

OCCURRENCE OF *XENOBALANUS GLOBICIPITIS* (STEENSTRUP) ON
THE FINLESS BLACK PORPOISE, *NEOMERIS PHOCOENOIDES*
IN INDIAN SEAS

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ABSTRACT

Previous record of *Xenobalanus globicipitis* in Indian Ocean is from the South African coast (Natal and Saldhana Bay). A specimen of *X. globicipitis*, 22.5 mm in length, was found attached to the fluke of a finless black porpoise (*Neomeris phocoenoides*) caught off Karwar by R. V. Varuna, and this finding extends considerably the known range of distribution of this species.

The balanid, *Xenobalanus globicipitis* (Steenstrup), attached to the fins and flukes of porpoises, dolphins and whales has been reported from different localities of North Atlantic (Faroe Islands between Madeira and England, Madeira, Azores and New England), Antarctic (South Shetland Islands), Pacific (Vancouver Islands, B.C.), Western Indian Ocean (Natal and Saldhana Bay, South Africa) (Nilson-Cantell 1930) and Australian Seas (Great Barrier Reef) (Pope 1958).

The hosts of this species so far recorded are *Globicephala melaena*, *G. intermedius*, *Balaenoptera borealis*, *B. physalus*, *B. musculus*, *Tursiops catalinae*, *Delphinus delphinus*, *Pseudorca crassidens*, *Grampus griseus* (Nilson-Cantell 1930), *Phocoena phocoena*, and *Feresa attenuata* (Stubbings 1965).

A finless black porpoise (*Neomeris phocoenoides*) caught by R. V. Varuna on one of its experimental cruises on 12th February 1965 off Karwar harboured a specimen of *X. globicipitis* on its fluke. Occurrence of this balanid in the present locality extends its distribution to the Indian seas and confirms Nilson-Cantell's view that this species is 'probably cosmopolitan'.

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The present specimen (Fig. 1) measures 22.5 mm in length and the diameter of the star-shaped shell is 5.0 mm. Largest specimens in record are that of Darwin (1854) measuring a length of 2 inches and star diameter of $\frac{1}{4}$ inch and

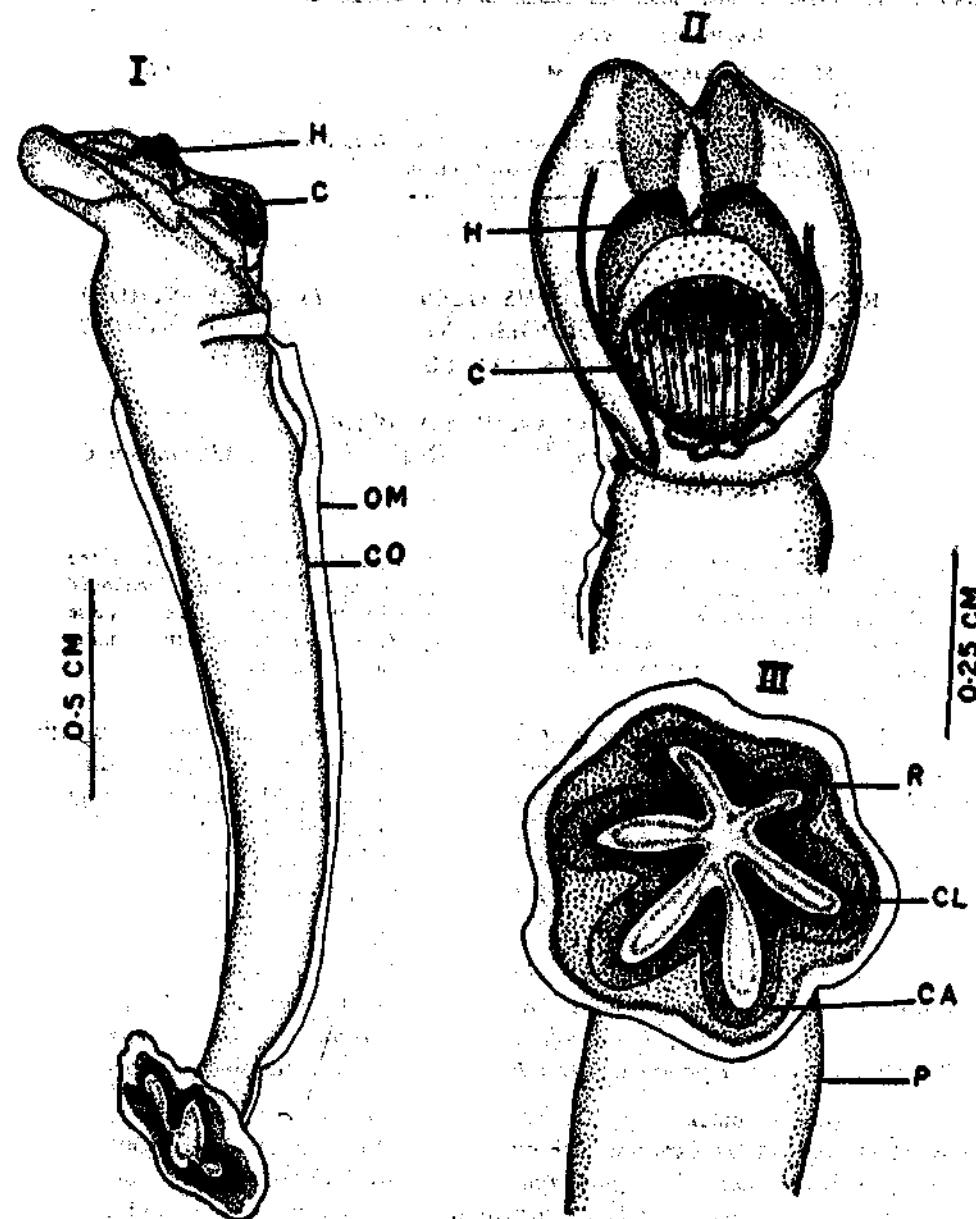


FIG. 1. *Xenobalanus globicipitis*. I, complete animal; II, reflexed hood. III, star-shaped shell. C; cirri, CA; carinal, CL; carino-lateral, CO; corium, OM; outer membrane, P; pseudopoduncle.

that of Calman (1920) measuring a length of 75 mm and star diameter of 16 mm.

Detailed morphological description is given by Darwin (1854) and supplementary descriptions by Broch (1924), Nilson-Cantell (1921, 1930), Cornwall (1927, 1955), Pope (1958) and Stubbings (1965). Only two salient features of the external morphology of the present specimen are described here.

The 6-rayed, star-shaped shell (Fig. 1, III) is imbedded up to its top in the skin of the porpoise. Out of the shell springs the peduncle-shaped cylindrical and flexible body which forms the main part of the animal (Fig. 1, I). The body is narrower near the shell and acquires its full diameter near the reflexed hood at the upper end (Fig. 1, II). A pair of rounded, hollow, but not perforated horns are present in the hood. Below the horns could be seen the cirri, the anterior three pairs of which being shorter than the posterior three pairs (Darwin 1854). The body surface is smooth and formed of a thin, transparent membrane, but from the colour of the underlying corium, the whole animal appears chocolate-red, the reflexed hood being of a slightly lighter colour.

The specimen is deposited in the Reference Collection Museum of the Central Marine Fisheries Research Institute, Mandapam Camp, the Register No. being CMFRI, C.103.

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