

CIRRIPEDES

(ADDITIONAL PART)

BY

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INTRODUCTION

The little collection, which I have received from the Natural History Museum, Brussels after finishing the description of the Cirripedes of the Expedition of T. R. H. the Prince and Princess Leopold of Belgium in the company of Prof. Dr. V. Van Straelen in the year 1929 (Nilsson-Cantell, 1931), may here be described as a supplement. The specimens, though dry preserved, were yet possible to identify. One species *Tetraclita porosa viridis* has been already mentioned in the part above cited, but here from a new locality. The 3 other balanids are also of interest for the localities. Two of these *B. cepa* Darwin, 1854 and *B. socialis* Hoek, 1883 have not been much studied earlier. As regards the first mentioned a supplementary description of the unknown body can here be given for the most important parts.

The complete list of the Cirripedes of this expedition will thus be the following :

- Pollicipes mitella* (LINNEUS, 1767);
- Ibla cumingi* (DARWIN, 1851);
- Octolasmis grayi* (DARWIN, 1851);
- Chthamalus withersi* PILSBRY, 1916;
- Chthamalus caudatus* PILSBRY, 1916;
- Octomeris brunnea* DARWIN, 1854;
- Balanus amphitrite* DARWIN, 1854;

- Balanus amphitrite cirratus* DARWIN, 1854;
Balanus amaryllis euamaryllis BROCH, 1922;
Balanus socialis HOEK, 1883;
Balanus cepa DARWIN, 1854;
Pseudoacasta libera NILSSON-CANTELL, 1930;
Tetraclita porosa viridis DARWIN, 1854;
Tetraclita purpurascens var. *multicostata* NILSSON-CANTELL, 1930;
Tetraclita costata DARWIN, 1854;
Chelonibia testudinaria (LINNAEUS, 1758);
Stomatolepas transversa NILSSON-CANTELL, 1930.
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SPECIAL PART

FAMILIA **BALANIDAE.**

SUBFAMILIA **BALANINAE.**

Genus **BALANUS** DA COSTA, 1778.

Subgenus **BALANUS** DA COSTA.

Balanus amphitrite cirratus DARWIN, 1854.

Some small specimens of a *Balanus* (greatest carino-rostral length 6 mm.) situated on a shell of the mussel *Tellina edentula* and belonging to the subgenus *cirratus*, I have studied on better material earlier (1921, 31). These dry preserved specimens could be identified by the typical colour of the parietes and the opercular valves. Of the internal parts the very typical maxilla II with the strong projecting lower part of the front edge was found (Nilsson-Cantell, 1921, Text-fig. 65a).

New locality : n° 28. Lho Seumawe, Atjeh, Sumatra. Some specimens on the mussel *Tellina edentula* Brod. (= *angulata* Chenen, non L., determined by P. DUPUIS, 1930).

Distribution : Mouth of Indus, Further India, Sunda Islands, Philippines, China and Australia.

Subgenus **SOLIDOBALANUS** HOEK.

Balanus socialis HOEK, 1833.

One little shell of a *Balanus* measuring in carino-rostral length 4,5 mm. and height 2 mm. seems to me to belong to the species *B. socialis*, for which Hoek (1913) has given a complete description. Externally the shell is rather like small *B. tenuis*, earlier examined by the author, but a study of the opercular valves reveals great dissimilarities. In these parts the specimen seems to me wholly to agree with *B. socialis*, which species has scuta without longitudinal striation. Internally there is a low adductor ridge connected above with a parallel smaller ridge, thus forming an inverted U.

The *tergum* has a short and rounded spur near to the basiscutal angle.

The *radii* are rather narrow and have oblique summits.

The internal parts (well described by Hoek) could not be studied in this specimen.

New locality : n° 27. Poeloe Enoe (Aroe Islands). One specimen from a mussel shell.

Distribution : Malay Archipelago, on shells from deeper water up to low-water mark.

Subgenus ARMATOBALANUS HOEK.

Balanus cepa DARWIN, 1854.

Fig. 1.

Supplementary description : This species belonging to the subgenus *Armatobalanus* Hoek is here represented by several dry preserved specimens. Since the first description was given by Darwin, 1854, the species is mentioned by

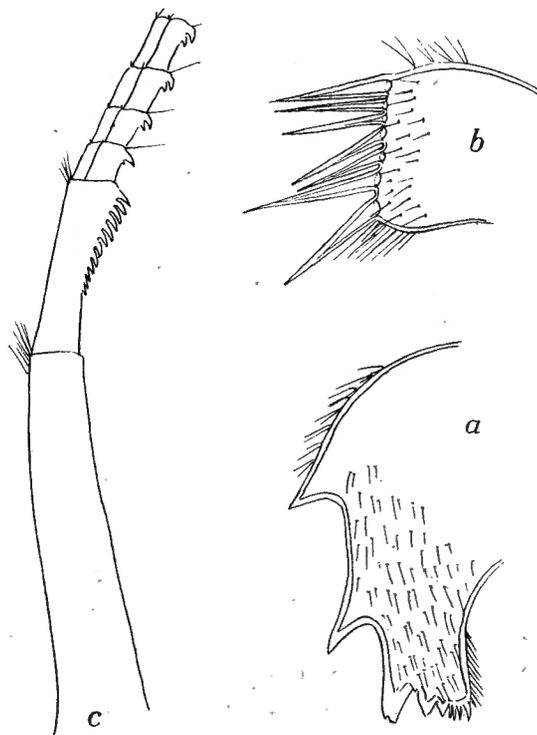


FIG. 1. — *Balanus cepa* DARWIN, 1854.
a mandible; b maxilla I; c cirrus IV.

Pilsbry (1916). Only the external characters are hitherto described. Though the material was preserved dry it was yet possible to soften some remains of the body and study the most typical internal parts. It is interesting thus to state that the cirrus IV has typical teeth of the subgenus. Consequently there

is no doubt that *B. cepa* is a real *Armatobalanus*. Other species of this subgenus have been well described as regards the internal parts.

Typical for the *wall* are the steeply conical shape and the very small orificium. The *radii* are very narrow, the *parietes* strongly ribbed. The *base* is flat with radial lines as was pointed out by Pilsbry (1916). *Terga* and *scuta* of these specimens agree well with the figures and descriptions given by Darwin (1854).

Measurements of some specimens in mm. :

Carino- rostr. length.	Height.
7	4,5
9	3
5	3

Of the *mouth-parts* it was only possible to figure and describe the mandible and *maxilla II*.

Labrum with three teeth on both sides of the notch.

Mandible with three strong and two lower smaller teeth. Near to the very small fifth tooth some bristles on the inferior angle. The third tooth very strong and blunted.

Maxilla I has a straight front edge without a notch. In the lower part two strong spines are situated.

Of the *cirri* the *cirrus I* has rather different rami. Of the other cirri *cirrus IV* has the distal segment of the protopodit armed with 12 (sometimes only 9) recurved strong teeth. On the anterior ramus the segments have two teeth. In species as *B. quadrivittatus* Darwin there is a smaller number of teeth on the protopodit.

New locality : n° 25. Poeloe Enoe (Aroe Islands). Several specimens on mussel shells.

Distribution : Japan to the Malay Archipelago, on shells of barnacles and mussels; and on *Isis*.

SUBFAMILIA TETRACLITINAE.

Genus TETRACLITA SCHUMACHER, 1817.

Subgenus TETRACLITA.

***Tetraclita porosa viridis* DARWIN, 1854.**

Some empty shells of this species, earlier noted from the same expedition.

New locality : n° 26. Manokwari, New Guinea. By the author (1930) some adjacent localities are given.

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