

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

Olga E. Kamenskaya

P.P. Shirshov Institute of Oceanology, Russian Academy of Sciences, Nakhimovsky Pr., 36, Moscow, 117997, Russia.

E-mail: okamenskaya@ocean.ru

ABSTRACT: An annotated check-list is given of Xenophyophores species occurring deeper than 2000 m in the seas bordering Europe. The check-list is based on published data. The check-list includes 16 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.

How to cite this paper: Kamenskaya O.E. 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. *Xenophyophores // Invert. Zool. Vol.11. No.1. P.254–258.*

KEY WORDS: deep-sea fauna, European seas, Xenophyophores.

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

О.Е. Каменская

Институт океанологии им. П.П. Ширшова РАН, Нахимовский просп. 36, Москва, 117997, Россия.

E-mail: okamenskaya@ocean.ru

РЕЗЮМЕ: Приводится аннотированный список видов Xenophyophores, обитающих глубже 2000 м в морях, окружающих Европу. Список основан на опубликованных данных. Список насчитывает 16 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.

Как цитировать эту статью: Kamenskaya O.E. 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. *Xenophyophores // Invert. Zool. Vol.11. No.1. P.254–258.*

КЛЮЧЕВЫЕ СЛОВА: глуководная фауна, европейские моря, Xenophyophores.

Molecular data place species of xenophyophores within the radiation of monothalamous foraminifera, but the hierarchy of taxa within this group is not clear therefore currently only species and genera can be distinguished (Pawlowski et al., 2013).

Supergroup Rhizaria Cavalier-Smith, 2002
Phylum Foraminifera d'Orbigny, 1826

Genus *Homogammina*
Gooday et Tental, 1988

Type species: *Homogammina lamina* Gooday, Tental, 1988.

COMPOSITION: 4 species (Tental, 1996; Kamenskaya, 1997).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 2963–4550 m.

***Homogammina crassa* Gooday, 1991**

Homogammina crassa — Gooday, 1991: 198–199, 210–211, pl. I: 1–5, pl. II: 1–2; 1 A–B, 2 A–B; Tental, 1996: 82; Kamenskaya, 1997: 46; Costello et al., 2001: 78.

LOCALITIES: “Meteor”, St. 233, 240, 255 (Gooday, 1991).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 3800–4550 m.

Homogammina lamina
Gooday et Tental, 1988

Homogammina lamina — Gooday, Tental, 1988: 414, 415, 417–419, fig. 1: A–E; Gooday, 1996: 193, 194, 206, pl. I: 1; Tental, 1996: 82; Kamenskaya, 1997: 46; Costello et al., 2001: 78.

LOCALITIES: “Discovery”, St. 9035 (Gooday, Tental, 1988); “Challenger”, St. 52701#10 (Gooday, 1996).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 2962–4843 m.

Homogammina maculosa
Gooday et Tental, 1988

Homogammina maculosa — Gooday, Tental, 1988: 419–421, 414, 415, 433, fig. 2: A–C; Gooday, 1991: 198; Levin, 1991: 893; Gooday, 1996: 193, 194, 206, pl. I: 2; Tental, 1996: 82; Kamenskaya, 1997: 46; Costello et al., 2001: 78.

LOCALITIES: “Discovery”, St. 8973, 8976, 9035 (Gooday, Tental, 1988).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 3003–4457 m.

***Homogammina* sp. A. Gooday, 1991**

Homogammina sp. A — Gooday, 1991: 200–201, 211, pl. III: 1–4; Gooday, 1996: 193, 194, 206, pl. I: 4–7; Tental, 1996: 82.

LOCALITIES: “Meteor”, St. 233 (Gooday, 1991).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4550 m.

Genus *Galatheammina* Tental, 1972

Type species: *Galatheammina tetraedra* Tental, 1972.

COMPOSITION: 6 species (Tental, 1996; Kamenskaya, 1997).

DISTRIBUTION: Atlantic, Indian and Pacific Oceans.

DEPTH RANGE: 1320–5353 m.

***Galatheammina erecta* Gooday, 1991**

Galatheammina erecta — Gooday, 1991: 204–206, 210, 211, pl. V: 1–5, 3A–D, 4A–B; Gooday, 1996: 193, 196, 206, pl. 2: 1–6, pl. 3: 1–4; Tental, 1996: 85; Kamenskaya, 1997: 47, 48; Costello et al., 2001: 78.

LOCALITIES: “Meteor”, St. 233; “Discovery”, St. 11908#23, 48 (Gooday, 1991); “Challenger”, St. 52701#9, 24, 29, 45, 47 (Gooday, 1996).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4550–4851 m.

***Galatheammina irregularis* Gooday, 1991**

Galatheammina irregularis — Gooday, 1991: 202–204, pl. 4: 1–4; Tental, 1996: 85; Kamenskaya, 1997: 48; Costello et al., 2001: 78.

LOCALITIES: “Meteor”, St. 233, St. 246; “Discovery”, St. 11908, series 23 (Gooday, 1991).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4550–4844 m.

Genus *Psammmina* Haeckel, 1889

Type species: *Psammmina nummulina* Haeckel, 1889.

COMPOSITION: 9 species (Tental, 1996; Kamenskaya, 1997).

DISTRIBUTION: North Atlantic, equatorial and West Pacific.

DEPTH RANGE: 1158–7320 m.

***Psammmina delicata* Gooday et Tental, 1988**

Psammmina delicata — Gooday, Tental, 1988: 414, 415, 427–429, fig. VI: A–C; Gooday, 1991: 201, pl. IV: 5–6; Levin, 1991: 893; Levin, Gooday, 1992: 96; Gooday, 1996: 196; Tental, 1996: 83; Kamenskaya, 1997: 48; Costello et al., 2001: 78.

LOCALITIES: “Meteor”, St. 233 (Gooday, 1991).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 2112–4550 m.

***Psammmina* sp. A Gooday, 1996**

Psammmina sp. A — Gooday, 1996: 196.

LOCALITIES: “Discovery”, St. 11908#23 (Gooday, 1996).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4847 m.

Genus *Reticulammina* Tental, 1972

Type species: *Reticulammina novaezealandica* Tental, 1972.

COMPOSITION: 9 species (Tental, 1996; Kamenskaya, 1997, 1998; Gooday et al., 2011).

DISTRIBUTION: Northeast Atlantic, Antarctic, West and East Pacific, Indian Ocean.
DEPTH RANGE: 743–6059 m.

***Reticulammina cretacea* (Haeckel, 1889)**

Holopsammina cretaceum — Haeckel, 1889: 39, pl. VII: 7 A–C; Schulze, 1907: 26, pl. III: 4, 6; *Cerelopsammina cretaceum* — Laubenfels, 1936: 33; *Reticulammina cretacea* — Tendal, 1972: 31, pl. 4: D–E; Tendal, 1996: 86; Kamenskaya, 1997: 49; Costello et al., 2001: 78.

LOCALITIES: “Challenger” (1872–1876), St. 70 (Haeckel, 1889).

DISTRIBUTION: Central Atlantic.

DEPTH RANGE: 3065 m.

***Reticulammina labyrinthica* Tendal, 1972**

Reticulammina labyrinthica — Tendal, 1972: 17, 27, 29, 30–31, 70, 72, 76, 77, 81, 83, 86, pl.: 3H, 4A; Tendal, 1975: 94, 95; Gooday, 1981: 417, 418, 419, 420, 421; Tendal, 1981: 285, 286, 287; Tendal, Gooday, 1984: 47, 48; Gooday, Tendal, 1988: 413, 414, 415, 416, 424–427, fig.: 5A–B; Gooday, 1991: 206–210, 211, 212, fig.: 4C–E, 5A–E, pl. VI: 1–5; Levin, 1991: 889, 893, fig. 1A; Dawson, 1992: 83; Levin, Gooday, 1992: 96; Gooday et al., 1993: 2132, 2141; Riemann et al., 1993: 545; Tendal, 1994: 52; Gooday, 1996: 193, 196, 198, 206, pl. 4: 1–4; Tendal, 1996: 86; Hopwood et al., 1997: 969, 971, 976, 980, 985; Kamenskaya, 1997: 49; Costello et al., 2001: 78.

LOCALITIES: “Challenger”, St. 50603#1 (Hopwood et al., 1997); “Meteor”, St. 233, 240, 255; “Discovery”, St. 11908#3, 12, 25; 11891#3 (Gooday, 1991); “Discovery”, St. 12175 (Gooday et al., 1993).

DISTRIBUTION: Northeast Atlantic, southwest Pacific.

DEPTH RANGE: 743–6000 m.

***Reticulammina cerebreformis* Gooday, Aranda da Silva et Pawlowski, 2011**

Reticulammina cerebreformis — Gooday, Aranda da Silva, Pawlowski, 2011: 2408–2412, fig. 7: A–C, fig. 8: A–F, fig. 9: A–F, fig. 10: A–D, fig. 11: A–E.

LOCALITIES: “James Cook”, St. 10-92, 10-130; “Discovery”, St. 15735#1, 15758#2, 15758#3, 15758#5, 15759#5, 15765#1, 15765#2 (Gooday et al., 2011).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4332–4435 m.

***Nazareammina tenera* Gooday, Aranda da Silva et Pawlowski, 2011**

Nazareammina tenera — Gooday, Aranda da Silva, Pawlowski, 2011: 2412–2416, fig. 12: A–H, fig. 13: A–G, fig. 14: A, B.

LOCALITIES: “Discovery”, St. 15758#2, 15765#2 (Gooday et al., 2011).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4332–4336 m.

Genus *Syringammina* Tendal, 1972

Type species: *Syringammina fragilissima* Brady, 1883.

COMPOSITION: 5 species (Tendal, 1996; Kamenskaya, 1997; Richardson, 2001; Pawlowski et al., 2003).

DISTRIBUTION: North Atlantic, southwest Pacific.

DEPTH RANGE: 740–4845 m.

***Syringammina reticulata* Gooday, 1996**

Occultammina sp. A — Gooday, 1991: 210, 211, pl. 7; *Occultammina* sp. — Levin, 1994: 35, fig. 2: a–b; *Syringammina reticulata* — Gooday, 1996: 193, 201, 203, 206, pl. 7: 1–4, pl. 8: 1–4; Tendal, 1996: 87; Kamenskaya, 1997: 49; Costello et al., 2001: 79.

LOCALITIES: “Meteor”, St. 233; “Discovery”, St. 11908#39 (Gooday, 1991); “Challenger”, St. 52701#25 (Gooday, 1996).

DISTRIBUTION: North Atlantic.

DEPTH RANGE: 4550–4845 m.

Genus *Aschemonella* Brady, 1879

Type species: *Aschemonella scabra* Brady, 1879.

COMPOSITION: 3 species (Tendal, 1996; Kamenskaya, 1997; Costello et al., 2001).

DISTRIBUTION: North Atlantic, North and West Pacific.

DEPTH RANGE: 1400–8950 m.

***Aschemonella scabra* Brady, 1879**

Ashemonella scabra — Brady, 1879: 44, pl. 3: 6–7; Cushman, 1910: 81; Hofker, 1930: 119; Barker, 1960: 54, pl. 27: 1–2, 4–11; Loeblich, Tappan, 1964: 215; Saidova, 1969: 134; Theyer, 1971: 730; Saidova, 1975: 368; Lewis, 1979: 19; Lukina, 1980: 23, fig. 26; Schröder, 1986: 40, pl. 12: 1–4; Loeblich, Tappan, 1988: 726; Schroder et al., 1988: 32, pl. 3: 12–16; Belyaev, 1989: 166; Dawson, 1992: 83; Gooday, 1996: 203, 204; Tendal, 1996: 88; Kamenskaya, 1997: 51; Costello et al., 2001: 79.

LOCALITIES: “Discovery”, St. 10145, 10148 (Gooday, 1983).

DISTRIBUTION: Atlantic and Pacific Oceans.

DEPTH RANGE: 2760–7180 m.

***Aschemonella ramuliformis* Brady, 1884**

Aschemonella ramuliformis — Brady, 1884: 273, 27, fig.: 12–15; Cushman, 1910: 81; Cushman, 1920: 2, pl. 1: 1; Earland, 1936: 5; Barker, 1960: 54, pl. 27: 12–15; Saidova, 1965: 103; Saidova, 1969: 132; Saidova, 1975: 368; Lukina, 1980: 22, fig. 25; Gooday, Nott, 1982: 595, 597, 599, 600, 601, 602; Gooday, 1983: 15, figs. 11–12; Gooday, 1984: 47, 48, 50; Tendal, 1985: 264, 265; Schroder, 1986: 41, pl. 12: 5; Schröder et al., 1988: 28, pl. 3: 9–11; Belyaev, 1989: 166; Schröder et al., 1989: 41; Levin, 1991: 893; Levin, Gooday, 1992: 94, 100; Dawson, 1992: 83; Reimann et al., 1993: 545; Gooday, 1996: 193, 203, 204, 206, pl. 9: 1–5; Tendal, 1996: 88; Hopwood et al., 1997: 969–973, 975–980, 984–985; Kamenskaya, 1997: 51; Costello et al., 2001: 79; *Aschemonella ramulifera* — Schröder, 1986: 41, pl. 12: 5.

LOCALITIES: “Discovery”, St. 10112, 10113, 10115, 10141, 10143; “Challenger”, St. 50603, 50604, 50605, 50812, 50813 (Goody, 1983); “Challenger”, St. 50602#2, 50603#1, 50604#1, 50812#1; “Challenger” St. P (Hopwood et al., 1997); “Discovery”, St. 11908#3 (Goody, 1996).

DISTRIBUTION: North and central Atlantic, North, central and West Pacific.

DEPTH RANGE: 1980–8950 m.

Genus *Cerelasma* Haeckel, 1889

Type species: *Cerelasma gyrosphaera* Haeckel, 1889.

COMPOSITION: 3 species (Tendal, 1996; Kamenskaya, 1997).

DISTRIBUTION: North Atlantic, Pacific and Indian Oceans.

DEPTH RANGE: 3660–4829 m.

Cerelasma massa Tendal, 1972

Cerelasma massa — Tendal, 1972: 40, pl. 8: A–B, 17: A, D–E, 15, 39, 68, 69, 71–74, 76, 77, 81, 83, 86, 87, 90; Tendal, 1979: 15; Tendal, 1980: 304–305; Kamenskaya, 1987: 52; Costello et al., 2001: 78.

LOCALITIES: INCAL, St.2-1, St.2-2, St.2-3 (Tendal, 1980).

DISTRIBUTION: Western Indian Ocean, North Atlantic.

DEPTH RANGE: 4240–4829 m.

References

- Barker R.W. 1960. Taxonomic notes on the species figured by H.B. Brady in his report on the Foraminiferida dredged by the H.M.S. Challenger during the years 1872–1876 // Special Publication. Soc. Econ. Paleont. and Mineral. Vol.9. P.1–238.
- Belyaev G.M. 1989. [Deep-sea oceanic trenches and their fauna]. Moscow: Nauka. 255 p. [in Russian]
- Brady H.B. 1879. Notes on some of the Reticularian Rhizopoda of the “Challenger” Expedition. Part I. On new or little known arenaceous types. Quarterly // J. Micros. Sci. Vol.19. P. 20–63.
- Brady H.B. 1883. Note on *Syringamina*, a new type of arenaceous Rhizopoda // Proc. Royal. Soc. Vol.35. P.155–161.
- Brady H.B. 1884. Report on the Foraminifera // Rep. Sci. Res Voyage of H.M.S. “Challenger” during the years 1873–76. Vol.9. P.1–814.
- Costello M.J., Emblow C.S., White R. et al. 2001. (eds). European Register of Marine Species. A check-list of the marine species in Europe and a bibliography of guides to their identification. // Patrim. Nat. Vol. 50. 463 p.
- Cushman J.A. 1910. A monograph of the Foraminifera of the North Pacific Ocean // Bull. U.S. Nat. Mus. Vol.71. P.1–134.
- Cushman J.A. 1920. The Foraminifera of the Atlantic Ocean. Part 2. Lituolidae // Bull. U.S. Nat. Mus. Vol.104. No.2. P. 1–111.
- Dawson E.W. 1992. The marine fauna of New Zealand: Index to the fauna: 1. Protozoa // Mem. New Zeal. Oceanogr. Inst. Vol. 99. P.1–368.
- Earland A. 1936. Foraminifera. Part IV. Additional records from the Weddell Sea sector from the material obtained by the S.Y. Scotia // Disc. Rep. Vol.13. P. 1–76.
- Goody A.J. 1983. Primitive Foraminifera and Xenophyophorea in IOS epibenthic sledge samples from the northeast Atlantic // Inst. Oceanogr.Sci.Rep. Vol.156. 33 p.
- Goody A.J. 1984. Records of the deep-sea rhizopod tests inhabited by metazoans in the North-east Atlantic // Sarsia. Vol.69. P.45–53.
- Goody A.J. 1991. Xenophyophores (Protista, Rhizopoda) in box-core samples from the abyssal northeast Atlantic Ocean (BIOTRANS area): Their taxonomy, morphology and ecology // J. Foramin. Res. Vol.21. P.197–212.
- Goody A.J. 1996. Xenophyophores (Protista), including two new species, from two abyssal sites in the northeast Atlantic Ocean // J. Foramin. Res. Vol.26. P.193–208.
- Goody A.J., Aranda da Silva A., Pawlowski J. 2011. Xenophyophores (Rhizaria, Foraminifera) from the Nazaré Canyon (Portuguese margin, NE Atlantic) // Deep-Sea Research II. Vol.58. P.2401–2419.
- Goody A.J. Bett B.J., Pratt D.N. 1993. Direct observation of episodic growth in an abyssal xenophyophore (Protista) // Deep-Sea Res. Vol.40. P.2131–2143.
- Goody A.J., Nott J.A. 1982. Intracellular barite crystals in two xenophyophores, *Aschemonella ramuliformis* and *Galatheamina* sp. (Protozoa: Rhizopoda) with comments on the taxonomy of *A. ramuliformis* // J. Mar. Biol. Ass. U.K. Vol.62. P.595–605.
- Goody A.J., Tendal O.S. 1988. New xenophyophores (Protista) from the bathyal and abyssal north-east Atlantic Ocean // J. Nat. Hist. Vol.22. P.413–434.
- Haeckel E. 1889. Report on the deep-sea Keratosa // Rrep. Sci. Res. Voyage of H.M.S. “Challenger” during the years 1873–76. Vol.32. P.1–92.
- Hofker J. 1930. The Foraminifera of the Siboga Expedition. Part II. Families Astrorhizidae, Rhizamminidae, Reopacidae, Anomalimidae, Peneroplidae // Siboga-Exp. Vol. IVa. P.75–170.
- Hopwood J.D., Mann S., Goody A.J. 1997. The crystallography and possible origin of barium sulphate in deep sea rhizopod protists (Xenophyophorea) // J. Mar. Biol. Ass. U.K. Vol.77. P. 969–987.
- Kamenskaya O.E. 1997. [Synopsis of the system of the class Xenophyophorea (Protozoa)] // A.P. Kuznetsov, O.N. Zvezina (eds.). Benthos of the Northern Euro-Asian Seas. Moscow: VNIRO Publishing House. P.43–56 [in Russian, with English summary].
- Laubenfels M.V. de. 1936. Sponge fauna of the Dry Tortugas // Papers from the Tortugas Laboratory of the Carnegie Institution of Washington. Vol.30. P.1–225.
- Levin L.A. 1991. Interactions between metazoans and large, agglutinating protozoans: Implications for the community structure of deep-sea benthos // Amer. Zool. Vol.31. P.886–900.
- Levin L.A. 1994. Paleocology and ecology of xenophyophores // Palaios. Vol.5. P.32–41.
- Levin L.A., Goody A.J. 1992. Possible roles for xenophyophores in deep-sea carbon cycling // G. Rowe T., V. Pariente (eds). Deep-sea food chains and the global carbon cycle. Dordrecht: Kluwer Academic Publishers. P.93–104.

- Lewis K.B. 1979. Foraminifera on the continental shelf and slope off Southern Hawke's Bay, New Zealand // Mem. N.Z. Oceanogr. Inst. Vol.45. P.1–88.
- Loeblich A.R., Tappan H. 1964. Treatise on Invertebrate Paleontology. Part C. Protista. Boulder: Univ. of Kansas Press. 900 p.
- Loeblich A.R., Tappan H. 1988. Foraminiferal genera and their classification. New York: Van Nostrand Reinhold Company. 970 p.
- Lukina T.G. 1980. [Deep-water foraminifera of the Central Pacific] // Issledovaniya fauny morei. Vol.24. Moscow: Acad. Sci. USSR. 204 p. [in Russian]
- Pawlowski J., Holzmann M., Fahrni J., Richardson S.L. 2003. Small Subunit Ribosomal DNA suggests that the Xenophyophorean *Syringammina corbicula* is a Foraminiferan // J. Eukaryotic Microbiol. Vol.50. No.6. P.483–487.
- Pawlowski J., Holzmann M., Tyszka J. 2013. New supraordinal classification of Foraminifera: Molecules meet morphology // Marine Micropaleontology. Vol.100. P.1–10.
- Richardson S.L. 2001. *Syringammina corbicula* sp.nov. (Xenophyophorea) from the Cape Verde Plateau, E. Atlantic // J. Foram. Res. Vol.31. No.3. P.201–209.
- Riemann F., Tendal O.S., Gingele F.X. 1993. *Reticulammina antarctica* nov. spec. (Xenophyophora, Protista) from the Weddell Sea and aspects of the nutrition of xenophyophores // Pol. Biol. Vol.13. P.543–547.
- Saidova Kh.M. 1965. [The distribution of benthic Foraminifera in the Pacific Ocean] // Okeanologia. Vol.5. P.99–110 [in Russian].
- Saidova Kh.M. 1969. [The distribution and ecology of the recent benthonic Foraminifera in the Pacific] // Biology of the Pacific Ocean. Microflora and microfauna on recent bottom types in the Pacific Ocean. Moscow: Nauka. P.120–201 [in Russian].
- Saidova Kh.M. 1975. [Benthonic Foraminifera of the Pacific Ocean, part I–III]. Moscow: Acad. Sci. USSR, P.P. Shirshov Institute of Oceanology. 586 p. [in Russian]
- Schröder C.J. 1986. Deep-water arenaceous Foraminifera in the northwest Atlantic Ocean // Can. Techn. Rep. Hydrogr. Oc. Sci. Vol.71. P.1–191.
- Schröder C.J., Medioli F.S., Scott D.B. 1989. Fragile abyssal Foraminifera (including new Komokiacea) from the Nares Abyssal Plain // Micropaleontology. Vol.35. P.10–48.
- Schröder C.J., Scott D.B., Medioli F.S., Bernstein B.B., Hessler R.R. 1988. Large agglutinated Foraminifera: Comparison of assemblages from central North Pacific and western North Atlantic (Nares Abyssal Plain) // J. Foram. Res. Vol.18. P.25–41.
- Schulze F.E. 1907. Die Xenophyophoren, eine besondere Gruppe der Rhizopoden // Wissenschaftliche Ergebnisse der Deutschen Tiefsee-Expedition auf dem Dampfer "Valdivia. Bd.11. S.1–55.
- Tendal O.S. 1972. A monograph of the Xenophyophoria (Rhizopodea, Protozoa) // Gal. Rep. Vol.12. P.7–99.
- Tendal O.S. 1975. The xenophyophores of the New Zealand (Rhizopodea, Protozoa) // Tuatara. Vol.21. P.92–97.
- Tendal O.S. 1980. Xenophyophores from the French expeditions "INCAL" and "BIOVEMA" in the Atlantic Ocean // Cah. Biol. Mar. Vol.21. P.303–306.
- Tendal O.S. 1981. New records of xenophyophores from the upper slope around New Zealand // N.Z. J. Mar. Freshw. Res. Vol.15. P.285–287.
- Tendal O.S. 1985. A preliminary account of the Komokiacea and the Xenophyophorea // L. Laubier, C. Monniot (eds.). Peuplements profonds du golf de Gascogne. IFREMER. P.262–266.
- Tendal O.S. 1994. Protozoa Xenophyophorea Granuloreticulosa: *Psammmina zonaria* sp.nov. from the West Pacific and some aspects of the growth of xenophyophores // A. Crosnier (ed.). Resultats des Campagnes MUSORSTOM. Vol.12. Mém. Mus. Nat. Hist Nat. Vol.161. P.49–54.
- Tendal O.S. 1996. Synoptic checklist and bibliography of the Xenophyophorea (Protista), with a zoogeographical survey of the group // Galath. Rep. Vol.17. P.79–101.
- Tendal O.S., Gooday A.J. 1981. Xenophyophoria (Rhizopodea, Protozoa) in bottom photographs from the bathyal and abyssal NE Atlantic // Oceanol. Act. Vol.4. P.415–422.
- Tendal O.S., Lewis K.B. 1978. New Zealand xenophyophores: upper bathyal distribution, photographs of growth position, and a new species // N.Z. J. Mar. Freshw. Res. Vol. 12. No 2. P.197–203.
- Theyer F. 1971. Benthic foraminiferal trends, Pacific-Antarctic Basin // Deep-Sea Res. Vol.18. P.723–738.

Responsible editors

A.V. Gebruk, H. Thiel, M. Thurston