

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

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ABSTRACT: An annotated check-list is given of Ophiuroidea species occurring deeper than 2000 m in the seas bordering Europe. The check-list is based on published data. The check-list includes 75 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, Ophiuroidea.

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

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РЕЗЮМЕ: Приводится аннотированный список видов Ophiuroidea, обитающих глубже 2000 м в морях, окружающих Европу. Список основан на опубликованных данных. Список насчитывает 75 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, Ophiuroidea.

A survey of the North Atlantic brittle stars was published by Paterson, 1985. We have drawn heavily from this fundamental publication, especially with regard to distributional data. Paterson, 1985 also gives a full reference list of taxonomic papers, including publications by authors quoted in synonymy.

Phylum Echinodermata

Class Ophiuroidea

Order Euryalida

Family Asteronychidae

Genus *Asteronyx* Müller et Troschel, 1842

COMPOSITION: 6 species (Djakonov, 1954; Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Asteronyx loveni* Müller et Troschel, 1842 (Djakonov, 1954).

Asteronyx loveni Müller et Troschel, 1842

Asteronyx loveni — Müller, Troschel, 1842: 199, M. Sars, 1861: 5, Norman, 1865: 98–129, Lyman, 1882: 285, Lyman, 1883: 282, Verrill, 1885: 550, Grieg, 1893: 29, Koehler, 1897: 370, Koehler, 1904: 167, Süßbach, Breckner, 1911: 262, Clark H.L., 1911: 285, Döderlein, 1911: 115, Mortensen, 1912: 264–287, Matsumoto, 1917: 33, Koehler, 1922: 34, Clark H.L., 1923: 314, Koehler, 1924: 227, May, 1924: 269, Rivera Galle, 1926: 17, Döderlein, 1927: 59, Mortensen, 1927: 158–160, Fedotov, 1929: 170, Koehler, 1931: 23, Djakonov, 1954: 21–22, Baranova, 1957: 186, Chang et al., 1965: 61–62, Rowe, 1971: 574, Cherbonnier, Sibuet, 1972: 1364, Gage et al., 1983: 287, Paterson, 1985: 13–15, Harvey et al., 1988: 168; *Asteronyx locardi* — Koehler, 1896a: 88, Koehler, 1907: 303, Grieg, 1921: 38; *Asteronyx dispar* — Lütken, Mortensen, 1899: 185, Clark H.L., 1913: 219; *Asteronyx cooperi* — Bell, 1909: 22; *Ophiuropsis lymani* — Studer, 1884.

LOCALITIES: BIOGAS, St. 1, CV 24, CP 01, CP 02, CP 03, CV 39, CP 08; St. 2, CV 26; St. 4, CV 35; BIOGAS DS 11; “Challenger”, St. SWT 32 (Paterson, 1985).

DISTRIBUTION: *Asteronyx loveni* appears to be widespread in distribution, although there are no records from the Arctic Ocean and parts of the Southern Ocean (Paterson, 1985). In the North Atlantic from northern Norway (Øksfjord), Bohuslän and Skagerrak and south of Iceland to Scotland, SW Ireland and off Spain and Portugal; off the east coast of North America.

DEPTH RANGE: 100–4721 m.

Genus *Astrodia* Verrill, 1899

COMPOSITION: 2 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Astronyx tenuispina* Verrill, 1884 (Stöhr, O'Hara, 2007).

Astrodia tenuispina Verrill, 1884

Astrodia tenuispina — Verrill, 1884: 219; Verrill, 1899: 371; Koehler, 1906: 33–34; Koehler, 1907: 304–

305, Mortensen, 1927: 158, Madsen, 1951: 112, Gage et al., 1983: 287–288, Paterson, 1985: 15–16; *Hemieuryale tenuispina* — Verrill, 1885: 550; *Astrodia bispinosa* — Koehler, 1922.

LOCALITIES: “Talisman” (Mortensen, 1927); BIOGAS, St. 1, CV 10; St. 2, DS 19, DS 41, DS 66, CV 26, CP 28; BIOGAS DS 14; “Challenger”, St. SWT 13; “Discovery”, St. 8511#2; 9640#1 (Paterson, 1985).

DISTRIBUTION: *A. tenuispina* has been recorded from both sides of the North Atlantic. In the west from off the east coast of the United States at depths of 2452–3659 m; in the east from the Rockall Trough, the Porcupine Sea Bight, the Bay of Biscay and off Portugal (Paterson, 1985).

DEPTH RANGE: 510–3720 m.

Family Gorgonocephalidae

Genus *Gorgonocephalus* Leach, 1815

COMPOSITION: 13 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Asterias caput-medusae* Linnaeus, 1758 (Djakonov, 1954).

Gorgonocephalus arcticus (Leach, 1819)

Gorgonocephalus agassizi — Lyman, 1882: 264, Döderlein, 1900: 227; *Gorgonocephalus arcticus* — Döderlein, 1911: 103, Koehler, 1924: 231, Shorygin, 1928: 61, Djakonov, 1933: 80, Mortensen, 1927: 161, Mortensen, 1933: 9, Djakonov, 1954: 27, Smirnov, Smirnov, 1990: 446; Smirnov, Smirnov, 1994: 161; *Astrophyton Agassizi* — Stimpson, 1853.

LOCALITIES: “Polarstern”—ARK IX/4, St. 50 (1 juv.) (unpublished).

DISTRIBUTION: An arctic species, occurring in the Arctic Ocean from North America along the coasts of Greenland, Spitzbergen and Norway (south to 62°N) to the Barents, White and Kara Seas, Franz Josef Land and the Siberian coast east to 164°28'E.

DEPTH RANGE: 5–1993 m.

Genus *Astrochele* Verrill, 1878

COMPOSITION: 3 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Astrochele lymani* Verrill, 1878 (Djakonov, 1954).

Astrochele lymani Verrill, 1878

Astrochele lymani — Verrill, 1878: 374; Verrill, 1885: 264, 407; Döderlein, 1927: 89; Paterson, 1985: 13.

LOCALITIES: BIOGAS, St. 1, CV 39; St.2: CP 09 (Paterson, 1985).

DISTRIBUTION: Western Atlantic (off Nantucket in 547–1764 m) and in the eastern Atlantic in the Bay of Biscay and off Portugal at depths of 1541–2350 m (Paterson, 1985).

DEPTH RANGE: 547–2350 m.

Family Asteroschematidae

Genus *Asteroschema* Örsted et Lütken, 1856

COMPOSITION: 32 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Asterias oligactes* Pallas, 1788 (Stöhr, O'Hara, 2007).

Asteroschema inornatum Koehler, 1906

Asteroschema inornatum — Koehler, 1906: 30–31, Koehler, 1907: 303–304, Koehler, 1909: 206, Mortensen, 1933: 114, Clark A.H., 1948: 78, Madsen, 1951: 112, Gage et al., 1983: 288, Paterson, 1985: 16–17, Harvey et al., 1988: 168.

LOCALITIES: BIOGAS, St. 6, CP 07; “Chal-lenger”, St. ES 112 (Paterson, 1985); St. ES 264 (Harvey et al., 1988).

DISTRIBUTION: Rockall Trough, Bay of Biscay, off NW Spain, off Madeira and off the Azores (Paterson, 1985).

DEPTH RANGE: 1460–4140 m.

Genus *Ophiocreas* Lyman, 1869

COMPOSITION: 14 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiocreas lumbricus* Lyman, 1869 (Stöhr, O'Hara, 2007).

Ophiocreas oedipus Lyman, 1878

Ophiocreas oedipus — Lyman, 1878: 65, Lyman, 1882: 283, Koehler, 1904: 166; Koehler, 1909: 206, Mortensen, 1927: 157, Paterson, 1985: 18.

LOCALITIES: “Princesse Alice II”, St. 2048 (Koehler, 1909; Mortensen, 1927).

DISTRIBUTION: *O. oedipus* appears to be widely distributed having been recorded from both the Atlantic and Pacific Oceans. In the North Atlantic it has been recorded from off Madeira (Paterson, 1985).

DEPTH RANGE: 1500–1994 m.

Order Ophiurida

Suborder Ophiomyxina

Family Ophiomyxidae

Genus *Ophiomyxa* Müller et Troschel, 1840

COMPOSITION: 20 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiomyxa pentagona* (Lamarck, 1816) (Stöhr, O'Hara, 2007).

Ophiomyxa serpentaria Lyman, 1883

Ophiomyxa serpentaria — Lyman, 1883: 274, Bell, 1892: 136, Farran, 1913: 47–48, Mortensen, 1913: 362, Mortensen, 1927: 168, Mortensen, 1933: 11–14, Cumano, 1941: 1–7, Paterson, 1985: 18–20, Harvey et al., 1988: 168; *Ophiodera serpentaria* — Verrill, 1899a: 67, Koehler, 1909: 203.

LOCALITIES: “Ingolf”, St. 11 (Mortensen, 1933a).

DISTRIBUTION: *Ophiomyxa serpentaria* has been recorded from the eastern Atlantic — Faeroe Channel, off S Iceland, off SW Ireland, Denmark Strait, the Azores (Paterson, 1985).

DEPTH RANGE: 450–2440 m.

Genus *Ophioscolex* Müller et Troschel, 1842

COMPOSITION: 12 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophioscolex glacialis* Müller et Troschel, 1842 (Djakonov, 1954).

Ophioscolex glacialis Müller et Troschel, 1842

Ophioscolex glacialis — Müller, Troschel, 1842: 109, Lyman, 1883: 268, Verrill, 1885: 549, Bell, 1892: 134, Grieg, 1893: 9, Pfeifer, 1894: 107–121, Grieg, 1900: 268, Grieg, 1902: 16, Grieg, 1903: 32, Grieg, 1910: 6, Michailovskij, 1902: 533, Mortensen, 1903: 86, Süsbach, Breckner, 1910: 259, Mortensen, 1913: 361, Koehler, 1914: 124, Hofsten, 1915: 117, Mortensen, 1927: 169, Schorygin, 1928: 60, Mortensen, 1932: 25, Mortensen, 1933: 14, Hedding, 1934: 57, Djakonov, 1935: 82, Djakonov, 1954: 30, Stendall, 1967: 837, Paterson, 1985: 20–21, Harvey et al., 1988: 168, Smirnov, Smirnov, 1990: 448; Smirnov, Smirnov, 1994: 162.

LOCALITIES: “Discovery”, St. 7711#62, (Paterson, 1985); “Sadko” (1935), St. 100 (Gorbunov, 1946).

DISTRIBUTION: This species has been recorded on both sides of the North Atlantic and from Arctic Seas (whole Norwegian coast, Jan Mayen, Barents Sea, Kola Bay, Franz Joseph Land, Spitsbergen, NE Greenland, off S Iceland, Davis Strait, E North America); in the east it has been recorded from the Laptev Sea and Kara Sea south to the Faeroe Channel and in the west from the Davis Strait south to off Maryland (Paterson, 1985).

DEPTH RANGE: 37–2727 m.

Suborder Ophiurina

Family Ophiacanthidae

Subfamily Ophiacanthinae

Genus *Ophiacantha* Müller et Troschel, 1842

COMPOSITION: 138 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiacantha spinulosa* Müller et Troschel, 1842 (Stöhr, O'Hara, 2007).

Ophiacantha abyssicola G.O. Sars, 1871

Ophiacantha abyssicola — Sars G.O., 1871: 8, Bell, 1892: 128, Nordgaard, 1893: 5, Grieg, 1893: 24, Grieg, 1895: 10, Koehler, 1895: 463, Koehler, 1896a: 79, Koehler, 1896b: 213, Koehler, 1898: 55, Grieg, 1903: 31, Kemp, 1905: 183, 195, Koehler, 1906: 42, Koehler, 1907: 287, Koehler, 1909: 182, Farran, 1913: 38, Mortensen, 1913: 356, Grieg, 1921: 73, Koehler, 1924: 247, Mortensen, 1925: 180; Mortensen, 1927: 194, Grieg, 1932: 37,

Mortensen, 1933: 23–24, Djakonov, 1935: 86, Djakonov, 1954: 38, Madsen, 1951: 112, Madsen, 1970: 15, Gage et al., 1983: 289, Paterson, 1985: 47–48, Bartsch, 1987: 118, Harvey et al., 1988: 169; *Ophiacantha millespina* — Verrill, 1879: 203; Verrill, 1899: 324, Clark H.L., 1915: 203.

LOCALITIES: BIOGAS, DS 05, DS 07 (Paterson, 1985).

DISTRIBUTION: This is a predominantly bathyal species recorded from both sides of the North Atlantic: in the west from Cape Hatteras north to southern Greenland at depths of 561–1048 m; in the east from SE Iceland, northern Norway south to the Canary Islands at depths of 260–2300 m (Paterson, 1985).

DEPTH RANGE: 35–3505 m.

Ophiacantha aculeata Verrill, 1885

Ophiacantha aculeata — Verrill, 1885a: 153, Verrill, 1899: 32, Verrill, 1899: 323, 335, Mortensen, 1933: 28–29, Gage et al., 1983: 291, Paterson, 1985: 38–39.

LOCALITIES: BIOGAS, St. 2: CP 11; “Discovery”, St. 7711#78; “Challenger”, St. SWT 13 (Paterson, 1985).

DISTRIBUTION: *O. aculeata* has been recorded in the west Atlantic from off Virginia at depths of 2500–2539 m and in the east from the Rockall Trough, the Bay of Biscay and the Iberian Basin at depths of 3425–3584 m (Paterson, 1985).

DEPTH RANGE: 2425–3584 m.

Ophiacantha bidentata (Retzius, 1805)

Asterias bidentata — Retzius, 1805: 33; *Ophiocoma bidentata* — Muller, Troschel, 1842: 99; *Ophiacantha spinulosa* — Müller, Troschel, 1842: 107, Lütken, 1859: 65, Lyman, 1865: 93; *Ophiacantha groenlandica* — Müller, Troschel, 1842: 183; *Ophiacantha bidentata* — Lyman, 1882: 186, Verrill, 1885: 545, Bell, 1892: 127, Grieg, 1893: 22, Koehler, 1896: 79, Koehler, 1896: 212, Koehler, 1898: 55, Verrill, 1899: 36, Verrill, 1899: 323, 335, Grieg, 1900: 267, Clark H.L., 1901: 249; Koehler, 1901: 102, Knipovich, 1901: 1, Whiteaves, 1901: 60, Grieg, 1902: 13, Michailovskij, 1902: 533, Grieg, 1903: 31, Mortensen, 1903: 86, Michailovskij, 1904: 174, Schmitt, 1904: 24, Grieg, 1905: 159, Koehler, 1907: 289, Kalischewskij, 1907: 19, Koehler, 1909: 184, Grieg, 1910: 5, Clark H.L., 1911: 30, Mortensen, 1913: 358, Koehler, 1914: 80, Mortensen, 1927: 196, Grieg, 1928: 10, Grieg, 1928: 19, Mortensen, 1932: 26, Nobre, 1931: 81, Mortensen, 1933: 20–22, Djakonov, 1933: 85, Heding, 1935: 58, Djakonov, 1949: 52, Djakonov, 1954: 36–37, Madsen, 1951: 112, Grainger, 1955: 907, Tyler, Gage, 1982: 45–55, Gage et al., 1983: 289–290, Paterson, 1985: 34–36, Harvey et al., 1988: 169, Smirnov, Smirnov, 1990: 448, Smirnov, Smirnov, 1994: 163; *Ophiacantha fraterna* — Verrill, 1885: 545, Koehler, 1914: 83, Clark H.L., 1915: 198.

LOCALITIES: BIOGAS, St. 1, DS 12, DS 15–18, DS 35, DS 63, DS 64, DS 71, CV 09, CV 10, CP 20, CV 23–25, CP 01, CP 02, CV 39, CP 08, CP 26, CP 27; BIOGAS, St. 2, DS 58, DS 74, CV 26, CV 40, CP 09, CP 10, CP 12; BIOGAS, St. 4, DS 23, CV 35;

BIOGAS, St. 6, DS 26, DS 51, CP 07, CP 23; BIOGAS, CV 05, CV 06, CW 03, DS 11; INCAL, WS 01, CP 01, CP 02, CP 04, CP 09; “Discovery”, St. 8512#4, 9041; “Challenger”, St. ES 55, ES 112, AT 141, ES 195, ES 197 (Paterson, 1985); “Challenger”, St. ES 10, ES 12, ES 34, ES 56, AT 107A, AT 139, AT 144, ES 147, AT 151, ES 152, AT 153, AT 154, ES 164, AT 167, AT 171, ES 172, AT 175, ES 176, AT 177, AT 181, ES 184, AT 186, AT 191, AT 195, AT 198, ES 200, SWT 10, SWT 11, SWT 16, SWT 32; “Shackleton”, St. AT 121 (Gage et al., 1983); “Challenger”, St. ES 129, ES 185, ES 232, AT 233, ES 244, AT 245, AT 247, ES 264, ES 266, AT 267, AT 271, AT 273, ES 283, AT 288, ES 289, 3/85/7 OTSB, (Harvey et al., 1988); “Polarstern” — ARK IX/4, St. 32, 50 (unpublished).

DISTRIBUTION: This is a very common Arctic and North Atlantic species. It has been recorded in the west from South Carolina north to Greenland and in the east from southern Iceland, south to the Azores and off north Africa (Cape Vert) with a bathymetric range of 32–4730 m. In the Arctic (circumpolar) it has been recorded from Baffin Bay, Barents, White, Kara and Siberian Seas. It has also been recorded in the northern Pacific from the Bering Sea south to Japan (Paterson, 1985).

DEPTH RANGE: 10–4730 m.

Ophiacantha crassidens Verrill, 1855

Ophiacantha crassidens — Verrill, 1885: 152, Verrill, 1899: 38; Verrill, 1899: 325, Farran, 1913: 42, Grieg, 1932: 38, Mortensen, 1927: 192–193, Madsen, 1951: 112, Gage et al., 1983: 291, Paterson, 1985: 40–41, Harvey et al., 1988: 169; *Ophiacantha decipiens* — Koehler, 1906: 22, Koehler, 1907: 283–284.

REMARKS: According to Mortensen, 1927 this is likely a synonym of *O. nodosa* Lyman (Paterson, 1985).

LOCALITIES: “Michael Sars”, (station details unknown) (Mortensen, 1927); BIOGAS, St. 1, DS 16, CV 10, CV 23, CV 27, CV 34; BIOGAS, St. 6, CV 16; BIOGAS, DS 11 (Paterson, 1985).

DISTRIBUTION: This species is recorded on both sides of the North Atlantic; in the west off Cape Hatteras at a depth of 1570 m, and in the east from SW Ireland south to the Azores (Paterson, 1985).

DEPTH RANGE: 970–3120 m.

Ophiacantha cuspidata Lyman, 1878

Ophiacantha cuspidata — Lyman, 1878: 143, Lyman, 1882: 191, Verrill, 1899: 42, Koehler, 1909: 186, Mortensen, 1927: 189; Mortensen, 1933: 31–33, Gage et al., 1983: 291, Paterson, 1985: 41–42, Bartsch, 1987: 121.

LOCALITIES: “Cymor”, DR 15; “Challenger”, St. ES 112 (Paterson, 1985).

DISTRIBUTION: *O. cuspidata* has been recorded in the eastern Atlantic from Iceland (off SW

Iceland, off Azores) as far south as Ascension Island (Paterson, 1985).

DEPTH RANGE: 768–2460 m.

***Ophiacantha enopla* Verrill, 1885**

Ophiacantha enopla veterna (Koehler, 1907)

Ophiacantha veterna — Koehler, 1907: 41, Koehler, 1909: 189, Mortensen, 1927: 189; *Ophiacantha enopla veterna* — Paterson, 1985: 37.

LOCALITIES: BIOGAS, St. 6, CP 07, CP 32, CV 10, CP 01, CP 02 (Paterson, 1985). Additional records in Mortensen, 1927.

DISTRIBUTION: *O. enopla veterna* has been recorded only from the eastern Atlantic from the Bay of Biscay south to the Azores and Madeira (Paterson, 1985).

***Ophiacantha simulans* Koehler, 1896**

Ophiacantha simulans — Koehler, 1896: 82, Mortensen, 1933: 26–29, Madsen, 1951: 112, Gage et al., 1983: 291, Paterson, 1985: 39–40, Bartsch, 1987: 124;

Ophiacantha composita — Koehler, 1907: 289–290, Mortensen, 1927: 191, Madsen, 1951: 112 (non *O. composita* Koehler, 1904).

LOCALITIES: “Ingolf”, St. 18, 41; “Thor”, St. 164 (Mortensen, 1933);

BIOGAS, St. 1, DS 11, DS 15, DS 17, DS 18, DS 65, CV 08, CV 09, CV 10, CV 23–25, CP 02, CV 39, CP 09, CP 10; BIOGAS, St. 3, CV 28; BIOGAS, St. 6, CP 07, CP 23; BIOGAS, CW 03; “Discovery”, St. 8512#4; “Challenger”, St. ES 112; “Travailleur” and “Talisman” 1882, St. 13 (Paterson, 1985).

DISTRIBUTION: This species has been recorded from both sides of the North Atlantic: in the west from off the Carolinas and in the east from off S and SW Iceland, Biscay, off Canaries and south of the Azores (Paterson, 1985).

DEPTH RANGE: 720–3020 m.

***Ophiacantha smitti* Ljungman, 1872**

Ophiacantha smitti — Ljungman, 1872: 615, Lyman, 1882: 179, Koehler, 1926: 25, Nobre, 1931: 81, Cherbonnier, Sibuet, 1972: 76, Paterson, 1985: 46–47, Bartsch, 1987: 124; *Ophiacantha segesta* — Lyman, 1878: 141–142.

LOCALITIES: HMS “Challenger”, St. 56; BIOGAS, CP 20; “Discovery”, St. 8967 (Paterson, 1985).

DISTRIBUTION: This species has been recorded from both sides of the North Atlantic: in the east from the Bay of Biscay south to off North Africa in depths of 994–2282 m, and in the west off Bermuda at 1996 m (Paterson, 1985).

DEPTH RANGE: 118–2282 m.

Genus *Ophiolebes* Lyman, 1878

COMPOSITION: 13 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiolebes scorteus* Lyman, 1878 (Djakonov, 1954).

***Ophiolebes bacata* Koehler, 1921**

Ophiolebes bacata — Koehler, 1921: 5–8, Paterson, 1985: 51, Harvey et al., 1988: 169.

LOCALITIES: BIOGAS, St. 1, CV 23 (Paterson, 1985).

DISTRIBUTION: This species has been recorded from the eastern Atlantic west of Scotland (Harvey et al., 1988), the Bay of Biscay and off Madeira (Paterson, 1985).

DEPTH RANGE: 1300–2034 m.

***Ophiolebes retecta* (Koehler, 1895)**

Ophioscolex retectus — Koehler, 1895: 462, Koehler, 1896: 78–79; *Ophiolebes retecta* — Mortensen, 1927: 183, 185, Paterson, 1985: 51–52.

LOCALITIES: BIOGAS St. 1: CP 20 (Paterson, 1985).

DISTRIBUTION: *Ophiolebes retecta* has been recorded only from the Bay of Biscay (Paterson, 1985).

DEPTH RANGE: 1410–2282 m.

Subfamily Ophiotominae

Genus *Ophiocymbium* Lyman, 1880

COMPOSITION: 1 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiocymbium cavernosum* Lyman, 1880 (Stöhr, O’Hara, 2007).

***Ophiocymbium cavernosum* Lyman, 1880**

Ophiocymbium cavernosum — Lyman, 1880: 7, Lyman, 1882: 162–163, Paterson, 1985: 59–60.

LOCALITIES: BIOGAS, St. 4, CP 15, DS 79; INCAL, WS 05, WS 09, WS 10, CP 08, CP 13, DS 16, OS 04, OS 05, OS 07, OS 08 (Paterson, 1985).

DISTRIBUTION: *Ophiocymbium cavernosum* is a little known ophiuroid previously recorded only from east of Îles Kerguelen, Southern Ocean, its discovery in the Bay of Biscay marks an exciting extension of range perhaps accountable to the considerable depth at which this species is found (Paterson, 1985).

DEPTH RANGE: 2644–4800 m.

Genus *Ophiolimna* Verrill, 1899

COMPOSITION: 8 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiacantha bairdi* Lyman, 1883 (Djakonov, 1954).

***Ophiolimna bairdi* (Lyman, 1883)**

Ophiacantha bairdi — Lyman, 1883: 256, Lütken, Mortensen, 1899: 177, Koehler, 1907: 289, H. L. Clark, 1911: 230, H. L. Clark, 1915: 106, Mortensen, 1927: 188, 190, Mortensen, 1932: 27, Mortensen, 1933: 30–31; *Ophiolimna bairdi* — Verrill, 1899: 40, 44, Verrill, 1899: 346, Matsumoto, 1917: 101–102, Djakonov, 1954: 32–33,

Baranova, 1957: 189, Fell, 1960: 17, Paterson, 1985: 60, Harvey et al., 1988: 170.

LOCALITIES: BIOGAS, St. 1, CV 10, CP 02, CV 39, DS 16, DS 18, DS 32; BIOGAS, St. 2, CP 09; BIOGAS, St. 6, CP 25, DS 26; “Discovery”, St. 8511#1; “Challenger”, St. ES 118 (Paterson, 1985; Harvey et al., 1988).

DISTRIBUTION: This species is perhaps of Arctic origin but is also found in bathyal and abyssal depths of both sides of the North Atlantic: south to Martha’s Vineyard in the west and from the Rockall Trough south to Portugal in the east (Paterson, 1985).

DEPTH RANGE: 620–2910 m.

Genus *Ophiomedeia* Koehler, 1906

COMPOSITION: 4 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiomedeia duplicata* Koehler, 1906 (Stöhr, O’Hara, 2007).

Ophiomedeia duplicata Koehler, 1906

Ophiomedeia duplicata — Koehler, 1906: 19–21; Koehler, 1907: 280; Koehler, 1922: 97; Mortensen, 1927: 183, Paterson, 1985: 58–59.

LOCALITIES: “Talisman” 2075 m (Mortensen, 1927); “Travailleur” and “Talisman”, 1883 St. 43 (Paterson, 1985).

DISTRIBUTION: *Ophiomedeia duplicata* has been recorded only from the type locality off the Canary Islands at a depth of 2075 m (Paterson, 1985).

DEPTH RANGE: 2075 m.

Genus *Ophiotoma* Lyman, 1883

COMPOSITION: 4 species (Smirnov, 2004; 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiotoma coriacea* Lyman, 1883 (Stöhr, O’Hara, 2007).

Ophiotoma coriacea Lyman, 1883

Ophiotoma coriacea — Lyman, 1883: 227–287, Farran, 1913: 45, Mortensen, 1927: 187, Mortensen, 1933: 39–41, Paterson, 1985: 57, Harvey et al., 1988: 169; *Ophiotoma bartletti* — Lyman, 1883, Madsen, 1951: 113.

REMARKS: “H. L. Clark, 1915 considered that *O. coriacea* is conspecific with *O. bartletti* Lyman, 1883. As all that remains of the type specimen in the (MCZ) Harvard University Museum of Natural History (MCZ) are fragments of the arms this cannot be confirmed. Accordingly it is proposed to retain the name *Ophiotoma coriacea* for this species.” (Paterson, 1985).

LOCALITIES: BIOGAS, St. 1, CP 27; BIOGAS, CV 06 (Paterson, 1985).

DISTRIBUTION: It has been recorded from both sides of the North Atlantic: in the west off Cape

Cod at a depth of 1242 m and in the east off Iceland south to the Azores in depths of 1765–4106 m (Paterson, 1985).

DEPTH RANGE: 530–4106 m.

Genus *Ophiotrema* Koehler, 1896

COMPOSITION: 3 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiotrema alberti* Koehler, 1896 (Stöhr, O’Hara, 2007).

Ophiotrema alberti Koehler, 1896

Ophiotrema alberti — Koehler, 1896: 251, Koehler, 1906: 6, Koehler, 1907: 295, Koehler, 1907: 142, Koehler, 1908: 612, Koehler, 1909: 196–198, Matsumoto, 1915: 67, Mortensen, 1927: 183, Gage et al., 1983: 288, Paterson, 1985: 57–58; *Ophiotoma alberti* — Madsen, 1951: 113.

LOCALITIES: “Princesse Alice”, 4060 m (Mortensen, 1927); BIOGAS, St. 3, CV 13; INCAL, WS 08, WS 10, CP 01, CP 16, OS 05; “Travailleur” and “Talisman”, (1883) St. 134 (Paterson, 1985).

DISTRIBUTION: This species has been recorded from the Rockall Trough, the Bay of Biscay and off the Azores (Paterson, 1985).

DEPTH RANGE: 1862–4354 m.

Subfamily Ophioplithacinae

Genus *Ophiocamax* Lyman, 1878

COMPOSITION: 12 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiocamax vitrea* Lyman, 1878 (Stöhr, O’Hara, 2007).

Ophiocamax dominans Koehler, 1906

Ophiocamax dominans — Koehler, 1906: 21, Koehler, 1907: 281, Paterson, 1985: 70–71, Bartsch, 1987: 126.

LOCALITIES: CYMOR-2, DR 2 (Paterson, 1985).

DISTRIBUTION: *O. dominans* has been recorded from off North Africa in 822–1229 m (Paterson, 1985).

DEPTH RANGE: 658–2600 m.

Genus *Ophiomitra* Lyman, 1869

COMPOSITION: 14 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiomitra valida* Lyman, 1869 (Stöhr, O’Hara, 2007).

Ophiomitra spinea Verrill, 1885

Ophiomitra spinea — Verrill, 1885: 153; Verrill, 1885b: 544, Mortensen, 1933: 43–44, Madsen, 1951: 113, Paterson, 1985: 69.

LOCALITIES: CYMOR, DR 13 (Paterson, 1985).

DISTRIBUTION: *O. spinea* has been recorded from both sides of the Atlantic, in the west from off Martha's Vineyard at a depth of 2479 m and in the east from the Bay of Biscay at a depth of 3150 m (Paterson, 1985).

DEPTH RANGE: 2479–3150 m.

***Ophiomitra hamula* Mortensen, 1933**

Ophiomitra hamula — Mortensen, 1933: 41–44, Paterson, 1985: 69.

LOCALITIES: “Ingolf”, St. 64 (Mortensen, 1933).

DISTRIBUTION: *O. hamula* has been recorded once from the south of Iceland (Paterson, 1985).

DEPTH RANGE: 1957 m.

Genus *Ophiomitrella* Verrill, 1899

COMPOSITION: 24 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiacantha laevipellis* Lyman, 1883 (Stöhr, O'Hara, 2007).

Genus *Ophioplinthaca* Verrill, 1899

COMPOSITION: 28 species (Smirnov, 2004; 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiomitra dipsacos* Lyman, 1878 (Stöhr, O'Hara, 2007).

Ophioplinthaca abyssalis

Cherbonnier et Sibuet, 1972

Ophioplinthaca abyssalis — Cherbonnier, Sibuet, 1972: 1368–1370, Paterson, 1985: 68–69.

LOCALITIES: NORATLANTE 132–D.12 (Paterson, 1985).

DISTRIBUTION: *O. abyssalis* has been recorded from the Bay of Biscay and off NW. Spain (Paterson, 1985).

DEPTH RANGE: 1541–3100 m.

***Ophioplinthaca carduus* (Lyman, 1878)**

Ophiomitra carduus — Lyman, 1878: 154; *Ophioplinthaca carduus* — Verrill, 1899: 35, Koehler, 1906: 6; Koehler, 1907: 294, Mortensen, 1927: 183, Madsen, 1951: 113, Paterson, 1985: 68.

LOCALITIES: From 30°N, 43°W on the Mid-Atlantic Ridge SW of the Azores (Paterson, 1985). Additional records in Mortensen, 1927.

DISTRIBUTION: *O. carduus* has been recorded from off Bermuda at 796 m in the Western Atlantic and from 30°17'N: 43°7'W, 3500 m, on the Mid-Atlantic Ridge SW of the Azores (Paterson, 1985).

DEPTH RANGE: 796–3530 m.

***Ophioplinthaca chelys* (Thomson, 1877)**

Ophiacantha chelys — Thompson, 1877: 64, *Ophiomitra chelys* — Lyman, 1878: 64, Lyman, 1882: 205; *Ophioplinthaca chelys* — Verrill, 1889b: 352, Koehler,

1904: 131, Koehler, 1906: 6, Koehler, 1907: 294; Koehler, 1909: 194; Madsen, 1951: 113, Paterson, 1985: 62.

LOCALITIES: HMS “Challenger”: St.3, 84 (Paterson, 1985).

DISTRIBUTION: *O. chelys* has been recorded from both sides of the North Atlantic, in the west off Bermuda 796 m and in the east off Portugal south to the Canaries, with a bathymetric range of 2056–3307 m. Outside the Atlantic Koehler (1922a) records it from off the Philippines with a bathymetric range of 1165–2081 m (Paterson, 1985).

DEPTH RANGE: 796–3307 m.

Genus *Ophiothamnus* Lyman, 1869

COMPOSITION: 12 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiothamnus vicarius* Lyman, 1869 (Stöhr, O'Hara, 2007).

***Ophiothamnus affinis* Ljungman, 1872**

Ophiothamnus affinis — Ljungman, 1872: 622, Paterson, 1985: 73, Bartsch, 1987: 125; *Ophioleđa minima* - Koehler, 1906: 26, Koehler, 1907: 292–294, Koehler, 1914: 111, Koehler, 1921: 4; *Ophioplinthaca occlusa* - Koehler, 1907b: 4, Koehler, 1909: 194–195; *Ophiothamnus minima* — Matsumoto, 1917: 123–126.

LOCALITIES: 1425–1935 m (Paterson, 1985).

DISTRIBUTION: *O. affinis* has been recorded from both sides of the North Atlantic; in the western Atlantic from off Florida in 229–491 m and in the eastern Atlantic from the Bay of Biscay, off the Canaries and from the Josephine Bank with a bathymetric range of 1425–1935 m (Paterson, 1985).

DEPTH RANGE: 193–1935 m.

Family Ophiactidae

Genus *Histampica* A.M.Clark, 1970

COMPOSITION: 6 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Amphiactis umbonata* Matsumoto, 1915 (Stöhr, O'Hara, 2007).

***Histampica duplicata* (Lyman, 1875)**

Amphiura duplicata — Lyman, 1875: 19, Lyman, 1879: 31, Lyman, 1882: 136, Lyman, 1883: 251, Koehler, 1896: 74, Koehler, 1898: 49; *Ophiactis duplicata* -Lütken, Mortensen, 1899: 142–143, Koehler, 1909: 171, Koehler, 1914: 40; *Amphiactis duplicata* — Matsumoto, 1915: 66–67, Matsumoto, 1917: 146–147, Mortensen, 1927: 198; *Histampica duplicata* — Clark A.M., 1970: 73–74, Paterson, 1985: 80.

LOCALITIES: BIOGAS, St. 1, DS 15, DS 17, CV 09, CV 10, CP 20, CP 01, CP 02, CV 39, CP 27; BIOGAS, St. 6, DS 26, CP 07; BIOGAS, St. HZ: CW 03 (Paterson, 1985).

DISTRIBUTION: *H. duplicata* is a widespread species recorded from the West Indies, Bay of Bis-

cay to off North Africa, and from the East Pacific off Colombia and Equador (Paterson, 1985).

DEPTH RANGE: 125–2870 m.

Genus *Ophiactis* Lütken, 1856

COMPOSITION: 61 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiolepis savignyi* Müller et Troschel, 1842 (Djakonov, 1954).

Ophiactis abyssicola (M. Sars, 1861)

Amphiura abyssicola — Sars M., 1861: 18; *Ophiocnida abyssicola* — Lyman, 1865: 12; *Ophiactis abyssicola* — Ljungman, 1867: 324, Lütken, 1872: 98, Lyman, 1882: 122, Hoyle, 1884: 710, 715, 718, Bell, 1892: 123, Koehler, 1898: 46, Grieg, 1903: 29, Koehler, 1909: 169, Mortensen, 1913: 356, Farran, 1913: 35, Grieg, 1921: 36, Clark H.L., 1923: 334, Koehler, 1924: 293, Mortensen, 1927: 202, Mortensen, 1933: 47–50, Madsen, 1951: 114, John, Clark, 1954: 154, Cherbonnier, Sibuet, 1972: 1370, Gage et al., 1983: 292, Paterson, 1985: 76–77, Harvey et al., 1988: 170; *Ophiactis poa* — Lyman, 1882: 119; *Ophiactis echinata* — Koehler, 1898: 48, Mortensen, 1927: 199, Cherbonnier, Sibuet, 1972: 1370; *Ophiactis corallicola* — Koehler, 1896: 75, Koehler, 1907: 272, Koehler, 1909: 170; ? *Ophiactis cuspidata* — Lyman, 1882.

LOCALITIES: “Ingolf”, St. 65; “Thor”, St. 164, 178 (Mortensen, 1933); “Challenger”, St. ES 34, AT 144, AT 151, AT 167, AT 171, AT 177, ES 184, AT 191, AT 195, ES 197, SWT 12, SWT 32, (Gage et al., 1983); BIOGAS, St. 1, DS 15–18, DS 32, DS 35, DS 61, DS 63, DS 65, CV 08, CV 09, CV 10, CP 20, CV 23–25, CP 01, CP 02, CV 39, CP 08, CP 26, CP 27; BIOGAS, St. 2, DS 60, DS 66, CV 41, CP 09; BIOGAS, St. 4, CV 35; BIOGAS, St. 6, DS 52, DS 70, CP 07, CP 23; BIOGAS, DS 04, DS 33, CV 06, CW 03; “Discovery”, St. 8511#2, 9753#4, 9753#7 (Paterson, 1985); “Challenger”, St. ES 112, AT 153, ES 197, AT 233, AT 247, ES 264, AT 271, AT 273 (Harvey et al., 1988).

DISTRIBUTION: *O. abyssicola* has been recorded from the Davis Strait, off Iceland, the Rockall Trough, the Faeroes and Norway south to southern Africa, with a bathymetric range of 125–4721 m (Paterson, 1985).

DEPTH RANGE: 125–4721 m.

Genus *Ophiopholis* Müller et Troschel, 1840

COMPOSITION: 7 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Asterias aculeata* Linnaeus, 1767 (Djakonov, 1954).

Ophiopholis aculeata (Linnaeus, 1767)

Asterias aculeata — Linnaeus, 1767; *Ophiopholis aculeata* — Lyman, 1865: 97, Süssbach, Breckner, 1910: 249, Clark H.L., 1911: 128, Matsumoto, 1917: 161, 162, (v. *japonica*), Mortensen, 1927: 204, Shorygin, 1928: 57, Djakonov, 1933: 89, Mortensen, 1933: 52, Djakonov,

1954: 53, Smirnov, Smirnov, 1990: 450; *Ophiolepis scolopendrica* — Müller J., Troschel, 1842; *Ophiocoma bellis* — Forbes, 1839.

LOCALITIES: *Ophiocoma bellis* taken by Dr. Wallich (Wallich, 1860: 22; Lyman, 1865: 99); “Ingolf”, St. 18, 64 (Mortensen, 1933).

DISTRIBUTION: Öresund and Belt Sea – Kattegatt – Bohuslän, whole Norwegian coast, Faeroes, Iceland, Barents Sea, White Sea, Kola Bay, Kara Sea, Franz Joseph Land, Rockall Bank, Britain, W Atlantic S to Cape Cod.

DEPTH RANGE: 0–2250 m.

Genus *Ophiopus* Ljungman, 1867

COMPOSITION: 1 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiopus arcticus* Ljungman, 1867 (Djakonov, 1954).

Ophiopus arcticus Ljungman, 1867

Ophiopus arcticus — Ljungman, 1867: 209, Mortensen, 1893: 506, Mortensen, 1927: 203, Shorygin, 1928: 60, Djakonov, 1933: 88, Mortensen, 1933: 53, Djakonov, 1954: 52; *Ophiaregma abyssorum* — Sars G.O., 1872: 112.

LOCALITIES: “Ob”, St. 35 (unpublished).

DISTRIBUTION: Arctic species. Northern portions of the Barents Sea, coasts of Franz Josef Land, slope off Norway south to 62.5°, Spitsbergen, Iceland (excluding the south coast) and Greenland.

DEPTH RANGE: 50–1950 m.

Family Amphiuridae

Amphipholis Ljungman, 1867

COMPOSITION: 37 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiolepis gracillima* Stimpson, 1852 (Djakonov, 1954).

Genus *Amphioplus* Verrill, 1899

COMPOSITION: 94 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Amphiura tumida* Lyman, 1878 (Djakonov, 1954).

Amphioplus dalea (Lyman, 1879)

Amphiura dalea — Lyman, 1879: 27, Lyman, 1882: 137–138, Lütken, Mortensen, 1899: 154; *Amphioplus daleus*: — Verrill, 1899: 315, Paterson, 1985: 92; *Amphichilus daleus* — Matsumoto, 1917: 177, Mortensen, 1933: 63; *Amphichilus dalea* — Madsen, 1951: 113; *Unioplus daleus* — Fell, 1962: 16; *Amphioplus (Unioplus) daleus* — Clark A.M., 1970: 45, Tommasi, 1976: 285–286.

LOCALITIES: “Ingolf” St. 11 (Mortensen, 1933a); BIOGAS, St. 1, CP 01; BIOGAS, St. 2, DS 40; BIOGAS, St. 6, DS 52; BIOVEMA, DS 03 (Paterson, 1985).

DISTRIBUTION: *A. dalea* appears to be a widespread abyssal species. In the North Atlantic it has been recorded from Iceland (2418 m) and the Bay of Biscay (2006–3345 m). It has also been found in the South Atlantic, off Patagonia (4929 m. Type locality) and in the eastern Pacific, off southern California and Mexico (2736–4151 m) (Paterson, 1985).

DEPTH RANGE: 1170–5870 m.

***Amphioplus verrilli* (Lyman, 1879)**

Amphiura verrilli — Lyman, 1879: 29–30, Lyman, 1882: 139–140; *Silax verrilli* — Fell, 1962: 16, Clark A.M., 1970: 36–37; *Silax pulvinus* — Cherbonnier, Sibuet, 1972: 1372–1375; *Amphioplus verrilli* — Madsen, 1951: 113, Bartsch, 1983b: 14–15; Paterson, 1985: 92–93.

LOCALITIES: “Meteor” 3, st. 24/AT 2, 38/AT 5 (Bartsch, 1983b); BIOGAS, St. 3, CV 14; BIOGAS, St. 4, CP 15, CP 16, CP 17; BIOVEMA, CP 02, CP 04 (Paterson, 1985).

DISTRIBUTION: *A. verrilli* has been recorded from both sides of the Atlantic: in the west from St Vincent (763 m), off N. Carolina and the Labrador Basin (4165–4864 m), in the east it has been recorded from the Bay of Biscay and the Iberian Basin (4252–5315 m) (Paterson, 1985).

DEPTH RANGE: 763–5330 m.

Genus *Amphiura* Forbes, 1842

COMPOSITION: 212 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Amphiura chiajei* Forbes, 1843 (Djakonov, 1954).

***Amphiura abyssorum* Norman, 1876**

Amphiura abyssorum — Norman, 1876: 215, Mortensen, 1927: 208, 211, Mortensen, 1933: 62, Madsen, 1951: 113, Paterson, 1985: 91; *Amphiura digna* — Koehler, 1907: 274, Mortensen, 1927: 208, 211.

LOCALITIES: “Valorous”, Northeastern Atlantic, 1785 fms (3210 m) (Clark H.L., 1915; Mortensen, 1927). Additional records in (Mortensen, 1927).

DISTRIBUTION: *A. abyssorum* has only been recorded from the Eastern Atlantic and Davis Strait (Paterson, 1985). It has a bathymetric range of 915–3210 m (Mortensen, 1933).

DEPTH RANGE: 915–3210 m.

***Amphiura otteri* Ljungman, 1872**

Amphiura otteri — Ljungman, 1872: 631, Lütken, 1872: 98–101, Lyman, 1878: 32, Lyman, 1882: 128, Lyman, 1883: 252, Verrill, 1885: 548, Koehler, 1907: 302, Koehler, 1914: 61, Mortensen, 1927: 210, Nobre, 1931: 85, Gage et al., 1983: 292–293, Paterson, 1985: 86–87, Harvey et al., 1988: 171; *Amphiura grandis* — Koehler, 1896c: 246, Koehler, 1907: 277, Koehler, 1909: 175–177, Mortensen, 1927: 209, Madsen, 1951: 114; *Amphiura palmeri* — Koehler, 1907: 279 (part), Mortensen, 1927: 209, Mortensen, 1933: 59–61 (non *A. palmeri* Lyman, 1875).

LOCALITIES: “Princesse Alice”, 1900 m (Mortensen, 1927); “Ingolf” St. 24 (Mortensen, 1933); “Challenger”, St. ES 143 (Gage et al., 1983); “Talisman”, drag. 101; “Discovery”, St. 8521#6; BIOGAS, St. 1 DS 65, CP 01; BIOGAS, St. 6 DS 06, DS 26, DS 50, DS 52, DS 86, DS 87 (Paterson, 1985); “Challenger”, St. ES 112, ES 231, ES 285 (Harvey et al., 1988).

DISTRIBUTION: *A. otteri* has been recorded from both sides of the North Atlantic. In the west from the West Indies 325–1036 m and as far north as the Labrador basin 198–2888 m; in the east Atlantic it has been recorded from Southern Iceland, Rockall Trough, Biscay, off Portugal, Azores, Canaries, south to the Cape Verde Islands with a bathymetric range of 729–3200 m (Paterson, 1985).

DEPTH RANGE: 198–3200 m.

Family Amphilepididae

Genus *Amphilepis* Ljungman, 1866

COMPOSITION: 15 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Amphiura norvegica* Ljungman, 1865 (Djakonov, 1954).

***Amphilepis ingolfiana* Mortensen, 1933**

Amphilepis ingolfiana — Mortensen, 1933: 54–56, Schoener, 1967: 655–658, Gage et al., 1983: 293–294, Paterson, 1985: 93–94, Harvey et al., 1988: 171; *Amphilepis norvegica* — Ljungman, 1872: 632, ?Lyman, 1882: 149, ?Koehler, 1914: 42, ?Mortensen, 1927: 222, ?Cherbonnier, Sibuet, 1972: 1375, [non *A. norvegica* (Ljungman, 1867)].

LOCALITIES: “Challenger”, St. ES 4, ES 6, ES 12, ES 27, ES 32, ES 34, ES 55, ES 111, ES 135, ES 140, ES 143, AT 153, SBC 163, ES 164, ES 169, ES 172, ES 176, AT 177, ES 180, ES 184, ES 185, AT 186, ES 190, ES 197, “Shackleton”, St. ES 118, AT 121 (Gage et al., 1983); BIOGAS, St. 1 DS 17, DS 18, DS 62; BIOGAS, St. 2 CP 11; BIOGAS, St. 3 DS 76, CV 12; BIOGAS, St. 4 CP 16; BIOGAS, St. 6: DS 51, DS 52, DS 70, CP 07, CP 24; INCAL, St. DS 01, DS 02, DS 05, DS 06, DS 09, DS 10, DS 13, DS 16, CP 01, CP 02, CP 03, CP 04, CP 05, CP 06, CP 07, CP 08, CP 09, CP 12, CP 13, WS 01, WS 02, WS 05, OS 01, OS 02, OS 04, OS 07, OS 08; “Discovery”, St. 7709#73, 8521#6; “Challenger”, St. ES 08, ES 10, ES 56 (Paterson, 1985); “Challenger”, St. ES 129, ES 200, ES 231, ES 232, ES 244, AT 267, AT 271, SBC 272, AT 273, AT 275, AT 282, ES 283, ES 285, AT 286, ES 289 (Harvey et al., 1988).

DISTRIBUTION: It has been recorded from both sides of the North Atlantic, in the west from Cape Hatteras north to the Davis Strait and SW off Iceland and in the east from the Rockall Trough south to off North Africa (Paterson, 1985).

DEPTH RANGE: 100–4825 m.

Family Ophiuridae**Subfamily Ophiurinae****Genus *Amphiophiura* Matsumoto, 1915**

COMPOSITION: 60 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophioglypha bullata* Thomson, 1877 (Djakonov, 1954).

***Amphiophiura bullata bullata*
(Thomson, 1877)**

Ophioglypha bullata — Thomson, 1873: 400, Thomson, 1877: 399, Lyman, 1878: 83–84; Lyman, 1882: 57–58, Verrill, 1885: 543; Verrill, 1894: 295, Koehler, 1906: 6; Koehler, 1907: 259, Koehler, 1908: 598; *Ophioglypha abdita* — Koehler, 1901b: 225; Koehler, 1909: 145–147, Mortensen, 1927: 230; *Amphiophiura bullata* — Matsumoto, 1915: 77; Mortensen, 1927: 230; Madsen, 1951: 107–108, 114; Schoener, 1967: 653–655; Litvinova, 1971: 305; Cherbonnier, Sibuet, 1972: 1376; *Amphiophiura bullata bullata* — Paterson, 1985: 131–132.

LOCALITIES: “Princesse Alice II”, St. 1173, “Talisman”, 4165–5000 m (Mortensen, 1927); Swedish Deep-Sea Exp. 1948, St. 329, Haul 3 (Madsen, 1951); BIOGAS, St. 4 CP 05 (Paterson, 1985).

DISTRIBUTION: This subspecies has only been recorded from the North Atlantic; in the west from off Delaware, Bermuda and near the Mid-Atlantic Ridge at depths of 2268–5320 m, in the east from the Bay of Biscay to off Sierra Leone at depths of 3850–5600 m (Paterson, 1985).

DEPTH RANGE: 2230–6035 m.

***Amphiophiura bullata convexa* (Lyman, 1878)**

Ophioglypha convexa — Lyman, 1878: 84; Lyman, 1882: 58, Koehler, 1907: 293, Koehler, 1908: 149, Koehler, 1909: 142, Koehler, 1914: 12; *Amphiophiura convexa* — Matsumoto, 1915: 77, Matsumoto, 1917: 263, Mortensen, 1927: 231, Hertz, 1927: 75, Clark H.L., 1939: 107, Madsen, 1951: 114, Litvinova, 1971: 302–303, Litvinova, Sokolova, 1971: 284, Cherbonnier, Sibuet, 1972: 1376, Gage et al., 1983: 295–296, Bartsch, 1983: 16; *Amphiophiura bullata convexa* — Paterson, 1985: 132–133.

LOCALITIES: “Michael Sars”, 3825–4700 m (Mortensen, 1927); “Meteor”, St. M3, 30/AT 3, 37/AT 4 (Bartsch, 1983); “Challenger”, St. ABD 3, ES 10 (Gage et al., 1983); BIOGAS, St. 4 CV 30, CV 35, CP 15, CP 16, CP 17, CP 18, ; BIOGAS, St. 6 DS 86; INCAL, CP 12, CP 13, DS 13, OS 03, OS 04, WS 05, WS 09; BIOVEMA, CP 01, CP 02, CP 04, CP 05 (Paterson, 1985).

DISTRIBUTION: *A. bullata convexa* has been recorded on both sides of the North Atlantic; in the west from the Labrador Basin off the coast of New England and south in the Demerara Abyssal Plain off northern South America at depths of 3126–4800 m; in the east from the Rockall Trough, Bay of Biscay, off the Azores and Vema Fracture zone at depth of

1997–5100 m. It has also been recorded from the Indian and Pacific Oceans (Paterson, 1985).

DEPTH RANGE: 1950–6810 m.

***Amphiophiura bullata vitjazi* Litvinova, 1971**

Amphiophiura vitjazi — Litvinova, 1971: 300–301, Litvinova, Sokolova, 1971: 287; *Amphiophiura vitjazi vitjazi* — Paterson, 1985: 133.

LOCALITIES: BIOVEMA, DS 09, DS 11, CP 06 (Paterson, 1985).

DISTRIBUTION: This subspecies was previously recorded from the Pacific Ocean from the Ryukyu Trench at a depth of 6810 m. It occurs in the North Atlantic from the Vema Fracture Zone (Paterson, 1985).

DEPTH RANGE: 5100–6810 m.

***Amphiophiura saurua* (Verrill, 1894)**

Ophioglypha saurua — Verrill, 1894: 288; *Ophioglypha aspera* — Koehler, 1898: 40; *Amphiophiura saurua* — Clark H.L., 1915: 315, Mortensen, 1927: 231, Mortensen, 1933: 89, Gage et al., 1983: 296, Paterson, 1985: 134, Harvey et al., 1988: 172; *Amphiophiura aspera* — Mortensen, 1927: 231.

LOCALITIES: “Thor”, St. AT 164 (Mortensen, 1927); BIOGAS, St. 1 CP 01; “Challenger”, St. ES 112 (Paterson, 1985).

DISTRIBUTION: *A. saurua* has been recorded from both sides of the North Atlantic Ocean; in the west from off Nantucket and Newfoundland with a bathymetric range of 844–1267 m and in the east from south of Iceland to the Bay of Biscay with a bathymetric range of 1560–2245 m (Paterson, 1985).

DEPTH RANGE: 844–2245 m.

Genus *Anthophiura* H.L. Clark, 1911

COMPOSITION: 5 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Anthophiura axiologa* H.L. Clark, 1911 (Djakonov, 1954).

***Anthophiura ingolfi* Fasmer, 1930**

Anthophiura ingolfi — Fasmer, 1930: 4, Schoener, 1969: 128–131, Paterson, 1985: 140; *Aspidophiura minuta?* — Koehler, 1896: 72 [non *Aspidophiura minuta*, Lyman?]

LOCALITIES: “Ingolf”, St. 11, BIOGAS, St. 6: DS 51 (Paterson, 1985).

DISTRIBUTION: *A. ingolfi* has been recorded from both sides of the North Atlantic; in the west from off the eastern United States to the west of Iceland in the Labrador Basin and in the east from the Bay of Biscay (Paterson, 1985).

DEPTH RANGE: 2300–2862 m.

Genus *Homophiura* Paterson, 1985

COMPOSITION: 3 species (Smirnov, 2004, 2009).

TYPE SPECIES: *Ophioglypha tessellata* Verrill, 1894 (Stöhr, O'Hara, 2007).

***Homophiura abyssorum* (Lyman, 1883)**

Ophioglypha abyssorum — Lyman, 1883: 238; *Homalophiura abyssorum* — Clark H.L., 1911: 326, Clark H.L., 1939: 112–113, Madsen, 1951: 114; *Ophiurolepis abyssorum* — Hertz, 1927: 93; *Homalophiura abyssorum* var. *africana* — Madsen, 1947; *Homophiura abyssorum* — Paterson, 1985: 138.

REMARKS: “Dr F. J. Madsen (personal communication) considers it was perhaps unnecessary to describe *Homalophiura abyssorum africanum* Madsen, 1947, as a separate subspecies, and that it should be treated as another record of *H. abyssorum*.” (Paterson, 1985).

LOCALITIES: West of the Straits of Gibraltar (35°43'N, 8°16'W) (Paterson, 1985).

DISTRIBUTION: *H. abyssorum* has been recorded from the Western tropical Atlantic off Virgin Gorda, West Indies, at a depth of 1974m, Marthas Vineyard (850–3290 m) and in the east off the Straits of Gibraltar at a depth of 2150–2300 m. It has also been recorded from the Indian Ocean at 2727 m (Paterson, 1985).

DEPTH RANGE: 850–3290 m.

***Homophiura tessellata* (Verrill, 1894)**

Ophioglypha tessellata — Verrill, 1894: 290, Koehler, 1898: 37, Koehler, 1909: 156; *Homalophiura tessellata* — Clark H.L., 1915: 327, Mortensen, 1927: 231, Mortensen, 1933: 91, Madsen, 1951: 114; *Homophiura tessellata* — Paterson, 1985: 137–138; *Homalophiura tessellata* — Gage et al., 1983: 295, Harvey et al., 1988: 172.

LOCALITIES: “Ingolf”, St. 18, 41 (Mortensen, 1933); “Challenger”, St. AT 171, ES 176, AT 181, ES 184 (Gage et al., 1983); BIOGAS, St. 1 DS 17, CP 26, CP 27; BIOGAS, St. 2 CV 12, CV 26, CV 38; BIOGAS, St. 3 CV 13; BIOGAS, St. 4 CP 17; INCAL, CP 04, DS 14, CP 15; “Discovery”, St. 7711#52, 7711#78, 8511#2; “Challenger”: St. AT 144, AT 151, AT 154 (Paterson, 1985).

DISTRIBUTION: It is found on both sides of the North Atlantic; in the west from off New England north to the Labrador Basin with a bathymetric range of 433–3229 m and in the east from off S. Iceland south to off the Azores with a bathymetric range of 1809–4706 m (Paterson, 1985).

DEPTH RANGE: 433–4706 m.

Genus *Ophiambix* Lyman, 1880

COMPOSITION: 4 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiambix aculeatus* Lyman, 1880 (Stöhr, O'Hara, 2007).

***Ophiambix meteoris* Bartsch, 1983**

Ophiambix meteoris — Bartsch, 1983: 97–100, Bartsch, 1983: 13–14, Bartsch, 1987: 126, Paterson, 1985: 142, Paterson, Baker, 1988: 1584.

LOCALITIES: “Meteor”, St. M3, 30/AT 3 (Bartsch, 1983; 1983; Paterson, 1985), St. M9c 170/DD 68 (Bartsch, 1987).

DISTRIBUTION: *Ophiambix meteoris* has been found off Spain in the Iberian Basin at 5315 m (Paterson, 1985) and on Great Meteor Bank at 306–313 m.

DEPTH RANGE: 306–5315 m.

Genus *Ophiecten* Lütken, 1855

COMPOSITION: 21 species (Smirnov, 2004, 2009; Stöhr, O'Hara, 2007).

TYPE SPECIES: *Ophiura sericea* Forbes, 1852 (Djakonov, 1954).

Ophiecten centobi

Paterson, Tyler et Gage, 1982

Ophiecten centobi — Paterson et al., 1982: 119–121, Paterson, 1985: 130.

LOCALITIES: CYMOR, DR 15 (Paterson, 1985).

DISTRIBUTION: This species has been recorded only from the type locality in the Bay of Biscay.

DEPTH RANGE: 2420 m.

***Ophiecten hastatum* Lyman, 1878**

Ophiecten hastatum — Lyman, 1878: 103, Lyman, 1882: 82, Koehler, 1898: 42–44, Koehler, 1909: 165, Mortensen, 1927: 246, Paterson et al., 1982: 117–119, Paterson, 1985: 129, Harvey et al., 1988: 172; *Ophiecten longispinum* — Koehler, 1896: 204–205, Koehler, 1896b: 243; *Ophiecten sericeum* — Hoyle, 1884: 718 (part), Bell, 1892: 113–114 (part) (non *O. sericeum* (Forbes, 1852)); *Ophiecten pacificum* — Lütken, Mortensen, 1899: 131, Clark H.L., 1911: 96–97, Clark H.L., 1923: 364, Hertz, 1927b: 11–12, Jumars, 1976: 244; *Ophiecten latens* — Koehler, 1906: 13, Koehler, 1907: 267, Koehler, 1921: 5, Grieg, 1921: 33, Grieg, 1932: 33, Mortensen, 1927: 246, Mortensen, 1932: 35, Mortensen, 1933: 98–99, Mortensen, 1933: 392–393, Madsen, 1951: 114, Cherbonnier, Sibuet, 1972: 1384, Clark A.M., Courtman-Stock, 1976: 189, Bartsch, 1983: 16.

LOCALITIES: “Ingolf”, St. 11 (Mortensen, 1933); “Meteor” 3, St. 100/AT 152 (Bartsch, 1983); “Travailler” and “Talisman”, 1883, St. 134; BIOGAS, St. 1, 2, 3, 5, 6; “Discovery”, St. 7711#57, 8511#1, 8512#4; “Porcupine”, St. 37; “Challenger”, St. ES 06, ES 27, ES 52, ES 55, AT 107A, ES 111, ES 129, ES 137, ES 140, ES 147 (Paterson et al., 1982); “Challenger”, St. ES 10, ES 31, ES 56, ES 143, ES 152, ES 164, ES 185, OTSB 51001; “Shackleton”, St. AT 119, AT 121 (Gage et al., 1983); “Challenger”, St. ES 266, AT 267, ES 283, OTSB 3/85/5 (Harvey et al., 1988).

DISTRIBUTION: This species has been found in the Atlantic, Southern and Pacific Oceans. In the North Atlantic it has mainly been recorded from the east from the Rockall Trough south to the Azores at

depths of 1970–4700 m, but it has been recorded only from the Labrador Basin in the west at 2340–2750 m.

DEPTH RANGE: 1130–5000 m.

***Ophiocten sericeum* (Forbes, 1852)**

Ophiura sericea — Forbes, 1852: 215; *Ophiocten sericeum* — Ljungman, 1867: 307, Duncan, Sladen, 1881: 65–66, Bell, 1892: 113–114 (part), Grieg, 1893: 9–10 (part), Grieg, 1900: 246, Grieg, 1903:26 (part), Michailovskij, 1903:492, 531, Michailovskij, 1904: 173, Koehler, 1909: 166, Mortensen, 1927: 247 (part), Mortensen, 1932: 34, Mortensen, 1933: 96–98 (part), Thorson, 1934: 4, Madsen, 1951: 115, Madsen, 1954: 36; Djakonov, 1954: 92, Grainger, 1955: 910, Semenova et al., 1964 (part), Paterson et al., 1982: 113–114, Smirnov, Smirnov, 1990: 451, Smirnov, Smirnov, 1994: 165; *Ophiocten kroyeri* Lütken, 1855: 102, Lütken, 1858: 52, Lütken, 1859: 28, 52–53, Lyman, 1865: 53.

LOCALITIES: “Voringen”, St. 40 (Grieg, 1893); “Ingolf”, St. 118; “Thor”, St. 164 (Mortensen, 1933a); “Polarstern”—ARK IX/4 — 32 AGT (3028–3011 m) (unpublished).

DISTRIBUTION: An arctic–boreal species with a wide range: circumpolar in the Arctic: Barents Sea, Spitsbergen, Kola Bay (absent in the White Sea proper), Kara Sea, Siberian coast, Chuckchi Sea (not as yet found in Bering Strait and Bering Sea). North Atlantic along the European coast (the Norwegian Sea) south as far as Skagerrak and along the east coast of North America south to Massachusetts. A very undemanding species living in diverse locations at depths from 5 to 4500 m.

DEPTH RANGE: 5–4500 m.

***Ophiocten gracilis* (G.O. Sars, 1871)**

Ophioglypha gracilis — Sars G.O., 1871: 18; *Ophiocten gracilis* — Paterson et al., 1982: 115–117; Gage et al., 1983: 296–297, Paterson, 1985: 130, Harvey et al., 1988: 172; *Ophioglypha signata* — Verrill, 1882: 220, Hoyle, 1884: 718; *Ophiocten pattersoni* — Lyman, 1883: 244; *Ophiocten sericeum* — Hoyle, 1884: 718 (part), Bell, 1892: 113–114 (part), Grieg, 1893: 9–10, Grieg, 1903: 26 (part), Mortensen, 1927: 247 (part); *Ophiocten le danteci* — Koehler, 1896: 72; *Ophiura signata* — Kemp, 1905: 193 (part), Farran, 1913: 30 (part); *Ophiocten hastatum* — Koehler, 1914: 37, Schoener, 1971: 153–160, (*non O. hastatum* Lyman, 1878); *Ophiocten amitinum* var. *boreale* — Hertz, 1927: 64.

REMARKS: Postlarvae of this species have been identified in samples taken in the summer months at depths to 2925 m in the Rockall Trough. They do not appear to survive until the following winter at these depths (Gage, Tyler, 1981).

LOCALITIES: “Ingolf”, St. 118; “Challenger”, St. ES 10, ES 27, ES 54, ES 59, ES 129, ES 135, ES 137, AT 141, ES 147, ES 164, ES 172, ES 176, ES 184 (Paterson et al., 1982); “Challenger”, St. ES 04, ES 12, SBC 46, SBC 58, SBC 60, ES 111, ES 169,

ES 180 (Gage et al., 1983); “Challenger”, St. ES 06, ES 57, SBC 150, SBC 160, SBC 163, ES 197, ES 200, ES 244, ES 264, ES 283 (Harvey et al., 1988).

DISTRIBUTION: *O. gracilis* has been recorded on both sides of the North Atlantic in the west from off the east coast of North America to Iceland and in the east from the Norwegian Sea south to the Rockall Trough.

DEPTH RANGE: 106–2921 (2925) m.

Genus *Ophiomisdium* Koehler, 1914

COMPOSITION: 8 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiomisdium speciosum* Koehler, 1914 (Stöhr, O’Hara, 2007)

***Ophiomisdium pulchellum* (Thomson, 1877)**

Ophiomusium pulchellum Thomson, 1877: 67, Lyman, 1878: 118, Lyman, 1882: 96, Koehler, 1907: 266; *Ophiomisdium pulchellum* — Koehler, 1914: 32–37, Mortensen, 1927: 228, Madsen, 1951: 115, Clark A.M., Courtman-Stock, 1976: 190–191, Paterson, 1985: 141.

LOCALITIES: “Challenger”, St. 87 (Lyman, 1878); “Talisman”, 946–1916 m (Mortensen, 1927).

DISTRIBUTION: This species has been recorded in the eastern Atlantic from the Bay of Biscay south to off the Cape of Good Hope with a bathymetric range of 70–3063 m and in the western Atlantic off South Carolina at 440 m and off Pernambuco, Brazil at 270 m (Paterson, 1985).

DEPTH RANGE: 70–3065 m.

Genus *Ophiophycis* Koehler, 1901

COMPOSITION: 6 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiophycis mirabilis* Koehler, 1901 (Stöhr, O’Hara, 2007).

***Ophiophycis mirabilis* Koehler, 1901**

Ophiophycis mirabilis — Koehler, 1901b: 222, Koehler, 1909: 163, Cherbonnier (1970): 348, Cherbonnier, Sibuet, 1972: 1387, Paterson, 1985: 141–142.

LOCALITIES: BIOGAS, St.6 CP 23 (Paterson, 1985).

DISTRIBUTION: This species has been recorded only in the eastern Atlantic from the Bay of Biscay south to the Azores (Paterson, 1985).

DEPTH RANGE: 1165–1980 m.

Genus *Ophiopleura*

Danielssen et Koren, 1877

COMPOSITION: 2 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiopleura borealis* Danielssen et Koren, 1877 (Djakonov, 1954).

Ophiopleura borealis**Danielssen et Koren, 1877**

Ophiopleura borealis — Danielssen, Koren, 1877: 77, Levinsen, 1886: 23, Grieg, 1893: 3, Knipovitsch, 1901, Grieg, 1903: 15, Michailovskij, 1903: 530, Mortensen, 1903: 84, Koehler, 1909: 142, Grieg, 1910: 2, Mortensen, 1913: 352, Koehler, 1924: 328, Mortensen, 1927: 249, Schorygin, 1928: 50, Grieg, 1932: 32, Mortensen, 1932: 35, Mortensen, 1933: 95–96, Djakonov, 1954: 124–125, Bladder, 1957: 26–47, Stendall, 1967: 839, Gage et al., 1983: 295, Paterson, 1985: 128–129, Smirnov, Smirnov, 1990: 454, Smirnov, Smirnov, 1994: 165; *Luetkenia arctica* — Duncan, 1878: 188; *Ophiopleura arctica* — Duncan et Sladen, 1881: 55, Koehler, 1901: 101.

LOCALITIES: “Polarstern”—ARK XI/4 — St. 23a, 30a (unpublished).

DISTRIBUTION: *O. borealis* is an Arctic species found only in negative temperature water. It has been recorded from the Norwegian Sea as far south as the Faeroe Channel, east to the Barents, Kara and White Seas.

DEPTH RANGE: 10–2500 m.

Genus *Ophiotypa* Koehler, 1897

COMPOSITION: 1 species (Smirnov, 2004; 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiotypa simplex* Koehler, 1897 (Stöhr, O’Hara, 2007).

***Ophiotypa simplex* Koehler, 1897**

Ophiotypa simplex — Koehler, 1897: 3–6, Koehler, 1907: 255, Koehler, 1909: 145, Mortensen, 1927: 229, Madsen, 1951: 115, Madsen, 1954: 36, Litvinova, 1975: 196–198, Paterson, 1985: 144–145.

LOCALITIES: “Talisman”, 4000 m, “Talisman” and “Princesse Alice”, 3655–4360 m, (Mortensen, 1927: 229); “Discovery”, St. 8524#1 (Paterson, 1985).

DISTRIBUTION: This species has been recorded in the NE Atlantic from off the Azores and Cape Verde Is, it has also been found in the Venezuelan Basin in the Caribbean and from the Indian Ocean (Bay of Bengal) (Paterson, 1985).

DEPTH RANGE: 2925–4412 m.

Genus *Ophiura* Lamarck, 1801

COMPOSITION: 81 species (Smirnov, 2004; 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Asterias ophiura* Linnaeus, 1758 (Djakonov, 1954).

Ophiura (Dictenophiura) carnea**Lütken, 1858**

Ophiura carnea — Lütken, 1858: 41, Sars M., 1861: 24, Farran, 1913: 29, Mortensen, 1927: 243, Hertz, 1927: 69, Gage et al., 1983: 297, Harvey et al., 1988: 172; *Ophioglypha carnea* — Lyman, 1865: 10, Grieg, 1893: 6, Marenzeller, 1893: 15, Koehler, 1896: 203, Koehler, 1896:

241; Koehler, 1898: 35, Grieg, 1902: 10, Grieg, 1905: 159, Koehler, 1906: 6, Koehler, 1907: 260, Grieg, 1912: 8; *Dictenophiura carnea* — Clark H.L., 1923: 361; *Ophiura (Dictenophiura) carnea* — Mortensen, 1933: 81–82, Madsen, 1947: 13–14, Madsen, 1970: 234, Paterson, 1985: 117.

LOCALITIES: “Challenger”: St. ES 02 (Paterson, 1985).

DISTRIBUTION: *O. carnea* has been recorded from the Faeroes and Norway south to the Cape Verde Islands and the Mediterranean (Paterson, 1985).

DEPTH RANGE: 40–2857 m.

***Ophiura (Ophiuroglypha) clemens*
(Koehler, 1904)**

Ophioglypha clemens — Koehler, 1904: 51, Koehler, 1907: 291; *Ophiura clemens* — Clark H.L., 1915: 319, Matsumoto, 1917: 268, Koehler, 1922: 374–375; *Ophiura (Ophiuroglypha) clemens* — Paterson, 1985: 120–121.

LOCALITIES: “Travailleur” and “Talisman”, 1881: St. 38 (Paterson, 1985).

DISTRIBUTION: Within the North Atlantic this species has been recorded from the Bay of Biscay at a depth of 1916 m. It has also been found in the Indo-West Pacific off the Philippines and East Indies.

DEPTH RANGE: 700–1916 m.

***Ophiura (Ophiuroglypha) irrorata irrorata*
(Lyman, 1878)**

Ophioglypha irrorata — Lyman, 1878: 73, Lyman, 1882: 47, Koehler, 1896: 67, Koehler, 1896c: 241, Koehler, 1914: 18; *Ophioglypha orbiculata* — Lyman, 1882; *Ophioglypha grandis* — Verrill, 1894: 293; *Ophioglypha involuta* — Koehler, 1898: 61–63; *Ophioglypha tumulosa* — Lütken, Mortensen, 1899: 120; *Ophioglypha integra* — Koehler, 1908: 248; *Ophioglypha figurata* Koehler, 1908: 251; *Ophiura irrorata* — Clark H.L., 1911: 62, Clark H.L., 1915: 320, Matsumoto, 1917: 227, Grieg, 1921: 32, Koehler, 1922: 380, Clark H.L., 1923: 358–359, Mortensen, 1927: 235, Hertz, 1927: 86, Grieg, 1932: 32–33, Madsen, 1951: 116, Madsen, 1955: 11, Madsen, 1956: 26, Baranova, 1957: 207, Belyaev, 1972: 5–20; *Homalophiura irrorata* — Koehler, 1922: 55; *Ophiuroglypha irrorata* — Hertz, 1927: 86–87, Pawson, 1969: 52–54; *Ophiura grandis* — Mortensen, 1927: 234; *Ophiura (Ophiuroglypha) irrorata* — Mortensen, 1933: 86–87, Clark A.M., Courtman-Stock, 1976: 197, Paterson, 1985: 123–124.

LOCALITIES: “Ingolf”, St. 11 (Mortensen, 1933); BIOGAS, St. 3 CP 04; BIOGAS, St. 5 CV 34; “Discovery”, St. 8511#1, 8521#6 (Paterson, 1985); “Challenger”, St. AT 151, AT 175, AT 177, AT 181, AT 191, AT 195, AT 198 (Gage et al., 1983).

DISTRIBUTION: *O. irrorata irrorata* has been recorded from the Caribbean Sea, Atlantic, Indian, Southern and Pacific Oceans with a bathymetric range of 403–5870 m. In the North Atlantic it has been recorded from off Cape Cod and SW Iceland in the west and from the Bay of Biscay south to off North Africa in the east.

DEPTH RANGE: 403–5870 m.

***Ophiura (Ophiuroglypha) irrorata concreta*
(Koehler, 1901)**

Ophioglypha concreta — Koehler, 1901: 228, Koehler, 1906: 7, Koehler, 1907: 261, Koehler, 1909: 148–149; *Ophiura concreta* — Clark H.L., 1915: 324, Mortensen, 1927: 235, Madsen, 1951: 116; *Ophiura (Ophiuroglypha) irrorata concreta* — Paterson, 1985: 125.

LOCALITIES: “Talisman”, 2995 m, “Michael Sars”, 3120 m (Mortensen, 1927), “Princesse Alice II”, 1901: St. 1182; C.S. “Monarch”, 47°32'N, 08°43'W, 2250 m (Paterson, 1985).

DISTRIBUTION: *O. concreta* has been recorded from the Bay of Biscay, off the Cape Verde Islands and off South Africa at depths of 2250–2743 m.

DEPTH RANGE: 2250–3120 m.

***Ophiura (Ophiura) ljunghmani*
(Lyman, 1878)**

Ophioglypha ljunghmani — Lyman, 1878: 71, Lyman, 1882: 44–45, Lyman, 1883: 241, Verrill, 1885: 544, Koehler, 1896: 71, Clark H.L., 1901: 243, Koehler, 1907: 263, Koehler, 1909: 152, Koehler, 1914: 21; *Ophioglypha lepida* — Lyman, 1878: 70, Lyman, 1882: 43–44, Koehler, 1914: 20; *Ophioglypha ljunghmani* var. *spinulosa* — Verrill, 1885: 543; *Ophioglypha thouletii* — Koehler, 1896: 69, Koehler, 1909: 158; *Ophiura lepida* — Meissner, 1901: 925, Mortensen, 1927: 234; *Ophiura ljunghmani* — Farran, 1913: 31, Mortensen, 1927: 240–242, Mortensen, 1932: 33, Schoener, 1967: 647–650, Tommasi, 1970: 79–80, Lightfoot et al., 1979: 970–971, Gage, Tyler, 1981: 153–161, Gage et al., 1983: 298–299, Bartsch, 1983: 16–18, Harvey et al., 1988: 173; *Ophiura (Ophiura) ljunghmani* — Paterson, 1985: 118–120.

LOCALITIES: “Thor”, 2060 m (Mortensen, 1927); “Ingolf”, St. 11, 18, 64; “Thor”, St. 164 (Mortensen, 1933); “Meteor” 3, St. 100/AT 152 (Bartsch, 1983); BIOGAS, St.1: DS 10, DS 11, DS 13, DS 15–18, DS 32, DS 35–38, DS 61–64, DS 71, CV 08–10, CP 20, CV 23–25, CP 01, CP 02, CV 39, CP 08, CP 26, CP 27; BIOGAS, St.2: DS 19, DS 41, DS 57–DS 60, DS 66, DS 73–75, CV 37, CV 38, CV 40, CP 09, CP 10–12; BIOGAS, St.3: DS 76; BIOGAS, St.6: DS 26, DS 49–52, DS 70, DS 86, DS 87, CV 33, CP 07, CP 23, CP 24; BIOGAS, St.HZ: DS 05, DS 07, DS 09, CW 03; “Discovery”: St. 8511#1, 8970, 9021; “Challenger”, St. ES 08, ES 10, SBC 46, ES 56 (Paterson, 1985); “Challenger”, St. ES 02, ABD 03, ES 04, ES 06, ES 12, ES 27, ES 28, ES 31, ES 32, ES 34, ES 52, ES 53, ES 55, ES 57, SBC 58, ES 59, SBC 60, AT 107A, ES 111, ES 112, ES 129, ES 135, ES 137, AT 138, AT 139, ES 140, AT 141, ES 143, AT 144, ES 147, SBC 150, AT 151, ES 152, AT 153, AT 154, ES 164, AT 167, ES 169, AT 171, ES 172, AT 175, ES 176, AT 177, ES 180, AT 181, ES 184, ES 185, AT 186, ES 190, AT 191, AT 195, ES 197, AT 198, ES 200, SWT 11, SWT 13; “Shackleton”, St. ES 118, AT 119, AT 121 (Gage et al., 1983); “Challenger”, St. SBC 159, SBC 160, SBC 163, ES 231, ES 232, AT 233, ES 244, AT

245, AT 247, ES 264, ES 266, AT 267, AT 271, AT 273, ES 283, ES 285, AT 288, ES 289 (Harvey et al., 1988).

DISTRIBUTION: *O. ljunghmani* is a common species found on both sides of the North Atlantic often in large numbers. In the west it has been recorded from off Florida north to the Labrador Basin with a bathymetric range of 101–2750 m and in the east from SE Iceland, Rockall Trough, Bay of Biscay, off Azores, off the Canaries to North Africa with a bathymetric range of 777–4150m. It has also been recorded from off Pernambuco, Brazil, 736 m, and southern Africa (Paterson, 1985).

DEPTH RANGE: 101–6398 m.

***Ophiura (Ophiura) mundata*
(Koehler, 1906)**

Ophioglypha mundata — Koehler, 1906: 10–11, Koehler, 1907: 257, Koehler, 1909: 153; *Ophiura mundata* — Mortensen, 1933: 88–89; *Ophiura irrorata* — Mortensen, 1927: 237, [non *Ophiura irrorata* (Lyman, 1878)]; *Ophiura (Ophiura) mundata* — Paterson, 1985: 127–128; *Ophiura mundata* — Madsen, 1951: 116.

LOCALITIES: “Ingolf”, St. 11, 18 (Mortensen, 1933); BIOGAS, St. 2: CV 40; “Discovery”, St. 8511#1, 8512#4 (Paterson, 1985).

DISTRIBUTION: *O. mundata* has been recorded from the Labrador Basin, SW of Iceland, from the Bay of Biscay, off Portugal south to the Azores (Paterson, 1985).

DEPTH RANGE: 1674–4315 m.

***Ophiura (Ophiura) nitida* Mortensen, 1933**

Ophiura nitida — Mortensen, 1933: 84–86; *Ophiura (Ophiura) nitida* — Paterson, 1985: 121–122.

LOCALITIES: “Ingolf”, St. 18 (Mortensen, 1933; Paterson, 1985).

DISTRIBUTION: This species has only been recorded from the type locality on the Rekjanes Ridge, SW of Iceland at 2134 m.

DEPTH RANGE: 2134 m.

***Ophiura robusta* (Ayres, 1851)**

Ophirolepis robusta — Ayres, 1851: 134; *Ophiura fasciculata* — Forbes, 1854: 214; *Ophiura squamosa* — Lütken, 1859: 46, Sars, 1861: 22; *Ophioglypha robusta* — Lyman, 1865: 45, Duncan, Sladen, 1881: 62, Grieg, 1893: 6, Mortensen, 1903: 83, Clark H.L., 1904: 558, Mortensen, 1910: 271; *Ophioglypha robusta* — Clark H.L., 1901: 243; *Ophiura robusta* — Bell, 1892: 109, Grieg, 1900: 262, Michailovskij, 1903: 31, Grieg, 1907: 18, Koehler, 1909: 154, Süßbach, Breckner, 1910: 247, Mortensen, 1913: 349, von Hofsten, 1915: 78, Koehler, 1924: 312, Shorygin, 1926: 22, Mortensen, 1927: 242, Shorygin, 1928: 52, Mortensen, 1932: 32, Djakonov, 1933: 99, Mortensen, 1933: 78, Djakonov, 1954: 118, Smirnov, Smirnov, 1990: 454.

LOCALITIES: “Ob”, 1956, St. 35 (1950 m) (unpublished).

DISTRIBUTION: *O. robusta* has been recorded from the Öresund, Belt Sea, Kattegatt, and Skagerrak, the whole Norwegian coast, Shetlands to off Durham, Faeroes, Iceland, Spitsbergen, Barents Sea, White Sea, Kara Sea, Laptev Sea, Greenland, NE America south to Cape Cod.

DEPTH RANGE: 6–2000 m.

***Ophiura scomba* Paterson, 1985**

Ophiura scomba — Paterson, 1985: 125–127; Harvey et al., 1988: 173; *Ophiura irrorata* — Gage et al., 1983: 297–298 [non *O. irrorata* Lyman, 1878].

LOCALITIES: “Challenger”, St. AT 151, AT 191; BIOGAS, St. 1: CP01, CP27; BIOGAS, St. 5: CV34; BIOGAS, St. 6: CP24 (Paterson, 1985); “Challenger”, St. AT 245, AT 247, ES 264 (Harvey et al., 1988).

DISTRIBUTION: *O. scomba* has been recorded from the NE Atlantic from the Rockall Trough south to off North Africa (Morocco).

DEPTH RANGE: 1595–4406 m.

***Ophiura (Ophiura) violainae* (Cherbonnier et Sibuet, 1972)**

Homalophiura violainae — Cherbonnier, Sibuet, 1972: 1378; *Ophiura (Ophiura) violainae* — Paterson, 1985: 122.

LOCALITIES: NORATLANTE St.124; “Discovery” St.8511#1 (Paterson, 1985).

DISTRIBUTION: This species has been recorded from the northern Bay of Biscay and off Portugal.

DEPTH RANGE: 2210–2399 m.

Genus *Ophiurolepis* Matsumoto, 1915

COMPOSITION: 16 species (Smirnov, 2004, 2009).

TYPE SPECIES: *Ophiurolepis carinata* Studer, 1876 (Stöhr, O’Hara, 2007).

***Ophiurolepis inornata* (Lyman, 1878)**

Ophioglypha inornata — Lyman, 1878: 97, Lyman, 1882: 73–74, Koehler, 1904: 40; Koehler, 1907: 262–263; *Homalophiura inornata* — Clark H.L., 1915: 326, Koehler, 1922: 387, Mortensen, 1927: 327–328, Mortensen, 1936: 231, Madsen, 1951: 114; *Ophiurolepis inornata* — Madsen, 1969: 132, Paterson, 1985: 138–139; *Ophioglypha indivisa* — Lütken, Mortensen, 1899.

LOCALITIES: “Talisman”, 640–2995 m (Mortensen, 1927); “Challenger”, St.106 (Paterson, 1985).

DISTRIBUTION: *O. inornata* has a wide distribution being recorded from the Pacific, Indian, Southern and North Atlantic Oceans. In the latter ocean it has been found off St Paul’s Rocks, east of Trinidad, off Cap Blanc and the Azores with a bathymetric range of 640–3330 m (Paterson, 1985).

DEPTH RANGE: 240–3385 m.

Genus *Perlophiura*

Belyaev et Litvinova, 1972

COMPOSITION: 1 species (Smirnov 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Perlophiura profundissima* Belyaev et Litvinova, 1972 (Stöhr, O’Hara, 2007).

***Perlophiura profundissima* Belyaev et Litvinova, 1972**

Perlophiura profundissima — Belyaev, Litvinova, 1972: 7–11, Litvinova, 1975: 198–199, Paterson, 1985: 145.

LOCALITIES: BIOGAS, St. 5 DS 82; INCAL, OS05; WS08, WS09, WS10; “Discovery” St.8524#1 (Paterson, 1985).

DISTRIBUTION: *P. profundissima* lives in the lower abyssal zone (sensu Menzies, George, Rowe, 1973) rarely having been recorded shallower than 4000 m. Besides in the NE Atlantic it has been recorded from the Pacific and Indian Oceans and the Caribbean Sea (Paterson, 1985).

DEPTH RANGE: 2265–8135 m.

Genus *Stegophiura* Matsumoto, 1917

COMPOSITION: 14 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiura nodosa* Lütken, 1855 (Djakonov, 1954).

***Stegophiura macrarthra* H.L.Clark, 1915**

Ophioglypha stuwitzii? — Lyman, 1883: 242; *Ophioglypha elevata* — Koehler, 1914: 16–17, [non *O. elevata* (Lyman) acc. H. L. Clark, 1915]; *Stegophiura macrarthra* — Clark H.L., 1915: 317–316, Paterson, 1985: 135.

LOCALITIES: BIOGAS, St. 1 DS 64; BIOGAS, DS 33; “Challenger”: St. ES 112 (Paterson, 1985).

DISTRIBUTION: This species has been recorded from both sides of the North Atlantic; in the west off Georgia 32°43’25”N; 77°20’30”W, 419 m and in the east from the Rockall Trough south to the Bay of Biscay (Paterson, 1985).

DEPTH RANGE: 419–2338 m.

Genus *Uriopha* Paterson, 1980

COMPOSITION: 1 species (Paterson, 1985; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Uriopha ios* Paterson, 1980 (Stöhr, O’Hara, 2007).

Subfamily Ophiolepidinae

Genus *Ophiomusium* Lyman, 1869

COMPOSITION: 69 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiomusium eburneum* Lyman, 1869 (Stöhr, O’Hara, 2007).

***Ophiomusium lymani* Thomson, 1873**

Ophiomusium lymani — Thomson, 1873: 174, Lyman, 1878: 113, Lyman, 1882: 90, Lyman, 1883: 245, Koehler, 1895: 453; Koehler, 1896: 72, Koehler, 1896: 204, Koehler, 1898: 42, Lütken and Mortensen, 1899: 137, Nichols, 1903: 254, Koehler, 1904: 58, Kemp, 1905: 194, Schmidt, 1904: 24, Koehler, 1907: 264, Koehler, 1909: 161, Grieg, 1910: 33, Clark H.L., 1911: 107, Mortensen, 1913: 354, Farran, 1913: 34, Koehler, 1914: 26, Koehler, 1922: 411; Koehler, 1924: 330, Mortensen, 1927: 253, Mortensen, 1933: 100–102, Clark H.L., 1939: 67, Madsen, 1951: 115, Barham et al., 1967: 777, Schoener, 1967: 650–652, Schoener, 1968: 84–85, Okutami, 1969: 21–22, Rowe, 1971: 569–581, Ayala, Valentine, 1971: 51–57, Doyle, 1971: 661–664, Cherbonnier, Sibuet, 1972: 1386–7, Clark A.M., Courtman-Stock, 1976: 191, Murphy et al., 1976: 339–348, Gage, Tyler, 1982: 73–83, Gage et al., 1983: 299–300, Bartsch, 1983: 18–19, Paterson, 1985: 147–148, Harvey et al., 1988: 173; *Ophiomusa lymani* — Hertz, 1927: 103–105, Clark H.L., 1939: 128.

LOCALITIES: “Ingolf”, St. 11, 18, 64, 65; “Thor”, St. 164, 178 (Mortensen, 1933); “Meteor” 3, St. 100/AT 152 (Bartsch, 1983); “Challenger”, St. ES 34, AT 107A, AT 114, AT 138, AT 139, AT 141, AT 144, ES 147, AT 151, AT 153, AT 154, AT 161, SBC 166, AT 167, AT 169, AT 171, AT 175, ES 176, AT 177, AT 181, ES 182, ES 184, AT 186, AT 191, AT 195, ES 197, AT 198, ES 200, SWT 10, SWT 11, SWT 16, SWT 17, SWT 32 (Gage et al., 1983); BIOGAS, St. 1 DS 11–13, DS 15–18, DS 35, DS 36, DS 61–63, CV 08–10, CP 20, CV 23–25, CP 01–03, CV 39, CP 08, CP 26, CP 27; BIOGAS, St. 2 DS 60, CV 37, CV 40, CP 09, CP 12, CP 28; BIOGAS, St. 6 DS 26, DS 49–52, DS 70, DS 86, DS 87, CV 32, CP 07, CP 23–25; INCAL, DS 01, DS 02, DS 05, DS 07, CP 01, CP 03, CP 04, CP 08–10, WS 01, WS 02, WS 09, ØS 01, ØS 02, ØS 04; “Discovery”, St. 7423, 8511#1, 8512#4, 8521#6, 9133#5, 9753#7, 9753#8, 9756#3; “Challenger”, St. ES 04, ES 10, ES 12 (Paterson, 1985); “Challenger”, St. ES 185, ES 232, AT 233, ES 244, AT 245, AT 247, ES 264, AT 271, AT 273, ES 285, AT 288, ES 289, 3/85/7 OTSB (Harvey et al., 1988).

DISTRIBUTION: This species is found in the Pacific, Indian and Atlantic Oceans. In the North Atlantic it has been recorded from the West Indies north to the Davis Strait and SW off Iceland and in the east from SE of Iceland south to Cap Blanc (Paterson, 1985).

DEPTH RANGE: 104–6280 m.

Genus *Ophiosphalma* H.L. Clark, 1941

COMPOSITION: 9 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiomusium planum* Lyman, 1878 (Stöhr, O’Hara, 2007)

***Ophiosphalma armigerum* (Lyman, 1878)**

Ophiomusium armigerum — Lyman, 1878: 109, Lyman, 1882: 86–87, Koehler, 1914: 31–32; *Ophiomusium*

planum — Lyman, 1878: 218, Lyman, 1882: 99, Koehler, 1896c: 242; Koehler, 1899: 26, Koehler, 1906: 6, Koehler, 1907: 265, Koehler, 1914: 26, Grieg, 1910: 36, Nobre, 1931: 94; *Ophiosphalma armigerum* — Clark H.L., 1941: 97, Madsen, 1951: 109, 115, Schoener, 1968: 136–139, Bartsch, 1983b: 19, Paterson, 1985: 149; *Ophiosphalma planum* — Clark H.L., 1941: 98, Madsen, 1951: 108, 115, Madsen, 1954: 36.

LOCALITIES: “Meteor” 3, st. 24/AT 2, 30/AT 3, 37/ AT 4, 38/AT 5 (Bartsch, 1983b); Swedish Deep-Sea Exp. 1948, St. 357, Haul N 6, St. 401, Haul N 14 (Madsen, 1951); “Challenger”, St. 83, 106; BIOGAS, St. 2: CP 12; BIOGAS, St. 4 CV 35, CP 05, CP 15–17; BIOGAS, St. 5 CV 34, CP 06, CP 19, CP 20, CP 22; INCAL, DS 13, CP 12, WS 03, WS 07–10, ØS 04; “Discovery”, 27°33’N, 14°41’W, 2410 m (Paterson, 1985).

DISTRIBUTION: *O. armigerum* has been recorded from Indian Ocean, both sides of the North Atlantic, in the west from off the West Indies north to Nantucket and in the east from the Bay of Biscay south to Cape Verde Islands (Paterson, 1985).

DEPTH RANGE: 160–5025 m.

Genus *Ophiozonella* Matsumoto, 1915

COMPOSITION: 28 species (Smirnov 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiozona longispina* Clark, 1908 (Stöhr, O’Hara, 2007).

***Ophiozonella molesta* (Koehler, 1904)**

Ophiozona molesta — Koehler, 1904: 23, Koehler, 1906: 6, Koehler, 1907: 253; *Ophiozonella molesta* — Matsumoto, 1915: 82; Matsumoto, 1917: 294, Koehler, 1922: 425, Paterson, 1985: 150.

LOCALITIES: “Talisman”, 2115 m (Koehler 1907; Mortensen, 1927).

DISTRIBUTION: This species has been recorded once in the North Atlantic from south of the Canaries at depth of 2115 m, 30°01’N: 14°06’W. It has mostly been recorded from the Indo – West Pacific region at depths of 68–1407 m (Paterson, 1985).

DEPTH RANGE: 68–2115 m.

Family Ophioleucidae**Genus *Ophiernus* Lyman, 1878**

COMPOSITION: 4 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiernus vallincola* Lyman, 1878 (Stöhr, O’Hara, 2007).

***Ophiernus vallincola* Lyman, 1878**

Ophiernus vallincola — Lyman, 1878: 122, Clark H.L., 1923: 365, Hertz, 1927: 114, Clark H.L., 1939: 134, Madsen, 1951: 116, Madsen, 1954: 35, Paterson, 1985: 98–99; *Ophiernus abyssalis* — Koehler, 1896: 242; Koehler, 1909: 143.

LOCALITIES: “Discovery”, St. 8968; BIO-GAS, CP 34 (Paterson, 1985).

DISTRIBUTION: This is a widely spread species known from the Pacific, Indian and Atlantic Oceans. In the North Atlantic it has been recorded from SW of Ireland, the Bay of Biscay and the Azores (Paterson, 1985; Mortensen, 1927).

DEPTH RANGE: 840–4082 m.

Genus *Ophiostriatus* Madsen, 1983

COMPOSITION: 4 species (Smirnov, 2004; 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiopyren striatum* Mortensen, 1933 (Stöhr, O’Hara, 2007)

Ophiostriatus striatus (Mortensen, 1933)

Ophiopyren striatum — Mortensen, 1933: 69, Gorbunov, 1946: 47, Djakonov, 1946: 328, Djakonov, 1954: 129, Baranova, 1964: 366, Madsen, 1983: 61, Smirnov, Smirnov, 1990: 456.

LOCALITIES: “Severyi Polus–2” [“North Pole”–2], St. 11 (Brodskiy, Nikitin, 1955); “F. Litke”, 1955, St. 35, 37 (Baranova, 1964); “Severnyi Polus – 22” [“North Pole” – 22], St. 15, 21, 27 (Afanasjev, Filatova, 1980); “Fram I”, St. 3, 4, 15 (Madsen, 1983); “Polarstern” ARK XI/4 St. 27a (unpublished).

DISTRIBUTION: A typical deepwater inhabitant of the Polar basin. Found north of the Kara Sea and in the Laptev Sea (698–869 m); elsewhere recorded northeast of Iceland (1334–1395 m) (Paterson, 1985).

DEPTH RANGE: 698–4000 m.

Family Ophionereididae

Genus *Ophiochiton* Lyman, 1878

COMPOSITION: 6 species (Smirnov, 2004, 2009; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Ophiochiton fastigatus* Lyman, 1878 (Stöhr, O’Hara, 2007).

Ophiochiton ternispinus Lyman, 1883

Ophiochiton ternispinus — Lyman, 1883: 255, Hoyle, 1884: 144, Bell, 1892: 114, Mortensen, 1913: 354, Clark H.L., 1915: 287, Grieg, 1921: 33, Mortensen, 1927: 224, Mortensen, 1933: 67–69, Gage et al., 1983: 294–295, Bartsch, 1983b: 15–16, Paterson, 1985: 96–98, Harvey et al., 1988: 171; *Ophiochiton grandis* — Verrill, 1884: 383, Koehler, 1914: 116; *Ophiochiton solutus* — Koehler, 1906: 16–17; Koehler, 1907: 269–271, Mortensen, 1927: 224; *Ophiozona tjalfiana* — Mortensen, 1913: 38, Mortensen, 1913: 353; *Ophiozonella tjalfiana* — Matsumoto, 1915: 294, H. L. Clark, 1915: 340, Mortensen, 1933: 71.

LOCALITIES: “Meteor” 3, st. 100/AT 152 (Bartsch, 1983b); “Challenger”, Stn. AT 177, AT 191 (Paterson, 1985). Additional records in Mortensen, 1927.

DISTRIBUTION: It has been recorded from both sides of the Atlantic; in the west from the Gulf of Mexico north to the Davis Strait with a bathymetric range of 425–1244 m and in the east from off SE Iceland south to Azores with a bathymetric range of 1577–2220 m (Paterson, 1985).

DEPTH RANGE: 425–2220 m.

Family Ophiordermatidae

Genus *Bathypectinura* H.L. Clark, 1909

COMPOSITION: 2 species (Smirnov 2004; Stöhr, O’Hara, 2007).

TYPE SPECIES: *Pectinura lacertosa* Lyman, 1883 (Stöhr, O’Hara, 2007)

Bathypectinura heros (Lyman, 1879)

Pectinura heros — Lyman, 1879: 48, Lyman, 1882: 16, Koehler, 1897: 325, Koehler, 1904: 9; *Pectinura tessellata* — Lyman, 1883: 230; *Pectinura lacertosa* — Lyman, 1883: 231; *Pectinura conspicua* — Koehler, 1897: 322, Koehler, 1899: 37, Koehler, 1904: 9; *Pectinura modesta* — Koehler, 1904: 7; *Ophiocrates lenta* — Koehler, 1904: 19; *Pectinura elata* — Koehler, 1906: 7, Koehler, 1907: 249, Grieg, 1921: 32; *Ophiocrates secunda* — Koehler, 1906: 1, Koehler, 1907: 253, Mortensen, 1927: 228, Clark H.L., 1939: 132; *Bathypectinura lacertosa* — Clark H.L., 1909: 129–130, Clark H.L., 1915: 306, Clark H.L., 1941: 90; *Bathypectinura elata* — Clark H.L., 1909: 129–130, Clark H.L., 1915: 306, Mortensen, 1927: 226; *Bathypectinura modesta* — Clark H.L., 1909: 129–130, Clark H.L., 1915: 306, *Bathypectinura conspicua* — Clark H.L., 1909: 129–130, H. L. Clark, 1915: 306, Koehler, 1922: 342, Clark H.L., 1939: 96; *Bathypectinura tessellata* — Clark H.L., 1909: 129–130, Clark H.L., 1915: 306; *Bathypectinura heros* — Clark H.L., 1909: 129–130, Clark H.L., 1915: 306, Hertz, 1927: 116, Shoener, 1967: 77, Rowe and Menzies, 1969: 533, Madsen, 1973: 133–143, Paterson, 1985: 95–96; *Bathypectinura gotoi* — Matsumoto, 1915: 87, Matsumoto, 1917: 320; *Ophiozonella brachyactis* — Clark H.L., 1939: 129; *Ophiocrates intervallus* — Madsen, 1947: 9.

LOCALITIES: “Talisman”, 2325–2638 m; “Michael Sars”, St. 53, 25 (Mortensen, 1927); “Discovery”, St. 8968, 8971 (Paterson, 1985).

DISTRIBUTION: *B. heros* is a widespread species recorded from most oceans except the Arctic and Southern Oceans. In the Atlantic it has been recorded in the west from North Carolina at 1920–2050 m, and in the east from the Bay of Biscay to the Azores at 2100–2580 m (Paterson, 1985).

DEPTH RANGE: 1920–2865 m.

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