

# *BEDOTELLA ARMATA* (CNIDARIA, HYDROZOA, LAFOEIDAE) IN THE BAY OF BISCAY, WITH DESCRIPTION OF ITS GONOTHECAE

C. ÁLVAREZ CLAUDIO

*B. armata* is known in the eastern Atlantic, principally from the continental shelf and slope of the southern part of the Bay of Biscay (PICTET & BEDOT, 1900). The first mention of the gonothecca of this species was by AGUIRREZABALAGA et al. (1986) but they did not describe nor illustrate it. RAMIL & VERVOORT (1992) noted that they had seen a gonothecca from the Cantabrian Sea; that gonothecca is part of the material studied in this paper since it was still undescribed.

*Bedotella armata* (Pictet & Bedot, 1900) (figs. 1,2)

## Material examined

COCACE cruise (Central Cantabrian Oceanographic Cruise, Oviedo University): St. E3 (43°42,62'N-06°03,70'W), 3 VI 87, 183 m, fine sand and stones, one infertile colony; St. F3 (43°51,93'N-06°04,71'W), 2 VI 87, 227 m, three infertile colonies; St. H5 (43°58,06'N-05°43,95'W), 29 IV 87, 769 m, very fine sand, stones and *Lophelia pertusa* coral bank, one fertile colony with one gonothecca and three infertile colonies growing on *L. pertusa* branches and Polychaeta tube; St. H2 (43°56,50'N-05°48,90'W), 11 VII 87, 893 m, very fine sand, stones and *L. pertusa* coral bank, one infertile colony and one fertile colony with two gonothecae growing on *L. pertusa* branches.

## Description

Most colonies erect, 1-4.5 cm high but some stolonal. Hydrothecae campanulate with a ring of desmocytes at base. Hydrothecal rim everted, without renovations, remnants of hydranths present. Nematothecae globular, containing a cluster of long nematocysts. Gonothecae isolated, without protective structures; strongly compressed, disc-shaped, 2665-3000 µm high, 2730-3150 µm maximal diameter. They are attached to the hydrocaulus and branches by short, wrinkled pedicels, 208-212 µm high. In lateral view, they are thick at the basal and medium regions and thin out gradually towards the apical region where they are strongly flattened. They open by means of a narrow slit at the apex. The contents of the gonothecae available were badly preserved, showing an undifferentiated mass. A scanning electron micrograph shows the surface to be wrinkled, probably as an artefact of preparation.

Although most of Lafoeidae genera have gonothecae associated in coppinia or scapus which are characteristic of the family, some genera have separate gonothecae. *Hebella* and *Scandia* gonothecae arise isolated from the hydrorhiza, *Cryptolarella* gonothecae are flask-shaped, partly adnate and *Halisiphonia* has strongly compressed gonothecae. *Bedotella armata* gonothecae have morphological affinities with those in the genus *Halisiphonia*, as RAMIL & VERVOORT (1992) pointed out, suggesting that the

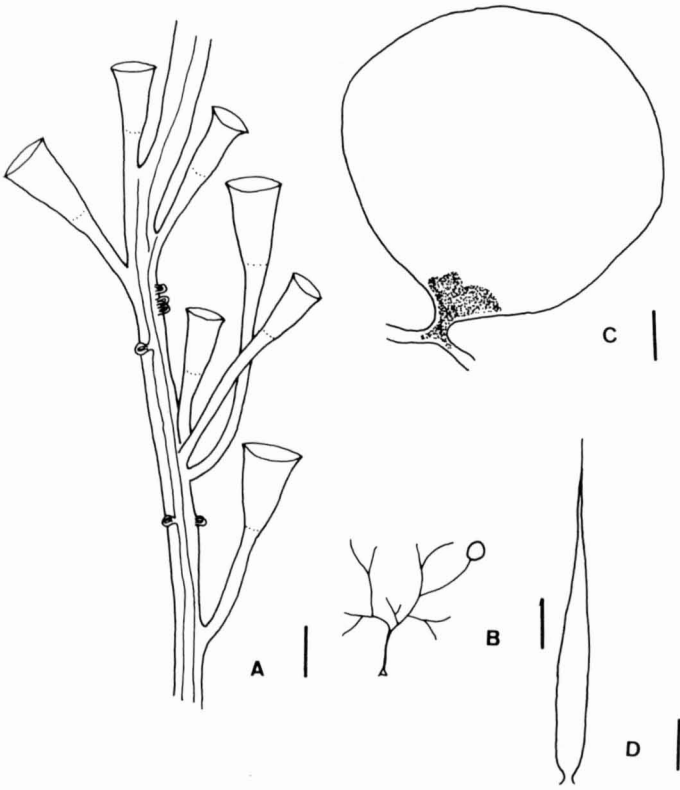


Fig. 1. *Bedotella armata*: A. Part of a colony showing hydrothecae and nematothecae; B. Colony natural size, with a gonotheca at the top of a side-branch; C. Gonotheca in frontal view showing rests of its contents; D. Gonotheca in lateral view. (Scale bars: A= 500  $\mu$ m; B= 1 cm; C, D= 550  $\mu$ m)

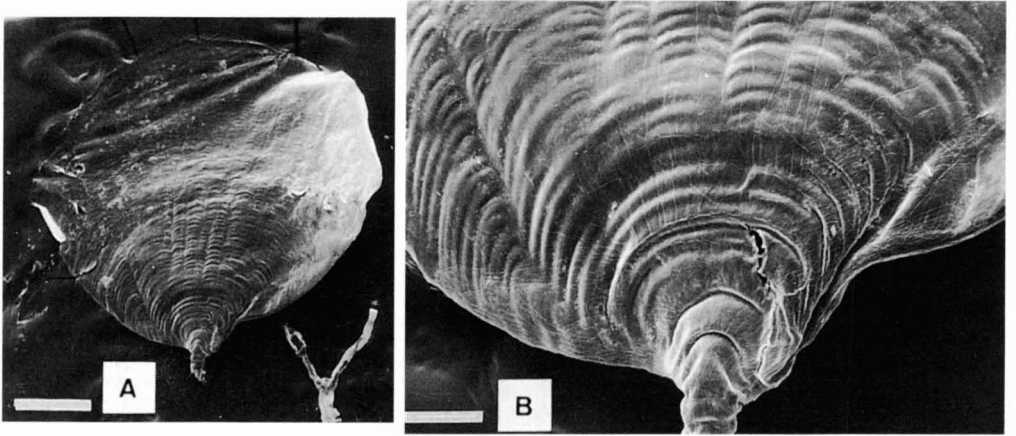


Fig. 2. A, B. Scanning Electron Micrograph of gonothecae. (Scale bars: A= 650  $\mu$ m; B= 175  $\mu$ m).

Lafoeidae family should include genera characterized by compressed gonothecae. Otherwise to a lesser degree it bears a resemblance to the gonothecae of the Campanulinidae genus *Plicatotheca*, described by GILI et al. (1989).

Spain. The gonothecae, described here, are large, strongly compressed, and disc-shaped suggesting that the Lafoeidae family should include genera characterized by compressed gonothecae.

Key words: *Bedotella armata*, Hydrozoa, Gonothecae, Biscay Bay, Spain.

## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to Dr. W. Vervoort of the Nationaal Natuurhistorisch Museum, Leiden for his help and for commenting the manuscript.

## ABSTRACT

*Bedotella armata* (Cnidaria, Hydrozoa, Lafoeidae) in the Bay of Biscay, with description of its gonothecae.— *Bedotella armata* (Pictet & Bedot, 1900), referable to the hydroid family Lafoeidae, is known principally from the Bay of Biscay. Gonothecae of this well known species are previously undescribed. Fertile colonies were collected at depths of 769 m and 893 m on the continental slope of the Cantabrian Sea, north of

## REFERENCES

- AGUIRREZABALAGA, F., ALTUNA, A., ARRARAS, M. D., MIGUEL, I., ROMERO, A., RUIZ DE OCENDA, M. J., SAN VICENTE, C. & IBÁÑEZ, M., 1986. Contribución al conocimiento de la fauna marina de la costa vasca. IV. *Lurralde*, 9: 133-158.
- GILI, J. M., VERVOORT, W. & PAGÉS, F., 1989. Hydroids from the West African coast: Guinea Bissau, Namibia and South Africa. *Sci. Mar.*, 53(1): 67-112.
- PICTET, C. & BEDOT, M., 1900. Hydraires provenant des campagnes de l'Hirondelle (1886-1888). *Rés. Camp. scient. Prince Albert I de Monaco*, 18: 1-59.
- RAMIL, F. & VERVOORT, W., 1992. Report on the Hydroida collected by the "BALGIM" expedition in and around the Strait of Gibraltar. *Zool. Verh. Leiden*, 277: 1-262.

Álvarez Claudio, C., 1993-1994. *Bedotella armata* (Cnidaria, Hydrozoa, Lafoeidae) in the Bay of Biscay, with description of its gonothecae. *Misc. Zool.*, 17: 265-267.

(*Rebut: 17 VI 94; Acceptació condicional: 9 IX 94; Acc. definitiva: 4 X 94*)

C. Álvarez Claudio, Depto. de Biología de Organismos y Sistemas, Lab. de Zoología, Univ. de Oviedo, 33005 Oviedo (Asturias), España (Spain).