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

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ABSTRACT: An annotated check-list is given of Porifera species occurring deeper than 2000 m in the seas bordering Europe. The check-list is based on published data. The check-list includes 39 species. For each species synonymy, data on localities in European seas and general species distribution are provided. Station data are presented separately in the present thematic issue.
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KEY WORDS: deep-sea fauna, European seas, Porifera.

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

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РЕЗЮМЕ: Приводится аннотированный список видов Porifera, обитающих глубже 2000 м в морях, окружающих Европу. Список основан на опубликованных данных. Список насчитывает 39 видов. Для каждого вида приведены синонимия, данные о нахождениях в европейских морях и сведения о распространении. Данные о станциях приводятся в отдельном разделе настоящего тематического выпуска.
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KEY WORDS: deep-sea fauna, European seas, Porifera.

Phylum Porifera
Class Hexactinellida
Subclass Hexasterophora
Order Lyssacinosida
Family Rossellidae
Genus *Asconema* Kent, 1870

COMPOSITION: 5 species (2 of which are subdivided into 3 and 4 subspecies; Tabachnick, Menshenina, 2007).

DISTRIBUTION: North Atlantic and Arctic Oceans.

DEPTH RANGE: 110–4270 m.

Asconema fristedti islandiensis Tabachnick et Menshenina, 2007

Asconema fristedti islandiensis Tabachnick, Menshenina, 2007: 1417; Tabachnick, Menshenina, 2013.

LOCALITIES: ECO-MAR, "James Cook", St. JCO48/040, ROV Isis dive 173 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: North Atlantic Ocean, of Iceland and Mid-Atlantic Ridge.

DEPTH RANGE: 1875-2623 m.

Asconema fristedti nordazoriensis Tabachnick et Menshenina, 2007

Asconema fristedti nordazoriensis Tabachnick, Menshenina, 2007: 1415; Tabachnick, Menshenina, 2013.

LOCALITIES: "Akademik Mstislav Keldysh", St. 3988. "Akademik Mstislav Keldysh" St. 499. "Akademik Mstislav Keldysh", St. 4535. ECO-MAR, "James Cook", St. JCO11/075; St. JCO48/006 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Off the Azores, Mid-Atlantic Ridge.

DEPTH RANGE: 1560–2800 m.

Asconema megaatrialia Tabachnick et Menshenina, 2007

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 1107–2942 m.

Asconema megaatrialia megaatrialia Tabachnick et Menshenina, 2007

Asconema megaatrialia megaatrialia Tabachnick, Menshenina, 2007: 1423.

LOCALITIES: "Vitiaz 2" –2, St. 80B, St. 159.

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 1940–2550 m.

Asconema megaatrialia nordiense Tabachnick et Menshenina, 2007

Asconema megaatrialia nordiense Tabachnick, Menshenina, 2007: 1424.

LOCALITIES: "Akademik Mstislav Keldysh", St. 3572.

DISTRIBUTION: Greenland Sea.

DEPTH RANGE: 2920–2942 m.

Genus *Bathydorus* Schulze, 1886

COMPOSITION: 7 species (Tabachnick, 2002a). Tabachnick, Menshenina, 2013 (in press).

DISTRIBUTION: Cosmopolitan except Arctic Ocean.

DEPTH RANGE: 163–7300 m.

Bathydorus spinosus Schulze, 1886

Bathydorus spinosus: Schulze, 1886: 50; 1887: 153; 1897: 534; Ijima, 1898: 48; Topsent, 1901: 36; Koltun, 1967: 165; Barthel, Tendal, 1994: 109 (*B. levis* is mentioned as a lower synonym); Hooper, Wiedenmayer, 1994: 525; Janussen et al., 2004: 1867; Dohrmann et all., 2008: 391; Janussen, Reiswig: 2009: 15; Tabachnick, Menshenina, 2013. *Bathydorus servatus*: Topsent, 1927: 1; Topsent, 1928: 79; Soest, 2001: 103. Not *Bathydorus levis spinosus* Wilson, 1904 (distributed in the central east Pacific): 51; Koltun, 1967: 88 (N-W Pacific) — (the name of the subspecies is a junior homonym and its replacement is actual — a new name *Bathydorus levis pseudospinosus* is suggested here). It is possible that *B. levis* Schulze, 1895: 57 is also a lower synonym of *B. spinosus* with its several subspecies, this requires further investigations.

LOCALITIES: "Princesse Alice", St. 1420. ECO-MAR, "James Cook", St. JCO11/075; St. JCO37/061; St. JCO37/067 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Atlantic Ocean and Atlantic sector of Antarctic Ocean.

DEPTH RANGE: 569-4847 m.

Genus *Caulophacus* (*Caulophacus*) Schulze, 1886

COMPOSITION: about 15 species (Tabachnick, 2002a).

DISTRIBUTION: Cosmopolitan.

DEPTH RANGE: 133–6770 m.

Caulophacus (*Caulophacus*) *arcticus* (Hansen, 1885)

Hyalonema arcticum Hansen, 1885: 19. *Caulophacus arcticus* (Hansen): Schulze, 1903: 3; Arndt 1928: 22; Burton, 1930; Koltun, 1964: 145: 1967: 113; Barthel, Tendal, 1993; Soest, 2001: 103; Tabachnick, Collins, 2008: 42.

LOCALITIES: "Akademik Mstislav Keldysh", St. 4540 (Tabachnick, Collins, 2008).

DISTRIBUTION: North Atlantic and Arctic Oceans.

DEPTH RANGE: 1000–4313 m.

Caulophacus (*Caulophacus*) *arcticus groenlandicus* Burton, 1928

Caulophacus arcticus groenlandicus Burton 1928: 7.

LOCALITIES: "Ingolf", St. 19, 102, 112, 113, 118; "Meteor", St. 426, 427, 501.

DISTRIBUTION: Off south-east Greenland.

DEPTH RANGE: 1780–2870 m.

Genus *Crateromorpha* Gray in Carter, 1872

COMPOSITION: 14 species (Tabachnick, 2002a).

DISTRIBUTION: Cosmopolitan, except Arctic Ocean.

DEPTH RANGE: 134–4200 m.

Crateromorpha (*Neopsacas*) Tabachnick, 2002

COMPOSITION: 4 species (Menshenina et al., 2007).

DISTRIBUTION: Mid-Atlantic Ridge, east Pacific, Indian and Antarctic Oceans.

DEPTH RANGE: 2500–4200 m.

Crateromorpha (*Neopsacas*) *variata* Tabachnick, 2002

Crateromorpha (*Neopsacas*) *variata* Tabachnick, 2002a: 1480; Menshenina et al., 2007: 56.

LOCALITIES: "Akademik Mstislav Keldysh", St. 432, St. 444. "Akademik Mstislav Keldysh", St. 3988 (Menshenina et al., 2007).

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 2500–2900 m.

Genus *Doconestes* Topsent, 1928

COMPOSITION: monospecific.

DISTRIBUTION: North of the Azores, Mid-Atlantic Ridge.

DEPTH RANGE: 2460 m.

Doconestes sessilis Topsent, 1928

Doconestes sessilis Topsent, 1928: 80; Tabachnick, 2002b: 1497; Tabachnick, Collins, 2008: 46; Soest, 2001: 103; Tabachnick, Menshenina, 2013.

LOCALITIES: "Princesse Alice", St. 1420 (Topsent, 1928). MAR–ECO, "G.O. Sars", St. 70/385 (Tabachnick, Collins, 2008). ECO-MAR, "James Cook", St. JCO37/061 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: North of the Azores, Mid-Atlantic Ridge.

DEPTH RANGE: 1860–2608 m.

Genus *Lophocalyx* Schulze, 1887

COMPOSITION: 15 species (Tabachnick, 2002a; Menshenina et al., 2007).

DISTRIBUTION: Atlantic, east Indian, southwest Pacific and Antarctic Oceans.

DEPTH RANGE: 155–4231 m.

Lophocalyx pseudovalida Menshenina, Tabachnick, Lopes et Hajdu, 2007

Lophocalyx pseudovalida Menshenina et al., 2007: 4.

LOCALITIES: "Akademik Mstislav Keldysh", St. 3988.

DISTRIBUTION: Mid-Atlantic Ridge, north of the Azores.

DEPTH RANGE: 2800 m.

Lophocalyx biogasi Menshenina, Tabachnick, Lopes et Hajdu, 2007

Lophocalyx biogasi Menshenina et al., 2007: 3.

LOCALITIES: BIOGAS V, CW 40. BIOGAS VII, CP 26. EPI I, "Suroit", CP 39. BYOCYAN II, submarine "Cyana", Pl. 18.

DISTRIBUTION: Bay of Biscay.

DEPTH RANGE: 2000–2860 m.

Lophocalyx atlantiensis Menshenina, Tabachnick, Lopes et Hajdu, 2007

Lophocalyx atlantiensis Menshenina et al., 2007: 10.

LOCALITIES: MAR-ECO, "G.O. Sars", St. 70/385, St. 60/380.

DISTRIBUTION: Mid-Atlantic Ridge, south of Greenland.

DEPTH RANGE: 1860–2165 m.

Lophocalyx reiswigi Menshenina, Tabachnick, Lopes et Hajdu, 2007

Lophocalyx reiswigi Menshenina et al., 2007: 460; Tabachnick, Menshenina, 2013.

LOCALITIES: ECO-MAR, "James Cook", St. JCO48/40, ROV Isis dive 173 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: South Atlantic Ocean, Mid-Atlantic Ridge.

DEPTH RANGE: 1717–2623 m.

Genus *Sympagella* Schmidt, 1870

COMPOSITION: 9 species (Tabachnick, 2002b; Tabachnick, Menshenina, 2013).

DISTRIBUTION: Pacific and Atlantic Oceans, Atlantic sector of Antarctic Ocean.

DEPTH RANGE: 128–5045 m.

Sympagella cooki Tabachnick et Menshenina, 2013

Sympagella cooki, Tabachnick, Menshenina, 2013.

LOCALITIES: ECO-MAR, "James Cook", St. JCO37/067 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 2620-2676 m.

Sympagella ecomari Tabachnick et Menshenina, 2013

Sympagella ecomari, Tabachnick, Menshenina, 2013.

LOCALITIES: ECO-MAR, "James Cook", St. JCO48/006 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 2500 m.

Family Euplectellidae
Genus *Euplectella* Owen, 1841

COMPOSITION: 17 species (Tabachnick, 2002b; Tabachnick, Collins, 2008).

DISTRIBUTION: Low and temperate latitudes of all Oceans.

DEPTH RANGE: 36–5050 m.

Euplectella suberea Thomson, 1877

Euplectella suberea — Thomson, 1877: 138; Filhol, 1885: 282; Schulze, 1887a: 73, 1895: 31; 1899: 17; 1904: 9; Topsent, 1892: 24: 1904: 38; Ijima, 1901: 58; 1927: 372; Burton, 1928: 5; Arnesen, 1920; 1932: 5; Arndt, 1940; Pawson, 1982; Boury-Esnault, Pansini, Uriz, 1994: 31; Soest, 2001: 103; Tabachnick, Collins 2008: 29; Tabachnick, Menshenina, 2013.

LOCALITIES: "Michael Sars", St. 25 (Arnesen, 1920, 1932); INGOLF, St. 37 (Burton, 1928); "Princesse Alice", St. 536 (Topsent, 1904); "Valdivia', St. 33 (Schulze, 1904); "Cryos" CP 66-50bis, CP 69-167 (Boury-Esnault et al., 1994). MAR-ECO, "G.O. Sars", St. 46/372, St. 50/373 (Tabachnick, Collins, 2008). ECO-MAR, "James Cook", St. JCO37/015; St. JCO11/023; St. JCO37/027 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: North Atlantic Ocean.

DEPTH RANGE: 818–3307 m.

Euplectella gibbsa Tabachnick et Collins, 2008

Euplectella gibbsa Tabachnick, Collins, 2008: 29; Tabachnick, Menshenina, 2013.

LOCALITIES: MAR-ECO, "G.O. Sars", St. 68/384. ECO-MAR, "James Cook", St. JCO11/023; St. JCO11/101; St. JCO11/111; St. JCO37/061 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 2350–2734 m.

Genus *Malacosaccus* Schulze, 1886

COMPOSITION: 8 species.

DISTRIBUTION: Cosmopolitan, except Arctic Ocean.

DEPTH RANGE: 2510–6328 m.

Malacosaccus heteropinularia Tabachnick, 1990

Malacosaccus heteropinularia Tabachnick, 1990: 70.

LOCALITIES: MAR-ECO,"G.O. Sars", St. 72/386 (Tabachnick, Collins, 2008).

DISTRIBUTION: Atlantic Ocean.

DEPTH RANGE: 2517–2555 m.

Malacosaccus floricomatus Topsent, 1901

Malacosaccus floricomatus Topsent, 1901: 448; 1904: 33. Burton, 1928: 6. Arnsen, 1932: 7; Soest, 2001: 103; Tabachnick, Menshenina, 2013.

LOCALITIES: "Princesse Alice", St. 749 (Topsent, 1901, 1904); Ingolf, St. 37 (Burton, 1928); "Michael Sars", St. 37 (Arnesen, 1920, 1932). ECO-MAR, "James Cook", St. JCO11/111 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Off the Azores, south-east of Greenland, Mid-Atlantic Ridge.

DEPTH RANGE: 2404–5005 m.

Malacosaccus unguiculatus Schulze, 1887

Malacosaccus unguiculatus — Schulze, 1887a: 41; 1895: 13; Topsent, 1904: 198; Tendal, 1973: 33; Soest, 2001: 103; Tabachnick, Menshenina, 2013.

LOCALITIES: "Talisman", St. 137 (Topsent, 1904). ECO-MAR, "James Cook", St. JCO48/28, ROV "Isis" dive 168 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: North-central and Mid-Atlantic Ocean.

DEPTH RANGE: 2435–5300 m.

Malacosaccus unguiculatus arctica Burton, 1928

Malacosaccus unguiculatus arctica Burton, 1928: 5.

LOCALITIES: "Ingolf", St. 38 (Burton, 1928).

DISTRIBUTION: Off south-east Greenland.

DEPTH RANGE: 3330 m.

Genus *Amphidiscella* Tabachnick et Levi, 1997

COMPOSITION: 4 species.

DISTRIBUTION: Mid-Atlantic Ridge; off the Falkland Islands; off New Caledonia.

DEPTH RANGE: 516–4090 m.

Amphidiscella atlantica Tabachnick et Collins, 2008

Amphidiscella atlantica Tabachnick, Collins, 2008: 34.

LOCALITIES: MAR-ECO, "G.O. Sars", St. 72/386.

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 2555–2517 m.

Amphidiscella monai Tabachnick et Levi, 1997

Amphidiscella monai Tabachnick, Levi, 1997: 149.

LOCALITIES: "Akademik Mstislav Keldysh", St. 3572.

DISTRIBUTION: North Atlantic (off Jan-Mayen Island).

DEPTH RANGE: 2927–2942 m.

Genus *Saccocalyx* Schulze, 1895

COMPOSITION: 2 species.

DISTRIBUTION: North-central Atlantic, Indo – West Pacific, Antarctic Oceans.

DEPTH RANGE: 1130–3835 m.

Saccocalyx pedunculata Schulze, 1895

Saccocalyx pedunculata Schulze, 1895: 53; 1897: 530; 1904: 75; Alcock, 1902: 295; Tabachnick, 2002b: 1410; Tabachnick, Menshenina, 2013.

LOCALITIES: “Akademik Mstislav Keldysh”, St. 441, 444, 3779 (Tabachnick, 2002b). MAR–ECO, “G.O. Sars”, St. 65/382 (Tabachnick, Collins, 2008). ECO-MAR, “James Cook”, St. JCO11/017; St. JCO48/40, ROV Isis dive 173 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: North-central Atlantic and Mid-Atlantic Ridge, Indo – West Pacific, Antarctic Oceans.

DEPTH RANGE: 607–3835 m.

Genus *Atlantisella* Tabachnick, 2002

COMPOSITION: 2 species (1 undescribed).

DISTRIBUTION: Atlantic, south of the Azores; Pacific, off Hawaii.

DEPTH RANGE: 1549–2350 m.

Atlantisella incognita Tabachnick, 2002

Atlantisella incognita Tabachnick, 2002b: 1416.

LOCALITIES: “Akademik Mstislav Keldysh”, St. 511 (Tabachnick, 2002b).

DISTRIBUTION: South of the Azores.

DEPTH RANGE: 2820–2350 m.

Genus *Dictyaulus* Schulze, 1895

COMPOSITION: 5 species.

DISTRIBUTION: North-west Indian Ocean, South Pacific and Mid-Atlantic Ridge.

DEPTH RANGE: 950–2165 m.

Dictyaulus marecoi Tabachnick et Collins, 2008

Dictyaulus marecoi Tabachnick, Collins, 2008: 36.

LOCALITIES: MAR-ECO, “G.O. Sars”, St. 70/385, 60/380 (Tabachnick, Collins, 2008).

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 1255–2165 m.

Genus *Hertwigia* Schmidt, 1880

COMPOSITION: 1 species.

DISTRIBUTION: North Atlantic Ocean and Indian Ocean, off South Africa.

DEPTH RANGE: 960–3800 m.

Hertwigia falcifera Schmidt, 1880

Hertwigia falcifera Schmidt, 1880: 62; Schulze, 1887a: 109; 1899: 22; 1904: 23; Topsent, 1890: 26; 1892: 25; 1904: 40; 1928: 73; Lévi, 1964: 103; Soest, 2001: 103; Tabachnick, 2002b: 1421; Tabachnick, Collins, 2008: 39.

LOCALITIES: “Hirondelle”, St. 213 (Topsent, 1901;1928). “Princesse Alice”, St. 869 (Topsent, 1904). “Hirondelle II”, St. 3140 (Topsent, 1928). MAR-ECO, “G.O. Sars”, St. 60/379, 62/380, 70/385 (Tabachnick, Collins, 2008).

DISTRIBUTION: North Atlantic Ocean and Indian Ocean, off South Africa.

DEPTH RANGE: 960–3800 m.

Genus *Heterotella* Gray, 1867

COMPOSITION: 5 species.

DISTRIBUTION: West Indian, South Pacific, west Atlantic Ocean and Mid-Atlantic Ridge.

DEPTH RANGE: 146–2005 m.

Heterotella midlatlantica Tabachnick et Collins, 2008

Heterotella midatlantica Tabachnick, Collins, 2008: 41.

LOCALITIES: MAR-ECO, “G.O. Sars”, St. 56/378 (Tabachnick, Collins, 2008).

DISTRIBUTION: Mid-Atlantic Ridge.

DEPTH RANGE: 1930–2005 m.

Rhabdopectella Schmidt, 1880

COMPOSITION: 1 species (Tabachnick, 2002a).

DISTRIBUTION: Central Atlantic Ocean.

DEPTH RANGE: 823–5600 m.

Rhabdopectella tintinnus Schmidt, 1880

Rhabdopectella tintinnus: Schmidt, 1880: 62; Schulze, 1887a: 108; Topsent, 1904: 40; Soest, 2001, 103; Tabachnick, 2002a: 1430; Dohrmann et al., 2008: 301; Tabachnick, Menshenina, 2013.

LOCALITIES: ECO-MAR, “James Cook”, St. JCO37/067 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: Central Atlantic Ocean.

DEPTH RANGE: 524–2676 m.

Order Hexactinosida
Family Euretidae

Genus *Chonelasma* Schulze, 1886

COMPOSITION: 4 species (Reiswig, Wheeler, 2002).

DISTRIBUTION: Cosmopolitan (except Indian Ocean and East Pacific).

DEPTH RANGE: 823–5600 m.

Chonelasma choanoides (Schulze et Kirkpatrick, 1910)

Chonelasma lamella choanoides: Schulze, Kirkpatrick, 1910: 5. *Chonelasma choanoides*: Reiswig, Mehl, 1994: 156. *Chonelasma lamella*: Schulze, 1887b: 76 in part; 1887a: 321 in part. *Chonelasma* sp. — Schulze 1887a: 326. *Hexactinella grimaldi*; Burton, 1928: 16. Not *Hexactinella grimaldi*: Topsent, 1890: 71. *Chonelasma ijimai*: Topsent, 1901: Soest, 2001: 102; Tabachnick, Menshenina, 2013.

LOCALITIES: “Ingolf” St. 19, 21, 46, 53, 78 (Burton, 1928). “Akademik Mstislav Keldysh”–49, St. 4535. MAR-ECO, “G.O. Sars”, St. 40/367, St. 50/379, St. 62/380, St. 70/385 (Tabachnick, Collins, 2008). ECO-MAR, “James Cook”, St. JCO37/015; St. JCO37/019; St. JCO37/027; St. JCO37/061; St. JCO37/067; St. JCO37/070; St. JCO11/075; St. JCO11/101; St. JCO11/106 (Tabachnick, Menshenina, 2013).

DISTRIBUTION: North Atlantic and Antarctic Oceans (Indian sector).
DEPTH RANGE: 823–3397 m.

Family Tretodictyidae
Genus *Tretodictyum* Schulze, 1886

COMPOSITION: 3 species (Reiswig, 2002a).
DISTRIBUTION: Low and temperate latitudes.
DEPTH RANGE: 90–2644 m.

Tretodictyum tubulosum Schulze, 1886

Tretodictyum tubulosum: Schulze, 1886: 78; Ijima, 1927: 221; Vacelet, 1969: 163; Zibrovius, 1985: 337; Boury-Esnault et al., 1994: 30; Dormann et al., 2008: 391. *Hexactinella tubulosa*: Schulze, 1887a: 328; Wilson, 1904: 83; Topsent, 1928: 337; Soest, 2001: 103; Longo et al., 2005: 1343.

LOCALITIES: Mediterranean, off Malta, Apulian escarpements (Vacelet, 1969; Zibrowius, 1985).
DISTRIBUTION: Central Atlantic Ocean, Mediterranian Sea and west Pacific Ocean.
DEPTH RANGE: 216–2644 m.

Family Farreidae
Genus *Farrea* Bowerbank, 1862

COMPOSITION: about 17 (according to Reiswig, 2002b).
DISTRIBUTION: Cosmopolitan (except Arctic Ocean).
DEPTH RANGE: 82–4400 m.

Farrea herdendorfi Duplessis et Reiswig, 2004

Farrea herdendorfi Duplessis, Reiswig, 2004: 199; Lopeset al., 2011: 171; Lopes, Tabachnick, 2013.

LOCALITIES: ECO-MAR, "James Cook" St. JCO48/40, ROV "Isis" dive 173; St. JCO48/006, ROV "Isis" dive 159; St. JCO48/53, ROV "Isis" dive 178; St. JCO11/075.
DISTRIBUTION: Atlantic Ocean.
DEPTH RANGE: 835-2630 m.

Farrea laminaris Topsent, 1904

Farrea laminaris Topsent, 1904: 43; 1928: 85; Soest, 2001: 102. Tabachnick, Collins, 2008: 27. *Phyllobrochis laminaris* — Reid, 1958.

LOCALITIES: "Princesse Alice II", St. 1318 (Topsent, 1904).
DISTRIBUTION: Off the Azores.
DEPTH RANGE: 1630–3018 m.

Subclass Amphidiscophora
Order Amphidiscosida
Family Pheronematidae
Genus *Pheronema* Leidy, 1868

COMPOSITION: 19, including 2 subspecies (Tabachnick, Menshenina, 2002a).
DISTRIBUTION: Low and temperate latitudes.
DEPTH RANGE: 90–4789 m.

Pheronema carpenteri (Thomson, 1869)

Holtenia carpenteri: Thomson, 1869: 702; Bocage, 1870; Carter, 1873: 362; Marshall, 1875: 150; Duncan, 1881: 178; *Pheronema carpenteri*: Marshall, 1876: 130; Filhol, 1885: 284; Schulze, 1887a: 241; 1893: 562; 1904: 50; Burton, 1928: 14; Arndt, 1940; Rice et al., 1990: 179; Bett et al., 1992: 19; Mehl, 1992; Reiswig, Champagne, 1995: 373; Barthel et al., 1996: 603. *Pheronema grayi*: Kent, 1869b: 182; 1870: 240; Carter, 1873: 281; Marshall, 1876: 130; Schulze, 1887a: 264; 1893: 564; Stephens, 1915: 7; Topsent, 1890: 26, 1892: 29: 1896: 19; 1904: 29; 1928: 98; Arnesen, 1920; 1932: 12; Arndt, 1940;Vacelet, 1960: 257; Zibrowius, 1985: 336; Boury-Esnault et al., 1994: 19; Soest, 2001: 102.

LOCALITIES: "Cryos", St. CP68, CP69 (Boury-Esnault et al., 1994). "Princesse Alice", St. 631 (Topsent, 1904, 1928).
DISTRIBUTION: North Atlanic.
DEPTH RANGE: 335–3300 m.

Family Hyalonematidae
Genus *Hyalonema* Gray, 1832

COMPOSITION: 12 subgenera and about 107 species (Tabachnick, Menshenina, 2002).
DISTRIBUTION: Cosmopolitan (except Arctic Ocean).
DEPTH RANGE: 100–6235 m.

Subgenus *Hyalonema* (*Cyliconema*) Ijima, 1927

COMPOSITION: about 28 species.
DISTRIBUTION: East Atlantic, Indo – West Pacific, North and East Pacific, off South Africa, off Australia, off New Zealand and one record from Antarctic Ocean.
DEPTH RANGE: 100–6235 m.

Hyalonema (*Cyliconema*) *thomsonis* (Marshall, 1875)

Hyalonema thomsonis: Marshall, 1875: 150; 1876: 132; Schulze, 1904: 67; *Hyalonema thomsoni*: Boury-Esnault et al., 1994: 21; Martin et al., 1992: 169; Schulze, 1887a: 211, 1893: 574; Topsent, 1896: 28, 1904: 31; 1928: 97; Uriz, Rossel, 1986; Soest, 2001: 102.

LOCATITIES: "Cyros", St. CP 66, CP 68.
DISTRIBUTION: North Atlantic.
DEPTH RANGE: 100–2256 m.

Subgenus *Hyalonema* (*Leptonema*) Lendenfeld, 1915

COMPOSITION: 9 species (one is divided into two subspecies).
DISTRIBUTION: Cosmopolitan (except for Arctic and Antarctic Oceans).
DEPTH RANGE: 489–5300 m.

Hyalonema (*Leptonema*) *lusitanicum* (Bocage, 1864)

Hyalonema lusitanicum: Bocage, 1864; 1865; 1867; 1868; Ehrenberg, 1866: 823; 1867: 419; Marshall, 1875: 150; Carter, 1873: 362; Filhol, 1885: 279; Schulze, 1887a: 225; 1893: 576; 1904: 97; Topsent, 1896: 273; 1928: 97; Arndt, 1940; Wolf, 1971: 130;Tendal, 1973: 34; Boury-Esnault et al.,1994: 24; Soest, 2001: 102.

LOCATITIES: "Princesse Alice II", St. 1116, 2994. "Archimed", St. 2.

DISTRIBUTION: North-East Atlantic.

DEPTH RANGE: 550–5300 m.

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