

A checklist of the holothurians of the far eastern seas of Russia

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Introduction

A total of 638 literature sources were used to compile distribution records of holothurians of the far eastern seas of Russia. From these 638 sources, a checklist of 92 species was established. The following information was gathered for each species recorded: (1) the geographical distribution in the far eastern seas of Russia; and (2) the characteristic depth distribution across its entire known range of occurrence.

Checklist of the 92 species recorded in the far eastern seas of Russia

Subclass Synaptacea Cuénot 1891

[nom. transl. pro subclasse Al. Smirnov 2007 (ex Synaptida Cuénot 1891, pro classis)]

Order Synaptida Cuénot 1891

Suborder Myriotrochina Al. Smirnov 1998

Family Myriotrochidae Théel 1877

Genus *Myriotrochus* Steenstrup 1851

1. *Myriotrochus longissimus* Belyaev 1970
2. *Myriotrochus mitsukurii* Ohshima 1915
3. *Myriotrochus rinkii* Steenstrup 1851

Genus *Prototrochus* Belyaev and Mironov 1982

4. *Prototrochus kurilensis* (Belyaev 1970)
5. *Prototrochus minutus* (Östergren 1905)
6. *Prototrochus zenkevitchi* (Belyaev 1970)

Genus *Siniotrochus* Pawson 1971

7. *Siniotrochus spiculifer* Belyaev and Mironov 1981

Suborder Synaptina Al. Smirnov 1998

Family Chiridotidae Östergren 1898a

Subfamily Chiridotinae Östergren 1898a, sensu Al. Smirnov 1998

Genus *Chiridota* Eschscholtz 1829

8. *Chiridota albatrossii* Edwards 1907
9. *Chiridota discolor* Eschscholtz 1829
10. *Chiridota ochotensis* Saveljeva 1941
11. *Chiridota orientalis* Al. Smirnov 1981
12. *Chiridota pellucida* Vahl 1806
13. *Chiridota tauiensis* Saveljeva 1941

Subfamily Taeniogyrinae Al. Smirnov 1998

Genus *Scoliorhapis* H.L. Clark 1946

14. *Scoliorhapis lindbergi* (Djakonov in Djakonov, Baranova et Saveljeva 1958)

Genus *Taeniogyrus* Semper 1868

15. *Taeniogyrus inexpectatus* (Smirnov 1989b)

Family Synaptidae (Burmeister 1837), sensu Östergren 1898a

Subfamily Rynkatorpinae Al. Smirnov 1989a

Genus *Rynkatorpa* Rowe and Pawson 1967

16. *Rynkatorpa duodactyla* (H.L. Clark 1907)

Subfamily Leptosynaptinae Al. Smirnov 1989a

Genus *Anapta* Semper 1868

17. *Anapta amurensis* Britten 1906
18. *Anapta ludwigi* Britten 1906

Genus *Labidoplax* Östergren 1898a, sensu Heding 1931a

19. *Labidoplax variabilis* (Théel 1886)

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Subclass Elpidiacea Al. Smirnov 2012

Order Elaspodida Théel 1882

Family Laetmogonidae Ekman 1926

Genus *Pannychia* Théel 1882

- 20.
- Pannychia moseleyi virgulifera*
- Théel 1882

Family Elpidiidae Théel 1882

Subfamily Peniagoninae Ekman 1926

Genus *Peniagone* Théel 1882

- 21.
- Peniagone dubia*
- (Djakonov and Saveljeva in Djakonov, Baranova and Saveljeva 1958)

- 22.
- Peniagone incerta*
- (Théel 1882)

- 23.
- Peniagone purpurea*
- (Théel 1882)

Genus *Psychroplanes* Gebruk 1988

- 24.
- Psychroplanes rigida*
- (Théel 1882)

Subfamily Elpidiinae Théel 1882, sensu Ekman 1926

Genus *Amperima* Pawson 1965

- 25.
- Amperima naresi*
- (Théel 1882)

Genus *Ellipinion* Hérouard 1923

- 26.
- Ellipinion papillosum*
- (Théel 1879)

Genus *Elpidia* Théel 1876

- 27.
- Elpidia birsteini*
- Belyaev 1971

- 28.
- Elpidia hanseni*
- Belyaev 1971

- 29.
- Elpidia kurilensis*
- Baranova and Belyaev in Belyaev 1971

- 30.
- Elpidia longicirrata*
- Belyaev 1971

- 31.
- Elpidia minutissima*
- Belyaev 1971

Genus *Kolga* Danielssen and Koren 1879

- 32.
- Kolga kamchatica*
- Rogacheva 2012

Genus *Scotoplanes* Théel 1882

- 33.
- Scotoplanes hanseni*
- Gebruk 1983

- 34.
- Scotoplanes kurilensis*
- Gebruk 1983

- 35.
- Scotoplanes theeli*
- Ohshima 1915

Family Psychropotidae Théel 1882

Genus *Benthodytes* Théel 1882

- 36.
- Benthodytes incerta*
- Ludwig 1894

Genus *Psychropotes* Théel 1882

- 37.
- Psychropotes longicauda*
- Théel 1882

Subclass Holothuriacea Al. Smirnov 2012

Order Aspidochirotida Grube 1840

Family Mesothuriidae Al. Smirnov 2012

Genus *Zygothuria* Perrier 1898

- 38.
- Zygothuria thomsoni*
- (Théel 1886)

Family Synallactidae Ludwig 1894

Genus *Bathyplores* Östergren 1896

- 39.
- Bathyplores moseleyi*
- (Théel 1886)

Genus *Paelopatides* Théel 1886

- 40.
- Paelopatides solea*
- Baranova 1955

Genus *Pseudostichopus* Théel 1886

- 41.
- Pseudostichopus mollis*
- Théel 1886

- 42.
- Pseudostichopus papillatus*
- (Djakonov 1952)

- 43.
- Pseudostichopus profundus*
- Djakonov 1952

Genus *Synallactes* Ludwig 1894

- 44.
- Synallactes chuni*
- Augustin 1908

- 45.
- Synallactes nozawai*
- Mitsukuri 1912

Family Stichopodidae Haeckel 1896

Genus *Apostichopus* Liao 1980

- 46.
- Apostichopus japonicus*
- Selenka 1867

- Order Dendrochirotida Grube 1840 [nom. transl. Pawson and Fell 1965 (ex. Dendrochiroten Grube, 1840)]
- Family Sclerodactylidae Panning 1949, sensu Smirnov 2012
- Genus *Eupentacta* Deichmann 1938
47. *Eupentacta fraudatrix* (Djakonov and Baranova in Djakonov, Baranova and Saveljeva 1958)
48. *Eupentacta pseudoquinquesemita* Deichmann 1938
- Genus *Havelockia* Pearson 1903
49. *Havelockia obunca* (Lampert 1885)
- Family Thyonidae Panning 1949, sensu Smirnov 2012
- Subfamily Thyoninae Panning 1949
- Genus *Allothyone* Panning 1949
50. *Allothyone longicauda* (Öestergren 1898b)
- Genus *Pentamera* Ayres 1852
51. *Pentamera calcigera* (Stimpson 1851)
- Genus *Thyone* Jaeger 1833
52. *Thyone bicornis* Ohshima 1915
- Subfamily Semperiellinae Heding and Panning 1954
- Genus *Phyrella* Heding and Panning 1954
53. *Phyrella fragilis* (Mitsukuri and Ohshima in Ohshima 1912)
- Family Cucumariidae Ludwig 1894
- Subfamily Cucumariinae Ludwig 1894, sensu Panning 1949
- Genus *Apseudocnus* Levin 2006
54. *Apseudocnus albus* Levin 2006
- Genus *Cucumaria* de Blainville 1834 emended Panning 1949
55. *Cucumaria anivaensis* Levin 2004
56. *Cucumaria conicospermium* Levin and Stepanov 2002
57. *Cucumaria diligens* Djakonov and Baranova, in Djakonov, Baranova and Saveljeva 1958
58. *Cucumaria djakonovi* Baranova 1980
59. *Cucumaria fusiformis* Levin, 2006
60. *Cucumaria insperata* Djakonov and Baranova in Djakonov, Baranova and Saveljeva 1958
61. *Cucumaria japonica* Semper 1868
62. *Cucumaria levini* Stepanov and Pilganchuk 2002
63. *Cucumaria obscura* Levin 2006
64. *Cucumaria okhotensis* Levin and Stepanov in Levin 2003
65. *Cucumaria saveljevae* Baranova 1980
66. *Cucumaria vegae* Théel 1886
- Genus *Pseudocnus* Panning 1949
67. *Pseudocnus fallax* (Ludwig 1874)
68. *Pseudocnus koraensis* (Östergren 1898b)
69. *Pseudocnus lamperti* (Ohshima 1915)
70. *Pseudocnus pusillus* (Ludvig 1886)
- Genus *Staurocucumis* Ekman 1927
71. *Staurocucumis abyssorum* (Théel 1886)
- Genus *Stereoderma* Ayres 1851 emend. Panning 1949
72. *Stereoderma imbricata* (Ohshima 1915)
- Subfamily Colochirinae Panning 1949
- Genus *Leptopentacta* H.L. Clark 1938
73. *Leptopentacta sachalinica* (Djakonov 1958)
- Genus *Ocnus* Forbes 1841
74. *Ocnus glacialis* (Ljungman 1880)
- Family Psolidae Burmeister 1837
- Genus *Psolidium* Ludwig 1887
75. *Psolidium djakonovi* Baranova 1977
- Genus *Psolus* Oken 1815
76. *Psolus chitonoides* H.L. Clark 1901
77. *Psolus eximius* Saveljeva 1941
78. *Psolus fabricii* (Düben and Koren 1846)
79. *Psolus japonicus* Öestergren 1898b
80. *Psolus peronii* Bell 1882
81. *Psolus phantapus* (Strussenfelt 1765)
82. *Psolus squamatus* (O.F. Müller 1776)

- Family Ypsilothuriidae Heding 1942
 Genus *Ypsilothuria* Perrier 1886
 83. *Ypsilothuria bitentaculata* (Ludwig 1894)
- Family Thyonidiidae (Heding and Panning 1954), status Smirnov 2012
 Genus *Ekmania* Hansen and McKenzie 1991
 84. *Ekmania barthii* (Troschel 1846)
 85. *Ekmania cylindricus* (Ohshima 1915)
 86. *Ekmania diomedea* (Ohshima 1915)
 Genus *Thyonidium* Düben and Koren 1845
 87. *Thyonidium kurilensis* (Levin 1984)
- Order Molpadiida Haeckel 1896
 Family Molpadiidae J. Müller 1850
 Genus *Molpadia* Risso 1826
 88. *Molpadia musculus* Risso 1826
 89. *Molpadia orientalis* (Saveljeva 1933)
 90. *Molpadia roretzi* (von Marenzeller 1877)
- Family Caudinidae Heding 1931b
 Genus *Paracaudina* Heding 1932
 91. *Paracaudina chilensis* (J. Müller 1850)
- Family Eupyrgidae Semper 1868
 Genus *Eupyrgus* Lütken 1857
 92. *Eupyrgus pacificus* Öestergren 1905

Geographical distribution of the 92 species recorded in the far eastern seas of Russia

The far eastern seas of Russia were divided into 14 geographical areas (Fig. 1), for which the following abbreviations were used: NWBS – northwest part of Bering Sea (from Cape Navarin to Bering Strait); MWBS – middle-west part of Bering Sea (from Cape Olytorsky to Cape Navarin); SWBS – southwest part of Bering Sea (Gulf Karaginsky, Gulf Korf, Gulf Olytorsky); CBS – central part of Bering Sea; KI – Commander Islands; SEK – off the southeast coast of Kamchatka (from Cape Lopatka to Cape Africa); KKT – Kurile-Kamchatka Trench; NKI – north Kuril Islands (Shumshu, Paramushir, Atlasova); MKI – middle Kuril Islands (Makanrushi, Onkotan, Harimkotan, Shiashkotan, Ekarma, Matua, Rasshua, Ushishir, Ketoy, Simushir, Urup); SKI – south Kuril Islands (Iturup, Kunashir, Shikotan etc.); EOS – east part of Okhotsk Sea (west coast of Kamchatka); WOS – west part of Okhotsk Sea; SI – coast of Sakhalin Island; and JS – continental shelf of Japan Sea.

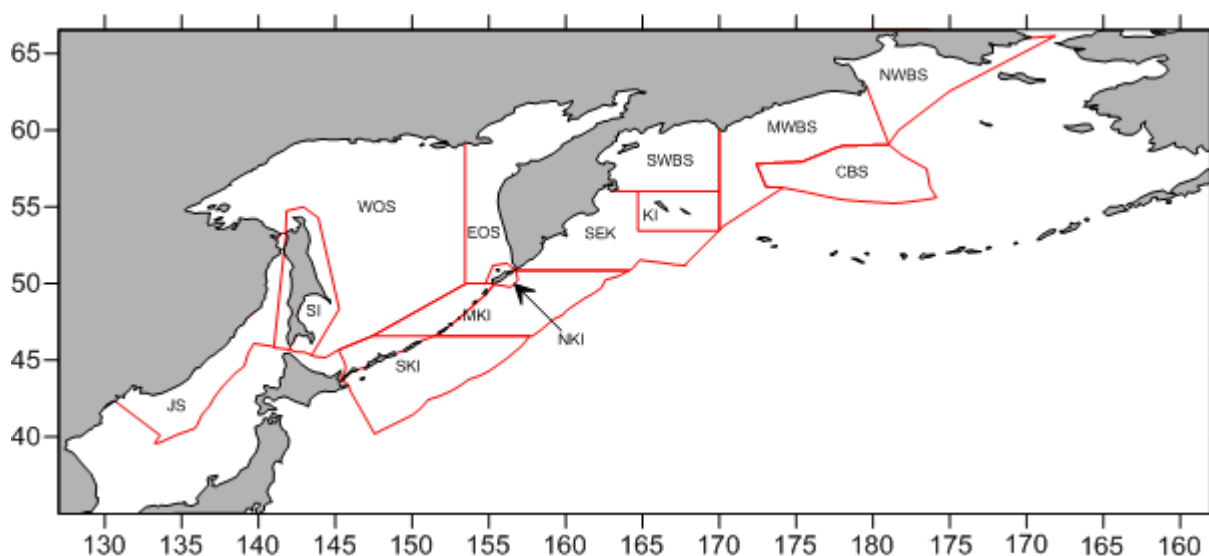


Figure 1. Division of the far eastern seas of Russia into 14 sectors. See text for abbreviations.

Detailed information on the sea cucumber species distribution in these 14 sectors is given in Table 1.

Table 1. Distribution of the 92 sea cucumber species in the checklist. Area abbreviations are defined in the text.

Species	Area													
	CBS	NWBS	MWBS	SWBS	KI	SEK	KKT	NKI	MKI	SKI	EOS	WOS	SI	JS
<i>Myriotrochus longissimus</i>							+							
<i>Myriotrochus mitsukurii</i>											+			+
<i>Myriotrochus rinkii</i>		+						+			+		+	
<i>Prototrochus kurilensis</i>							+							
<i>Prototrochus minutus</i>														+
<i>Prototrochus zenkevitchi</i>							+							
<i>Siniotrochus spiculifer</i>							+							
<i>Chiridota albatrossii</i>										+			+	+
<i>Chiridota discolor</i>		+			+	+					+	+		?
<i>Chiridota ochotensis</i>											+	+	+	
<i>Chiridota orientalis</i>				+		+		+					+	
<i>Chiridota pellucida</i>		+								+		+	+	
<i>Chiridota tauiensis</i>												+		
<i>Scoliorhapis lindbergi</i>										+			+	+
<i>Taeniogyrus inexpectatus</i>									+					
<i>Rynkatorpa duodactyla</i>	+		+							+				
<i>Anapta amurensis</i>													+	
<i>Anapta ludwigi</i>													+	
<i>Labidoplax variabilis</i>														+
<i>Pannychia moseleyi virgulifera</i>		+								+			+	
<i>Pannychia moseleyi mollis</i>											+			+
<i>Peniagone dubia</i>												+		
<i>Peniagone incerta</i>				+			+							
<i>Peniagone purpurea</i>							+							
<i>Psychroples rigida</i>							+							
<i>Amperima naresi</i>												+		
<i>Ellipinion papillosum</i>												+		
<i>Elpidia birsteini</i>							+							
<i>Elpidia hanseni</i>							+							
<i>Elpidia kurilensis</i>				+			+							
<i>Elpidia longicirrata</i>							+							
<i>Elpidia minutissima</i>				+										
<i>Kolga kamchatica</i>							+							
<i>Scotoplanes hanseni</i>							+							
<i>Scotoplanes kurilensis</i>				+			+							
<i>Scotoplanes theeli</i>										+				
<i>Benthodytes incerta</i>												+		
<i>Psychropotes longicauda</i>							+					+	+	
<i>Zygothuria thomsoni</i>							+				+			
<i>Bathyplores moseleyi</i>												+	+	
<i>Paelopatides solea</i>			+		+									



Species	Area													
	CBS	NWBS	MWBS	SWBS	KI	SEK	KKT	NKI	MKI	SKI	EOS	WOS	SI	JS
<i>Pseudostichopus mollis</i>					+					+			+	+
<i>Pseudostichopus papillatus</i>				+										
<i>Pseudostichopus profundus</i>				+										
<i>Synallactes chuni</i>			+							+		+	+	+
<i>Synallactes nozawai</i>		+	+	+	+	+			+	+	+		+	+
<i>Apostichopus japonicus</i>										+	?	+	+	+
<i>Eupentacta fraudatrix</i>					+	+		+	+	+			+	+
<i>Eupentacta pseudoquinquesemita</i>									+					
<i>Havelockia obunca</i>													+	
<i>Allothyone longicauda</i>										+			+	+
<i>Pentamera calcigera</i>		+	+	+		+				+	+	+	+	
<i>Thyone bicornis</i>									+	+				+
<i>Phyrella fragilis</i>									+	+				+
<i>Apseudocnus albus</i>													+	+
<i>Cucumaria anivaensis</i>													+	
<i>Cucumaria conicospermium</i>									+	+				+
<i>Cucumaria diligens</i>													+	
<i>Cucumaria djakonovi</i>			+	+	+	+								
<i>Cucumaria fusiformis</i>												+		
<i>Cucumaria insperata</i>													+	
<i>Cucumaria japonica</i>										?			?	+
<i>Cucumaria levini</i>											+			
<i>Cucumaria obscura</i>													+	
<i>Cucumaria okhotensis</i>											+			
<i>Cucumaria savelijevae</i>						+		+			+			
<i>Cucumaria vegae</i>					+	+		+	+	+	+	+	+	?
<i>Pseudocnus fallax</i>					+	+				+			+	
<i>Pseudocnus koraensis</i>										+			+	+
<i>Pseudocnus lamperti</i>					+									
<i>Pseudocnus pusillus</i>		+			+	+		+			+	+	+	+
<i>Staurocucumis abyssorum</i>			+	+	+	+								
<i>Stereoderma imbricata</i>													+	
<i>Leptopentacta sachalinica</i>									+	+			+	+
<i>Ocnus glacialis</i>		+	+	+						+	+	+	+	+
<i>Psolidium djakonovi</i>			+											
<i>Psolus chitonoides</i>		+	+		+				+	+	+	+	+	
<i>Psolus eximius</i>								+					+	
<i>Psolus fabricii</i>		+	+	+	+	+		+	+			+		+
<i>Psolus japonicus</i>										+			+	
<i>Psolus peronii</i>		+	+	+		+								
<i>Psolus phantapus</i>		+				+					+		+	+
<i>Psolus squamatus</i>										+	+		+	+
<i>Ypsilothuria bitentaculata</i>			+	+	+	+				+				
<i>Ekmania barthii</i>		+											+	



Species	Area													
	CBS	NWBS	MWBS	SWBS	KI	SEK	KKT	NKI	MKI	SKI	EOS	WOS	SI	JS
<i>Ekmania cylindricus</i>													+	
<i>Ekmania diomedea</i>		+											+	
<i>Thyonidium kurilensis</i>									+					
<i>Molpadia musculus</i>													+	
<i>Molpadia orientalis</i>										+			+	+
<i>Molpadia roretzi</i>			+					+			+		+	+
<i>Paracaudina chilensis</i>													+	+
<i>Eupyrigus pacificus</i>														+

Depth distribution of the 92 species recorded in the far eastern seas of Russia

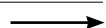
The depth distribution of the 92 species was classified according to the following categories:

- 0–350/400 m: sublittoral;
- 350/400–3,500 m: bathyal;
- 3,500–6,000 m: abyssal; and
- 6,000–11,000 m: ultra-abyssal.

Detailed information on the depth distribution pattern for the 92 species in the checklist is given in Table 2.

Table 2. Characteristic depth distribution of the 92 species across their entire known range of occurrence.

Species	Depth (m)	Characteristic depth distribution of the species
<i>Myriotrochus longissimus</i>	5,422–7,370	Abyssal–ultra-abyssal
<i>Myriotrochus mitsukurii</i>	67–1,760	Sublittoral–bathyal
<i>Myriotrochus rinkii</i>	2–790	Sublittoral–bathyal
<i>Prototrochus kurilensis</i>	7,795–8,430	Ultra-abyssal
<i>Prototrochus minutus</i>	60–3,357	Sublittoral–bathyal
<i>Prototrochus zenkevitchi</i>	7,400–8,135	Ultra-abyssal
<i>Siniotrochus spiculifer</i>	4,650–8,430	Abyssal–ultra-abyssal
<i>Chiridota albatrossii</i>	46–1,000	Sublittoral–bathyal
<i>Chiridota discolor</i>	0–1,037	Sublittoral–bathyal
<i>Chiridota ochotensis</i>	591–1,643	Sublittoral–bathyal
<i>Chiridota orientalis</i>	10–382	Sublittoral–bathyal
<i>Chiridota pellucida</i>	32–252	Sublittoral–bathyal
<i>Chiridota tauiensis</i>	0–1	Sublittoral
<i>Scoliorhapis lindbergi</i>	0–65	Sublittoral
<i>Taeniogyrus inexpectatus</i>	10	Sublittoral
<i>Rynkatorpa duodactyla</i>	1,006–2,980	Bathyal
<i>Anapta amurensis</i>	4.2	Sublittoral
<i>Anapta ludwigi</i>	0–53	Sublittoral
<i>Labidoplax variabilis</i>	0–250	Sublittoral
<i>Pannychia moseleyi</i>	212–2,499	Sublittoral–bathyal
<i>Peniagone dubia</i>	2,850	Bathyal



Species	Depth (m)	Characteristic depth distribution of the species
<i>Peniagone incerta</i>	2,293–7,230	Bathya–abyssal–ultra-abyssal
<i>Peniagone purpurea</i>	2,934–5,070	Bathya–abyssal
<i>Psychroples rigida</i>	3,194–5,230	Bathya–abyssal
<i>Amperima naresi</i>	1,889–7,160	Bathya–abyssal–ultra-abyssal
<i>Ellipinion papillosum</i>	700–5,400	Bathya–abyssal
<i>Elpidia birsteini</i>	8,060–9,345	Ultra-abyssal
<i>Elpidia hansenii</i>	8,610–9,735	Ultra-abyssal
<i>Elpidia kurilensis</i>	6,156–8,100	Abyssal–ultra-abyssal
<i>Elpidia longicirrata</i>	8,035–8,345	Ultra-abyssal
<i>Elpidia minutissima</i>	4,100–5,740	Abyssal
<i>Kolga kamchatica</i>	6,225–6,236	Ultra-abyssal
<i>Scotoplanes hansenii</i>	4,650–7,660	Abyssal–ultra-abyssal
<i>Scotoplanes kurilensis</i>	2,300–4,400	Bathyal–abyssal
<i>Scotoplanes theeli</i>	545–2,500	Bathyal
<i>Benthoedys incerta</i>	2,417–3,570 4,087?	Bathyal–abyssal
<i>Psychropotes longicauda</i>	2,210–6,420	Bathya–abyssal–ultra-abyssal
<i>Zygothuria thomsoni</i>	565–5,307	Bathya–abyssal
<i>Bathyploetes moseleyi</i>	50–1,730	Sublittoral–bathyal
<i>Paelopatides solea</i>	2,220–2,416	Bathyal
<i>Pseudostichopus mollis</i>	91–1,600	Sublittoral–bathyal
<i>Pseudostichopus papillatus</i>	182–4,200	Sublittoral–bathyal–abyssal
<i>Pseudostichopus profundus</i>	4,100–4,200	Abyssal
<i>Synallactes chuni</i>	75–653 1,000?	Sublittoral–bathyal
<i>Synallactes nozawai</i>	56–1,600	Sublittoral–bathyal
<i>Apostichopus japonicus</i>	0–150	Sublittoral
<i>Eupentacta fraudatrix</i>	0–40	Sublittoral
<i>Eupentacta pseudoquinesemita</i>	0–200	Sublittoral
<i>Havelockia obunca</i>	0–20	Sublittoral
<i>Allothyone longicauda</i>	15–241	Sublittoral
<i>Pentamera calcigera</i>	0–500	Sublittoral–bathyal
<i>Thyone bicornis</i>	19–635	Sublittoral–bathyal
<i>Phyrella fragilis</i>	0–450	Sublittoral–bathyal
<i>Apseudocnus albus</i>	30.5–74	Sublittoral
<i>Cucumaria anivaensis</i>	29	Sublittoral
<i>Cucumaria conicospermium</i>	34–102	Sublittoral
<i>Cucumaria diligens</i>	47	Sublittoral
<i>Cucumaria djakonovi</i>	5–140	Sublittoral
<i>Cucumaria fusiformis</i>	36	Sublittoral
<i>Cucumaria insperata</i>	36	Sublittoral
<i>Cucumaria japonica</i>	0–300	Sublittoral
<i>Cucumaria levini</i>	60?	Sublittoral
<i>Cucumaria obscura</i>	88	Sublittoral
<i>Cucumaria okhotensis</i>	14–131	Sublittoral
<i>Cucumaria savelijevae</i>	36–183	Sublittoral
<i>Cucumaria vegae</i>	0–51	Sublittoral
<i>Pseudocnus fallax</i>	8–180	Sublittoral



Species	Depth (m)	Characteristic depth distribution of the species
<i>Pseudocnus koraensis</i>	?–68	Sublittoral
<i>Pseudocnus lamperti</i>	79–247	Sublittoral
<i>Pseudocnus pusillus</i>	0–62	Sublittoral
<i>Staurocucumis abyssorum</i>	385–4,810	Sublittoral–bathyal
<i>Stereoderma imbricata</i>	127–136	Sublittoral
<i>Leptopentacta sachalinica</i>	0–28	Sublittoral
<i>Ocnus glacialis</i>	11–500	Sublittoral–bathyal
<i>Psolidium djakonovi</i>	1,440	Bathyal
<i>Psolus chitonoides</i>	0–624	Sublittoral–bathyal
<i>Psolus eximius</i>	60–128	Sublittoral
<i>Psolus fabricii</i>	0–180	Sublittoral
<i>Psolus japonicus</i>	40–300	Sublittoral
<i>Psolus peronii</i>	7–93	Sublittoral
<i>Psolus phantapus</i>	0–400	Sublittoral–bathyal
<i>Psolus squamatus</i>	7–1,206	Sublittoral–bathyal
<i>Ypsilothuria bitentaculata</i>	100–4,400	Sublittoral–bathyal–abyssal
<i>Ekmania barthii</i>	10–600	Sublittoral–bathyal
<i>Ekmania cylindricus</i>	133	Sublittoral
<i>Ekmania diomedea</i>	10–300	Sublittoral
<i>Thyonidium kurilensis</i>	10–228	Sublittoral
<i>Molpadia musculus</i>	35–5,205	Sublittoral–bathyal–abyssal
<i>Molpadia orientalis</i>	17–450	Sublittoral–bathyal
<i>Molpadia roretzi</i>	44–620	Sublittoral–bathyal
<i>Paracaudina chilensis</i>	1–990	Sublittoral–bathyal
<i>Eupyrgus pacificus</i>	31–1,475	Sublittoral–bathyal

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