

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

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ABSTRACT: An annotated check-list is given of Mysida and Lophogastrida species occurring deeper than 2000 m in the seas bordering Europe. The check-list is based on published data. The check-list includes 35 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, Mysida, Lophogastrida.

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

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РЕЗЮМЕ: Приводится аннотированный список видов Mysida и Lophogastrida, обитающих глубже 2000 м в морях, окружающих Европу. Список основан на опубликованных данных. Список насчитывает 35 видов. Для каждого вида приведены синонимия, данные о нахождении в европейских морях и сведения о распространении. Данные о станциях приводятся в отдельном разделе настоящего тематического выпуска.

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КЛЮЧЕВЫЕ СЛОВА: глубоководная фауна, европейские моря, Mysida, Lophogastrida.

Introduction

The world fauna of Mysida and Lophogastrida includes about 1200 species, of which almost 100 species are deep-sea forms. In total 33 identified species and two unidentified species (*Mysimenzies* sp. and *Pseudomma* sp.) have been recorded from depths below 2000 m in the Arctic and the north-eastern Atlantic Oceans. In addition, seven species (*Gnathophausia gracilis*, *Neognathophausia ingens*, *Boreomysis atlantica*, *B. incisa*, *B. microps*, *B. plebeja* and *Thalassomysis tattersalli*) occur at depths greater than 2000 m in other oceans, but in the study area were found only at shallower depths.

Studies of deep-sea mysids and lophogastrids living in the Arctic and the northeastern Atlantic began in 1885 (G.O. Sars, 1885). Initially these investigations were not confined to the deep sea and were conducted together with a study of mysids at shallower depths (Ohlin, 1901; Holt and Tattersall, 1906; Hansen, 1908; Birstein, Tchindonova, 1958; Lomakina, 1964). Prior to 1970 only five species of mysids and lophogastrids were known in the study region at the depths greater than 2000 m: *Gnathophausia zoa*, *Eucopia unguiculata*, *Petalophthalmus armiger*, *Birsteiniamysis inermis* and *Pseudomysis abyssii*. The latter species is an Arctic endemic. Articles dedicated mainly to mysid and lophogastrid fauna of Arctic and European waters have been published in the last three decades of 20th century (Lagardere, 1977, 1983; Mauchline, 1982, 1986; Petryashov, 1993; Hargreaves, Murano, 1996; Murano, Mauchline, 1999). As a result, the list of mysids and lophogastrids, which inhabit depths below 2000 m in the Arctic and this area increased from 5 to 33 species, including eight new species (and fragments of two more possibly new species). In this fauna 15 species are endemic to the Arctic and northeastern Atlantic. However these results are preliminary.

The Norwegian North-Atlantic Expedition (1878) was the first to collected mysids and lophogastrids deeper 2000 m in the study region. The expedition of "Ingolf" (1895–1896), the Swedish Arctic Expedition (1898) and British expeditions that worked from Ireland to the

Bay of Biscay, continued these investigations in the late 19th and early 20th centuries. In the Arctic Basin, the first mysids from depths > 2000 m were sampled by "Sadko" (1935) and drifting-stations "Sever-5" (1950) and "Severnyi Poljus-5" (1955). The expeditions on "Litke" (1955) and "Ob" (1956) worked in the Greenland Sea and adjacent areas of the Arctic Basin. In the more recent decades the biggest collections of mysids and lophogastrids at depths below 2000 m in the north-east Atlantic were obtained by French and British expeditions: POLYGAS (1972), BIOGAS 1-6 (1972–1974), INCAL (1976), "Discovery" (1978, 1984, 1985)]. In the Arctic samples were taken by the Russian drifting-station "Severnyi Poljus-22" (1977) and the Russian-German expeditions on "Polarstern" (1991, 1993, 1995).

Phylum Crustacea

Order Lophogastrida

Family Gnathophausiidae

Genus *Gnathophausia* W.-Suhm, 1873

COMPOSITION: 8 species (Mauchline, Murano, 1977; Petryashov, 1992; Casanova, 1996a,b). Type species: *Gnathophausia zoëa* W.-Suhm, 1873.

DISTRIBUTION: Cosmopolitan (in the tropical and temperate regions of the World Ocean): Atlantic Ocean — 3, Indian Ocean — 2, Pacific Ocean — 7, Subantarctic and Antarctic — 1.

DEPTH RANGE: 200–4800 m.

CENTRE OF DIVERSITY: Pacific Ocean (7 species).

Gnathophausia zoëa W.-Suhm, 1873

Gnathophausia zoëa — Willemoes-Suhm, 1873: 401; *Gnathophausia willemoesii* — G.O.Sars, 1883: 1; *Gnathophausia sarsi* — Wood-Mason, Alcock, 1891: 187; *Gnathophausia cristata* — Illig, 1906: 319; *Gnathophausia scapularis* — Ortmann, 1906: 50; *Gnathophausia zoëa* var. *scapularis* — W.M. Tattersall, 1939: 226.

LOCALITIES: "Ingolf", St. 18, 41 (Hansen, 1908); BIOGAS III, St. CV 27; BIOGAS V, St. CV 41; CP 07; BIOGAS VI, St. CP 16; CP 19; CP 21; INCAL, St. CP 01; CP 04; CP 06; CP 07; CP 09; CP 12; CP 15 (Lagardère, 1983); also Rockall Trough in stomachs of demersal fish trawled from depths of 750–2900 m (Mauchline, 1986).

DISTRIBUTION: Atlantic Ocean south of the Faroe-Iceland Ridge and Greenland (59°–61°N), Pacific, Indian and Subantarctic Oceans.

DEPTH RANGE: 200–4796 m.

Genus *Neognathophausia* Petryashov, 1992

COMPOSITION: 2 species (Petryashov, 1992). Type species: *Neognathophausia gigas* (W.-Suhm, 1873).

DISTRIBUTION: Cosmopolitan (absent from Arctic Ocean): Atlantic Ocean — 2, Indian Ocean — 1, Pacific Ocean — 2, Subantarctic and Antarctic Oceans — 2.

DEPTH RANGE: 200–7000 m.

***Neognathophausia gigas* (W.-Suhm, 1873)**

Neognathophausia gigas — Petryashov, 1992: 47–48; *Gnathophausia gigas* — Willemoes-Suhm, 1873: 400; *Gnathophausia drepanophora* — Holt, Tattersall, 1905a: 113, 142; Holt, Tattersall, 1905b: 9.

LOCALITIES: BIOGAS II, St. CV 20; BIOGAS VI, St. CP 21; INCAL, St. CP 07 (Lagardère, 1983); Rockall Trough from depths of 2500 m and deeper (Mauchline, 1986).

DISTRIBUTION: Atlantic south of the Faroe-Iceland Ridge and Greenland, Pacific, Indian, Subantarctic and Antarctic Oceans.

DEPTH RANGE: 200–7000 m.

Family Eucopiidae

Genus *Eucopia* Dana, 1852

COMPOSITION: 8 species (Nouvel et al., 1999; Casanova, 1997). Type species: *Eucopia australis* Dana, 1852.

DISTRIBUTION: Cosmopolitan (absent from Arctic Ocean): Atlantic Ocean — 6, Indian Ocean — 5, Pacific Ocean — 5, Subantarctic and Antarctic Oceans — 3.

DEPTH RANGE: 200–6000 m.

***Eucopia unguiculata* (W.-Suhm, 1875)**

Eucopia unguiculata — Willemoes-Suhm, 1875: 37; *Chalaraspis unguifer* — Willemoes-Suhm, 1874: 14, 20; *Eucopia biunguiculata* — Leavitt, 1938: 384; *Eucopia hanseni* — Fage, 1942: 47.

LOCALITIES: “Ingolf”, St. 49 (Hansen, 1908); POLYGAS, St. DS 16; BIOGAS I, St. CV 04; BIOGAS III, St. CV 27; BIOGAS IV, St. DS 54, DS 56, DS 57, DS 58, DS 60, DS 61, DS 63; BIOGAS V, St. CV 39, CV 40; BIOGAS VI, St. DS 77, DS 78, DS 79, CP 14, CP 17, CP 21, CP 22; POLYMEDE, St. DS 07, DS 10; INCAL, St. DS 09, DS 10, WS 01, PE 01, DS 11, WS 03, PE 02, CP 13, DS 13, ØS 08 (Lagardère, 1983).

DISTRIBUTION: Tropical temperate regions of the World Oceans.

DEPTH RANGE: 200–4829 m.

***Eucopia grimaldii* Nouvel, 1942**

Eucopia grimaldii — Nouvel, 1942a: 5; Nouvel, 1942b: 10

LOCALITIES: BIOGAS IV, St. DS 54; INCAL, St. DS 09, PE 01, WS 03, WS 04, PE 02, WS 09, ØS 08 (Lagardère, 1983).

DISTRIBUTION: Atlantic south of the Faroe-Iceland Ridge and Greenland, Pacific, Indian and Subantarctic Oceans.

DEPTH RANGE: 200–4829 m.

***Eucopia australis* Dana, 1852**

Eucopia australis — Dana, 1852: 609; *Eucopia major* — Hansen, 1910: 21.

LOCALITIES: BIOGAS IV, St. DS 54; BIOGAS V, St. DS 69; BIOGAS VI, St. CP 12, CP 16, CP 21, CP 22; INCAL, St. CP 16, ØS 08 (Lagardère, 1983).

DISTRIBUTION: Atlantic south of 47°30'N, Pacific, Indian, Subantarctic and Antarctic Oceans.

DEPTH RANGE: 600–6000 m.

***Eucopia sculpticauda* Faxon, 1893**

Eucopia sculpticauda — Faxon, 1893: 218; *Eucopia australis* — G.O. Sars, 1884: 10 (in part); *Eucopia intermedia* — Hansen, 1905: 5.

LOCALITIES: BIOGAS IV, St. CP 02; BIOGAS V, St. CV 40, CV 41; BIOGAS VI, St. CP 16, CP 17, CP 21; INCAL, St. WS 01, CP 11, PE 02, CP 16 (Lagardère, 1983).

DISTRIBUTION: Atlantic south of the Faroe-Iceland Ridge, Indian and Pacific Oceans.

DEPTH RANGE: 800–6000 m.

Order Mysida

Suborder Petalophthalmida

Family Petalophthalmidae

Genus *Petalophthalmus* W.-Suhm, 1874

COMPOSITION: 5 species (Panampunnayil, 1982; Tchindonova, Vereshchaka, 1991). Type species: *Petalophthalmus armiger* W.-Suhm, 1874.

DISTRIBUTION: Cosmopolitan (tropical and temperate regions of the World Oceans): Atlantic Ocean — 2, Indian Ocean — 4, Pacific Ocean — 2. DEPTH RANGE: 400–5000 m.

CENTRE OF DIVERSITY: Indian Ocean (4 species).

***Petalophthalmus armiger* W.-Suhm, 1874**

Petalophthalmus armiger — Willemoes-Suhm, 1874: 14; *Petalophthalmus pacificus* — Faxon, 1893: 218.

LOCALITIES: Northeast Atlantic west of Ireland at depths from 900 to 1200 fathoms (1638–2184 m) (Holt, Tattersall, 1906; W.M. Tattersall, 1951).

DISTRIBUTION: Atlantic west of Ireland, Indian and Pacific Oceans in the tropical and temperate regions.

DEPTH RANGE: 900–5000 m.

Genus *Hansenomysis* Stebbing, 1893

COMPOSITION: 18 species (Mauchline, Murano, 1977; Lagardère, 1983; Casanova, 1993; San Vicente, Sorbe, 2008). Type species: *Hansenomysis fyllae* (Hansen, 1888).

DISTRIBUTION: Cosmopolitan: Arctic — 1, Atlantic Ocean — 3, Pacific Ocean — 12, Subantarctic and Antarctic Oceans — 3.

DEPTH RANGE: 100–4829 m.

CENTRE OF DIVERSITY: Pacific Ocean (12 species).

***Hansenomysis nouveli* Lagardere, 1983**

Hansenomysis nouveli — Lagardère, 1983: 814–820.

LOCALITIES: INCAL, St. DS 06, WS 02 (Lagardère, 1983).

DISTRIBUTION: Northeastern Atlantic, Ireland to the Bay of Biscay. DEPTH RANGE: 1913–2498 m.

Hansenomysis pseudofyllae**Lagardere, 1983**

Hansenomysis pseudofyllae — Lagardère, 1983: 820–825.

LOCALITIES: POLYGAS, St. DS 26; BIOGAS VI, St. CP 12; INCAL, St. WS 04 (Lagardère, 1983).

DISTRIBUTION: Bay of Biscay (NE Atlantic).

DEPTH RANGE: 1950–4829 m.

Genus *Bacescomysis***Murano et Krygier, 1985**

COMPOSITION: 7 species (Murano, Krygier, 1985; Casanova, De Jong, 2005). Type species: *Bacescomysis pacifica* Murano et Krygier, 1985.

DISTRIBUTION: Northeastern Atlantic and eastern Pacific Oceans: northeastern Atlantic Ocean — 2, eastern Pacific Ocean — 4.

DEPTH RANGE: 2000–4829 m.

CENTRE OF DIVERSITY: Eastern Pacific Ocean (4 species).

***Bacescomysis abyssalis* (Lagardère, 1983)**

Bacescomysis abyssalis — Murano, Krygier, 1985: 686–687; *Hansenomysis abyssalis* — Lagardère, 1983: 825–832.

LOCALITIES: BIOGAS VI, St. CP 22; INCAL, St. PE 01, WS 03, WS 04, WS 05, DS 13 (Lagardère, 1983).

DISTRIBUTION: Atlantic, south-west of Ireland to the Bay of Biscay.

DEPTH RANGE: 4475–4829 m.

***Bacescomysis atlantica* (Lagardère, 1983)**

Bacescomysis atlantica — Murano, Krygier, 1985: 686–687; *Hansenomysis atlantica* — Lagardère, 1983: 832–838.

LOCALITIES: POLYGAS, St. DS 20, DS 22; BIOGAS VI, St. DS 77, CP 14, CP 21; INCAL, St. ØS 08, WS 05, WS 09 (Lagardère, 1983).

DISTRIBUTION: Atlantic, Ireland to the Bay of Biscay.

DEPTH RANGE: 1894–4804 m.

Suborder Mysida**Family Boreomysidae****Genus *Boreomysis* G.O. Sars, 1869**

COMPOSITION: 36 species (Mauchline, 1980; Murano, Krygier, 1985; Saltzman, Bowman, 1993). Type species: *Boreomysis arctica* (Krøyer, 1861).

DISTRIBUTION: Cosmopolitan: Arctic Ocean — 4, Atlantic Ocean — 14, Indian Ocean — 10,

Pacific Ocean — 23, Subantarctic and Antarctic Oceans — 5.

DEPTH RANGE: 170–6000 m.

CENTRE OF DIVERSITY: Western Pacific (18 species).

***Boreomysis arctica* (Krøyer, 1861)**

Boreomysis arctica — G.O. Sars, 1869: 246; *Mysis arctica* — Krøyer, 1861: 34, 42; *Arctomysis arctica* — Czerniavsky, 1887: 7; *Boreomysis tregouhoffi* — Bacescu, 1941a: 12; Bacescu, 1941b: 168.

LOCALITIES: Rockall Trough in stomachs of fish caught at depths of 500–2500 m (Mauchline, 1986). DISTRIBUTION: Arctic Ocean, Atlantic Ocean south to the Bay of Biscay and to 28°N in the west, the Mediterranean Sea, Pacific Ocean from the Bering Sea to Japan and California.

DEPTH RANGE: 170–2500 m.

Boreomysis latipes**Birstein et Tchindonova, 1958**

Boreomysis latipes — Birstein, Tchindonova, 1958: 298–299.

LOCALITIES: “Discovery”, Cruise 92, St. 9801; Cruise 148, St. 11121 (Hargreaves, Murano, 1996).

DISTRIBUTION: Northeastern Atlantic and northwestern Pacific Oceans.

DEPTH RANGE: 2790–4800 m.

Boreomysis longispina**Birstein et Tchindonova, 1958**

Boreomysis longispina — Birstein, Tchindonova, 1958: 299–300.

LOCALITIES: “Discovery”, Cruise 92, St. 9801; Cruise 148, St. 11121 (Hargreaves, Murano, 1996).

DISTRIBUTION: Northeastern Atlantic and northwestern Pacific Oceans.

DEPTH RANGE: 2790–5000 m.

***Boreomysis semicaeca* Hansen, 1905**

Boreomysis semicaeca — Hansen, 1905: 9.

LOCALITIES: “Discovery”, Cruise 92, St. 9801; Cruise 148, St. 11121 (Hargreaves, Murano, 1996).

DISTRIBUTION: Eastern Atlantic Ocean (45° 30'N–37°30'S), western Pacific Ocean (59°50'N–27°49'N), northwestern Indian Ocean.

DEPTH RANGE: 1900–4021 m.

***Boreomysis vanhoeffeni* Zimmer, 1914**

Boreomysis vanhoeffeni — Zimmer, 1914: 385; *Boreomysis richardi* — Nouvel, 1942: 2.

LOCALITIES: Rockall Trough (54°39'N, 12°21'W, 1973) at depths of 2500 m, St. A 57 (RV unknown) (Mauchline, 1986); “Discovery”, Cruise 92, St. 9801, Cruise 148, St. 11121 (Hargreaves, Murano, 1996).

DISTRIBUTION: Eastern Atlantic (54°39'–38°N), northwestern Pacific (49°29'–37°39'N).

DEPTH RANGE: 2500–4021 m.

***Boreomysis tridens* G.O. Sars, 1870**

Boreomysis tridens — G.O. Sars, 1870: 153; *Pseudanchialus megalolepis* — Caullery, 1896: 369; *Boreomysis tridens* var. *lobata* — Nouvel, 1942: 1.

LOCALITIES: Rockall Trough (Mauchline, 1986).

DISTRIBUTION: North Atlantic from the Lofoten Islands and the Davis Strait to Canary Islands and eastern coast of USA (39°29'N).

DEPTH RANGE: 500–2500 m.

Genus *Birsteiniamysis* Tchindonova, 1979

COMPOSITION: 2 species (Petryashov, 1993). Type species: *Birsteiniamysis inermis* (W.-Suhm, 1874).

DISTRIBUTION: Bipolar (Antarctic and Subantarctic Oceans, North Pacific, North Atlantic and Arctic Oceans): Arctic Ocean — 1, Atlantic Ocean — 1, Pacific Ocean — 2, Subantarctic and Antarctic Oceans — 1.

DEPTH RANGE: 756–7200 m.

***Birsteiniamysis inermis* (W.-Suhm, 1874)**

Birsteiniamysis inermis — Tchindonova, 1981: 28–29; *Petalophthalmus inermis* — Willemoes-Suhm, 1874: 15; *Petalophthalmus armiger* — Willemoes-Suhm, 1875: 41; *Boreomysis scyphops* — G.O. Sars, 1879: 428; *Boreomysis suhmi* — Faxon, 1893: 218; *Boreomysis distinguenda* — Hansen, 1908: 100; *Boreomysis inermis* — W.M. Tattersall, 1951: 46; *Birsteiniamysis scyphops* — Tchindonova, 1981: 28–29.

LOCALITIES: Norwegian North-Atlantic Expedition, St. 295 (G.O. Sars); “Ingolf”, St.112, St.113 (Hansen, 1908); Swedish Arctic Expedition, St. 26, 27 (Ohlin, 1901); “Sadko”, St.59/99 (Birstein, Tchindonova, 1958); “Litke”, St. 32 (Lomakina, 1964); Rockall Trough at depths 2200 and 2900m (Mauchline, 1986); “Sever-5”, St. 2; “Severnyi Poljus-22”, St. 27, 50; “Polarstern”, 1991, St.108 (Petryashov, 1993); “Discovery”, Cruise 92, St. 9801; Cruise 148, St. 11121, Cruise 156, St. 11261, 11262 (Hargreaves, Murano, 1996); “Ob”, St. 45; “Polarstern”, 1993, St. 54; “Polarstern”, 1995, St. 23 (Petryashov, 2004).

DISTRIBUTION: Arctic-Atlantic, Canada Basin to the region between Azores and Canary Islands, North Pacific, Bering Sea to south of the Kurile-Kamchatka Trench (44°N) and southern California (16°52'N), Peru Trench south of 8°S, Subantarctic and Antarctic Oceans.

DEPTH RANGE: 756–7200 m.

Family Mysidae

Subfamily Erythropinae

Genus *Mysimenzies* Bacescu, 1971

COMPOSITION: 2 species (Murano, Mauchline, 1999). Type species: *Mysimenzies hadalis* Bacescu, 1971.

DISTRIBUTION: Eastern Pacific (Peru Trench), northeastern Atlantic: Atlantic Ocean — 1, Pacific Ocean — 1.

DEPTH RANGE: 3463–6200 m.

***Mysimenzies* sp.**

REMARKS: 1 fragmentary specimen distinguishable from *M. hadalis* Bacescu, 1971.

LOCALITIES: Rockall Trough, 1977, St. SWT 13 (Murano, Mauchline, 1999).

Genus *Katerythrops* Holt et Tattersall, 1905

COMPOSITION: 4 species (Murano, Mauchline, 1999). Type species: *Katerythrops oceanae* Holt et Tattersall, 1905.

DISTRIBUTION: Cosmopolitan (tropical and temperate regions of the World Oceans): Atlantic Ocean — 2, Indian Ocean — 3, Pacific Ocean — 1.

DEPTH RANGE: 200–3000 m.

***Katerythrops oceanae*
Holt et Tattersall, 1905**

Katerythrops oceanae — Holt, Tattersall, 1905: 117–119.

LOCALITIES: Rockall Trough, 1973, St. A 50 (Murano, Mauchline, 1999).

DISTRIBUTION: Tropical and temperate regions of the Atlantic Ocean, Indian Ocean and western Pacific Ocean.

DEPTH RANGE: 200–3000 m.

Genus *Longithorax* Illig, 1906

COMPOSITION: 6 species (Murano, Mauchline, 1999). Type species: *Longithorax similerythrops* Illig, 1906.

DISTRIBUTION: Cosmopolitan (tropical and temperate regions of the World Oceans): Atlantic Ocean — 5; Indian Ocean — 2; Pacific Ocean — 2.

DEPTH RANGE: 600–4650 m.

CENTRE OF DIVERSITY: northern and central parts of Atlantic Ocean (5 species).

***Longithorax megalops*
Murano et Mauchline, 1999**

Longithorax megalops — Murano, Mauchline, 1999: 289–292.

LOCALITIES: Bay of Biscay, 1974, St. A 78, 44°00'N, 13°00'W, 1500–4650 m depth (Murano, Mauchline, 1999).

DISTRIBUTION: Northeastern Atlantic (49°24'–44°00'N).

DEPTH RANGE: 1000–4650 m.

Genus *Dactylamblyops* Holt et Tattersall, 1906

COMPOSITION: 14 species (Mauchline, Murano, 1977; Murano, Mauchline, 1999). Type species: *Dactylamblyops hodgsoni* Holt et Tattersall, 1906.

DISTRIBUTION: Cosmopolitan: Arctic Ocean — 1, Atlantic Ocean — 2, Indian Ocean — 3, Pacific Ocean — 8, Subantarctic and Antarctic Oceans — 1.
DEPTH RANGE: 50–4320 m.

CENTRE OF DIVERSITY: western Pacific (8 species).

Dactylamblyops atlanticus

Murano et Mauchline, 1999

Dactylamblyops atlanticus — Murano, Mauchline, 1999: 280–283.

LOCALITIES: Rockall Trough, 1973, St. A 57; 1974, St. A 62 (Murano, Mauchline, 1999).

DISTRIBUTION: Rockall Trough (northeast Atlantic).

DEPTH RANGE: 0–2500 m.

***Dactylamblyops sarsi* (Ohlin, 1901)**

Dactylamblyops sarsi — Holt, Tattersall, 1906: 9; *Amblyops sarsi* — Ohlin, 1901: 75–76.

LOCALITIES: “Severnyi Poljus–22”, St. 12, 14, 21, 24, 27, 29, 34, 38, 39, 40, 42, 47, 49, 53 (Petryashov, 1993); “Severnyi Poljus–5”, St. 13 (unpublished).

DISTRIBUTION: Isfiorden (Spitzbergen) and Arctic Ocean (Canada to Amundsen Basins).

DEPTH RANGE: 50 m (in Isfiord), 1230–4320 m.

Genus *Dactylerythropros*

Holt et Tattersall, 1905

COMPOSITION: 5 species (Mauchline, Murano, 1977; Murano, Krygier, 1985; Murano, 2001). Type species: *Dactylerythropros dactylops* Holt et Tattersall, 1905.

DISTRIBUTION: North Atlantic and North Pacific Oceans: Atlantic Ocean — 3, Pacific Ocean — 2.

DEPTH RANGE: 190–2853 m.

Dactylerythropros dactylops

Holt et Tattersall, 1905

Dactylerythropros dactylops — Holt, Tattersall, 1905: 121, 143. LOCALITIES: Rockall Trough (54°39'N, 12°21'W) from 2500 m (Mauchline, 1986).

DISTRIBUTION: Northeastern Atlantic, Faroes to southwest Ireland.

DEPTH RANGE: 366–2500 m.

Genus *Teratamblyops* Murano, 2001

COMPOSITION: 3 species (Murano, 2001). Type species: *Teratamblyops suluensis* Murano, 2001.

DISTRIBUTION: Northeastern Atlantic and western tropical Pacific Oceans: Atlantic Ocean — 1; Pacific Ocean — 2.

DEPTH RANGE: 1281–5530 m.

Teratamblyops gracilurus

(W.M. Tattersall, 1907)

Teratamblyops gracilurus — Murano, 2001: 61–62; *Dactylerythropros gracilura* — W.M. Tattersall, 1907: 111.

LOCALITIES: Rockall Trough at depths of 1500–2900 m in the stomachs of demersal fish and in pelagic trawl (Mauchline, 1986).

DISTRIBUTION: Northeastern Atlantic from the Rockall Trough to the Porcupine Sea Bight.

DEPTH RANGE: 1281–2900 m.

Genus *Paramblyops* Holt et Tattersall, 1905

COMPOSITION: 7 species (Nouvel et al., 1999; Murano, 2002). Type species: *Paramblyops rostrata* Holt et Tattersall, 1905.

DISTRIBUTION: Bipolar: Atlantic Ocean — 2, Pacific Ocean — 2, Subantarctic and Antarctic Oceans — 1.

DEPTH RANGE: 160–2900 m.

Paramblyops bidigitata

W.M. Tattersall, 1911

Paramblyops bidigitata — W.M. Tattersall, 1911: 48.

LOCALITIES: Rockall Trough in the stomachs of demersal fishes at the depths of 1750–2900 m (Mauchline, 1986).

DISTRIBUTION: Northeastern Atlantic from the Rockall Trough to 50°48'N.

DEPTH RANGE: 1600–2900 m.

Paramblyops rostrata

Holt et Tattersall, 1905

Paramblyops rostrata — Holt, Tattersall, 1905: 125, 144.

LOCALITIES: Rockall Trough at depths of 1000–2900 m (Mauchline, 1986).

DISTRIBUTION: North Atlantic Ocean, Iceland and southwest of the Faroe Islands to Morocco, Mediterranean and in the west to 39°30'N.

DEPTH RANGE: 260–2900 m.

Genus *Hyperamblyops*

Birstein et Tchindonova, 1958

COMPOSITION: 5 species (Murano, Mauchline, 1999). Type species: *Hyperamblyops nana* Birstein et Tchindonova, 1958.

DISTRIBUTION: Bipolar: Atlantic Ocean — 2, Pacific Ocean — 2, Subantarctic Ocean — 1.

DEPTH RANGE: 200–4000 m.

Hyperamblyops atlanticus

Murano et Mauchline, 1999

Hyperamblyops atlanticus — Murano, Mauchline, 1999: 283–286.

LOCALITIES: Rockall Trough, 1973, St. A 52, A 53, A 57; 1975, St. A 92, A 111 (Murano, Mauchline, 1999).

DISTRIBUTION: Northeastern Atlantic in the Rockall Trough.

DEPTH RANGE: 0–2500 m.

Genus *Amblyopsoides* O. Tattersall, 1955

COMPOSITION: 4 species (Ledoyer, 1990). Type species: *Amblyopsoides obtusa* O. Tattersall, 1955.

DISTRIBUTION: Bipolar (Arctic, North Atlantic, Pacific and Subantarctic and Antarctic Oceans): m.Arctic Ocean — 1, Atlantic Ocean — 1, Pacific Ocean — 1, Subantarctic and Antarctic Oceans — 3.

DEPTH RANGE: 580–2500 m.

CENTRE OF DIVERSITY: Subantarctic and Antarctic Oceans (3 species).

***Amblyopsoides ohlinii*
(W.M. Tattersall, 1951)**

Amblyopsoides ohlinii — O.Tattersall, 1955: 108; *Amblyops crozetii* — Ohlin, 1901: 74–75; *Ambliops ohlinii* — W.M. Tattersall, 1951: 130–132.

LOCALITIES: Rockall Trough at depths of 1500–2500 m (Mauchline, 1986).

DISTRIBUTION: Greenland Sea (72°42'N, 14°49'W) to coast of the USA (39°44'N, 70°31'W) and the Rockall Trough.

DEPTH RANGE: 1500–2500 m.

Genus *Pseudomma* G.O. Sars, 1870

COMPOSITION: 38 species (Murano, Mauchline, 1999; Meland, Brattegard, 2007). Type species: *Pseudomma affine* G.O. Sars, 1870.

DISTRIBUTION: Cosmopolitan: Arctic Ocean — 3, Atlantic Ocean — 8, Indian Ocean — 1, Pacific Ocean — 22, Subantarctic and Antarctic Oceans — 10.

DEPTH RANGE: 20–3000 m.

CENTRE OF DIVERSITY: Northwestern Pacific (16 species).

***Pseudomma nanum* Holt et Tattersall, 1906**

Pseudomma nanum — Holt, Tattersall, 1906: 35.

LOCALITIES: Rockall Trough at depths of 1500 m and 2200 m in the stomachs of demersal fishes (Mauchline, 1986).

DISTRIBUTION: Northeastern Atlantic Ocean, southwest of the Faroe Islands to Bay of the Bay of Biscay.

DEPTH RANGE: 360–2200 m.

***Pseudomma* sp.**

REMARKS: 3 damaged specimens from the stomachs of fishes not distinguishable to species.

LOCALITIES: Rockall Trough, 1977, St. SWT 16; 1978, St. 144; 1979, St. 154 (Murano, Mauchline, 1999).

DISTRIBUTION: Northeast Atlantic Ocean, Rockall Trough.

DEPTH RANGE: 2240–2441 m.

Genus *Michthyops* W.M. Tattersall, 1911

COMPOSITION: 3 species (Petryashov, 1993). Type species: *Michthyops parva* (Vanhöffen, 1897).

DISTRIBUTION: Arctic and North Atlantic Oceans: Arctic Ocean — 2, North Atlantic Ocean — 1. DEPTH RANGE: 27–3550 m.

CENTRE OF DIVERSITY: Arctic Ocean (2 species).

***Michthyops parva* (Vanhuffen, 1897)**

Michthiops parva — W.M. Tattersall, 1911: 61; *Pseudomma parvum* — Vanhöffen, 1897: 199.

LOCALITIES: Rockall Trough, 1500–2900 m (Mauchline, 1986), Bay of Biscay 1200–2500 m (Lagardère, 1977).

DISTRIBUTION: Rockall Trough to the Bay of Biscay, west coast of Greenland (70°30'N) to the eastern coast of the USA (37°N).

DEPT RANGE: 193–2900 m.

***Michthyops theeli* (Ohlin, 1901)**

Michthyops theeli — Stephensen, 1918: 76; *Pseudomma theeli* — Ohlin, 1901: 78.

LOCALITIES: “Sever-5”, St. 2 (Petryashov, 1993).

DISTRIBUTION: Circumpolar in the Arctic Basin, northwestern Greenland Sea (81°N to 73°25'N).

DEPTH RANGE: 27–2245 m.

***Michthyops arctica* Petryashov, 1993**

Michthyops arctica — Petryashov, 1993: 84–88.

LOCALITIES: “Severnyi Poljus-22”, St. 12, 21, 34, 39, 40, 42, 53 (Petryashov, 1993).

DISTRIBUTION: Arctic Ocean from the Canada Basin to the Laptev Sea.

DEPTH RANGE: 1079–3550 m.

Subfamily Leptomysinae

Genus *Pseudomysis* G.O. Sars, 1879

COMPOSITION: 2 species (W.M. Tattersall, 1951). Type species: *Pseudomysis abyssi* G.O. Sars, 1885.

DISTRIBUTION: Arctic and western Pacific Oceans: Arctic Ocean — 1, western Pacific Ocean — 1.

DEPTH RANGE: 218–3081 m.

***Pseudomysis abyssi* G.O. Sars, 1885**

Pseudomysis abyssi — G.O. Sars, 1885: 50.

LOCALITIES: Norwegian North-Atlantic Expedition, St. 295, 297 (G.O. Sars, 1885); Swedish Arctic Expedition, St. 26 (Ohlin, 1901); “Ingolf”, St. 113 (Hansen, 1908); “Polarstern”, 1993, St. 54 (Petryashov, 2004).

DISTRIBUTION: Norwegian and Greenland Seas to the Laptev Sea.

DEPTH RANGE: 1421–3081 m.

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References

- Bacescu M. 1971. *Mysimenzies hadalis* g. n., sp. n., a benthic mysid of the Peru Trench, found during cruise XI/1965 of R/V Anton Bruun (USA) // Rev. Roum. Biol. Zool. Vol.16. P.3–8.
- Birstein J.A., Tchindonova J.G. 1958. [The deep-sea Mysidacea from the northwestern Pacific Ocean] // Trudy Instituta Okeanologii. Vol.27. P.258–355 [in Russian].
- Casanova J.-P. 1993. Crustacea Mysidacea: Les Mysidacés Lophogastrida et Mysida (Petalophthalmidae) de la région neo-caledonienne // A. Crosnier (ed.). Resultats des Campagnes MUSORSTOM. Vol.10. Mem. Mus. natn. Hist. nat. T.156. P.33–53.
- Casanova J.-P. 1996a. Crustacea Mysidacea: Les Lophogastrides d'Indonesie, de Nouvelle-Caledoet des iles Wallis et Futuna // A. Crosnier (ed.). Resultats des Campagnes MUSORSTOM. Vol.15. Mem. Mus. Nat. Hist. Nat. Vol.168. P.125–146.
- Casanova J.-P. 1996b. *Gnathophausia childressi*, new species, a mysid from deep near-bottom waters off California, with remarks on the mouthparts of the genus *Gnathophausia* // J. Crustac. Biol. Vol.16. No.1. P.192–200.
- Casanova J.-P. 1997. Les mysidacés Lophogastrida (Crustacea) du canal de Mosambique (côte de Madagascar) // Zoosystema. Vol.19. No.1. P.91–109.
- Casanova J.-P., De Jong L. 2005. A new North-East Atlantic species of *Bacescomysis* (Mysidacea, Crustacea) with original moth-like antennules // J. Nat. Hist. Vol.39. No.21. P.1839–1849.
- Gordon J. 1957. A bibliography of the order Mysidacea // Bull. Am. Mus. Nat. Hist. Vol.112. P.297–394.
- Hansen H.J. 1908. Crustacea Malacostraca. I. // Danish Ingolf-Expedition. Copenhagen. Vol.3. No.2. P.1–120.
- Hargreaves P.M., Murano M. 1996. Mysids of the genus *Boreomysis* from abyssopelagic regions of the north-eastern Atlantic // J. Mar. Biol. Ass. U.K. Vol.76. No.3. P.665–674.
- Holt E.W.L., Tattersall W.M. 1906. Schizopodous Crustacea from the north-east Atlantic slope // Sci. Inv. Fish. Br. Ireland 1904. Suppl. 5. P.3–50.
- Lagardère J.P. 1977. Recherches sur le régime alimentaire et le comportement predateur des decapodes benthiques de la pente continentale de l'Atlantique nordoriental (Golf de Gascogne et Maroc) // Proc. 11th European Symp. Mar. Biol. Galway. Ireland. 1976. P.397–408.
- Lagardère J.P. 1983. Les Mysidacés de la plaine abyssale du Golfe de Gascogne. I. Familles des Lophogastridae, Eucopiidae et Petalophthalmidae // Bull. Mus. Nat. Hist. Nat. Paris. Vol.5. No.4.(A3). P.809–843.
- Ledoyer M. 1990. Mysidacea (Crustacea) de la campagne "EPOS 3" en mer de Weddell, Antarctique // Mesogee. Vol.50. P.37–44.
- Lomakina N.B. 1964. [Mysids, cumaceans and euphausiids (Mysidacea, Cumacea, Euphausiacea) by collections of Arctic Expedition on RV "F.Litke" 1955, RV "Ob" 1956, RV "Lena" 1957 and 1958)] // Trudy Arcticheskogo i Antarkticheskogo nauchno-issledovatel'skogo Instituta. Vol.259. P.241–254 [in Russian].
- Mauchline J. 1980. The biology of mysids and euphausiids // Adv. Mar. Biol. Vol.18. P.1–681.
- Mauchline J. 1982. The predation of mysids by fish of the Rockall Trough, northeastern Atlantic Ocean // Hydrobiologia. Vol.93. P.85–99.
- Mauchline J. 1986. The biology of the deep-sea species of Mysidacea (Crustacea) of the Rockall Trough // J. Mar. Biol. Ass. U.K. Vol.66. P.803–824.
- Mauchline J., Murano M. 1977. World list of the Mysidacea, Crustacea // J. Tokyo Univ. Fish. Vol.64. No.1. P.39–88.
- Meland K., Brattegard T. 2007. New Mysida (Crustacea) in the genera *Amblyops* and *Pseudomma* from the Iceland Basin // Zootaxa. Vol.1628. P.43–58.
- Murano M. 2001. A new mysid genus, *Teratamblyops*, from deep-sea with description of two new species (Crustacea: Mysidacea: Mysidae: Erythropini) // Bull. Nat. Sci. Mus. Tokyo. Ser.A. Vol.27. No.1. P.61–69.
- Murano M. 2002. Two new species of the genus *Paramblyops* (Crustacea: Mysidacea: Mysidae) from the Sulu Sea // Bull. Nat. Sci. Mus. Tokyo. Ser.A. Vol.28. No.1. P.35–41.
- Murano M., Krygier E.E. 1985. Bathypelagic mysids from the northeastern Pacific // J. Crust. Biol. Vol.5. No.4. P.686–706.
- Murano M., Mauchline J. 1999. Deep-sea mysids from the North Atlantic Ocean with description of four new species // Crustaceana. Vol.72. No.3. P.273–295.
- Nouvel H., Casanova J.-P., Lagardère J.-P. 1999. Ordre des Mysidacés (Mysidacea Boas, 1883) // Traite de Zoologie, Anatomie, Systematique, Biologie. T.VII, fasc.IIIA. Crust. Peracarides. Vol.19. P.39–86.
- Ohlin A. 1901. Arctic Crustacea collected during the Swedish Arctic expeditions 1898, 1899 and 1900 under the direction of A.G. Nathorst and G.Kolthoff. II. Decapoda, Schizopoda // Handl. Kungl. Sven. Vetenskapsakademien Bihang. Bd.27. H.4,8. P.1–92.
- Panampunnayil S.U. 1982. Description of a new species of *Petalophthalmus* (Mysidacea) with a revised definition of the genus // J. Plankton Res. Vol.4. No.3. P.643–650.
- Petryashov V.V. 1992. [Notes on mysid systematics (Crustacea, Mysidacea) of Arctic and northwestern Pacific] // Zool. Zhurn. Vol.71. No.10. P.47–58 [in Russian, with English summary].
- Petryashov V.V. 1993. [Deep-sea mysids (Crustacea, Mysidacea) of the Arctic Basin (Arctic Ocean)] // Issledovaniya fauny morei. Vol.45. No.53. P.70–89 [in Russian, with English summary].
- Petryashov V.V. 2004. [Mysids (Crustacea, Mysidacea) of the Euroasiatic Subbasin of the Arctic Basin and adjacent seas: the Barents, Kara and Laptev Seas] // Issledovaniya fauny morei. Vol.54. No.62. P.124–145 [in Russian, with English summary].
- Saltzman J., Bowman T.E. 1993. *Boreomysis oparva*, a new possum shrimp (Crustacea: Mysidacea) from an eastern tropical Pacific seamount // Proc. Biol. Soc. Wash. Vol.106. No.2. P.325–331.

- San Vicente C., Sorbe J.C. 2008. *Hansenomysis anaramosae* n. sp., a new suprabenthic mysis (Crustacea: Mysidacea: Petalophthalmidae) from the Bellingshausen Sea (Southern Ocean) // *Organisms, Diversity & Evolution*. Vol.8. P.21e1–21e9.
- Sars G.O. 1885. Crustacea I. // *Den Norske Nordhavs-Exp. 1876–78. Zoology*. Bd.14. S.1–280.
- Tattersall W.M. 1951. A review of the Mysidacea of the United States National Museum // *Bull. US Nat. Mus.* Vol.201. P.1–292.
- Tchindonova J.G.1981. [New data on systematic position of same deep-sea mysids (Mysidacea, Crustacea) and their distribution in the World Ocean] // *Biologiya bolshikh glubin Tikhogo Oceana*. Vol.1. P.24–33 [in Russian, with English summary].
- Tchindonova J.G., Vereshchaka A.L. 1991. [New mysid species *Petalophthalmus macrops* sp. n. from the west part of the Indian Ocean] // *Zool. Zhurn.* Vol.70. No.11. P.135–138 [in Russian, with English summary].

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