

THE HELMINTH FAUNA OF ANDAMAN AND  
NICOBAR. ACANTHOCEPHALA

By

T. D. SOOTA,

AND

K. C. KANSAL,

*Zoological Survey of India, Calcutta*

(With 2 Text-figures)

I—INTRODUCTION

The paper deals with description of three species of Acanthocephala of the genera *Centrorhynchus* Lühe, 1911, *Prosthorhynchus* Kostylew, 1915, and *Pseudoporrorchis* Joyeux et Baer, 1935, the material of which was collected by the Andaman and Nicobar Survey, 1969 (February-April) led by the senior author. All the three genera form first host and locality records.

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II—DESCRIPTION

***Centrorhynchus andamanensis* Soota and Kansal, 1970**

(Text-fig. 1, a-c)

1970. *Centrorhynchus andamanensis* Soota and Kansal, *Proc. Indian Sci. Congr.*, Pt 3 : 450.

*Material examined.*—Holotype—a ♂, Z. S. I. Reg. No. w 6920/1, host—crested serpent eagle, location—intestine, locality—Burma Dera, Maya Bundar (Middle Andaman), collector—T. D. Soota, 23.iii.1969. Paratypes—11. Z.S.I.Reg.No.w 6921/1, other details as in holotype.

*Description.*—Male : Body slender, 34-36\* long, 0.25-0.6 wide at the maximum; proboscis 1.3 long, 0.25-0.4 wide at the maximum, and armed with 24-28 longitudinal rows of hooks with 38-40 hooks in each (14+6+18) which are of three types : anterior large and rooted,

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\* All measurements are in millimeters.

posterior smaller and unrooted, and middle still smaller and rooted; proboscis receptacle double-walled, 0.72 long and 0.35 wide at the maximum; lemnisci two, long (though not clearly discernible); testes two, lying at tandem, overlapping, anterior one 0.75 long, 0.27 wide, posterior 0.7 long, 0.25 wide; cement glands four, elongated (though not clearly discernible); prostatic reservoir cylindrical; bursa muscular.

Female : Body 25-65 long, 0.2-0.8 wide at the maximum; proboscis and hooks same as in male; eggs oval, without polar prolongation,  $0.04 \times 0.015$  in diameter.

*Discussion.*—The present species comes closest to *C. giganticum* Travassos, 1921, in the shape of proboscis and the arrangement of proboscis hooks, but differs from it in the size of body, in the number of longitudinal rows of hooks, and in the number of hooks in each row. It comes close to *C. knowlesi* Datta and Soota, 1954, in the shape of body, but differs from it in the size of body, in the number of longitudinal rows of hooks, in the number of hooks in each row, and in the shape of genitalia. It also comes close to *C. milvus* Ward, 1956, in the shape of genitalia, but differs from it in all other characters.

The genus forms the first locality record from the Andaman.

### ***Prosthorhynchus nicobarensis* Soota and Kansal, 1970**

(Text-fig. 2, a-c)

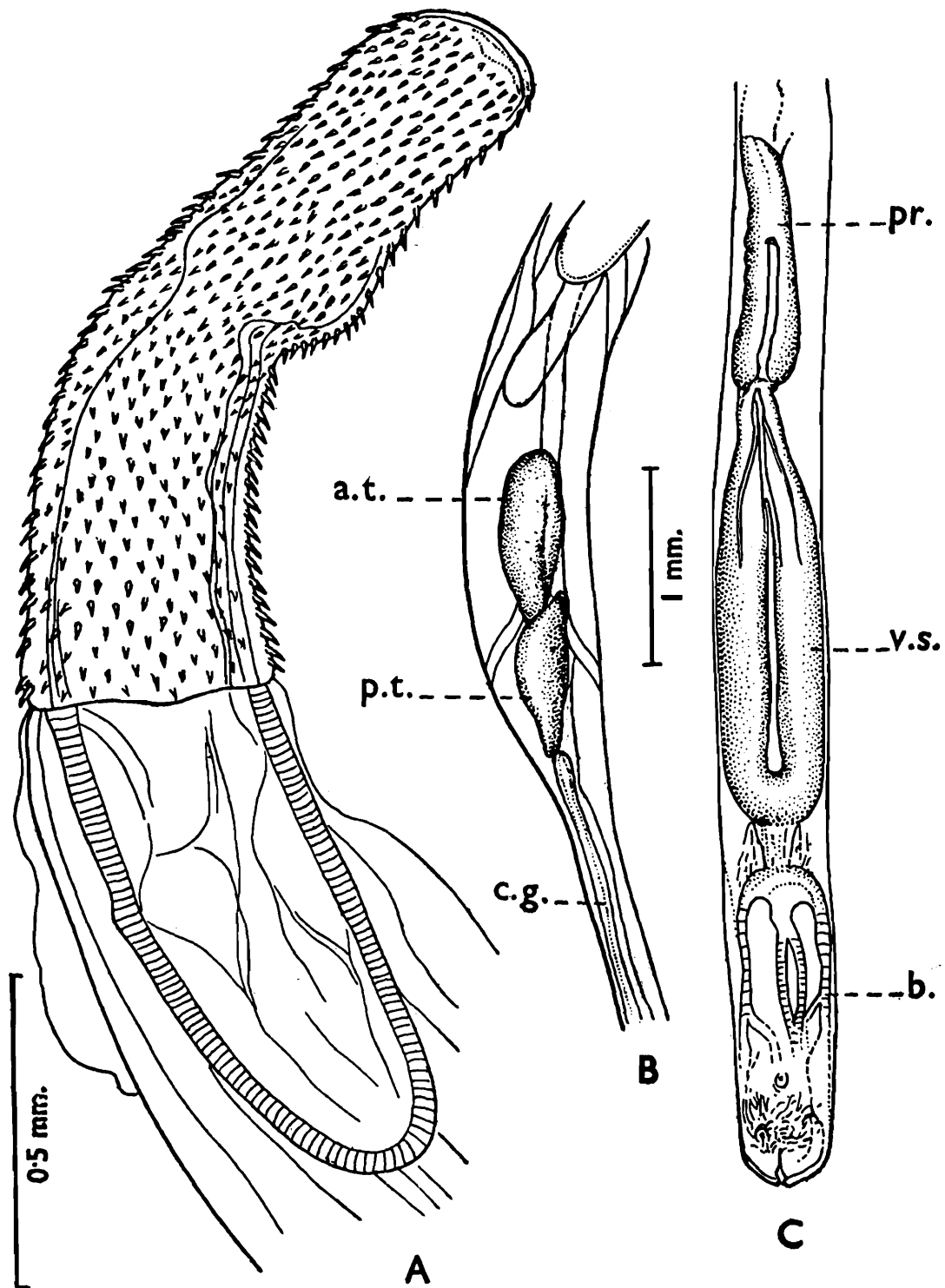
1970. *Prosthorhynchus nicobarensis* Soota and Kansal, *Proc. Indian Sci. Congr.*, Pt 3 : 450.

*Material examined.*—Holotype—a ♀, Z.S.I. Reg. No. w 6924/1, host—ground thrush, location—intestine, locality—Car Nicobar, collector—T. D. Soota, 11.iii.1969. Paratypes—two ♀ ♀, Z. S. I. Reg. No. w 6925/1, other details as in holotype.

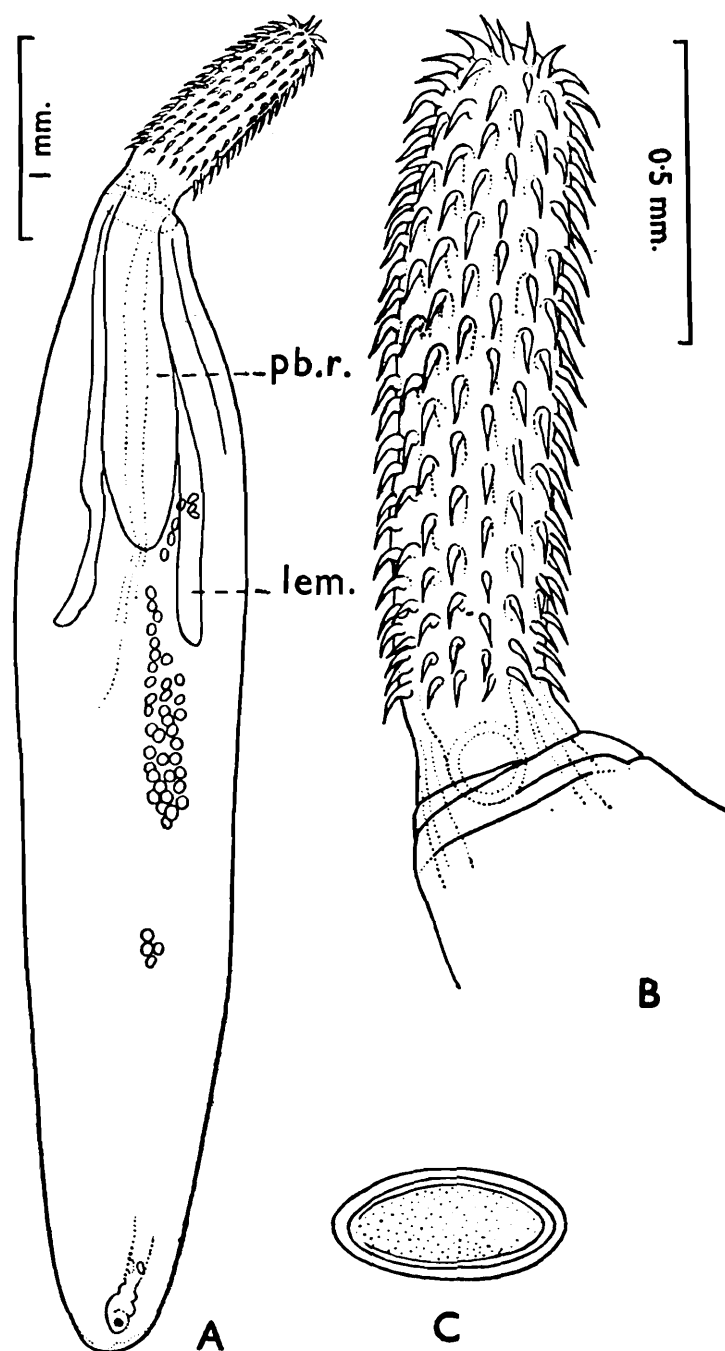
*Description.*—Female : Body cylindrical, 7-8.5 long, 1.1-1.5 at maximum width; proboscis cylindrical, 1.1 long, 0.3 at maximum width, and armed with 14-16 longitudinal rows of hooks with 14-15 hooks in each; anterior hooks rooted with the roots directed posteriorly, but posterior ones rootless and of lesser number; proboscis neck hookless, 0.1 long; proboscis receptacle double-walled, 1.62 long, 0.3 wide at the maximum; nerve ganglion situated in middle of proboscis sheath; lemnisci tubular, two, of equal size, 2.0 long, 0.1 at maximum width; eggs elliptical,  $0.07 \times 0.035$  in diameter, double-walled, middle wall thick, and lacking the polar prolongation.

*Discussion.*—The species comes close to *P. scolopacidis* Kostylew 1915, and *P. reticulatum* (Westrumb, 1821) in the number of hooks in each longitudinal row, but differs from them in the number of longitudinal rows of hooks, and in the size of body and in the size of eggs.

The genus forms the first locality record from India.



TEXT-FIG. 1. *Centrorhynchus andamanensis* Soota and Kansal A. Anterior region, B. Body region showing testes and cement glands, C. Posterior region of male.



TEXT-FIG. 2. *Prosthorrhynchus nicobarensis* Soota and Kansal. A. Entire female, B. Anterior region, C. Egg.

### *Pseudoporrorchis indicus* Das, 1957

1957. *Pseudoporrorchis indicus* Das, *J. Parasit.*, 43 (6) : 659.

*Material examined.*—Five ♂♂, four ♀♀, and nine juveniles, Z. S. I. Reg. No. w 6926/1, host—*Centropus andamanensis*, location—intestine, locality—Port Blair, collector—T. D. Soota, 6. iii. 1969.

*Description.*—Male: Body almost cylindrical, 27-28 long, 0.85-1.0 at maximum width; proboscis ovate, 0.62 long, 0.42 at maximum

width, and armed with 20-22 longitudinal rows of hooks with 9-10 hooks in each; hooks gradually decreasing in size antero-posteriorly and agreeing with the description of the species as given by Das; proboscis sheath cylindrical, 1.2 long, 0.29 at maximum width, formed of two concentric muscular layers and with an elliptical posterior extremity; nerve ganglion situated almost in the middle of proboscis sheath; lemnisci long, tubular, nucleated, and in some cases reaching upto anterior testes; testes two, lying at tandem, oval and almost equal in size, 0.9 long, 0.5 at maximum width; cement glands four, long, tubular, and varying in size, followed by a tubular reservoir touching bursa which is muscular, capped and well-developed; lacunar system almost clear in both sexes.

Female : Body large, 22-45 long, 0.9-1.1 at maximum width; proboscis and hooks same as in the male; eggs  $0.06 \times 0.03$  in diameter.

*Discussion.*—Though the present specimens show some variations from the original description given by Das (1957) in respect of size of body, hooks, and eggs, these variations are quite negligible and do not demand the creation of a new species, and hence the specimens are being referred to the above species. Although the genus and the species have already been recorded from India, they form first locality record from Andaman.

### III—SUMMARY

The paper deals with three species of acanthocephala (belonging to three genera) from the Andaman and Nicobar Islands, out of which two viz., *Centrorhynchus andamanensis* Soota and Kansal and *Prosthorhynchus nicobarensis* Soota and Kansal are described in detail and the remaining one shows interesting hitherto unrecorded variations. All the genera form new locality records.

### IV—REFERENCE

- DAS, E. N. 1957. On juvenile and adult forms of *Pseudoporrorchis indicus*, a new species of acanthocephala from India.—*J. Parasit.*, Lancaster, **43** (6), pp. 659-663.

### V—ABBREVIATIONS

a.t. anterior testis; b. bursa; c.g. cement glands; lem. lemnisci; p. r. prostatic reservoir; p. t. posterior testis; pb. r. proboscis receptacle; v. s. vesicula seminalis.