

## **Deep-sea fauna of European seas: An annotated species check-list of benthic invertebrates living deeper than 2000 m in the seas bordering Europe. Gastropoda**

**Alexander V. Sysoev**

*Zoological Museum, Moscow State University, Bol'shaya Nikitskaya ul., 6, Moscow, 125009, Russia.*

*E-mail: sysoev@zmmu.msu.ru*

**ABSTRACT:** An annotated check-list is given of Gastropoda species occurring deeper than 2000 m in the seas bordering Europe. The check-list is based on published data. The check-list includes 221 species. For each species data on localities in European seas and general species distribution are provided. Station data are presented separately in the present thematic issue.

How to cite this article: Sysoev A.V. 2014. Deep-sea fauna of European seas: An annotated species check-list of benthic invertebrates living deeper than 2000 m in the seas bordering Europe. *Gastropoda // Invert. Zool.* Vol.11. No.1. P.134–155.

**KEY WORDS:** deep-sea fauna, European seas, Gastropoda.

## **Глубоководная фауна европейских морей: аннотированный список видов донных беспозвоночных, обитающих глубже 2000 м в морях, окружающих Европу. Gastropoda**

**А.В. Сысоев**

*Зоологический музей МГУ им. М.В. Ломоносова, ул. Большая Никитская, 6, Москва 125009, Россия.*

*E-mail: sysoev@zmmu.msu.ru*

**РЕЗЮМЕ:** Приводится аннотированный список видов Gastropoda, обитающих глубже 2000 м в морях, окружающих Европу. Список основан на опубликованных данных. Список насчитывает 221 вид. Для каждого вида приведены данные о нахождении в европейских морях и сведения о распространении. Данные о станциях приводятся в отдельном разделе настоящего тематического выпуска.

Как цитировать эту статью: Sysoev A.V. 2014. Deep-sea fauna of European seas: An annotated species check-list of benthic invertebrates living deeper than 2000 m in the seas bordering Europe. *Gastropoda // Invert. Zool.* Vol.11. No.1. P.134–155.

**КЛЮЧЕВЫЕ СЛОВА:** глубоководная фауна, европейские моря, Gastropoda.

**Phylum Mollusca**  
**Class Gastropoda**  
**Family Acmaeidae**

**Genus *Pectinodonta* Dall, 1882**

***Pectinodonta maxima* (Dautzenberg, 1925)**

LOCALITIES: “Princesse Alice II”, St. 1306; BIOGAS, St. 245 and station without number (44°25'N, 04°50'W, depth 4450 m) (Dautzenberg, 1927; Christiaens, 1979).

DISTRIBUTION: Azores, Bay of Biscay (Christiaens, 1979).

DEPTH RANGE: 4270–4475 m (Christiaens, 1979).

**Family Fissurellidae**

**Genus *Fissurisepta* Seguenza, 1863**

***Fissurisepta profunda* (Jeffreys, 1877)**

LOCALITIES: “Valorous”, St. 12; “Travailleur”, 1881 Dr. 1 (Jeffreys, 1877; Locard, 1898).

DISTRIBUTION: Northeast Atlantic, Caribbean Sea (Dautzenberg, 1927).

DEPTH RANGE: 713–3199 m (Dautzenberg, 1927).

**Genus *Cranopsis* A. Adams, 1860**

***Cranopsis asturiana* (P. Fischer, 1882)**

LOCALITIES: “Travailleur”, 1881, Dr. 3 (Locard, 1898).

DISTRIBUTION: Caribbean Sea, Bay of Biscay (Locard, 1898).

DEPTH RANGE: 155–2018 m (Locard, 1898).

**Genus *Puncturella* Lowe, 1827**

***Puncturella noachina* (Linnaeus, 1771)**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1898).

DISTRIBUTION: Atlantic, Arctic seas (Locard, 1898).

DEPTH RANGE: 9–2018 m (Locard, 1898).

**Genus *Emarginula* Lamarck, 1801**

***Emarginula fissura* (Linnaeus, 1758)**

LOCALITIES: “Travailleur”, 1881, Dr. 18 (Locard, 1898; as *Emarginula intervecta* Locard, 1898).

DISTRIBUTION: Scandinavia ??? to Mediterranean Sea (Poppe, Goto, 1991).

DEPTH RANGE: Sublittoral to 2465 m (Locard, 1898; Poppe, Goto, 1991).

***Emarginula multistriata* Jeffreys, 1882**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1898).

DISTRIBUTION: Off West Europe and Northwest Africa, Mediterranean Sea (Locard, 1898).

DEPTH RANGE: 397–2308 m (Locard, 1898).

**Genus *Emarginella* Pilsbry  
in Tryon et Pilsbry, 1891**

***Emarginella huzardii* (Payraudeau, 1826)**

LOCALITIES: “Travailleur”, 1881, Dr. 3 (Locard, 1898; as *Emarginula papillosa* Risso, 1826).

DISTRIBUTION: Off West Europe, Mediterranean Sea (Locard, 1898).

DEPTH RANGE: 120–2018 m (Locard, 1898).

**Family Addisoniidae**

**Genus *Addisonia* Dall, 1882**

***Addisonia excentrica* (Tiberi, 1857)**

LOCALITIES: “Travailleur”, 1881, Dr. 3 (Locard, 1898).

DISTRIBUTION: North Atlantic, Mediterranean Sea (Locard, 1898).

DEPTH RANGE: 298–3307 m (Locard, 1898).

**Family Lepetellidae**

**Genus *Lepetella* Verrill, 1880**

***Lepetella ionica* F. Nordsieck, 1973**

LOCALITIES: “Meteor”, St. A 2, B 2, D 1, 14, 15, 30, 42 (Nordsieck, 1973; Janssen, 1989).

DISTRIBUTION: East Mediterranean Sea, off Iberian Peninsula (Dantart, Luque, 1994).

DEPTH RANGE: 900–4210 m (Dantart, Luque, 1994).

***Lepetella laterocompressa***

**(De Rayneval et Ponzi, 1854)**

LOCALITIES: “Princesse Alice I”, St. 624 (Dautzenberg, 1927).

DISTRIBUTION: Mediterranean, off the Azores (Poppe, Goto, 1991).

DEPTH RANGE: 1250–2102 m (Dautzenberg, 1927).

**Genus *Propilidium* Forbes, 1840**

***Propilidium exigua***

**(Forbes in Thompson, 1844)**

LOCALITIES: “Porcupine”, St. 19 (Jeffreys, 1883; as *Propilidium ancylodes* Forbes, 1840, non Sowerby, 1824).

DISTRIBUTION: Northeast Atlantic from Lofoten Islands to British Isles, Mediterranean Sea, off the Azores, off the Canaries (Dantart, Luque, 1994).

DEPTH RANGE: 70–2652 m (Dantart, Luque, 1994).

***Propilidium bavayi***

**Dautzenberg et Fischer, 1896**

LOCALITIES: “Princesse Alice I”, St. 624 (Dautzenberg, 1927).

DISTRIBUTION: off the Azores (Dautzenberg, 1927).

DEPTH RANGE: 1165–2102 m (Dautzenberg, 1927).

### Family Cocculinidae

#### Genus *Cocculina* Dall, 1882

##### *Cocculina* aff. *pusilla* (Jeffreys, 1883)

LOCALITIES: “Meteor”, St. AT4 (Fechter, 1979).

DISTRIBUTION: off Portugal (Fechter, 1979).

DEPTH RANGE: 1000–5330 m (Fechter, 1979).

### Family Pseudococculinidae

#### Genus *Copulabyssia* Haszprunar, 1988

##### *Copulabyssia corrugata* (Jeffreys, 1883)

LOCALITIES: “Meteor”, St. D 1, 15, 30 (Nordsieck, 1973; Janssen, 1989).

DISTRIBUTION: Mediterranean Sea, off Shetland Islands and Iceland (Dantart, Luque, 1994).

DEPTH RANGE: 370–2700 m (Nordsieck, 1973; Janssen, 1989; Dantart, Luque, 1994).

### Family Bathysciadiidae

#### Genus *Bathysciadium*

##### Dautzenberg et Fischer, 1900

##### *Bathysciadium costulatum* (Locard, 1898)

LOCALITIES: “Talisman”, Dr. 118 (Locard, 1898).

DISTRIBUTION: of the Azores (Locard, 1898).

DEPTH RANGE: 1557–3175 m (Dantart, Luque, 1994).

### Family Scissurellidae

#### Genus *Scissurella* D’Orbigny, 1824

##### *Scissurella crispata* (Fleming, 1832)

LOCALITIES: “Travailleur”, 1881, Dr. 1; “Vöringen”, St. 40; NORBI, St. 4, CP 07, DS 08; 5, CP 09, DS 11; 10, CP 16 (Locard, 1898; Bouchet, Warén, 1979).

DISTRIBUTION: Arctic seas to off Florida, off the West Indies, off Europe, off Alaska to Lower California (Bouchet, Warén, 1979).

DEPTH RANGE: 100–3000 m (Bouchet, Warén, 1979).

REMARK: the Pacific Ocean and Caribbean Sea records of the species need to be confirmed (Bouchet, Warén, 1979).

##### *Scissurella tenuis* Jeffreys, 1877

LOCALITIES: “Valorous”, St. 12 (Jeffreys, 1877).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 2653 m (Jeffreys, 1877).

### Family Seguenziidae

#### Genus *Seguenzia* Jeffreys, 1876

##### *Seguenzia elegans* Jeffreys, 1876

LOCALITIES: “Meteor”, St. AT3 (Fechter, 1979).

DISTRIBUTION: Atlantic (Fechter, 1979).

DEPTH RANGE: 1400–5315 m (Fechter, 1979).

#### *Seguenzia carinata* Jeffreys, 1876

LOCALITIES: “Princesse Alice II”, St. 1116 (Dautzenberg, 1927).

DISTRIBUTION: Mid-Atlantic Ridge, off Portugal, off the Azores southward to Cape Verde Islands (Jeffreys, 1886).

DEPTH RANGE: 1240–4024 m (Jeffreys, 1885).

#### *Seguenzia cazioti* Dautzenberg, 1925

LOCALITIES: “Princesse Alice II”, St. 2044 (Dautzenberg, 1927).

DISTRIBUTION: off the Azores (Dautzenberg, 1927).

DEPTH RANGE: 2286 m (Dautzenberg, 1927).

### Family Trochidae

#### Genus *Putzeysia* Sullioti, 1889

##### *Putzeysia wiseri* (Calcara, 1842)

LOCALITIES: “Travailleur”, 1881, Dr. 1; “Meteor”, St. D, D 1, 15 (Locard, 1898; Nordsieck, 1973, as *Margarites cancellata ionica* ssp. n. (Di Geronimo, Panetta, 1973; Janssen, 1989).

DISTRIBUTION: Bay of Biscay, Mediterranean Sea (Di Geronimo, Panetta, 1973).

DEPTH RANGE: 534–2760 m (Di Geronimo, Panetta, 1973).

#### Genus *Gibbula* Risso, 1826

##### *Gibbula sculpturata* Locard, 1898

LOCALITIES: “Talisman”, Dr. 41; “Travailleur”, 1881, Dr. 3 (Locard, 1898).

DISTRIBUTION: off Portugal (Locard, 1898).

DEPTH RANGE: 2100–3307 m (Locard, 1898).

#### Genus *Calliostoma* Swainson, 1840

##### *Calliostoma grimaldii*

##### (Dautzenberg et Fischer, 1896)

LOCALITIES: “Princesse Alice II”, St. 1116 (Dautzenberg, 1927).

DISTRIBUTION: off the Azores (Dautzenberg, 1927).

DEPTH RANGE: 1250–2165 m (Dautzenberg, 1927).

#### Genus *Turcicula* Dall, 1881

##### *Turcicula alicei* Dautzenberg et Fischer, 1896

LOCALITIES: “Princesse Alice I”, St. 527; 652, “Princesse Alice II”, St. 1306; “Talisman”, Dr. 131 (Locard, 1898; Dautzenberg, 1927).

DISTRIBUTION: off the Azores (Dautzenberg, 1927).

DEPTH RANGE: 2102–4261 m (Locard, 1898; Dautzenberg, 1927).

***Turricula miranda* (P. Fischer in Locard, 1898)**

LOCALITIES: “Talisman”, Dr. 131, Dr. 134 (Locard, 1898).

DISTRIBUTION: off the Azores (Locard, 1898).

DEPTH RANGE: 2995–4060 m (Locard, 1898).

**Genus *Solariella* Wood, 1842*****Solariella rhina* (Watson, 1886)**

LOCALITIES: “Talisman”, Dr. 38, Dr. 39, Dr. 40, Dr. 41 (Locard, 1898).

DISTRIBUTION: off the Azores (Locard, 1898).

DEPTH RANGE: 823–3200 m (Locard, 1898).

***Solariella lusitanica* (P. Fischer, 1887)**

LOCALITIES: “Travailleur”, 1883, Dr. 3 (Locard, 1898).

DISTRIBUTION: off Portugal (Locard, 1898).

DEPTH RANGE: 3307 m (Locard, 1898).

***Solariella cincta* (Philippi, 1836)**

LOCALITIES: “Princesse Alice I”, St. 624; “Travailleur”, 1881, Dr. 1; “Talisman”, Dr. 41 (Locard, 1898; Dautzenberg, 1927).

DISTRIBUTION: off Europe, to off Norway in the north (Locard, 1898).

DEPTH RANGE: 183–2115 m (Locard, 1898).

***Solariella laminarum* (Jeffreys, 1883)**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1898).

DISTRIBUTION: off Portugal (Locard, 1898).

DEPTH RANGE: 1455–2018 m (Locard, 1898).

**Family Skeneidae****Genus *Skenea* Fleming, 1825*****Skenea basistriata* (Jeffreys, 1877)**

LOCALITIES: INCAL, St. DS 05 (Warén, 1991).

DISTRIBUTION: from Southwest of Iceland to off Spitsbergen and off northern Norway and south to the British Isles (Warén, 1991).

DEPTH RANGE: 75–2500 m (Warén, 1991).

**Genus *Lissospira* Bush, 1897*****Lissospira profunda* (Friele, 1879)**

LOCALITIES: “Vöringen”, St. 353; NORBI, St. 4, CP 07, DS 08; St. 5, CP 09, DS 08; St. 10, CP 11 (Bouchet, Warén, 1979).

DISTRIBUTION: Norwegian Sea (Bouchet, Warén, 1979).

DEPTH RANGE: 2930–3213 m (Bouchet, Warén, 1979).

***Lissospira turgida* (Odhner, 1912)**

LOCALITIES: Swedish Arctic Expedition. 1898. Spitzbergen, St. 26, 27; NORBI, St. 2, DS 04, DS 05,

CP 03; St. 3, DS 06, DS 07; St. 5, CP 10 (Odhner, 1912; Bouchet, Warén, 1979).

DISTRIBUTION: Greenland and Norwegian Seas (Bouchet, Warén, 1979).

DEPTH RANGE: 2700–3670 m (Bouchet, Warén, 1979).

**Genus *Anekes* Bouchet et Warén, 1979*****Anekes undulispira* Bouchet et Warén, 1979**

LOCALITIES: NORBI, St. 1, DS 02, DS 03; St. 2, DS 04, DS 05, CP 04; St. 4, DS 08; St. 5, DS 11; St. 11, DS 18, CP 17 (Bouchet, Warén, 1979).

DISTRIBUTION: Norwegian Sea (Bouchet, Warén, 1979).

DEPTH RANGE: 2470–3213 m (Bouchet, Warén, 1979).

**Genus *Palazzia* Warén, 1991*****Palazzia planorbis* (Dall, 1927)**

LOCALITIES: “Chain”, St. 323; INCAL, St. DS 01, DS 02, DS 05, DS 06, CP 05; “Challenger” II, St. 190 (Rex, 2002).

DISTRIBUTION: North, Tropical, and South Atlantic (Rex, 2002).

DEPTH RANGE: 241–5216 m (Rex, 2002).

**Genus *Protolira* Warén et Bouchet, 1993*****Protolira thorvaldssoni* Warén, 1996**

LOCALITIES: NAUTILE, dives 1196, 1206 (Warén, Bouchet, 2001).

DISTRIBUTION: Mid-Atlantic Ridge from Menez Gwen to Snake Pit (Warén, Bouchet, 2001).

DEPTH RANGE: 850–3700 m (Warén, Bouchet, 2001).

**Genus *Cirsonella* Angas, 1877*****Cirsonella romettensis* (Seguenza, 1873)**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1898).

DISTRIBUTION: Bay of Biscay to off Northwest Africa, Mediterranean Sea (Locard, 1898).

DEPTH RANGE: 379–2308 m (Locard, 1898).

***Cirsonella gaudryi*****(Dautzenberg et Fischer, 1896)**

LOCALITIES: “Travailleur”, 1881, Dr. 1; “Princesse Alice II”, St. 1116 (Locard, 1898; Dautzenberg, 1927).

DISTRIBUTION: Bay of Biscay, off the Azores (Locard, 1898).

DEPTH RANGE: 1095–2018 m (Locard, 1898).

***Cirsonella ateles*****(Dautzenberg et Fischer, 1896)**

LOCALITIES: “Princesse Alice I”, St. 738 (Dautzenberg, Fischer, 1896, as “Princesse Alice” 1895, St. 117).

DISTRIBUTION: off the Azores (Dautzenberg, Fischer, 1896).

DEPTH RANGE: 1385–2102 m (Dautzenberg, Fischer, 1896; Dautzenberg, 1927).

**Genus *Moelleriopsis* Bush, 1897**

***Moelleriopsis richardi***

**(Dautzenberg et Fischer, 1896)**

LOCALITIES: “Meteor”, St. AT 4 (Fechter, 1979).

DISTRIBUTION: of the Azores and off Portugal (Fechter, 1979).

DEPTH RANGE: 1385–5330 m (Fechter, 1979).

**Genus *Akritogyra* Warén, 1992**

***Akritogyra similis* (Jeffreys, 1883)**

LOCALITIES: “Princesse Alice I”, St. 624 (Dautzenberg, 1927).

DISTRIBUTION: Northeast Atlantic.

DEPTH RANGE: 948–2102 m.

***Akritogyra conspicua* (Monterosato, 1880)**

LOCALITIES: BIOMEDE, St. 2 (Warén, 1992).

DISTRIBUTION: Central and western Mediterranean Sea (Warén, 1992).

DEPTH RANGE: 100–2420 m (Warén, 1992).

**Genus *Retigyra* Warén, 1989**

***Retigyra granulosa* (Sykes, 1925)**

LOCALITIES: SEAMOUNT, St. CP 30 (Warén, 1992).

DISTRIBUTION: off Portugal (Warén, 1992).

DEPTH RANGE: 1000–2000 m (Warén, 1992).

**Genus *Lissotesta* Iredale, 1915**

***Lissotesta major* Warén, 1992**

LOCALITIES: ABYPLAINE, St. CP 11 (Warén, 1992).

DISTRIBUTION: North Atlantic (Warén, 1992).

DEPTH RANGE: 1993–4270 m (Warén, 1992).

***Lissotesta minima* (Seguenza, 1876)**

LOCALITIES: BIOGAS, St. DS 65 (Warén, 1992).

DISTRIBUTION: Bay of Biscay to Ibero-Moroccan Gulf (Warén, 1992).

DEPTH RANGE: 500–2360 m (Warén, 1992).

**Genus *Moelleriopsis* Bush, 1897**

***Moelleriopsis messanensis* (Seguenza, 1876)**

LOCALITIES: BIOMEDE, St. 2, 4 (Warén, 1992).

DISTRIBUTION: Bay of Biscay, western and central Mediterranean Sea (Warén, 1992).

DEPTH RANGE: 350–2500 m (Warén, 1992).

**Genus *Granigyra* Dall, 1889**

***Granigyra granulifera* (Warén, 1992)**

LOCALITIES: ABYPLAINE, St. CP 11; BIOMEDE, St. 2, 3, 5, 6, 7, 12, 13, 14 (Warén, 1992).

DISTRIBUTION: Bay of Biscay to off Madeira central Mediterranean Sea (Warén, 1992).

DEPTH RANGE: 700–4300 m (Warén, 1992).

**Family Cyclostrematidae**

**Genus *Vetulonia* Dall, 1913**

***Vetulonia cancellata* (Jeffreys, 1865)**

LOCALITIES: “Princesse Alice II”, St. 1116 (Dautzenberg, 1927).

DISTRIBUTION: off Portugal to off the Azores (Jeffreys, 1883; Dautzenberg, 1927).

DEPTH RANGE: 620–2165 m (Jeffreys, 1883; Dautzenberg, 1927).

**Family Lepetodrilidae**

**Genus *Lepetodrilus* McLean, 1988**

***Lepetodrilus atlanticus***

**Warén et Bouchet, 2001**

LOCALITIES: NAUTILE, dives 1196, 1206 (Warén, Bouchet, 2001).

DISTRIBUTION: Mid-Atlantic Ridge between 38°N and 23°N (Warén, Bouchet, 2001).

DEPTH RANGE: 850–3500 m (Warén, Bouchet, 2001).

**Family Phenacolepadidae**

**Genus *Shinkailepas***

**Okutani, Saito et Hashimoto, 1989**

***Shinkailepas briandi***

**Warén et Bouchet, 2001**

LOCALITIES: NAUTILE, dives 1196, 1206 (Warén, Bouchet, 2001).

DISTRIBUTION: Mid-Atlantic Ridge from Meñez Gwen to Logatchev site (Warén, Bouchet, 2001).

DEPTH RANGE: 850–3500 m (Warén, Bouchet, 2001).

**Family Vanikoridae**

**Genus *Talassia* Warén et Bouchet, 1988**

***Talassia dagueneti* (de Folin, 1873)**

LOCALITIES: “Talisman”, Dr. 39 (Locard, 1897, as *Ondina venusta* (de Folin, 1884).

DISTRIBUTION: southern Bay of Biscay to off Morocco, Mediterranean Sea (Bouchet, Warén, 1993).

DEPTH RANGE: 150–2200 m (Locard, 1897; Bouchet, Warén, 1993).

**Family Cerithiopsidae**

**Genus *Cerithiella* Verrill, 1882**

***Cerithiella metula* (Lovén, 1846)**

LOCALITIES: “Challenger” II, St. 2, 8, 10, 12, 28, 137; INCAL, St. CP 01, CP 07, DS 01, DS 02, DS



06, DS 07; "Discovery", St. 10112-1, 10112-2; BIOGAS, St. CP 01, DS 71, KG 172 (Bouchet, Warén, 1993).

DISTRIBUTION: Northeast Atlantic, Mediterranean, Barents Seas (Bouchet, Warén, 1993).

DEPTH RANGE: 50–2900 m (Bouchet, Warén, 1993).

***Cerithiella enode* (Watson, 1880)**

LOCALITIES: INCAL, St. OS 04; ABY-PLAINE, St. DS 07 (Warén, Bouchet, 1993).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 1235–4796 m (Bouchet, Warén, 1993).

**Genus *Krachia* Baluk, 1975**

***Krachia obeliscoides* (Jeffereys, 1885)**

LOCALITIES: "Princesse Alice II", St. 1116 (Bouchet, Warén, 1993).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 1092–2165 m (Bouchet, Warén, 1993).

**Genus *Ektonos* Warén et Bouchet, 1983**

***Ektonos turbonilloides***

**(Dautzenberg et Fischer, 1896)**

LOCALITIES: "Challenger" II, St. 177 (Bouchet, Warén, 1993).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 1070–2949 m (Bouchet, Warén, 1993).

**Family Triphoridae**

**Genus *Strobiliger* Dall, 1924**

***Strobiliger brychia***

**(Bouchet et Guillemot, 1978)**

LOCALITIES: "Talisman", Dr. 129 (Bouchet, Warén, 1993).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1993).

DEPTH RANGE: 170–2220 m (Bouchet, Warén, 1993).

***Strobiliger lubrica* Bouchet et Warén, 1993**

LOCALITIES: BIOCYAN II, "Cyana" - dive 18 (Bouchet, Warén, 1993).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1993).

DEPTH RANGE: 2000 m (Bouchet, Warén, 1993).

**Family Rissoidae**

**Genus *Alvania* Risso, 1826**

***Alvania electa* (Monterosato, 1874)**

LOCALITIES: BIOMEDE I, St. 2 (Bouchet, Warén, 1993).

DISTRIBUTION: Bay of Biscay to off the Canaries, Mediterranean Sea (Bouchet, Warén, 1993).

DEPTH RANGE: 80–2770 m (Bouchet, Warén, 1993).

***Alvania porcupinae* Gofas et Warén, 1982**

LOCALITIES: BIOGAS, St. CP 07, CP 35, DS 52, DS 53; SEAMOUNT I, St. CP 30 (Bouchet, Warén, 1993).

DISTRIBUTION: Bay of Biscay to off the Canaries (Bouchet, Warén, 1993).

DEPTH RANGE: 800–4720 m (Bouchet, Warén, 1993).

***Alvania pseudosyngenes* Warén, 1973**

LOCALITIES: "Vöringen", St. 53 (Warén, 1973).

DISTRIBUTION: Off eastern Greenland to off southern Iceland and north of Lofoten (Bouchet, Warén, 1993).

DEPTH RANGE: 200–2184 m (Bouchet, Warén, 1993).

***Alvania wyvillethomsoni* (Friele, 1877)**

LOCALITIES: "Vöringen", St. 53, "Michael Sars", St. 9 (Friele, 1903; Warén, 1973).

DISTRIBUTION: Northeastern Greenland, off northern and eastern Iceland, south to the Shetland-Faroe Channel, off western Norway, to north of Franz Josef Land (Bouchet, Warén, 1993).

DEPTH RANGE: 300–2800 m (Bouchet, Warén, 1993).

**Genus *Pusillina* Monterosato, 1884**

***Pusillina ambli* (Watson, 1886)**

LOCALITIES: ABYPLANE, St. CP 68; "Princesse Alice II", St. 1116 (Bouchet, Warén, 1993).

DISTRIBUTION: From off northwestern Morocco, south to the Canaries (Bouchet, Warén, 1993).

DEPTH RANGE: 1500–2165 m (Bouchet, Warén, 1993).

**Genus *Pseudosetia* Monterosato, 1884**

***Pseudosetia semipellucida* (Friele, 1879)**

LOCALITIES: "Vöringen", St. 353; "Ingolf", St. 113; NORBI, St. 1, DS 03; St. 2, CP 04, DS 04, DS 05; St. 5, CP 10, DS 10, DS 11; St. 6, DS 12, DS 13; St. 11, CP 17 (Bouchet, Warén, 1979, 1993).

DISTRIBUTION: Norwegian Sea (Bouchet, Warén, 1993).

DEPTH RANGE: 700–3200 m (Bouchet, Warén, 1993).

**Genus *Benthonella* Dall, 1889**

***Benthonella tenella* (Jeffreys, 1869)**

LOCALITIES: "Meteor", St. B<sub>2</sub>, St. D, St. D1, St. 13, St. 14, St. 15, St. 30, St. 42; "Discovery", St.

50605-1; BIOMEDE 2, St. 6; SEAMOUNT I, St. CP 30; many unspecified stations in the Northeast Atlantic and the Mediterranean (Di Geronimo, Panetta, 1973; Bouchet, Warén, 1993; Janssen, 1989).

DISTRIBUTION: from south of Iceland to southwest of the Faroes and the British Isles as far north as off the Shetland, southward along and off the European continental slope; the eastern and western basins of the Mediterranean; off Madeira and the Azores. Also western Atlantic (to the Caribbean) and scattered localities in the central and southern Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 100–5987 m (Bouchet, Warén, 1993).

### Family Adeorbidae

#### Genus *Teinostoma* H. et A. Adams, 1853

##### *Teinostoma azoricum*

##### (Dautzenberg et Fischer, 1896)

LOCALITIES: “Princesse Alice I”, St. 624; “Talisman”, Dr. 40, Dr. 143 (Locard, 1898; Dautzenberg, 1927).

DISTRIBUTION: off the Azores, off Northwest Africa (Locard, 1898).

DEPTH RANGE: 912–4060 m (Locard, 1898).

### Family Hipponicidae

#### Genus *Leptonotis* Conrad, 1866

##### *Leptonotis perplexus* (Suter, 1907)

LOCALITIES: SEAMOUNT I, St. CP 30; CANCAP, St. 5.042 (Bouchet, Warén, 1993).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 200–2775 m (Bouchet, Warén, 1993).

REMARK: This species seems to occur also in the Southwest Pacific and the Southeast Indian Ocean, but according to Bouchet, Warén (1993) the material from the entire range, as well as some fossil shells, do not necessarily belong to the same species but are undistinguishable.

### Family Haloceratidae

#### Genus *Haloceras* Dall, 1889

##### *Haloceras carinata* (Jeffreys, 1883)

LOCALITIES: SEAMOUNT I, St. CP 30 (Warén, Bouchet, 1991).

DISTRIBUTION: North Atlantic between 27°N and 42°N (Bouchet, Warén, 1993).

DEPTH RANGE: 700–2075 m (Bouchet, Warén, 1993).

##### *Haloceras cingulata* (Verrill, 1884)

LOCALITIES: BIOGAS, St. CP 37; SEAMOUNT I, St. CP 30 (Warén, Bouchet, 1991).

DISTRIBUTION: North Atlantic between 36°N and 49°N (Bouchet, Warén, 1993).

DEPTH RANGE: 1050–2685 m (Bouchet, Warén, 1993).

##### *Haloceras laxa* (Jeffreys, 1885)

LOCALITIES: “Princesse Alice I”, St. 624; SEAMOUNT Ø, St. CP 30; BIOGAS, St. CP 37 (Warén, Bouchet, 1991).

DISTRIBUTION: Northeast Atlantic: from the northern part of the Bay of Biscay to the Ibero-Moroccan Gulf and off the Azores (Bouchet, Warén, 1993).

DEPTH RANGE: 1000–2200 m (Bouchet, Warén, 1993).

##### *Haloceras tricarinata* (Jeffreys, 1885)

LOCALITIES: SEAMOUNT Ø, St. CP 30; BIACORES, St. 126; BIOGAS, St. DS 62 (Warén, Bouchet, 1991).

DISTRIBUTION: East Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 1940–3716 m (Bouchet, Warén, 1993).

### Family Capulidae

#### Genus *Capulus* Monfort, 1810

##### *Capulus ungaricus* (Linnaeus, 1758)

LOCALITIES: Stations unspecified, Rockall Trough, 2500 m (Bouchet, Warén, 1993).

DISTRIBUTION: from south of Iceland and off Hammerfest, northern Norway, to west off the Azores and south to the Gulf of Guinea (Bouchet, Warén, 1993).

DEPTH RANGE: Shallow waters to about 500 m, rarely down to 2500 m (Bouchet, Warén, 1993).

##### *Genus Torellia* Jeffreys, 1867

##### *Torellia delicata* (Philippi, 1844)

LOCALITIES: “Michael Sars”, St. 9; BIOGAS, St. CP 01, CP 06, CP 07, CP 08, CP 20, CP 37, DS 51, DS 61, DS 65, DS 71; INCAL, St. CP 05, CP 09, CP 10, DS 01, DS 02, DS 09, WS 04; POLYGAS, St. DS 15; SEAMOUNT I, St. CP 30 (Friele, 1903, as *Torellia vestita* var. *abyssicola* Friele, 1903; Bouchet, Warén, 1993).

DISTRIBUTION: Both sides of North Atlantic, east and west of Iceland, off northern Norway south to the Ibero-Moroccan Gulf, central Mediterranean Sea (Bouchet, Warén, 1993).

DEPTH RANGE: 100–4829 m (Bouchet, Warén, 1993).

##### *Torellia didyma* Bouchet et Warén, 1993

LOCALITIES: BIOGAS, St. CP 09; INCAL, St. WS 04; ABYPLAINE, St. DS 13 (Bouchet, Warén, 1993).

DISTRIBUTION: Bay of Biscay and west of Spain (Bouchet, Warén, 1993).

DEPTH RANGE: 2179–4990 m (Bouchet, Warén, 1993).

#### Family Lamellariidae

##### Genus *Calyptoconcha* Bouchet et Warén, 1993

###### *Calyptoconcha pellucida* (Verrill, 1880)

LOCALITIES: BIACORES, St. 202, St. 252; NORATLANTE, St. E 1 (Bouchet, Warén, 1993).

DISTRIBUTION: West Atlantic, from 37°N to off Newfoundland, to Iceland and off the Azores, to off Norway, southwards along the slope off the British Isles to the Bay of Biscay and off Morocco (Bouchet, Warén, 1993).

DEPTH RANGE: 130–4452 m (Bouchet, Warén, 1993).

#### Family Naticidae

##### Genus *Natica* Scopoli, 1777

###### *Natica dillwyni* Payraudeau, 1826

LOCALITIES: “Meteor”, St. D 1 (Nordsieck, 1973, as *Tectonatica operculata farolita* ssp. n.).

DISTRIBUTION: off the Azores and Canaries, Mediterranean (Poppe, Goto, 1991).

DEPTH RANGE: see remark.

REMARK: There is no clearly expressed opinion in the literature on the identity of Nordsieck’s subspecies. Bouchet, Warén (1993) simply stated that it is not *Cryptonatica operculata* (Jeffreys, 1885). In the CLEMMAM database the Nordsieck’s subspecies is synonymized with *Natica dillwyni*, but the latter species lives at 1–25 m (Poppe, Goto, 1991), whereas Nordsieck’s record is from 2700 m.

##### Genus *Cryptonatica* Dall, 1892

###### *Cryptonatica bathybi* (Friele, 1879)

LOCALITIES: “Vöringen”, St. 51, 303, 353; “Michael Sars”, St. 9; “Frithjof”, 72°42’N, 14°49’W, 2000 m; NORBI, St. 1, 2, 11; “Ingolf”, St. 113 (Friele, 1903; Bouchet, Warén, 1979, 1993).

DISTRIBUTION: Norwegian and Greenland Seas (Bouchet, Warén, 1993).

DEPTH RANGE: 150–3000 m (Bouchet, Warén, 1993).

###### *Cryptonatica operculata* (Jeffreys, 1885)

LOCALITIES: SEAMOUNT I, St. CP 30 (Bouchet, Warén, 1993).

DISTRIBUTION: From the Bay of Biscay to the Ibero-Moroccan Gulf and into the Mediterranean (Bouchet, Warén, 1993).

DEPTH RANGE: 50–2075 m (Bouchet, Warén, 1993).

##### *Cryptonatica affinis* (Gmelin, 1791)

LOCALITIES: “Discovery”, St. 10112-2 (Bouchet, Warén, 1993).

DISTRIBUTION: Arctic circumpolar, North Atlantic, south to the Bay of Biscay and off North Carolina (Bouchet, Warén, 1993).

DEPTH RANGE: 0–2650 m (Bouchet, Warén, 1993).

##### Genus *Amauropsis* Mörch, 1857

###### *Amauropsis sphaeroides* (Jeffreys, 1877)

LOCALITIES: “Discovery”, St. 10106/1, St. 10112/1, St. 10112/2, St. 50605/1, St. 50613/1; INCAL, St. CP 09, DS 09, WS 01, OS 07, DS 14, WS 07, WS 08, CP 06, WS 09, OS 06, OS 04, DS 13, CP 08, WS 10; BIOGAS, St. CP 13, CP 07, DS 52, DS 55, CV 41, CV 30; “Princesse Alice II”, St. 2986 (Bouchet, Warén, 1993).

DISTRIBUTION: From off southeastern Greenland to off Mauritania (Bouchet, Warén, 1993).

DEPTH RANGE: 830–4870 m (Bouchet, Warén, 1993).

##### Genus *Polinices* Monfort, 1810

###### *Polinices obtusa* (Jeffreys, 1885)

LOCALITIES: “Travailleur”, 1881, Dr. 1; “Challenger” II, St. 2, 6, 10, 27, 121, 137, 141, 151, 153, 167, 177; NORATLANTE, St. E 1; “Discovery”, St. 50304, 10112-1, 10112-2, 10112-3, 50605-1, 51417; INCAL, St. DS 01, DS 02, CP 02, CP 05, CP 06, CP 08, CP 09, DS 08, DS 09, DS 10, WS 01, WS 02, CP 16; BIOGAS, St. CP 37, CP 11, DS 52, CP 10, CP 07, DS 57, CP 01, DS 64, CV 23, DS 51; “Sarsia”, St. 7601 (Bouchet, Warén, 1993).

DISTRIBUTION: From the southern side of the Shetland-Faroe Ridge, along the European west coast, to West Africa (Bouchet, Warén, 1993).

DEPTH RANGE: 500–4262 m (Bouchet, Warén, 1993).

###### *Polinices subplicata* (Jeffreys, 1885)

LOCALITIES: INCAL, St. OS 07; BIOGAS, St. CP 07, DS 52; SEAMOUNT I, St. CP 30; “Talisman”, Dr. 44 (Bouchet, Warén, 1993).

DISTRIBUTION: From the southwestern part off the British Isles along the European west coast, to off Mauritania (Bouchet, Warén, 1993).

DEPTH RANGE: 264–4249 m (Bouchet, Warén, 1993).

###### *Polinices aff. agujanus* Dall, 1908

LOCALITIES: “Meteor”, St. AT 2, AT 90, AT 91 (Fechter, 1979).

DISTRIBUTION: off Portugal (Fechter, 1979, see remark).

DEPTH RANGE: 5315–5325 m (Fechter, 1979).



REMARK: Identification of the "Meteor" material probably erroneous as the species was previously known from off Peru and the Gulf of Panama.

***Polinices cf. nanus* (Møller, 1842)**

LOCALITIES: "Meteor", St. AT 91 (Fechter, 1979).

DISTRIBUTION: off Portugal (Fechter, 1979, see remark).

DEPTH RANGE: 5315 m (Fechter, 1979).

REMARK: All deep-sea findings of this high-arctic shallow water species recorded in the literature, are due to erroneous identifications (Bouchet, Warén, 1993: 810–812).

**Family Laubierinidae**

**Genus *Laubierina* Warén et Bouchet, 1990**

***Laubierina* sp. A**

LOCALITIES: SEAMOUNT I, St. CP 30 (Bouchet, Warén, 1993).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1993).

DEPTH RANGE: 200–2075 m (Bouchet, Warén, 1993).

***Laubierina cf. peregrinator***

**Warén et Bouchet, 1990**

LOCALITIES: SEAMOUNT I, St. CP 30 (Bouchet, Warén, 1993).

DISTRIBUTION: Southeast Atlantic, Southwest Indian Ocean (Bouchet, Warén, 1993).

DEPTH RANGE: 2300–3550 m (Bouchet, Warén, 1993).

**Family Cassidae**

**Genus *Oocorys* Fischer, 1883**

***Oocorys sulcata* Fischer, 1883**

LOCALITIES: "Princesse Alice I", St. 536, 652, 1116, 2990; "Talisman", Dr. 38, Dr. 130; BIACORES, St. 95, 163, 176, 202, 251; BIOGAS, St. CP 01, CV 39, CP 33, CV 24; INCAL, St. CP 08, WS 01; NORATLANTE, St. B12, B19; "Discovery", St. 50613/1, 51611, 10112/2 (Dautzenberg, 1927; Bouchet, Warén, 1993).

DISTRIBUTION: From southwest of Ireland and off New England southwards to the Azores, the Caribbean, and the Gulf of Mexico, off western and southwestern Africa, off southeastern Brazil, off southern Africa, the Indian Ocean, Indonesia, southwestern Pacific (Bouchet, Warén, 1993).

DEPTH RANGE: 350–5073 m (Bouchet, Warén, 1993).

**"*Bulbus*" *globosus* (Jeffreys, 1885)**

LOCALITIES: "Meteor", St. D 1, 14, 15, 30, 42 (Nordsieck, 1973; Janssen, 1989).

DISTRIBUTION: Off southwestern Europe, Mediterranean (Bouchet, Warén, 1993).

DEPTH RANGE: 700–3259 m (Bouchet, Warén, 1993; Janssen, 1989).

REMARK: The status of the species is unclear. Bouchet, Warén (1993) selected a lectotype from the type series representing a mixture of larval shells belonging to different families. The lectotype is a larval shell of *Semicassis* (family Cassidae). The deep-sea records are based on data of Janssen (1989) who did not illustrate the actual shells, and his concept of the species is therefore unclear.

**Family Ranellidae**

**Genus *Pisanianura* Rovereto, 1899**

***Pisanianura grimaldii* (Dautzenberg, 1889)**

LOCALITIES: "Princesse Alice II", St. 1116 (Warén and Bouchet, 1990).

DISTRIBUTION: Northeast Atlantic, Southwest Indian, and Pacific Oceans (Bouchet, Warén, 1993).

DEPTH RANGE: 600–2165 m (Bouchet, Warén, 1993).

**Family Zeratulidae**

**Genus *Zerotula* Finlay, 1926**

***Zerotula incornita* Warén et Hain, 1996**

LOCALITIES: ABYPLAINE, St. CP 13 (Warén, Hain, 1996).

DISTRIBUTION: Iberia Abyssal Plain (Warén, Hain, 1996).

DEPTH RANGE: 5270 m (Warén, Hain, 1996).

**Family Muricidae**

**Genus *Trophon* Monfort, 1810**

***Trophon dabneyi* Dautzenberg, 1889**

LOCALITIES: "Princesse Alice I", St. 624; NORATLANTE, St. B 19; "Thalassa", St. Z 453; BIACORES, St. 36, 95, 227, 252; BIOGAS, St. CV 06, CV 09, CV 10, CV 39, CP 01, CP 33, DS 15, DS 17, DS 65, DS 71; "Thor", St. 76 (Bouchet, Warén, 1985).

DISTRIBUTION: East Atlantic, from northern Bay of Biscay to off the Cape Verde Islands and Azores (Bouchet, Warén, 1985).

DEPTH RANGE: 1095–2670 m (Bouchet, Warén, 1985).

***Trophon echinatus* (Kiener, 1840)**

LOCALITIES: "Talisman", Dr. 130; NORATLANTE, St. B 1, B 12, B 16; BIACORES, St. 202, 206, 235, 252; INCAL, St. DS 01, DS 06, CP 01, CP 02, CP 03; CP 04, CP 07; "Thalassa", St. X 336 (Bouchet, Warén, 1985).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1985).

DEPTH RANGE: 100–4150 m (Bouchet, Warén, 1985).

#### Family Fasciolariiidae

##### Genus *Fusinus* Rafinesque, 1815

##### *Fusinus bocagei* (Fischer, 1882)

LOCALITIES: BIACORES, St. 171, 235 (Bouchet, Warén, 1985).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1985).

DEPTH RANGE: 225–3215 m (Bouchet, Warén, 1985).

#### Family Columbelloidea

##### Genus *Mitrella* Risso, 1826

##### *Mitrella nitidulina* (Locard, 1897)

LOCALITIES: “Talisman”, Dr. 40, Dr. 131; “Princesse Alice I”, St. 536, 624; BIACORES, St. CV 38; “Nautile”, dives 1196, 1206 (Dautzenberg, 1927, as *Columbella profundi* (Dall, 1889); Bouchet, Warén, 1985; Warén, Bouchet, 2001).

DISTRIBUTION: Northeast Atlantic, Rainbow Hydrothermal Vent Field on Mid-Atlantic Ridge (Bouchet, Warén, 1985; Warén and Bouchet, 2001).

DEPTH RANGE: 1390–3360 m (Bouchet, Warén, 1985; Warén, Bouchet, 2001).

##### Genus *Amphissa* H. et A. Adams, 1853

##### *Amphissa acutecostata* (Philippi, 1844)

LOCALITIES: “Princesse Alice II”, St. 1116; “Meteor”, St. 15 (Janssen, 1989; Bouchet, Warén, 1985).

DISTRIBUTION: From south of Iceland and Lofoten Islands, along continental slope of Europe to 31°N, the Mediterranean and Azores, off northern North America south to North Carolina (Bouchet, Warén, 1985).

DEPTH RANGE: 150–2165 m (Bouchet, Warén, 1985).

#### Family Buccinidae

##### Genus *Buccinum* Linnaeus, 1758

##### *Buccinum abyssorum* Verrill et Smith, 1884

LOCALITIES: “Ingolf”, St. 65, INCAL, St. CP 05; “Challenger” II, Rockall Trough, ca. 2000 m (Bouchet, Warén, 1985).

DISTRIBUTION: North Atlantic, Mediterranean Sea (Bouchet, Warén, 1985).

DEPTH RANGE: 1400–2884 m (Bouchet, Warén, 1985).

##### Genus *Troschelia* Mörch, 1786

##### *Troschelia berniciensis* (King, 1846)

LOCALITIES: “Princesse Alice II”, St. 1116, 2990; BIACORES, St. 252 (Dautzenberg, 1927; Bouchet, Warén, 1985).

DISTRIBUTION: Northeast Atlantic continental shelves and upper slopes (Bouchet, Warén, 1985).

DEPTH RANGE: 600–2700 m (Bouchet, Warén, 1985).

##### Genus *Kryptos* Jeffreys in Dautzenberg et Fischer, 1896

##### *Kryptos koehleri* (Locard, 1896)

LOCALITIES: “Travailleur”, 1881, Dr. 1; BIOGAS, St. DS 40, CP 07 (Bouchet, Warén, 1985).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1985).

DEPTH RANGE: 500–3345 m (Bouchet, Warén, 1985; Warén Bouchet, 2001).

##### Genus *Mohnia* Friele in Kobelt, 1878

##### *Mohnia mohni* (Friele, 1877)

LOCALITIES: “Vöringen”, St. 51, 295, 303, 353; “Michael Sars”, St. 9; “Frithjof”, 72°01'N, 08°33'W, 2400 m; 72°42'N, 14°49'W, 2000 m; NORBI, St. 1, 2, 4, 5, 6, 9, 10, 11; NW of Franz Josef Land, 2899 m, between Spitsbergen and Greenland, 2800 m (Bouchet, Warén, 1979, 1985).

DISTRIBUTION: Northeast Atlantic and Arctic Ocean (Bouchet, Warén, 1979, 1985).

DEPTH RANGE: 150–3800 m (Bouchet, Warén, 1985).

##### *Mohnia danielsseni* (Friele, 1879)

LOCALITIES: “Voeringen”, St. 51, 295, 303, 353; “Michael Sars”, St. 9; “Frithjof”, 72°01'N, 08°33'W, 2400 m; 72°42'N, 14°49'W, 2000 m; NORBI, St. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11; N of Franz Josef Land, 2899 m, between Spitsbergen and Greenland, 2800 m (Bouchet, Warén, 1979, 1985).

DISTRIBUTION: Northeast Atlantic and Arctic Ocean (Bouchet, Warén, 1979, 1985).

DEPTH RANGE: 1400–3700 m (Bouchet, Warén, 1985).

##### *Mohnia abyssorum* (P. Fischer, 1883)

LOCALITIES: “Princesse Alice I”, St. 527, 536; “Princesse Alice II”, St. 2986, 3006; many unspecified localities from “Talisman”, NORATLANTE, BIACORES, BIOGAS, INCAL (Dautzenberg, 1927; Bouchet, Warén, 1985).

DISTRIBUTION: North and Central Atlantic, south to about 15°N (Bouchet, Warén, 1985).

DEPTH RANGE: 1900–5000 m (Bouchet, Warén, 1985).

##### Genus *Belomitra* Fischer, 1882

##### *Belomitra quadruplex* (Watson, 1882)

LOCALITIES: “Princesse Alice I”, St. 527, 624, 652; “Princesse Alice II”, St. 1116, 1306; “Talisman”, St. 44, 45; NORATLANTE, St. B19; BIA-

CORES, St. 120, 165, 202, 245; BIOGAS, St. CV 23, CP 01, CP 02, CP 07, CP 17, DS 52, DS 57, 1, 2; INCAL, St. CP 01, CP 02, CP 03, CP 13, OS 05, OS 06, WS 07, WS 08, WS 09, WS 10; "Meteor", St. AT 2, AT 3, AT 4, AT 90, AT 91 (Dautzenberg, 1927; Fechter, 1979; Bouchet, Warén, 1985).

DISTRIBUTION: North Atlantic, from south of Iceland to 19°N (Bouchet, Warén, 1985).

DEPTH RANGE: 300–5330 m (Fechter, 1979; Bouchet, Warén, 1985).

#### Family Pseudolividae

##### Genus *Benthobia* Dall, 1889

##### *Benthobia tryoni* Dall, 1889

LOCALITIES: BIACORES, St. 165; ABY-PLAINE, St. DS2 (Bouchet, Warén, 1985).

DISTRIBUTION: Atlantic, from 37°N to 34°S (Bouchet, Warén, 1985).

DEPTH RANGE: 800–4415 m (Bouchet, Warén, 1985).

#### Family Turbinellidae

##### Genus *Metzgeria* Norman, 1879

##### *Metzgeria gagei* Bouchet et Warén, 1985

LOCALITIES: "Ingolf", St. 10 (Bouchet, Warén, 1985).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1985).

DEPTH RANGE: 670–2137 m (Bouchet, Warén, 1985).

##### Genus *Latiromitra* Locard, 1897

##### *Latiromitra cryptodon* (Fischer, 1882)

LOCALITIES: "Princesse Alice II", St. 1116 (Bouchet, Warén, 1985).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1985).

DEPTH RANGE: 1550–2165 m (Bouchet, Warén, 1985).

#### Family Cancellariidae

##### Genus *Brocchinia* Jousseaume, 1887

##### *Brocchinia azorica* (Bouchet et Warén, 1985)

LOCALITIES: "Shackleton" 2A/77, St. 121, "Challenger" II, St. 2, 401 (Verhecken, 2002).

DISTRIBUTION: Off the Azores to off North-west Ireland (Verhecken, 2002).

DEPTH RANGE: 1820–2910 m (Verhecken, 2002).

##### *Brocchinia nodosa* (Verrill et Smith in Verrill, 1885)

LOCALITIES: BIOGAS, St. CP 07 (Verhecken, 2002).

DISTRIBUTION: off the Atlantic west coast from about 42°N to 31°N, off the Atlantic east coast from 57°N to 19°N (Verhecken, 2002).

DEPTH RANGE: 678–2170 m (Verhecken, 2002).

#### Family Admetidae

##### Genus *Admete* Krøyer in Møller, 1842

##### *Admete nodosa* Verrill, 1885

LOCALITIES: INCAL, St. DS 05; BIOGAS, St. CP 07 (Bouchet, Warén, 1985).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1985).

DEPTH RANGE: 1475–2503 m (Bouchet, Warén, 1985).

##### *Admete azorica* Bouchet et Warén, 1985

LOCALITIES: "Talisman", Dr. 129 (Bouchet, Warén, 1985).

DISTRIBUTION: Off the Azores (Bouchet, Warén, 1985).

DEPTH RANGE: 1250–2220 m (Bouchet, Warén, 1985).

##### Genus *Iphinopsis* Dall, 1924

##### *Iphinopsis fuscoapicata*

##### Bouchet et Warén, 1985

LOCALITIES: INCAL, St. WS 01, DS 06, CP 06, DS 09, CP 08, WS02; "Challenger" II, Rockall Trough, 2851 m (Bouchet, Warén, 1985).

DISTRIBUTION: Off the British Isles (Bouchet, Warén, 1985).

DEPTH RANGE: 1993–2897 m (Bouchet, Warén, 1985).

##### *Iphinopsis alba* Bouchet et Warén, 1985

LOCALITIES: BIOGAS, St. CP 01, CP 08, CP 12, DS 26, DS 52, DS 62, DS 63, DS 64, DS 71 (Bouchet, Warén, 1985).

DISTRIBUTION: Northeast Atlantic (continental slopes of the Bay of Biscay and the Rockall Trough) (Bouchet, Warén, 1985).

DEPTH RANGE: 1900–2925 m (Bouchet, Warén, 1985).

#### Family Drilliidae

##### Genus *Spirotropis* Sars, 1878

##### *Spirotropis centimata* (Dall, 1889)

LOCALITIES: "Talisman", St. 130; "Princesse Alice I", St. 536, 624; "Princesse Alice II", St. 1116, 2044; BIACORES, St. 185, 206, 227 (Dautzenberg, 1927; Bouchet, Warén, 1980).

DISTRIBUTION: Off North Carolina to Gulf of Mexico, off the Azores, off West Africa (Bouchet, Warén, 1980).

DEPTH RANGE: 1300–3590 m (Bouchet, Warén, 1980).

### Family Turridae

#### Genus *Micropleurotoma* Thiele, 1931

##### *Micropleurotoma spirotropoides* (Thiele, 1925)

LOCALITIES: “Travailleur”, 1881, St. 1; BIOGAS, St. DS 52 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1980).

DEPTH RANGE: 112–2028 m (Bouchet, Warén, 1980).

#### Genus *Aforia* Dall, 1889

##### *Aforia hypomela* Dall, 1889

LOCALITIES: BIACORES, St. 252; NORATLANTE, St. B 16, B 17; BIOGAS, St. DS 19, DS 40, DS 57, CP 10, CP 11, CV 28, CP 13, CP 14, CP 17, CP 19, CP 21; “Michael Sars”, St. 10; “Princesse Alice II”, St. 3006; “Talisman”, St. 147; INCAL, St. CP 05, CP 06, CP 07, CP 09, CP 11, OS 02, WS 08 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1900–4823 m (Bouchet, Warén, 1980).

#### Genus *Leucosyrinx* Dall, 1889

##### *Leucosyrinx verrilli* (Dall, 1881)

LOCALITIES: “Talisman”, Dr. 16, 143; “Princesse Alice II”, St. 1116, 2044, 2990; NORATLANTE, St. B 12; BIACORES, St. 120, 163, 176, 202, 227, 235 (Bouchet, Warén, 1980).

DISTRIBUTION: East and West Atlantic, from off the Azores, Spain and North Carolina, south to about 10°N (Bouchet, Warén, 1980).

DEPTH RANGE: 495–2900 m (Bouchet, Warén, 1980).

### Family Conidae

#### Genus *Phymorhynchus* Dall, 1908

##### *Phymorhynchus sulcifera* (Bush, 1893)

LOCALITIES: “Talisman”, off Morocco, 2100–2200 m, Dr. 41; “Princesse Alice II”, St. 1116, 2044 (Dautzenberg, 1927, as *Pleurotoma talismani* Locard, 1897; Bouchet, Warén, 1980).

DISTRIBUTION: North American Basin in West Atlantic, East Atlantic from the southern part of the Bay of Biscay and southwards (Bouchet, Warén, 1980).

DEPTH RANGE: 1165–2324 m (Bouchet, Warén, 1980).

##### *Phymorhynchus alberti*

##### (Dautzenberg et Fischer, 1906)

LOCALITIES: “Meteor”, St. AT 3; NORATLANTE, St. B 17, B 18; BIOGAS, St. CP 04, CP 14,

CP 16, CP 17, CV 18, CP 19, CP 20, CP 22, CV 28; “Michael Sars”, St. 10; INCAL, St. CP 13, CP 15; “Sarsia”, St. 7603 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1895–5315 m (Fechter, 1979; Bouchet, Warén, 1980).

#### Genus *Typhlomangelia* G.O. Sars, 1878

##### *Typhlomangelia nivalis* (Lovén, 1846)

LOCALITIES: “Talisman”, St. 143; “Princesse Alice II”, St. 2044; “Ingolf”, St. 76; BIACORES, St. 120, 176, 202; POLYMEDE, St. CV 4; BIOGAS, St. CP 01, CP 07, CP 08, CP 11, CP 26, DS 62; INCAL, St. CP 04 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1980).

DEPTH RANGE: 45–3000 m (Bouchet, Warén, 1980).

#### Genus *Borsonia* Bellardi, 1839

##### *Borsonia hirondellae* (Dautzenberg, 1891)

LOCALITIES: “Princesse Alice I”, St. 624; “Princesse Alice II”, St. 2044 (Dautzenberg, 1927).

DISTRIBUTION: Subtropical East Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 160–2286 m (Dautzenberg, 1927; Bouchet, Warén, 1980).

#### Genus *Drilliola* Monterosato in Locard, 1897

##### *Drilliola pruina* (Watson, 1881)

LOCALITIES: BIACORES, St. 126, 245; BIOGAS, St. CP 01, CP 09, CV 37, DS 71; NORATLANTE, St. B 19; INCAL, St. CP 08, OS 01, CP 09, WS 01 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1100–4270 m (Bouchet, Warén, 1980).

#### Genus *Pleurotomella* Verrill, 1872

##### *Pleurotomella benedicti*

##### Verrill et Smith, 1884

LOCALITIES: BIOGAS, St. CP 01, CP 07, DS 65 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 2170–2360 m (Bouchet, Warén, 1980).

##### *Pleurotomella lottae* Verrill, 1885

LOCALITIES: BIOGAS, St. CP 01, DS 64 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).



DEPTH RANGE: 1925–2750 m (Bouchet, Warén, 1980).

***Pleurotomella sandersoni* Verrill, 1884**

LOCALITIES: NORATLANTE, St. E 8; BIOGAS, St. DS 55, DS 60; “Meteor”, St. AT 4; INCAL, St. OS 06, OS 07, OS 08, WS 03, WS 08, WS 09, WS 10; POLYGAS, St. DS 15 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1884–5330 m (Bouchet, Warén, 1980).

***Pleurotomella packardii* Verrill, 1872**

LOCALITIES: BIACORES, St. 227, 251; NORBI, St. CP 02, CP 03, DS 08, CP 07, CP 08, DS 11, DS 13; “Meteor”, St. AT 2, AT 3, AT 5, AT 91, 191; BIOGAS, St. DS 13, DS 15, DS 61, DS 62, DS 63, DS 64, DS 71, CP 01, CP 02, CP 08, DS 26, DS 52, DS 53, DS 55; INCAL, St. CP 01, DS 01, DS 02, DS 05, DS 06, DS 09, DS 16, OS 01, OS 05, OS 06, OS 07, WS 01, WS 09, WS 10 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 200–4425 m (Bouchet, Warén, 1980).

***Pleurotomella eurybrocha*  
(Dautzenberg et Fischer, 1896)**

LOCALITIES: “Pola”, St. 82; “Meteor”, St. 15 (Bouchet, Warén, 1980; Janssen, 1989).

DISTRIBUTION: North Atlantic, Mediterranean (Bouchet, Warén, 1980; Janssen, 1989).

DEPTH RANGE: 200–4425 m (Bouchet, Warén, 1980).

**Genus *Neopleurotomoides* Shuto, 1971  
*Neopleurotomoides distincta***

**Bouchet et Warén, 1980**

LOCALITIES: BIACORES, St. 126 (Bouchet, Warén, 1980).

DISTRIBUTION: North-East Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1300–3360 m (Bouchet, Warén, 1980).

***Neopleurotomoides* sp. A**

LOCALITIES: INCAL, St. WS 10 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 4354 m (Bouchet, Warén, 1980).

***Neopleurotomoides* sp. B**

LOCALITIES: INCAL, St. OS 07 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 4249 m (Bouchet, Warén, 1980).

**Genus *Benthomangelia* Thiele, 1925**

***Benthomangelia antonia* (Dall, 1881)**

LOCALITIES: “Princesse Alice I”, St. 624; BIOGAS, St. CV 18, CV 23, CV 27, CV 36, CV 41, CP 01, CP 02, CP 08, CP 16, CP 16, CP 17, CP 20, DS 53, DS 57, DS 63, DS 75, DS 76; BIACORES, St. 126; SARSIA, St. 7603; INCAL, St. WS 07, WS 08, WS 09, WS 10, OS 07, OS 08 (Dautzenberg, 1927, as *Pleurotoma incincta* Watson, 1881; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1150–4825 m (Bouchet, Warén, 1980).

***Benthomangelia macra* (Watson, 1881)**

LOCALITIES: BIACORES, St. 173; “Princesse Alice I”, St. 624; “Princesse Alice II”, St. 1116; BIOGAS, St. CP 01; “Meteor”, St. D, D 1, 14, 15, 30, 42 (Dautzenberg, 1927; Di Geronimo and Panetta, 1973; Nordsieck, 1973; Bouchet, Warén, 1980; Janssen, 1989).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1980).

DEPTH RANGE: 597–3259 m (Bouchet, Warén, 1980; Janssen, 1989).

***Benthomangelia decapitata***

**Bouchet et Warén, 1980**

LOCALITIES: BIOGAS, St. CP 19, CV 18, CV 23, CV 27, CV 28, CV 30, CV 34, CP 13, CP 14, CP 16, CP 17, CP 19, DS 55, DS 67, DS 76, DS 77, DS 78, DS 79; INCAL, St. WS 03, WS 05, WS 07, WS 08, WS 09, WS 10, OS 04, OS 05, OS 06, OS 07, OS 08, DS 12, DS 13, DS 14, DS 16, PE 2, KR 11, CP 13; “Meteor”, St. 3-AT2, 3-AT4; AT 91 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 3360–5330 m (Bouchet, Warén, 1980).

**Genus *Gymnobela* Verrill, 1884**

***Gymnobela abyssorum* (Locard, 1897)**

LOCALITIES: “Princesse Alice I”, St. 536 (Dautzenberg, 1927).

DISTRIBUTION: Bay of Biscay and southwards, Mediterranean Sea, off the Azores (Dautzenberg, 1927; Bouchet, Warén, 1980).

DEPTH RANGE: 50–3890 m (Dautzenberg, 1927; Bouchet, Warén, 1980).



***Gymnobela agassizi* (Verrill et Smith, 1880)**

LOCALITIES: "Princesse Alice I", St. 527; "Princesse Alice II", St. 2990; NORATLANTE, St. E 12; BIOGAS, St. CV 39, CP 01, CP 02, CP 07, DS 51; BIACORES, St. 227; "Sarsia", St. 7626 (Dautzenberg, 1927, as *Pleurotoma brychia* Watson, 1881; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 775–4020 m (Dautzenberg and Fischer, 1896; Bouchet, Warén, 1980).

***Gymnobela fulvotincta*****(Dautzenberg et Fischer, 1896)**

LOCALITIES: "Talisman", St. 131 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 860–2995 m (Bouchet, Warén, 1980).

***Gymnobela emertoni* (Verrill et Smith, 1884)**

LOCALITIES: "Talisman", St. 131; NORATLANTE, St. B 16; BIACORES, St. 252; BIOGAS, St. DS 40, CV 37, Na03, CV 30, CP 04, CP 05, CP 11, CP 16, CP 17, CP 18, CP 20, CP 21; "Meteor", St. 191; AT 2, AT 3, AT 4, AT 5 (Fechter, 1979, as *Pleurotomella tincta*; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1980–5330 m (Fechter, 1979; Bouchet, Warén, 1980).

***Gymnobela watsoni* (Dautzenberg, 1889)**

LOCALITIES: BIOGAS, St. DS 15 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1165–2246 m (Bouchet, Warén, 1980).

***Gymnobela aquilarum* (Watson, 1881)**

LOCALITIES: BIACORES, St. 95; BIOGAS, St. CV 23, CV 28, CV 39, CP 07, DS 53, DS 76, DS 76, DS 82; "Sarsia", St. 7603; INCAL, St. WS 01, WS 02, WS 08, WS 09, OS 06, OS 08, DS 02 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 350–4462 m (Bouchet, Warén, 1980).

***Gymnobela frielei* (Verrill, 1885)**

LOCALITIES: "Princesse Alice I", St. 527, 536, 624, 650; "Talisman", St. 133, 142, 144; NORATLANTE, St. B 10, B 16; BIACORES, St.

176, 235; BIOGAS, St. CV 10, CV 34, CV 41, DS 15, DS 40, DS 71, CP 01, CP 08, CP 12, CP 17; INCAL, St. WS 01, WS 02, DS 02, OS 05, OS 06, CP 02 (Dautzenberg, 1927, as *Pleurotoma polysarca* Dautzenberg et Fischer, 1896; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1600–4400 m (Bouchet, Warén, 1980).

***Gymnobela engonia* Verrill, 1885**

LOCALITIES: "Talisman", St. 147; NORATLANTE, St. B 16, B 17; BIACORES, St. 249, 251; BIOGAS, St. DS 21, CV 14, CV 27, CV 30, CV 41, CP 04, CP 05, CP 06, CP 10, CP 13, CP 15, CP 16, CP 17, CP 19, CP 22; INCAL, St. WS 03, WS 05, WS 07, WS 08, WS 09, WS 10, CP 15, OS 07, OS 08; "Sarsia", St. 7603; "Meteor", St. AT 2, AT 3, AT 5, AT 90, AT 91 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: Mid North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 2878–5330 m (Fechter, 1979; Bouchet, Warén, 1980).

***Gymnobela homeotata* (Watson, 1886)**

LOCALITIES: BIOGAS, St. CP 16, DS 48 (Bouchet, Warén, 1980).

DISTRIBUTION: East Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1123–4825 m (Bouchet, Warén, 1980).

***Gymnobela subaraneosa*****(Dautzenberg et Fischer, 1896)**

LOCALITIES: BIOGAS, St. DS 11, DS 15, DS 18, DS 31, DS 32, DS 52, DS 53, DS 58, DS 59, DS 62, DS 63, DS 64, DS 74, CP 01, CP 08, CP 09, CP 26; "Travailleur", 1881, Dr. 4; NORATLANTE, St. E 1; INCAL, St. DS 06, DS 07, WS 01, WS 02, OS 01, CP 08, CP 09; "Challenger" II, St. 12; "Porcupine", 46°08'N, 05°01'W, 3950 m; "Meteor", St. 15 (Bouchet, Warén, 1980; Janssen, 1989).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1980).

DEPTH RANGE: 800–3950 m (Bouchet, Warén, 1980).

***Gymnobela chyta* (Watson, 1886)**

LOCALITIES: "Princesse Alice II", St. 2990; BIOGAS, St. DS 17 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1800–2320 m (Bouchet, Warén, 1980).

***Gymnobela phyxanor* (Watson, 1886)**

LOCALITIES: "Meteor", St. AT 91; BIOGAS, St. CP 13; INCAL, St. CP 15 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: Northeast and Central Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1787–5315 m (Fechter, 1979; Bouchet, Warén, 1980).

***Gymnobela vayssieri* (Dautzenberg, 1925)**

LOCALITIES: "Princesse Alice I", St. 527; "Princesse Alice II", St. 1787; BIOGAS, St. CP 13, CP 17; INCAL, St. WS 08; "Meteor", St. 37, AT 2, AT 3, AT 4, AT 5 (Fechter, 1979, as *Pleurotomella bathyiberica*; Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 3070–5413 m (Bouchet, Warén, 1980).

***Gymnobela chariessa* (Watson, 1881)**

LOCALITIES: "Talisman", St. 38, 131; "Princesse Alice I", St. 624; "Princesse Alice II", St. 1306, 2044, 3006; BIACORES, St. 95, 163, 165, 176, 185, 206, 227, 235, 252; NORATLANTE, St. B 11; BIOGAS, St. DS 15, DS 16, DS 19, DS 48, DS 65, CV 06, CV 23, CV 39, CP 01, CP 07, CP 09, CP 10; "Sarsia", St. 7626; "Meteor", St. 191; INCAL, St. CP 09, WS 08 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 400–4300 m (Bouchet, Warén, 1980).

***Gymnobela lyroniclea* (Clarke, 1959)**

LOCALITIES: "Meteor", St. AT 2, AT 6, AT 5, AT 90, AT 91; BIACORES, St. 126, 245, 249, 251; NORATLANTE, St. B 13; BIOGAS, St. CV 13, CV 14, CP 13, CP 15, CP 16, CP 17; INCAL, St. WS 05, WS 10, CP 13, CP 15 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 3064–5330 m (Fechter, 1979; Bouchet, Warén, 1980).

***Gymnobela nudator* (Locard, 1897)**

LOCALITIES: "Talisman", St. 134; BIACORES, St. 251; INCAL, St. CP 10 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 3400–4823 m (Bouchet, Warén, 1980).

***Gymnobela tenellunum* (Locard, 1897)**

LOCALITIES: "Talisman", St. 118; NORATLANTE, St. B 11, B 12 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 2756–3465 m (Bouchet, Warén, 1980).

**Genus *Xanthodaphne* Powell, 1942*****Xanthodaphne heterogramma* (Odhner, 1960)**

LOCALITY: BIACORES, St. 202 (Bouchet, Warén, 1980).

DISTRIBUTION: North and Central Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 2900–4474 m (Bouchet, Warén, 1980).

***Xanthodaphne bruneri* (Verrill, 1884)**

LOCALITIES: NORATLANTE, St. B 17; BIACORES, St. 202; BIOGAS, St. CV 30, CP 16, CP 22; INCAL, St. WS 05, CP 13; "Meteor", St. AT 2 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1500–5325 m (Fechter, 1979; Bouchet, Warén, 1980).

***Xanthodaphne leptalea* (Bush, 1893)**

LOCALITIES: "Talisman", St. 40; "Princesse Alice II", St. 3006; BIACORES, St. 163 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1165–2779 m (Bouchet, Warén, 1980).

***Xanthodaphne charcotiana*****Bouchet et Warén, 1980**

LOCALITIES: INCAL, St. WS 03, WS 07, WS 08 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 4280–4829 m (Bouchet, Warén, 1980).

***Xanthodaphne dalmasi*****(Dautzenberg et Fischer, 1897)**

LOCALITIES: "Princesse Alice I", St. 624; BIACORES, St. 202; BIOMEDE 2, St. 17; "Meteor", St. D, D 1 (Nordsieck, 1973; Di Geronimo, Panetta, 1973; Bouchet, Warén, 1980; Bouchet, Taviani, 1989).

DISTRIBUTION: Northeast Atlantic, Mediterranean (Bouchet, Warén, 1980; Bouchet, Taviani, 1989).

DEPTH RANGE: 1165–2900 m (Bouchet, Warén, 1980).

***Xanthodaphne* sp.**

LOCALITIES: INCAL, St. OS 01 (Bouchet, Warén, 1980; as *Xanthodaphne* sp. n.).

DISTRIBUTION: North-East Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1100–2634 m (Bouchet, Warén, 1980).

**Genus *Oenopota* Mörch, 1852**

***Oenopota ovalis* (Friele, 1877)**

LOCALITIES: “Vöringen”, St. 40, 295, 353; “Michael Sars”, St. 9; NORBI, St. 1; “Ingolf”, St. 113, “Thor”, St. 76; “Challenger” II, St. 12; NORATLANTE, St. E 1; BIOGAS, St. DS 23, DS 58, DS 65, DS 74; INCAL, St. DS 01, DS 02, CP 01, CP 02 (Bouchet, Warén, 1979, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 557–4734 m (Bouchet, Warén, 1980).

***Oenopota dictyophora***

**Bouchet et Warén, 1980**

LOCALITIES: 47°36'N, 08°40'W, 2360 m; “Challenger” II, St. ES 12; “Thor”, St. 76; BIOGAS, St. DS 16, DS 52 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1070–2360 m (Bouchet, Warén, 1980).

***Oenopota convexigyra***

**Bouchet et Warén, 1980**

LOCALITIES: BIACORES, St. 126 (Bouchet, Warén, 1980).

DISTRIBUTION: Off the Azores (Bouchet, Warén, 1980).

DEPTH RANGE: 3360 m (Bouchet, Warén, 1980).

***Oenopota graphica* (Locard, 1897)**

LOCALITIES: “Travailleur”, 1881, Dr. 1; “Challenger” II, St. 12; INCAL, St. DS 01, DS 02, CP 01 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 700–2091 m (Bouchet, Warén, 1980).

***Oenopota tenuicostata* (G.O. Sars, 1878)**

LOCALITIES: “Ingolf”, St. 11; INCAL, St. DS 02, CP 02 (Bouchet, Warén, 1979, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 200–2702 m (Bouchet, Warén, 1980).

***Oenopota violacea* (Mighels et Adams, 1842)**

LOCALITIES: “Travailleur”, 1881, Dr. 1, Dr. 4 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 80–2505 m (Bouchet, Warén, 1980).

**Genus *Corinnaeturris***

**Bouchet et Warén, 1980**

***Corinnaeturris leucomata* (Dall, 1881)**

LOCALITIES: “Princesse Alice II”, St. 1116 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1125–3530 m (Bouchet, Warén, 1980).

**Genus *Taranis* Jeffreys, 1870**

***Taranis moerchi* (Malm, 1861)**

LOCALITIES: BIOGAS, St. DS 51, DS 81; “Porcupine”, St. 17; INCAL, St. DS 02 (Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic, Mediterranean Sea (Bouchet, Warén, 1980).

DEPTH RANGE: 80–4715 m (Bouchet, Warén, 1980).

**Genus *Lusitanops* Nordsieck, 1968**

***Lusitanops cingulata***

**Bouchet et Warén, 1980**

LOCALITIES: INCAL, St. WS 02, DS 05; BIOMEDE 2, St. 11 (Bouchet, Warén, 1980; Bouchet, Taviani, 1989).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1980; Bouchet, Taviani, 1989).

DEPTH RANGE: 2500–2795 m (Bouchet, Warén, 1980; Bouchet, Taviani, 1989).

***Lusitanops sigmoidea***

**Bouchet et Warén, 1980**

LOCALITIES: BIOGAS, St. CP 08, DS 76; INCAL, St. WS 03 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1980–4830 m (Bouchet, Warén, 1980).

***Lusitanops* sp. A**

LOCALITIES: BIOGAS, St. CP 01 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic, Mediterranean Sea (Bouchet, Warén, 1980).

DEPTH RANGE: 2245 m (Bouchet, Warén, 1980).

**Genus *Famelica* Bouchet et Warén, 1980**  
***Famelica catharinae* (Verrill et Smith, 1884)**

LOCALITIES: BIACORES, St. 36; "Meteor", St. AT 2, St. AT 5, St. AT 90, St. AT 91 (Fechter, 1979; Bouchet, Warén, 1980).

DISTRIBUTION: North Atlantic, 35° to 40°N (Bouchet, Warén, 1980).

DEPTH RANGE: 1500–5330 m (Fechter, 1979; Bouchet, Warén, 1980).

***Famelica monoceros* (Watson, 1881)**

LOCALITIES: BIACORES, St. 126 (Bouchet, Warén, 1980).

DISTRIBUTION: North and Central Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1340–4000 m (Bouchet, Warén, 1980).

***Famelica mirmidina***

**(Dautzenberg et Fischer, 1896)**

LOCALITIES: BIACORES, St. 126 (Bouchet, Warén, 1980).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTH RANGE: 1350–3360 m (Bouchet, Warén, 1980).

***Famelica* sp.**

LOCALITIES: "Princesse Alice II", St. 1116 (Bouchet, Warén, 1980; as *Famelica* sp. n.).

DISTRIBUTION: Northeast Atlantic (Bouchet, Warén, 1980).

DEPTHRANGE: 2165 m (Bouchet, Warén, 1980).

**Family Aclididae**

**Genus *Aclis* Lovén, 1846**

***Aclis walleri* Jeffreys, 1867**

LOCALITIES: BIOGAS, St. CP 07, CP 37, DS 32, DS 52, DS 62, DS 63; "Meteor", St. 14 (Bouchet, Warén, 1986; Janssen, 1989).

DISTRIBUTION: from North Norway along the European coast to northern Spain (Bouchet, Warén, 1986).

DEPTHRANGE: 140–3259 m (Bouchet, Warén, 1986; Janssen, 1989).

**Family Eulimidae**

**Genus *Eulima* Risso, 1826**

***Eulima incolor* Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 52 (Bouchet, Warén, 1986).

DISTRIBUTION: Off northern Spain (Bouchet, Warén, 1986).

DEPTH RANGE: 2006 m (Bouchet, Warén, 1986).

**Genus *Pelseeneria* Koehler et Vaney, 1908**

***Pelseeneria stimpsoni* (Verrill, 1872)**

LOCALITIES: "Princesse Alice I", St. 624 (Dautzenberg, 1927).

DISTRIBUTION: Off east coast of the USA, off the Azores.

DEPTH RANGE: 24–2295 m.

**Genus *Batheulima* Nordsieck, 1968**

***Batheulima fuscoapicata* (Jeffreys, 1884)**

LOCALITIES: "Princesse Alice I", St. 624; BIOGAS, St. CP 37 (Dautzenberg, 1927; Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay, off Portugal, the Azores and southeastern USA (Bouchet, Warén, 1986).

DEPTH RANGE: 800–2175 m (Bouchet, Warén, 1986).

**Genus *Halielloides* Bouchet et Warén, 1986**

***Halielloides* sp.**

LOCALITIES: "Talisman", St. 42 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay, off Portugal, the Azores and southeastern USA (Bouchet, Warén, 1986).

DEPTHRANGE: 800–2175 m (Bouchet, Warén, 1986).

**Genus *Rectilabrum* Bouchet et Warén, 1986**

***Rectilabrum lanceolatum***

**Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 50, DS 55, DS 57, DS 60, DS 66, DS 75, DS 78, DS 82, KG 208; INCAL, St. DS 01, DS 02, ØS 03, ØS 04, WS 09; "Challenger" II, St. 2; "Discovery", St. 9756(4) (Bouchet, Warén, 1986).

DISTRIBUTION: North Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 1800–4825 m (Bouchet, Warén, 1986).

**Genus *Ophieulima* Warén et Sibuet, 1981**

***Ophieulima minima* (Dall, 1927)**

LOCALITIES: 135–145 km SW of Vestmannaöyarne, South of Iceland, 2140 m (Warén, Sibuet, 1981).

DISTRIBUTION: From the southern Bay of Biscay to off south Iceland, Western Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 528–2140 m (Warén, Sibuet, 1981).

**Genus *Ophiolamia* Warén et Carney, 1981**  
***Ophiolamia fragilissima***  
**Bouchet et Warén, 1986**

LOCALITIES: “Challenger” II, St. 6, 10; INCAL, St. CP 04 (Bouchet, Warén, 1986).

DISTRIBUTION: West of Scotland (Bouchet, Warén, 1986).

DEPTH RANGE: 2500–2900 m (Bouchet, Warén, 1986).

**Genus *Melanella* Bowdich, 1822**  
***Melanella lucida* (Verrill, 1884)**

LOCALITIES: “Challenger” II, St. 2, 6, 10, 12, 55, 137, 140, 143; INCAL, St. DS 09 (Bouchet, Warén, 1986).

DISTRIBUTION: Rockall Trough and off the northeastern USA (Bouchet, Warén, 1986).

DEPTH RANGE: 1993–3834 m (Bouchet, Warén, 1986).

***Melanella charissa* (Verrill, 1884)**

LOCALITIES: “Challenger” II, St. 2, 6, 10, 55, 111, 135, 140; INCAL, St. DS 05, CP 06, DS 07, DS 09 (Bouchet, Warén, 1986).

DISTRIBUTION: both sides of the North Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 1484–3834 m (Bouchet, Warén, 1986).

***Melanella densicostata***  
**Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 67, INCAL, St. WS 09; “Discovery”, St. 9756(14) (Bouchet, Warén, 1986).

DISTRIBUTION: Southwest of the British Isles (Bouchet, Warén, 1986).

DEPTH RANGE: 3690–4415 m (Bouchet, Warén, 1986).

***Melanella similior* Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 52 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay and off Portugal (Bouchet, Warén, 1986).

DEPTH RANGE: 1050–2006 m (Bouchet, Warén, 1986).

***Melanella turbonilloides***  
**Bouchet et Warén, 1986**

LOCALITIES: INCAL, St. WS 09, DS 13 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay and off Portugal (Bouchet, Warén, 1986).

DEPTH RANGE: 1355–4822 m (Bouchet, Warén, 1986).

***Melanella gagei* Bouchet et Warén, 1986**

LOCALITIES: “Challenger” II, St. 10 (Bouchet, Warén, 1986).

DISTRIBUTION: Rockall Trough (Bouchet, Warén, 1986).

DEPTH RANGE: 1770–2540 m (Bouchet, Warén, 1986).

***Melanella planisutis* Bouchet et Warén, 1986**

LOCALITIES: “Princesse Alice I”, St. 624; BIA-CORES, St. 120 (Bouchet, Warén, 1986).

DISTRIBUTION: Off the Azores (Bouchet, Warén, 1986).

DEPTH RANGE: 1257–2102 m (Bouchet, Warén, 1986).

***Melanella myriotrochi***  
**Bouchet et Warén, 1986**

LOCALITIES: “Challenger” II, St. ES 266 (Bouchet, Warén, 1986).

DISTRIBUTION: Rockall Trough (Bouchet, Warén, 1986).

DEPTH RANGE: 2591 m (Bouchet, Warén, 1986).

**Genus *Pisolaria* Bouchet et Lützen, 1976**

***Pisolaria brychia* (Watson, 1883)**

LOCALITIES: “Talisman”, St. 139; BIOGAS, St. 2, 3, 4; INCAL, St. 2, 4; “Chain”, St. 328; ABYPLAINE, St. CP 20, CP 21 (Bouchet, Lützen, 1980; Bouchet, Warén, 1986).

DISTRIBUTION: probably all over the abyssal parts of the Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 2900–5260 m (Bouchet, Lützen, 1980; Bouchet, Warén, 1986).

**Genus *Megadenus* Rosén, 1910**

***Megadenus oneirophantae***  
**Bouchet et Lützen, 1980**

LOCALITIES: INCAL, St. CP 12, St. WS 03 (Bouchet, Lützen, 1980).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 4796–4829 m (Bouchet, Lützen, 1980; Bouchet, Warén, 1986).

**Genus *Molpadicola* Grusov, 1957**

***Molpadicola* sp.**

LOCALITIES: INCAL, St. ØS 02 (Bouchet, Warén, 1986).

DISTRIBUTION: Southwest of Ireland (Bouchet, Warén, 1986).

DEPTH RANGE: 4829 m (Bouchet, Warén, 1986).



**Genus *Crinolamia* Bouchet et Warén, 1979*****Crinolamia anguistispira*  
Bouchet et Warén, 1986**

LOCALITIES: NORATLANTE, St. C 4; INCAL, St. DS 9; "Challenger" II, St. 135, 140 (Bouchet, Warén, 1986).

DISTRIBUTION: Off West Europe (Bouchet, Warén, 1986).

DEPTH RANGE: 2090–4500 m (Bouchet, Warén, 1986).

***Crinolamia dahli* Bouchet et Warén, 1979**

LOCALITIES: NORBI, St. 2, CP 03, CP 04; St. 3, CP 05, CP 06, DS 07; St. 5, CP 09, CP 10; St. 6, DS 12; St. 7, CP 13, DS 14; St. 8, CP 14, DS 15; St. 9, DS 16; St. 10, CP 16; St. 11, CP 17 (Bouchet, Warén, 1979).

DISTRIBUTION: Norwegian Sea (Bouchet, Warén, 1979).

DEPTH RANGE: 2470–3709 m (Bouchet, Warén, 1979).

**Genus *Curveulima* Laseyron, 1955*****Curveulima macrophtalmica* (Warén, 1972)**

LOCALITIES: INCAL, St. CP 04 (Bouchet, Warén, 1986).

DISTRIBUTION: Off West Europe, Norway to the Canaries (Bouchet, Warén, 1986).

DEPTH RANGE: 60–2483 m (Bouchet, Warén, 1986).

**Genus *Bathycrinicola*****Bouchet et Warén, 1986*****Bathycrinicola talaena*****(Dautzenberg et Fischer, 1896)**

LOCALITIES: ABYPLANE, St. CP 68; "Thalassa", St. Z 453 (Bouchet, Warén, 1986).

DISTRIBUTION: Off the Azores, Bay of Biscay, Ibero-Moroccan Gulf (Bouchet, Warén, 1986).

DEPTH RANGE: 1210–2077 m (Bouchet, Warén, 1986).

***Bathycrinicola micrapex*****Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 61, St. DS 65 (Bouchet, Warén, 1986).

DISTRIBUTION: Off the Azores, Bay of Biscay, off Portugal (Bouchet, Warén, 1986).

DEPTH RANGE: 1175–2360 m (Bouchet, Warén, 1986).

**Genus *Costaclis* Bartsch, 1947*****Costaclis mizon* (Watson, 1881)**

LOCALITIES: "Discovery", St. 8971; BIOGAS, St. CP 37 (Bouchet, Warén, 1986).

DISTRIBUTION: Off the Azores and Canaries, Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 1600–2918 m (Bouchet, Warén, 1986).

**Genus *Hemiaclis* G.O. Sars, 1878*****Hemiaclis ventrosa* (Jeffreys in Friele, 1876)**

LOCALITIES: NORBI, St. CP 11; "Vöringen", St. 297 (Bouchet, Warén, 1986).

DISTRIBUTION: Off Scandinavia and Iceland, also off Georgia (USA) (Bouchet, Warén, 1986).

DEPTH RANGE: 196–2945 m (Bouchet, Warén, 1986).

***Hemiaclis ventrosa* Bouchet et Warén, 1986**

LOCALITIES: POLYGAS, St. DS 15; BIOGAS, St. CP 01, CP 08, CP 37, DS 62, DS 63, DS 64, KG 147, KG 151 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 1894–2246 m (Bouchet, Warén, 1986).

**Genus *Bulimeulima* Bouchet et Warén, 1986*****Bulimeulima magna*****Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 79 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 4175 m (Bouchet, Warén, 1986).

**"*Eulima*" *devistoma* Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. CP 09, St. DS 65 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 825–2360 m (Bouchet, Warén, 1986).

**"*Eulima*" *strongylostoma*****Bouchet et Warén, 1986**

LOCALITIES: INCAL, St. OS 03, St. WS 09 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 4277–4798 m (Bouchet, Warén, 1986).

**"*Eulima*" *anonyma* Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 52, St. DS 53, St. DS 65 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay and off Portugal (Bouchet, Warén, 1986).

DEPTH RANGE: 975–4425 m (Bouchet, Warén, 1986).

**Family Pyramidellidae**

**Genus *Pyramidella* Lamarck**

***Pyramidella curtissima* Locard, 1897**

LOCALITIES: “Travailleur”, 1881, Dr. 3; “Travailleur”, 1882, Dr. 13 (Locard, 1897).

DISTRIBUTION: Off Portugal (Locard, 1897).

DEPTH RANGE: 1205–3307 m (Locard, 1897).

**Genus *Turbonilla* Risso, 1826**

***Turbonilla rufa* (Philippi, 1836)**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1897).

DISTRIBUTION: North Atlantic and Mediterranean Sea (Locard, 1897).

DEPTH RANGE: 40–2018 m (Locard, 1897).

***Turbonilla atlantica* (Locard, 1897)**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1897).

DISTRIBUTION: Off Portugal and Morocco (Locard, 1897).

DEPTH RANGE: 1900–2018 m (Locard, 1897).

***Turbonilla hoeki***

**(Dautzenberg et Fischer, 1896)**

LOCALITIES: “Princesse Alice I”, St. 624 (Dautzenberg, 1927).

DISTRIBUTION: Off the Azores (Dautzenberg, 1927).

DEPTH RANGE: 1846–2102 m (Dautzenberg, 1927).

***Turbonilla* sp.**

LOCALITIES: “Meteor”, St. AT3 (Fechter, 1979).

DISTRIBUTION: Off Portugal (Fechter, 1979).

DEPTH RANGE: 5315 m (Fechter, 1979).

**Genus *Odostomia* Fleming, 1813**

***Odostomia conoidea* (Brocchi, 1814)**

LOCALITIES: “Travailleur”, 1880, Dr. 4 (Locard, 1897).

DISTRIBUTION: Off Europe, Norway to Portugal, and the Mediterranean Sea (Locard, 1897).

DEPTH RANGE: 40–2651 m (Locard, 1897).

**Genus *Eulimella* Gray, 1847**

***Eulimella cerullii* (Cossmann, 1915)**

LOCALITIES: “Travailleur”, 1880, Dr. 4 (Locard, 1897, as *Odostomia praelonga* Jeffreys, 1884, non Deshayes, 1861).

DISTRIBUTION: Bay of Biscay to off West Africa, Mediterranean Sea (Locard, 1897).

DEPTH RANGE: 10–2651 m (Locard, 1897).

**Family Cimidae Warén, 1993**

**Genus *Cima* Chaster, 1998**

***Cima ventricosa* (Forbes, 1844)**

LOCALITIES: “Travailleur”, 1881, Dr. 1 (Locard, 1897).

DISTRIBUTION: Norwegian Sea, Northeast Atlantic, Mediterranean Sea (Locard, 1897).

DEPTH RANGE: 110–2018 m (Locard, 1897).

**Family Epitoniidae**

**Genus *Eccliseogyra* Dall, 1892**

***Eccliseogyra nitida* (Verrill et Smith, 1885)**

LOCALITIES: “Travailleur”, 1881, Dr. 3 (Bouchet, Warén, 1986).

DISTRIBUTION: Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 645–3834 m (Bouchet, Warén, 1986).

***Eccliseogyra monniotti***

**Bouchet et Warén, 1986**

LOCALITIES: ABYPLAINE, St. DS4 (Bouchet, Warén, 1986).

DISTRIBUTION: East Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 3850–5867 m (Bouchet, Warén, 1986).

***Eccliseogyra sericea* Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. CP 17, CP 20, CP 21, CV 29; “Discovery”, St. 10115-1 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay to off Mauretania (Bouchet, Warén, 1986).

DEPTH RANGE: 3850–4706 m (Bouchet, Warén, 1986).

**Genus *Papuliscala* de Bourj, 1911**

***Papuliscala elongata* (Watson, 1881)**

LOCALITIES: “Princesse Alice I”, St. 624 (Bouchet, Warén, 1986).

DISTRIBUTION: Southwest of Europe and off the Azores (Bouchet, Warén, 1986).

DEPTH RANGE: 1680–2102 m (Bouchet, Warén, 1986).

***Papuliscala praelonga* (Jeffreys, 1877)**

LOCALITIES: “Talisman”, Dr. 39, Dr. 40; “Princesse Alice I”, St. 624 (Locard, 1897, as *Turbonilla scalariformis* (de Folin, 1884); Dautzenberg, 1927; Bouchet, Warén, 1986).

DISTRIBUTION: West and East Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 718–2212 m (Bouchet, Warén, 1986).

**Genus *Cylindriscala* de Bourri, 1909**

***Cylindriscala aurantia* Bouchet et Warén, 1986**

LOCALITIES: BIACORES, St. 206 (Bouchet, Warén, 1986).

DISTRIBUTION: Off the Azores (Bouchet, Warén, 1986).

DEPTH RANGE: 2085–2095 m (Bouchet, Warén, 1986).

***Cylindriscala mirifica***

**(P. Fischer in Filhol, 1886)**

LOCALITIES: CANCAP, St. 5.042, St. 5.043 (Bouchet, Warén, 1986).

DISTRIBUTION: Off the Canaries and the Azores (Bouchet, Warén, 1986).

DEPTH RANGE: 2075–2950 m (Bouchet, Warén, 1986).

**Genus *Claviscala* de Bourri, 1909**

***Claviscala richardi***

**(Dautzenberg et de Bourri, 1897)**

LOCALITIES: “Talisman”, Dr. 129 (Bouchet, Warén, 1986).

DISTRIBUTION: Off southwestern Europe from 51°36'N and the Azores (Bouchet, Warén, 1986).

DEPTH RANGE: 440–2220 m (Bouchet, Warén, 1986).

**Genus *Periapta* Bouchet et Warén, 1986**

***Periapta polygyrella***

**(P. Fischer in Locard, 1897)**

LOCALITIES: “Talisman”, Dr. 136; BIACORES, St. 249; “Walther Herwig” cruise 45, Sts. 3, 47, 66 (Bouchet, Warén, 1986).

DISTRIBUTION: Temperate and tropical Atlantic (Bouchet, Warén, 1986).

DEPTH RANGE: 3676–4730 m (Bouchet, Warén, 1986).

***Periapta gracilis* (Verrill, 1880)**

LOCALITIES: “Discovery”, St. 10112-1 (Bouchet, Warén, 1986).

DISTRIBUTION: off eastern USA, Southwest of Ireland, and off Portugal (Bouchet, Warén, 1986).

DEPTH RANGE: 672–2660 m (Bouchet, Warén, 1986).

**Genus *Alora* H. Adams, 1861**

***Alora tenerrima***

**(Dautzenberg et Fischer, 1896)**

LOCALITIES: “Travailleur”, Dr. 1 (Bouchet, Warén, 1986).

DISTRIBUTION: off eastern USA, off the Azores, off Portugal (Bouchet, Warén, 1986).

DEPTH RANGE: 948–2018 m (Bouchet, Warén, 1986).

**Genus *Gregorioiscala* Cossmann, 1912**

***Gregorioiscala exfoliata***

**Bouchet et Warén, 1986**

LOCALITIES: BIOGAS, St. DS 52 (Bouchet, Warén, 1986).

DISTRIBUTION: Bay of Biscay (Bouchet, Warén, 1986).

DEPTH RANGE: 2006 m (Bouchet, Warén, 1986).

**Family Tjaernoidea**

**Genus *Tjaernoia* Warén et Bouchet, 1988**

***Tjaernoia boucheti* Warén, 1991**

LOCALITIES: INCAL, St. DS 01 (Warén, 1991).

DISTRIBUTION: Rockall Trough, Bay of Biscay, and North of Iceland (Warén, 1991).

DEPTH RANGE: 540–2091 m (Warén, 1991).

**References**

- Bouchet P., Lützen J. 1980. Deux Gastéropodes parasites d'une Holothurie Élasipode // Bulletin du Muséum National d'Histoire Naturelle. Sér.4. No.2(A). P.59–75.
- Bouchet P., Taviani M. 1989. Atlantic deep-sea gastropods in the Mediterranean: new findings // Bolletino Malacologico. Vol.25. No.5–8. P.137–148.
- Bouchet P., Warén A. 1979. The abyssal fauna of the Norwegian Sea and its relations to other faunas // Sarsia. Vol.64. P.211–243.
- Bouchet P., Warén A. 1980. Revision of the North-East Atlantic bathyal and abyssal Turridae (Mollusca, Gastropoda) // Journal of Molluscan Studies. Suppl.8. 199 p.
- Bouchet P., Warén A. 1985. Revision of the Northeast Atlantic bathyal and abyssal Neogastropoda excluding Turridae (Mollusca, Gastropoda) // Bolletino Malacologico. Suppl.1. P.121–296.
- Bouchet P., Warén A. 1986. Revision of the Northeast Atlantic bathyal and abyssal Acclididae, Eulimidae, Epitonidae Turridae (Mollusca, Gastropoda) // Bolletino Malacologico. Suppl.2. P.297–576.
- Bouchet P., Warén A. 1993. Revision of the Northeast Atlantic bathyal and abyssal Mesogastropoda // Bolletino Malacologico. Suppl.3. P.579–840.
- Christiaens J. 1979. Le genre *Pectinodonta* Dall, 1882 (Gastropoda: Acmaeidae) // Informations de la Société Belge de Malacologie. Ser.7. T.1. P.17–22.
- Dantart L., Luque A. 1994. Cocculiniformia and Lepetidae (Gastropoda: Archaeogastropoda) from Iberian waters // Journal of Molluscan Studies. Vol.60. P.277–313.
- Dautzenberg P. 1927. Mollusques provenant des campagnes scientifiques du Prince Albert Ier de Monaco

- dans l'Océan Atlantique et dans le Golfe de Gascogne // Résultats des Campagnes Scientifiques accomplies sur son yacht par Albert Ier Prince souverain de Monaco. T.72. P.1-400.
- Dautzenberg P., Fischer H. 1896. Dragages effectués par l'Hirondelle et par la "Princesse-Alice", 1888-1895 // Mémoires de la Société Zoologique de France. T.9. P.1-104.
- Di Geronimo I., Panetta P. 1973. La malacofauna batiale del Golfo di Taranto // Conchiglie. T.9. No.5-6. P.69-122.
- Fechter R. 1979. Gastropoden aus der Iberischen Tiefsee // "Meteor" Forschung-Ergebnisse. Reihe D. Bd.30. S.23-40.
- Friele H. 1903. Mollusken der ersten Nordmeerfahrt des Fischereidampfers "Michael Sars" 1900 unter Leitung von Herrn Dr. Johan Hjort // Bergen Museums Aarbog 1902. H.3. S.1-18.
- Janssen R. 1989. Benthos-Mollusken aus dem Tiefwasser des östlichen Mittelmeeres, gesammelt während der "METEOR"-Fahrt 5 (1987) // Senckenbergiana maritima. Bd.20. H.5/6. S.265-276.
- Jeffreys J.G. 1877. New and peculiar Mollusca of the Patellidae and other families of Gastropoda procured in the "Valorous" Expedition // Annals and Magazine of Natural History. Ser.4. Vol.19. No.111. P.231-243.
- Jeffreys J.G. 1883. On the Mollusca procured during the "Lightning" and "Porcupine" Expeditions, 1868-70. Part V // Proceedings of the Zoological Society of London for 1882. P.656-687.
- Jeffreys J.G. 1886. On the Mollusca procured during the "Lightning" and "Porcupine" Expeditions, 1868-70. Part IX // Proceedings of the Zoological Society of London for 1885. P.27-63.
- Locard A. 1897. Expéditions scientifiques du "Travailleur" et du "Talisman" pendant les années 1880, 1881, 1882, 1883. Mollusques testacés. Paris: Masson. Vol.1. 516 pp.
- Locard A. 1898. Expéditions scientifiques du "Travailleur" et du "Talisman" pendant les années 1880, 1881, 1882, 1883. Mollusques testacés. Paris: Masson. Vol.2. 515 pp.
- Nordsieck F. 1973. Molluschi abyssali dello Jonio // La Conchiglia. No.57-58. P.4-7.
- Odhner N. 1912. Northern and Arctic invertebrates in the collection of the Swedish State Museum. Prosobranchia. 1. Diotocardia // Kungliga Svenska Vetenskapsakademiens Handlingar. Bd.48. H.1. P.1-93.
- Poppe G., Goto Y. 1991. European seashells. Verlag Christa Hemmen. Vol.1. P.1-352.
- Rex M.A. 2002. Biogeography of the deep-sea gastropod *Palazzia planorbis* (Dall, 1927): an uncommon form of rarity // Nautilus. Vol.116. No.1. P.36-38.
- Verhechen A. 2002. Atlantic bathyal Cancellariidae (Neogastropoda: Cancellarioidea): additional data, and description of a new species // Journal of Conchology. Vol.37. No.5. P.505-514.
- Warén A. 1973. Revision of the Rissoidae from the Norwegian North Atlantic Expedition, 1876-78 // Sarsia. Vol.53. P.1-14.
- Warén A. 1991. New and little known Mollusca from Iceland and Scandinavia // Sarsia. Vol.76. P.53-124.
- Warén A. 1992. New and little known "skeneimorph" gastropods from the Mediterranean Sea and the adjacent Atlantic Ocean // Bolletino Malacologico. Vol.27. No.10-12. P.149-248.
- Warén A., Bouchet P. 1990. Laubierinidae and Pisanianurinae (Ranellidae), two new deep-sea taxa of the Tonnoidea (Gastropoda: Prosobranchia) // Veliger. Vol.33. No.1. P.56-102.
- Warén A., Bouchet P. 1991. Systematic position and revision of *Haloceras* Dall, 1889 (Mollusca: Gastropoda: Haloceratidae fam. nov.) // Mémoires du Muséum national d'Histoire naturelle. Vol.(A)150. P.111-161.
- Warén A., Bouchet P. 2001. Gastropoda and Monoplacophora from hydrothermal vents and seeps; new taxa and records // Veliger. Vol.44. No.2. P.116-231.
- Warén A., Hain S. 1996. Description of Zeratulidae fam. nov. (Littorinoidea), with comments on an Antarctic littorinid gastropod // Veliger. Vol.39. No.4. P.277-344.
- Warén A., Sibuet M. 1981. *Ophiulima* (Mollusca, Prosobranchia), a new genus of ophiuroid parasites // Sarsia. Vol.66. P.103-107.

Responsible editors

A.V. Gebruk, H. Thiel, M. Thurston