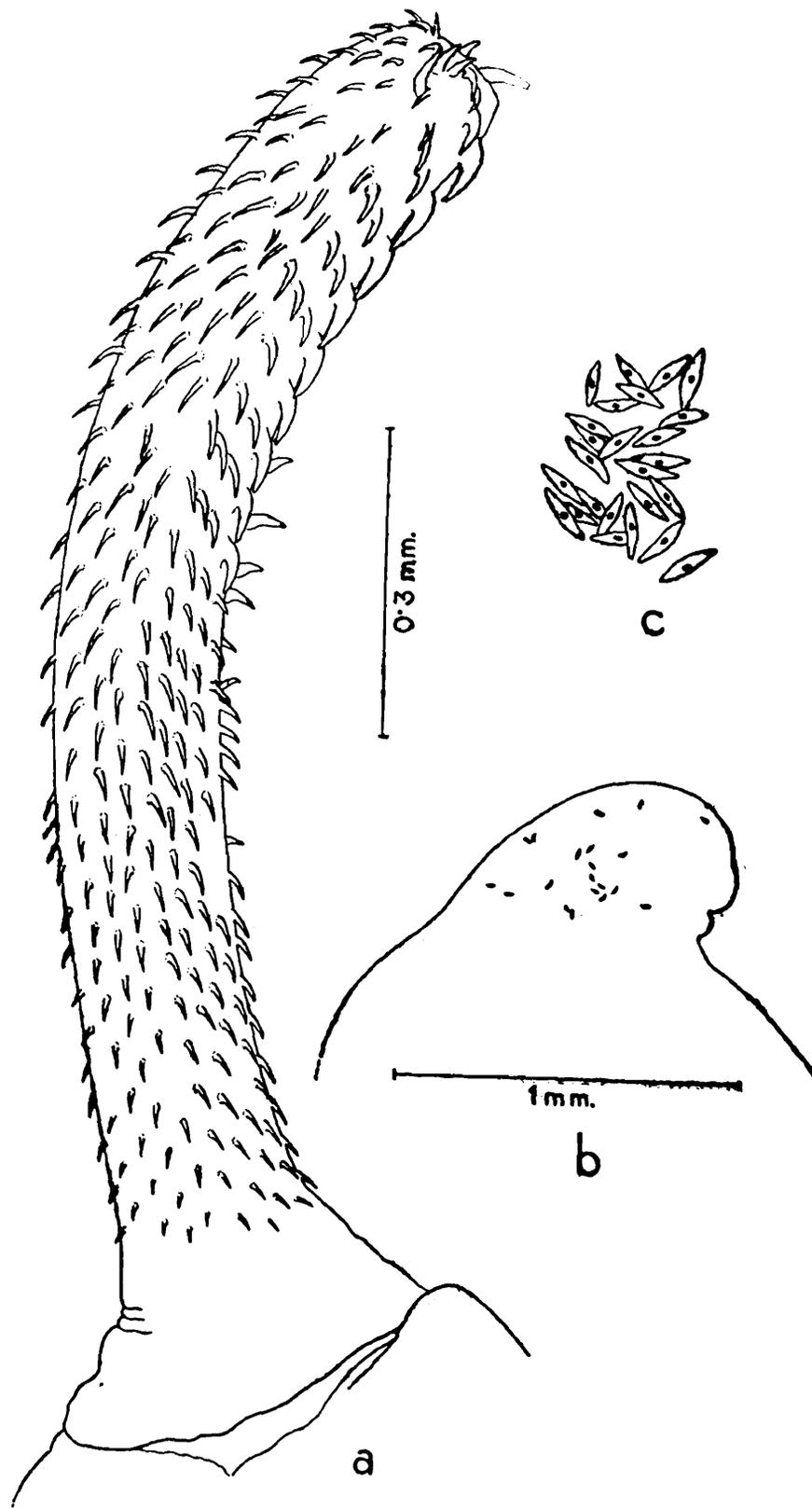
Two new species from India, as discovered in the collections of the Zoological Survey of India, are described below.

1. *Filisoma scatophagusi* Datta & Soota, sp. nov.

(Text-fig. 1)

*Diagnosis*.—A zonal differentiation between dorsal and ventral hooks clearly discernible, the former being thicker and less pointed than the latter. First ten hooks of median dorsal row exceptionally conspicuous—0.04—0.06 mm. long and 0.01—0.02 mm. broad ; subsequent hooks progressively diminishing towards the posterior end and measuring 0.02—0.04 mm. long and 0.004—0.02 mm. broad ; first submedian dorsal row measuring 0.02—0.04 mm. in length and 0.004—0.01 mm. in breadth ; the second submedian dorsal row 0.02—0.04 mm. long and 0.008 mm.

broad ; ventrals measuring 0.008—0.03 mm. in length and 0.004 mm. in maximum thickness, all gradually diminishing in size antero-posteriorly.



TEXT-FIG. 1.—*Fillisoma scatophagusi* Datta & Soota, sp. nov. Holotype (♀).  
(a). Proboscis. (b). Posterior end. (c). Eggs.

*Description.*—The female specimen nearly 115 mm. long, narrow anteriorly (0.5 mm. wide) and broad posteriorly (1.6 mm. wide). Proboscis 1.1 mm. in length, 0.9 mm. in greatest width ; with 14—16 longitudinal rows of hooks (26—32 hooks in each row). Dorsal and ventral hooks clearly differentiated, the former being thicker and stouter

than the latter. Proboscis receptacle double-walled. A small spineless neck-like region (0.1 mm. long and 0.3 mm. broad) towards the base, interrupting the proboscis and the body proper. Body spineless. Ova crowding the entire body. Genitalia not traceable.

*Type-specimen.*—*Holotype* (♀) Zoological Survey of India Registered No. W 3988/1, mounted on a slide, deposited in the collections of the Zoological Survey of India, Calcutta.

*Type-locality.*—River Hooghly, Calcutta, India.

*Type-host.*—From the intestine of the brackish water fish *Scatophagus argus* (Bloch) (order Perciformes ; family Scatophagidae.)

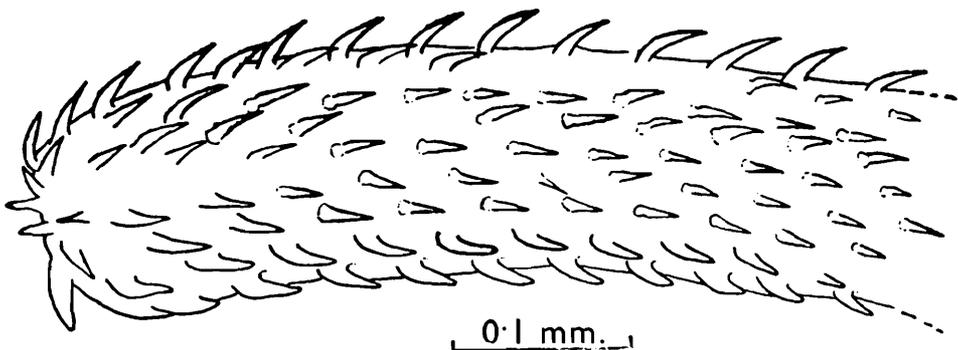
*Remarks.*—The present species can be easily separated from its nearest allies, namely, *F. bucerium* van Cleave and *F. rhizalium* Tubangui & Masilungan in the following respects :

(i) In showing zonal differentiation in both, median and submedian dorsal hooks, whereas in the former (*F. bucerium*) this differentiation is met with only in the median dorsal row and the latter (*F. rhizalium*) in the anterior 8 to 10 hooks of submedian dorsal rows. (ii) In the possession of very conspicuous first ten median dorsal hooks.

## 2. *Filisoma hoogliensis* Datta & Soota, sp. nov.

(Text-fig. 2)

*Diagnosis.*—The median dorsal and the first row of submedian dorsal row of hooks stouter than the rest, measuring 0.02—0.04 mm. in length and 0.004—0.1 mm. in breadth, thus marking a zonal differentiation ; the ventrals measuring 0.01—0.04 mm. in length and 0.008 mm. in maximum thickness ; all the hooks progressively diminishing in size antero-posteriorly.



TEXT-FIG. 2.—*Filisoma hoogliensis* Datta & Soota, sp. nov. Holotype (♀) : Proboscis.

*Description.*—The single female specimen nearly 43 mm. long ; broadest in middle. Proboscis 0.8 mm. long and 0.1 mm. broad, studded with 12-14 longitudinal rows of hooks (24-28 hooks in a row) ; median dorsal and first row of submedian dorsals quite distinct from the rest ; a neck-like region 0.15 mm. long and 0.3 mm. broad lying between the proboscis and the body proper. Genitalia not traceable.

*Type-specimen*.—*Holotype* (♀), Zoological Survey of India Registered No. W 3989/1, mounted on a slide ; deposited in the collections of the Zoological Survey of India, Calcutta.

*Type-locality*.—River Hooghly, Calcutta, India.

*Type-host*.—From the intestine of the fish *Scatophagus argus* (Bloch) (*vide supra* also).

*Remarks*.—The new species is easily distinguishable from its closest ally, *F. bucerium* van Cleave, in the differentiation of the median and the first submedian dorsal rows ; in the latter only the median dorsal row is present.

#### REFERENCE

VAN CLEAVE, H. J. 1928. Two new genera and species of Acanthocephala from fishes of India.—*Rec. Indian Mus.*, Calcutta, 30, pp. 147-149.