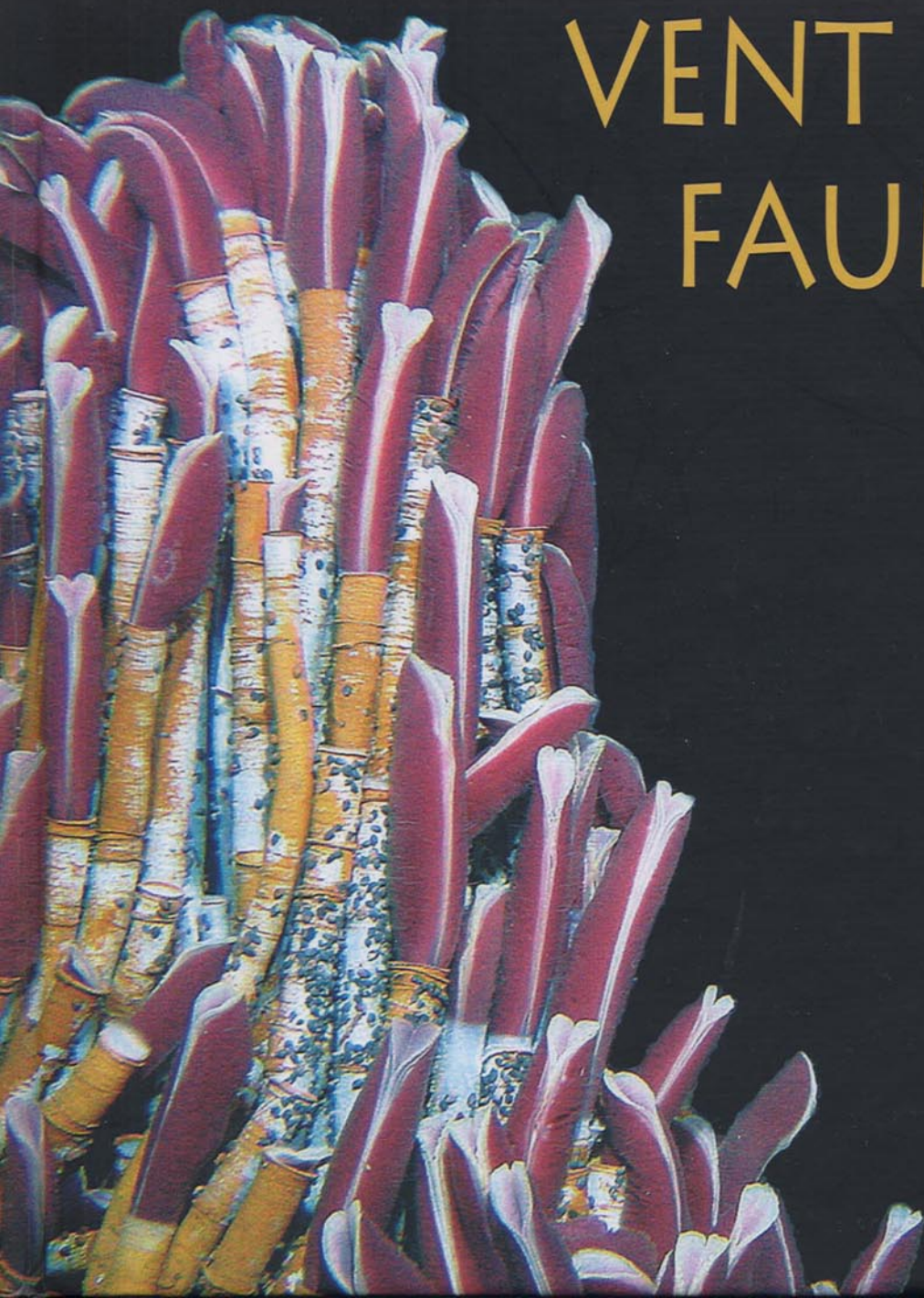


# HANDBOOK OF DEEP-SEA HYDROTHERMAL VENT FAUNA



EDITORS: D. DESBRUYÈRES, M. SEGONZAC & M. BRIGHT

*Atlantocuma bidentatum* LEDOYER, 1988

**Size:** 3.9 mm.

**Morphology:** Subfamily: Mandibles not broad at base. Exopods only on maxilliped 3 and pereopod 1 in female. Males usually with five pairs of pleopods (sometimes two or three) but they are absent in *Atlantocuma* that has been considered as an aberrant genus (JONES, 1984). Without free telson. Uropod endopod one- or two-articulated.

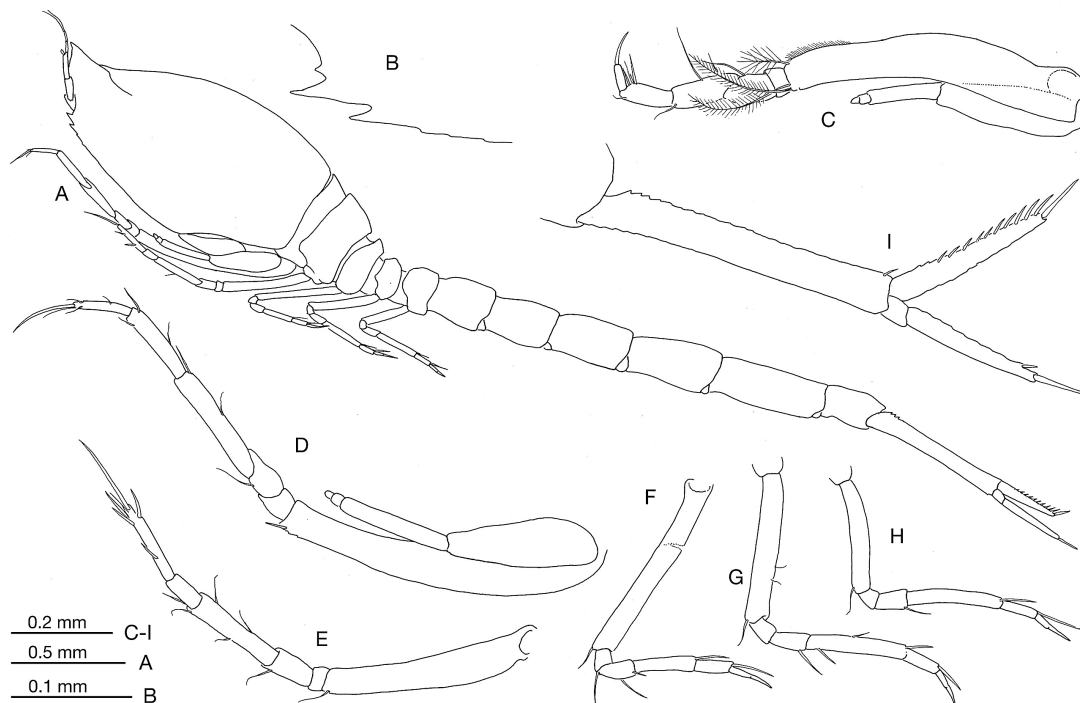
Female: Carapace smooth, about twice as long as high and slightly shorter than 1/3 of total length; pseudorostrum not very long, pointed; antennal notch shallow, anterolateral angle not prominent, marked by two teeth; eyelobe pointed at front, without lenses. Five thoracic segments visible. Pleon slightly longer than carapace and thoracic segments combined. Antenna 1 peduncle three-articulated; main flagellum two-articulated with two aesthetascs terminally, accessory flagellum rudimentary. Exopods on maxilliped 3 and pereopod 1. Maxilliped 3 basis slender, 1.5 as long as the rest of appendage. Pereopod 1 basis slightly longer than rest of appendage with a small simple seta on distal corner; carpus longer than propodus, which is 1.5 times as

long as dactylus. Pereopod 2 basis shorter than the remaining articles together, ischium very short, carpus longer than dactylus. Pereopod 3 basis longer than rest of appendage, carpus about 1/3 of basis. Pereopod 4-5 basis shorter than the rest of appendage, carpus longer than half length of basis. Uropod peduncle longer than pleonite 5 and twice length of endopod; exopod article 2 with a simple seta on distal third of inner margin and a long simple seta terminally; endopod one-articulated, with 10 setae on inner margin and a longer one terminally.

**Remark:** Although the specimen described above agrees with the LEDOYER'S (1988) description in most of the features, it differs by a greater number of setae on the endopod of uropod.

**Biology:** Collected in a sediment trap (12 m above the bottom) located at East Pacific Rise: 13°N, 2 m north of the vent site Parigo.

**Distribution:** East Pacific Rise: 13°N, site Parigo. Previously known only from South-East of Glorieuses Islands, Mozambique Channel, at 3716 m depth (LEDOYER 1988).



1: Preadult female; A: Habitus; B: Anterolateral angle of carapace; C: Maxilliped 3; D: Pereopod 1; E: Pereopod 2; F: Pereopod 3; G: Pereopod 4; H: Pereopod 5; I: Uropod; by J. Corbera.

#### References:

- JONES N.S. (1984) Bull. Br. Mus. Nat. Hist. (Zool.) **46**(3): 207-289.  
LEDOYER M. (1988) Mésogée **48**: 131-172.

*Bathycuma brevirostre* (NORMAN, 1879)

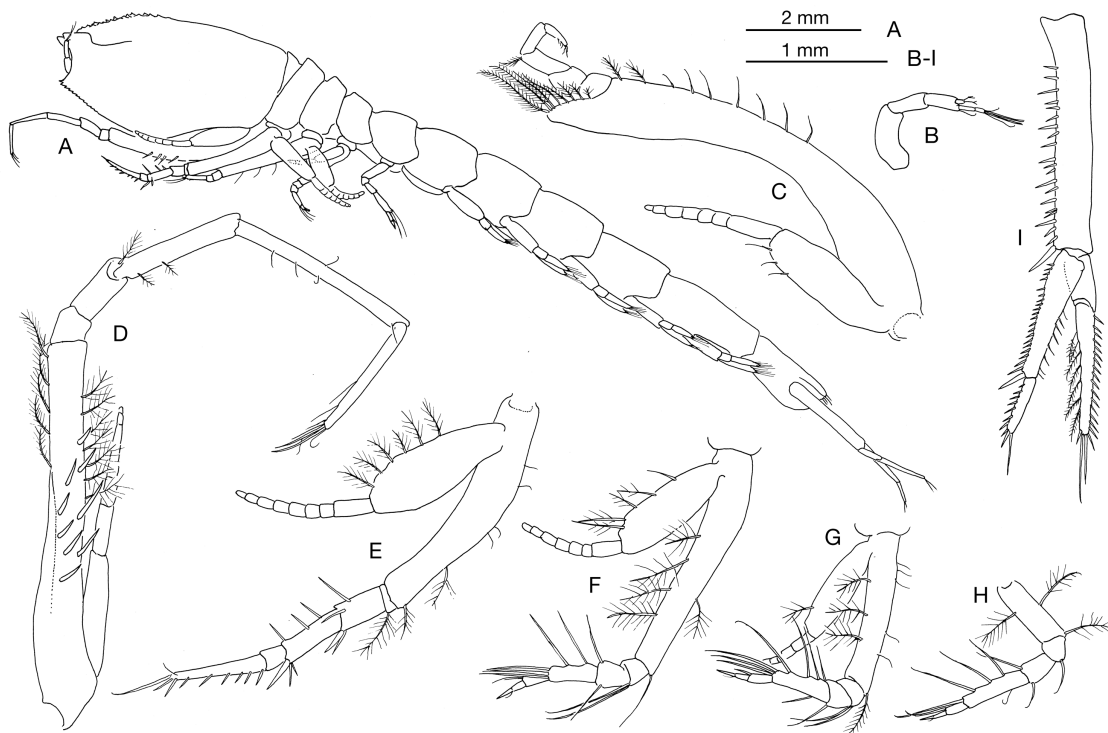
**Size:** 15.5 mm.

**Morphology:** Subfamily (Vaunthompsoniinae): Mandibles not broad at base. Exopods on at least first three pairs of pereopods. Males usually with five pairs of pleopods (sometimes three). Without free telson. Uropod endopod one- or two-articulated. Species, adult male: Carapace with a mid-dorsal paired row of teeth on anterior half; anterolateral angle acute and lateral margin serrated. Antenna 1 peduncle three-articulated, article 1 slightly shorter than article 2 and 3 combined lengths; main flagellum two-articulated with 2 aesthetascs terminally, accessory flagellum rudimentary. Well developed exopods on maxilliped 3 and pereopods 1-4. Maxilliped 3 basis longer than rest of appendage, distal outer corner produced reaching merus. Pereopod 1 basis shorter than rest of appendage, with cuspidate setae on ventral face and pappose setae on distal half of outer and inner margins; carpus and dactylus of the same length. Pereopod 2 basis as long as rest of appendage, ischium very

short. Pereopod 3 and 4 basis longer than rest of appendage, with pappose setae on margin. Pereopod 5 basis shorter than the three following articles combined lengths. Uropod peduncle longer than rami, with more than 20 setae on inner margin, being largest the distal one; exopod article 2 with simple setae on outer margin, plumose setae on the inner margin and two long simple setae terminally; endopod two-articulated, article 1 twice long as article 2 with more than 20 setae on inner margin; article 2 with eight setae on inner margin and 2 terminally.

**Biology:** Collected in a sediment trap (2.5 m above the bottom) located between two active vents at 1630 m depth.

**Distribution:** Previously known from south of Ireland (CALMAN 1905), Bay of Biscay (JONES 1985) and Mediterranean Sea (REYSS 1973) up to 5000 m depth. Mid-Atlantic Ridge: Lucky Strike.



1: Adult male; A: Habitus; B: Antenna 1; C: Maxilliped 3; D: First pereopod; E: Second pereopod; F: Third pereopod; G: Fourth pereopod; H: Fifth pereopod; I: Uropod; by J. Corbera.

#### References:

- CALMAN W.T. (1905) Fish. Ireland, Sci. Invest. **1904**(1): 1-7.  
 JONES N.S. (1985) in LAUBIER L. & C. MONNIOT (Eds.) Peuplements Profonds du Golfe de Gascogne: 429-433.  
 NORMAN A.M. (1879) Ann. Mag. Nat. Hist. **3**(5): 54-73.  
 REYSS D. (1972) Deep-Sea Res. **20**: 1119-1123.