

# Review of the Shell-bearing Gastropods in the Russian Waters of the East Sea.

## II. Caenogastropoda: Sorbeoconcha, Hypsogastropoda

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### ABSTRACT

Based on investigation of collections at the A.V.Zhirmunsky Institute of Marine Biology of the Far-Eastern Branch of the Russian Academy of Sciences (Vladivostok) and Zoological Institute of the Russian Academy of Sciences (Saint-Petersburg), as well as on the analysis of published data, the species composition of shell-bearing gastropod mollusks of the Russian waters of the East Sea, consisting of 331 species and subspecies, has been identified. Each species is assigned to a biogeographic grouping in the study area. Its type locality and habitat (depth and substrate) are also documented. The second part of this review includes 101 species from Sorbeoconcha and Hypsogastropoda (Caenogastropoda).

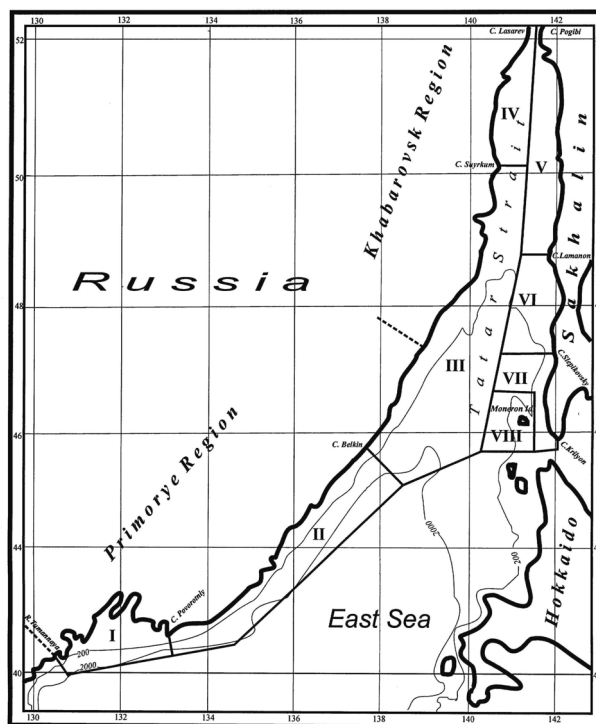
**Keywords:** Gastropoda, East Sea, faunal

### Introduction

The fauna of shell-bearing gastropod mollusks of the Russian waters of the East Sea includes 331 species and subspecies: 306 prosobranchs, 24 opisthobranchs, and 1 pulmonate. The second part of this review includes 101 species from Sorbeoconcha and Hypsogastropoda (Caenogastropoda).

For each species a brief synonymy is given, including the original description, and reference to the most complete faunal reports on the mollusks of Korea (Min *et al.*, 2004), Japan (Higo *et al.*, 1999), and Russia (Kantor and Sysoev, 2006). Its type locality is also listed, as well as its distribution. The distribution includes its biogeographic grouping, the specific faunal zones (Fig. 1) where it was obtained in the Russian waters of the East Sea (Roman numerals), and a general statement of its abundance.

Its habitat is also listed, and includes data on depth and substrate which refer only to its distribution in



**Fig. 1.** The faunal zones in the Russian Waters of the East Sea.

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the Russian waters of the East Sea.

The classification of gastropod mollusks developed by Bouchet and Rocroi (2005) is used in the paper up to a superfamily rank. Also, all shell-bearing gastropod mollusks have been divided into the groups of Patellogastropoda, Vetigastropoda, Cocculiniformia, Caenogastropoda and Heterobranchia, without assigning them a taxonomic rank. Subordinate taxa within a higher rank taxon are listed, as a rule, in alphabetical order. Subgenera were not distinguished.

## SYSTEMATICS

Sorbeoconcha

Superfamily Cerithioidea Fleming, 1822

Family Batillariidae Thiele, 1929

Genus *Batillaria* Benson, 1842

Type species: *Cerithium zonalis* Bruguière, 1792.

56. *Batillaria cumingii* (Crosse, 1862).

[*Lampania cumingii* Crosse, 1862: 54, pl. 1, fig. 10, 11; *Batillaria cumingii*: Higo *et al.*, 1999: 88 Min *et al.*, 2004: 131, fig. 225; Kantor and Sysoev, 2006: 47-48, pl. 22 K].

Type locality: Northern China.

Distribution: Asian subtropical-low-boreal species; I; common.

Habitat: Intertidal -9 m; muddy sand, muddy gravel

Family Litiopidae Gray, 1847

Genus *Diffalaba* Iredale, 1936

Type species: *Diffalaba opioniosa* Iredale, 1936.

57. *Diffalaba picta* (A. Adams, 1861).

[*Diala picta* A. Adams, 1861b: 243; *Diffalaba picta*: Higo *et al.*, 1999: 85 Min *et al.*, 2004: 125, fig. 203; Kantor and Sysoev, 2006: 48, pl. 22 E].

Type locality: Laoshang (Shangong Province, China).

Distribution: Asian subtropical-low-boreal species; I; common.

Habitat: Intertidal -2 m; rock and stones

Family Turritellidae Lovén, 1847

Genus *Neohaustator* Ida, 1952

Type species: *Turritella nipponica* Yokoyama, 1920.

58. *Neohaustator fortiliratus* Sowerby 1914

[*Turritella fortilirata* Sowerby, 1914: 36, pl. 2, fig. 12; *Neohaustator fortilirata fortilirata*: Higo *et al.*, 1999: 88 Min *et al.*, 2004: 131, fig. 227; *Neohaustator fortilirata*: Kantor and Sysoev, 2006: 48, pl. 23 A].

Type locality: Nemuro (Hokkaido).

Distribution: Asian low-boreal species; I, II, III, IV, V, VII, VIII (empty shells only); common.

Habitat: 30-200 m; mainly sand and muddy sand

Genus *Tachyrhynchus* Mörch, 1868

Type species: *Turritella reticulata* Mighels and Adams, 1842.

59. *Tachyrhynchus erosus erosus* (Couthouy, 1838)

[*Turritella erosa* Couthouy, 1838: 103, pl. III, fig. 1; *Tachyrhynchus erosus erosus*: Higo *et al.*, 1999: 89 Kantor and Sysoev, 2006: 49, pl. 23 C].

Type locality: Massachusetts Bay.

Distribution: Boreal-arctic species; I-VII; common.

Habitat: 10-220 m; mainly sand, muddy sand, and muddy sand with gravel

60. *Tachyrhynchus reticulatus reticulatus* (Mighels and Adams, 1842)

[*Turritella reticulata* Mighels and Adams, 1842: 50, pl. 4, fig. 19; *Tachyrhynchus reticulatus*: Higo *et al.*, 1999: 89; *Tachyrhynchus reticulatus reticulatus*: Kantor and Sysoev, 2006: 49, Table 23 B].

Type locality: Chaleur Bay (Gulf of St. Lawrence, eastern Canada).

Distribution: Boreal-arctic subspecies; I, II, III, IV, V, VI common.

Habitat: 65-373 m; sand, muddy sand and muddy sand with gravel

Clade Littorinimorpha

Superfamily Calyptraeidea Lamarck 1809

Family Calyptraeidae Lamarck 1809

Genus *Crepidula* Lamarck, 1799

Type species: *Patella fornicata* Linnaeus, 1758.

61. *Crepidula derjugini* Golikov and Kussakin, 1962. [Golikov and Kussakin, 1962: 291, pl. 1, fig. 4; Kantor and Sysoev, 2006: 50-51, pl. 23 G].  
Type locality: Sovetskaya Gavan Bay (Tatar Strait).  
Distribution: Asian low-boreal species; I, II, III, IV, V, VI, VII; common  
Habitat: Intertidal –62 m; rock and stones, sand; often on Neptunea shells.

62. *Crepidula grandis* Middendorff, 1849 [Middendorff, 1849: 101-103, pl. XI, figs. 8-10 Higo *et al.*, 1999: 116; Kantor and Sysoev, 2006: 51 pl. 23 F].  
Type locality: St. Paul Island, Bering Sea.  
Distribution: Pacific boreal species I (storm drift), IV, VI, VII; single records only  
Habitat: 8-500 m; rock and stones, sand, muddy sand with pebbles often on Neptunea shells.

Genus *Crepipatella* Lesso, 1830

Type species: *Patella dilatata* Linnaeus, 1803.

63. *Crepipatella lingulata* Gould, 1846 [*Crepidula lingulata* Gould, 1846: 160; *Crepipatella lingulata*: Higo *et al.*, 1999: 116; Kantor and Sysoev, 2006: 51, pl. 23 F].  
Type locality: Puget Sound, Oregon.  
Distribution: Pacific boreal species II, III, IV, V; single records only  
Habitat: 40-130 m; sand, muddy sand with pebbles

Superfamily Capuloidea Fleming, 1822

Family Capulidae Fleming, 1822

Genus *Ariadnaria* Habe, 1961

Type species: *Trichotropis borealis* Broderip and Sowerby, 1829.

64. *Ariadnaria borealis* (Broderip and Sowerby, 1829). [*Trichotropis borealis* Broderip and Sowerby, 1829: 375; Higo *et al.*, 1999: 117; *Ariadnaria borealis*: Kantor and Sysoev, 2006: 51-52, pl. 24 H].  
Type locality: Melville Island, northern Canada.  
Distribution: Boreal-arctic species; I, II, III, VI; rare.  
Habitat: 31-246 m; sand and sand with shells

65. *Ariadnaria insignis* (Middendorff 1849) [*Trichotropis insignis* Middendorff, 1848: 107, pl. X, figs. 7-9 Higo *et al.*, 1999: 117; *Ariadnaria insignis*: Kantor and Sysoev, 2006: 52, pl. 24 G].  
Type locality: Sitka (Bering Sea).  
Distribution: Pacific boreal species I, II, III, IV, V, VI, VII, VIII; common.  
Habitat: 5-100 m; stone, sand with shells

Genus *Ciliatotropis* Golikov, 1986

Type species: *Ciliatotropis striata* Golikov, 1986.

66. *Ciliatotropis japonica* Golikov, 1986. [*Ciliatotropis japonica* Golikov, 1986a: 14, figs. 1, 7 Min *et al.*, 2004: 153, fig. 314; Kantor and Sysoev, 2006: 53, pl. 25 B].  
Type locality: south-western part of Tatar Strait.  
Distribution: Asian low-boreal species; II, III; common.  
Habitat: 50-130 m; stone, muddy sand with pebbles

Genus *Neoiphinoe* Habe, 1978

Type species: *Trichiotrpsis unicarinata* Sowerby, 1834.

67. *Neoiphinoe coronata* (Gould, 1860). [*Trichotropis coronata* Gould, 1860: 324; *Iphinoe coronata*: Higo *et al.*, 1999: 117; *Neoiphinoe coronata*: Kantor and Sysoev, 2006: 54, pl. 26 C].  
Type locality: Strait of Seniavine, Arctic Ocean.  
Distribution: Boreal-arctic species; III; single record only  
Habitat: 205 m; muddy sand

68. *Neoiphinoe echinata* (Egorov and Alexeyev 1998) [*Iphinoe echinata* Egorov and Alexeyev 1998: 15, fig. 12; *Neoiphinoe echinata*: Kantor and Sysoev, 2006: 54; pl. 25 F].  
Type locality: Tatar Strait.  
Distribution: Asian low-boreal species; VI very rare.  
Habitat: 200 m.

69. *Neoiphinoe kroyeri* (Philippi, 1849) [*Trichotropis kroyeri* Philippi, 1849: 175; *Iphinopsis kroyeri*: Higo *et al.*, 1999: 118; Kantor and Sysoev, 2006: 54-55, pl. 25 F].

Type locality: Spitzbergen.

Distribution: Boreal-arctic species; VIII single record only

Habitat: 110 m; sand.

70. ***Neoiphinoe triseriata*** Golikov 1986

[*Iphinoe triseriata* Golikov, 1986a: 18-19, figs. 4, 10; *Neoiphinoe triseriata*: Kantor and Sysoev, 2006: 554-55, pl. 25 E].

Type locality: 4<sup>th</sup> Kurile Strait.

Distribution: Asian boreal species; VI; single record only

Habitat: 221 m; sand, mud.

Genus ***Torellia*** Loven in Jeffreys, 1867

Type species: *Torellia vestita* Jeffreys, 1867.

71. ***Torellia*** Golikov and Gulbin, 1978.

[*Torellia acuta* Golikov and Gulbin, 1978: 205-206, figs. 16; 24, 4; Kantor and Sysoev, 2006: 55, pl. 25 F].

Type locality: Urup Island (Middle Kurile Islands).

Distribution: Asian boreal species; VII; single record only

Habitat: 31 m; stones and sand

Genus ***Trichamathina*** Habe, 1962

Type species: *Amathina nobilis* A. Adams, 1867.

72. ***Trichamathina buccinula*** Golikov in Golikov and Scarlato, 1967

[*Capulus buccinulum* Golikov and Scarlato, 1967: 43, pl. 1, fig. 17; *Trichamathina buccinula*: Higo *et al.*, 1999: 118, Kantor and Sysoev, 2006: 55, pl. 26 G].

Type locality: Posjet Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I, II, IV, V; single records only

Habitat: 35-667 m; pebbles with sandy mud

73. ***Trichamathina nobilis*** (A. Adams, 1867)

[*Amathina nobilis* A. Adams, 1867: 312, pl. 19, fig. 27; *Trichamathina nobilis*: Higo *et al.*, 1999: 118; Min *et al.*, 2004: 153, fig. 317; Kantor and Sysoev, 2006: 55, pl. 26 H].

Type locality: Cape Ostriy (= Notoro), South-Eastern Sakhalin Island (Sea of Okhotsk).

Distribution: Asian boreal species; II, VII, VIII rare.

Habitat: 5-120 m; stone, pebble and muddy sand

Superfamily Littorinoidea Children, 1834

Family Littorinidae Children, 1834

Subfamily Lacuninae Gray, 1857

Genus ***Epheria*** Leach in Gray, 1847

Type species: *Turbo vinctus* Montagu, 1803.

74. ***Epheria decorata*** (Adams, 1861)

[*Lacuna decorata* A. Adams, 1861b: 304; *Epheria decorata*: Higo *et al.*, 1999: 93; Min *et al.*, 2004: 135, fig. 243; Kantor and Sysoev, 2006: 60, pl. 29 D].

Type locality: Rishiri Island, Hokkaido (East Sea).

Distribution: Asian low-boreal species; I, II, IV, VI, VII, VIII; common.

Habitat: intertidal -23 m; rock and stones

75. ***Epheria turrita*** (Adams, 1861)

[*Lacuna turrita* A. Adams, 1861b: 305; *Tamanella turrita*: Higo *et al.*, 1999: 93 *Tamanella turrita* Min *et al.*, 2004: 135, fig. 242; *Epheria turrita* Kantor and Sysoev, 2006: 61, pl. 29 G].

Type locality: Rishiri Island, Hokkaido (East Sea).

Distribution: Asian low-boreal species; I-VIII; abundant

Habitat: intertidal -25 m; mainly rock and stones usually in algae.

Genus ***Haloconcha*** Dall, 1886

Type species: *Lacunella refleza* Dall, 1884.

76. ***Haloconcha minor*** (Dall, 1919).

[*Haloconcha minor* Dall, 1919: 350 Higo *et al.*, 1999: 94; Kantor and Sysoev, 2006: 61, pl.29 I-I'].]

Type locality: St. Paul Island, Pribilof Group (Bering Sea).

Distribution: Pacific boreal species I, II-VII; common.

Habitat: intertidal -20 m; mainly rock and stones usually in algae.

77. ***Haloconcha refleza*** (Dall, 1884)

[*Lacunella refleza* Dall, 1884: 344-345, pl. 2, figs. 1-3; *Haloconcha refleza*: Higo *et al.*, 1999: 93-94; Kantor and Sysoev, 2006: 61-62, pl. 29 H].

Type locality: St. Paul Island, Pribilof Group (Bering Sea).

Distribution: Pacific boreal species II, VIII; single records only

Habitat: intertidal -30 m; rock.

Genus ***Stenotis*** A.Adams, 1863

Type species: *Stenotis laxata* A. Adams, 1863.

78. ***Stenotis uchidai*** (Habe, 1953)

[*Stenotis uchidai* Habe, 1953: 136, fig. 19; Higo *et al.*, 1999: 93; Min *et al.*, 2004: 137, fig. 247; Kantor and Sysoev, 2006: 62, pl. 30 C].

Type locality: Akkeshi Bay, Hokkaido.

Distribution: Asian low-boreal species; II, V, VII, VIII; single records only

Habitat: intertidal -25 m; rock; usually in algae and eelgrass

Subfamily Littorininae Children, 1834

Genus ***Littorina*** Ferrussac, 1821

Type species: *Turbo littoreus* Linnaeus, 1758.

79. ***Littorina brevicula*** (Philippi, 1844)

[*Turbo brevicula* Philippi, 1844: 166; *Littorina brevicula*: Higo *et al.*, 1999: 90; Min *et al.*, 2004: 133, fig. 233; Kantor and Sysoev, 2006: 57, pl. 27 E].

Type locality: mouth of the Yangtze River, China.

Distribution: Asian subtropical-low-boreal species; I-VIII; abundant.

Habitat: intertidal -3 m; various, mainly rock and stones

80. ***Littorina mandshurica*** Schrenck, 1867

[*Littorina mandshurica* Schrenck, 1867: 333-339, pl. XIV, figs. 14-20; Higo *et al.*, 1999: 90 Kantor and Sysoev, 2006: 58, pl. 27 H].

Type locality: Bay of Chihachev, Tatar Strait.

Distribution: Asian low-boreal species; I-VIII; abundant.

Habitat: intertidal -1 m; various, mainly rock and stones

81. ***Littorina sitchana*** Philippi, 1846

[*Littorina sitchana* Philippi, 1846: 140; *Littorina sitchana*: Higo *et al.*, 1999: 90-91; Min *et al.*, 2004: 133, fig. 234; Kantor and Sysoev, 2006: 59, pl. 28 A-B].

Type locality: Sitka, Alaska.

Distribution: Pacific boreal species I-VIII; abundant.

Habitat: intertidal -1.5 m; various, mainly rock and stones

82. ***Littorina squalida*** Broderip and Sowerby, 1829

[*Littorina squalida* Broderip and Sowerby, 1829: 370; Higo *et al.*, 1999: 90; Kantor and Sysoev, 2006: 59, pl. 28 I].

Type locality: Icy Cape (northwestern Alaska).

Distribution: Pacific boreal species I-VIII; abundant.

Habitat: intertidal -16 m; various, mainly rock and stones

Superfamily Naticoidea Guilding, 1834

Family Naticidae Guilding, 1834

Genus ***Bulbus*** Brown in Smith, 1839

Type species: *Bulbusmithii* Brown in Smith, 1839.

83. ***Bulbus normalis*** (Middendorff, 1851)

[*Natica aperta* forma *normalis* Middendorff, 1851: 206-208, pl. 11, figs. 1-3; *Bulbus flavus elongates*: Higo *et al.*, 1999: 143; *Bulbus flavus flavus*: Min *et al.*, 2004: 171, fig. 385; *Bulbus normalis*: Kantor and Sysoev, 2006: 63, pl. 30 J].

Type locality: Shantar Islands (Sea of Okhotsk).

Distribution: Asian boreal species; I, II, VI, VIII; common.

Habitat: 5-60 m; muddy sand with pebbles

84. ***Bulbus tenuiculus*** (Sowerby, 1915)

[*Natica (Polynices) tenuiculus* Sowerby, 1915: 166, pl. 10, fig. 3; *Bulbus flavus flavus*: Higo *et al.*, 1999: 142; *Bulbus tenuiculus*: Kantor and Sysoev, 2006: 64, pl. 30 I].

Type locality: Nemuro Peninsula (Sea of Okhotsk, Japan).

Distribution: Asian low-boreal species; I, IV, VI; VIII; rare.

Habitat: 40-130 m; muddy sand with pebbles

Genus ***Cryptonatica*** Dall, 1892

Type species: *Natica (Cryptonatica) floridiana* Dall, 1892.

85. ***Cryptonatica affinis*** (Gmelin, 1791)

[*Nerita affinis* Gmelin, 1791: 3675; *Cryptonatica clausa*: Higo *et al.*, 1999: 148; Min *et al.*, 2004: 177, fig. 411; *Cryptonatica affinis*: Kantor and Sysoev, 2006: 64, pl. 31 A].

Type locality: Iceland.

Distribution: Boreal-arctic species; I-VIII; common.

Habitat: 47-900 m; mainly sand and muddy sand

86. ***Cryptonatica aleutica*** (Dall, 1919)

[*Natica aleutica* Dall, 1919: 352; *Cryptonatica russa*: Higo *et al.*, 1999: 149; Min *et al.*, 2004: 177, fig. 413; *Cryptonatica aleutica*: Kantor and Sysoev, 2006: 64, pl. 31 B].

Type locality: Unalaska, Aleutian Islands.

Distribution: Pacific boreal species I-VII; common.

Habitat: 10-400 m; mainly sand and muddy sand

87. ***Cryptonatica hirasei*** (Pilsbry, 1905)

[*Natica hirasei* Pilsbry, 1905: 105; *Cryptonatica hirasei*: Higo *et al.*, 1999: 149; Min *et al.*, 2004: 179, fig. 419; Kantor and Sysoev, 2006: 64-65, pl. 31 D].

Type locality: Akkeshi and Kushiro, Hokkaido.

Distribution: Asian low-boreal species; I-VIII; common.

Habitat: intertidal -70 m; mainly sand and muddy sand, rock (rare)

88. ***Cryptonatica janthostoma*** (Deshayes, 1839)

[*Natica janthostoma* Deshayes, 1839: 361 *Cryptonatica janthostoma*: Higo *et al.*, 1999: 149; Min *et al.*, 2004: 179, fig. 417; Kantor and Sysoev, 2006: 65, pl. 31 F; *Cryptonatica janthostomoides*: Higo *et al.*, 1999: 149; Min *et al.*, 2004: 179, fig. 418].

Type locality: Kamchatka Peninsula.

Distribution: Asian boreal species; I-VIII; common.

Habitat: intertidal -120 m; mainly sand and muddy sand

89. ***Cryptonatica wakkanaiensis*** Habe and Ito, 1976

[*Cryptonatica wakkanaiensis* Habe and Ito, 1976: 8, fig.3; Higo *et al.*, 1999: 148; Min *et al.*, 2004: 177, fig. 412; Kantor and Sysoev, 2006: 65, pl. 31 G].

Type locality: Wakkanai Bay, northernmost Hokkaido.

Distribution: Asian low-boreal species; I, II, IV, V, VIII; common.

Habitat: intertidal -550 m; mainly muddy sand with gravel

90. ***Cryptonatica zenryumaruae*** Habe and Ito, 1976

[*Cryptonatica zenryumaruae* Habe and Ito, 1976, pp. 79-82, fig. 4; Higo *et al.*, 1999: 149 Min *et al.*, 2004: 177-178, fig. 416; Kantor and Sysoev, 2006: 65, pl. 31 C].

Type locality: Cape Soya, northernmost Hokkaido.

Distribution: Asian low-boreal species; VIII; rare.

Habitat: 18-115 m; shell-sand-gravel-shells with sand and gravel

Genus ***Glossaulax*** Pilsbry, 1929

Type species: *Neverita reclusiana* Deshayes, 1841.

91. ***Glossaulax didyma didyma*** (Röding, 1789)

[*Albula didyma* Röding, 1789: 20; *Glossaulax didyma didyma*: Higo *et al.*, 1999: 144; Min *et al.*, 2004: 173, fig. 392; *Glossaulax didyma*: Kantor and Sysoev, 2006: 66, pl. 32 F].

Type locality: none designated.

Distribution: Asian subtropical species; I; one record only (empty shell)

Habitat: beach drift only

Genus ***Lunatia*** Gray, 1847

Type species: *Natica ampullarius* Lamarck, 1822.

92. ***Lunatia pallida*** (Broderip and Sowerby, 1829)

[*Natica pallida* Broderip and Sowerby, 1829: 372; *Lunatia pallida*: Higo *et al.*, 1999: 143; Kantor and Sysoev, 2006: 66, pl. 32 E].

Type locality: Icy Cape (northwestern Alaska).

Distribution: Boreal-arctic species; I-VIII; common.

Habitat: 5-400 m mainly muddy sand

93. ***Lunatia pila*** (Pilsbry, 1911)

[*Polinices pila* Pilsbry, 1911: 32; *Lunatia pila pila*: Higo *et al.*, 1999: 143; *Lunatia pila*: Kantor and Sysoev, 2006: 66, pl. 32 F].

Type locality: Kushiro and Akkeshi, Hokkaido.

Distribution: Asian low-boreal species; I, II, IV, V, VIII; common.

Habitat: 8-80 m; mainly muddy sand

Genus ***Pseudopolinices*** Golikov et Sirenko, 1983

Type species: *Natica nana* Møller, 1842.

94. ***Pseudopolinices nanus*** (Møller, 1842)

[*Natica nana* Møller, 1842: 80 *Pseudopolinices nana*: Higo *et al.*, 1999: 143; Kantor and Sysoev, 2006: 67, pl. 32 C-C'].

Type locality: Greenland.

Distribution: Boreal-arctic species; I, VIII uncommon (dead shells only)

Habitat: 59-25 m sand

Superfamily Rissooidea Gray, 1847

Family Assimineidae H. et A. Adams, 1856 in  
1853-1858

Genus ***Assiminea*** Fleming, 1828

Type species: *Assiminea grayana* Fleming, 1828.

95. ***Assiminea lutea*** A. Adams, 1861

[*Assiminea lutea* A. Adams, 1861b: 307; Min *et al.*, 2004: 139, fig. 259; Kantor and Sysoev, 2006: 78, pl. 38 G; *Assiminea septentrionalis* Habe, 1942: 39, pl. 1 fig. 2, pl. 4 fig. 13; Higo *et al.*, 1999: 97; Min *et al.*, 2004: 139, fig. 257;].

Type locality: Baihe, Hebei, northern China.

Distribution: Asian subtropical-low-boreal species; I, VI; estuaries and lagoons common.

Habitat: intertidal -2 m; muddy sand, sand, mud, or stones, usually in sea grass

96. ***Assiminea possietica*** Golikov and Kussakin in Golikov et Scarlato, 1967

[*Assiminea possietica* Golikov and Scarlato, 1967: 36-37, fig. 28; Kantor and Sysoev, 2006: 78-79, pl. 38 H].

Type locality: Posjet Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; estuaries and lagoons common.

Habitat: intertidal; sand, muddy sand

Family Barleidae Gray, 1853

Genus ***Barleeia*** Clark, 1855

Type species: *Turbo ruber* Adams, 1797.

97. ***Barleeia angustata*** (Pilsbry, 1901)

[*Assiminea angustata* Pilsbry, 1901: 396; *Barleeia angustata*: Higo *et al.*, 1999: 105; Min *et al.*, 2004: 145, fig. 281; *Ansola angustata*: Kantor and Sysoev, 2006: 79, pl. 38 J].

Type locality: Rishiri Island, northwestern Hokkaido.

Distribution: Asian subtropical-low-boreal species; I, II, VII, VIII; common.

Habitat: intertidal -40 m; rock and stones mainly on algal fronds

98. ***Barleeia angulosa*** (Golikov and Kussakin, 1978)

[*Ansola angulosa* Golikov and Kussakin, 1978: 127, fig. 85; Kantor and Sysoev, 2006: 79, pl. 38 K].

Type locality: Putjatin Island (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; common.

Habitat: intertidal -1 m rock and stones

99. ***Barleeia labiosa*** (Golikov and Kussakin, 1978)

[*Ansola labiosa* Golikov and Kussakin, 1978: 127, fig. 85; Kantor and Sysoev, 2006: 79, pl. 38 I].

Type locality: Peter the Great Bay, East Sea.

Distribution: Asian low-boreal species; I; common.

Habitat: intertidal; rock and stones on *Sargassum* sp.

Family Caecidae Gray, 1847

Genus ***Brochina*** Gray, 1857

Type species: *Dentalium glaber* Montagu, 1803.

100. ***Brochina derjugini*** Golikov in Golikov and Scarlato, 1967

[*Brochina derjugini* Golikov and Scarlato, 1967: 38-39, fig. 29; Kantor and Sysoev, 2006: 80, pl. 39 A].

Type locality: Patrokl Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I, II, VIII; common.

Habitat: intertidal -70 m; rock and stones, sand (rare)

Genus **Fartulum** Carpenter, 1858

Type species: *Caecum leave* C. B. Adams, 1852.

101. **Fartulum bucerium** Golikov in Golikov and Scarlato, 1967

[*Fartulum bucerium* Golikov and Scarlato, 1967: 39 fig. 30 a, b; Kantor and Sysoev, 2006: 80, pl. 39 B].

Type locality: Patrokl Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; common.

Habitat: Intertidal -9 m; muddy sand, rock and stones (rare) usually in sea grass

Family Falsicingulidae Slavoshevskaya, 1975

Genus **Falsicingula** Habe, 1958

Type species: *Cingula kurilensis* Pilsbry, 1905.

102. **Falsicingula athera** Bartsch in Golikov and Scarlato, 1967

[*Falsicingula athera* Golikov and Scarlato, 1967: 28-29, fig.19; Kantor and Sysoev, 2006: 82, pl. 39 H-H'].

Type locality: Yuzhno-Morskoy (= Tafuin) Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I, II, IV, VII, VIII; common.

Habitat: intertidal -45 m; rock and stones, muddy sand (rare)

103. **Falsicingula kurilensis** (Pilsbry, 1905)

[*Cingula kurilensis* Pilsbry, 1905: 106, pl. 4, fig. 31; *Falsicingula kurilensis*: Higo *et al.*, 1999: 96 Kantor and Sysoev, 2006: 82, pl. 39 M].

Type locality: Kunashir Island (South Kurile Islands).

Distribution: Asian low-boreal species; II, V, VII, VIII; common.

Habitat: intertidal -5 m; rock and stones usually in algae

104. **Falsicingula mundana** (Yokoyama, 1926)

[*Rissoa (Cingula) mundana* Yokoyama, 1926: 276, pl.

33, fig. 11; *Cingula mundana*: Higo *et al.*, 1999: 98; *Falsicingula mundana*: Kantor and Sysoev, 2006: 82, pl. 39 J].

Type locality: Sado Island, East Sea (fossil).

Distribution: Asian low-boreal species; I-VIII; abundant

Habitat: intertidal -20 m; rock and stones usually in algae

Family Iravadiidae Thiele, 1928

Genus **Iravadia** Blanford, 1867

Type species: *Iravadia ornata* Blanford, 1867.

105. **Iravadia elegantula** (A.Adams, 1861).

[*Onoba elegantula* A. Adams, 1861a: 136; *Iravadia (Fluviocingula) elegantula*: Higo *et al.*, 1999: 96; *Fluviocingula elegantula*: Kantor and Sysoev, 2006: 112-113, pl. 51 C].

Type locality: Gulf of Pe-chili (Gulf of Chihli, China).

Distribution: Asian subtropical-low-boreal species; I, V; uncommon (brackish water lagoons, channels and river mouths)

Habitat: intertidal -0.3 m; muddy sand

Genus **Hyalia** H. et A. Adams

Type species: *Turbo vitrea* Montagu, 1803.

106. **Hyalia adamsi** Golikov et Kussakin in Golikov and Scarlato, 1971.

[*Hyalia adamsi* Golikov and Scarlato, 1971: 193, fig. 5; Kantor and Sysoev, 2006: 112, pl. 51 A-B].

Type locality: Patrokl Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I rare.

Habitat: intertidal -2 m; muddy sand, epiphytes of *Zostera* sp.

Family Pomatiopsidae Stimpson, 1865

Genus **Cecina** A. Adams, 1861

Type species: *Cecina manchurica* A. Adams, 1861.

107. **Cecina manchurica** A. Adams, 1861.

[*Cecina manchurica* A. Adams, 1861b: 308; Higo *et al.*, 1999: 96 (in part); Kantor and Sysoev, 2006: 115, pl. 52 D].



Type locality: Olga and Vladimir Bay (Tatar Strait, East Sea)

Distribution: Asian boreal species; I; uncommon.

Habitat: supratidal and intertidal; sand and muddy sand, in eelgrass and algae

108. *Cecina scarlatoi* Prosorova, 1996

[*Cecina scarlatoi* Prosorova, 1996: 661, fig. 1 (e); 3 (v); Kantor and Sysoev, 2006: 116, pl. 52 A].

Type locality: Posjet Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; uncommon

Habitat: supratidal and intertidal; sand and muddy sand, in eelgrass and algae

109. *Cecina tatarica* (Schrenck, 1867)

[*Truncatella tatarica* Schrenck, 1867: 310-312, pl. XIV, figs. 10-13; *Cecina manchurica*: Higo *et al.*, 1999: 96 (in part); Kantor and Sysoev, 2006: 116, pl. 52 G].

Type locality: Chihachev Bay, Tatar Strait.

Distribution: Asian low-boreal species; I; II; IV; uncommon.

Habitat: supratidal and intertidal; sand and muddy sand, in eelgrass and algae

Family Rissoidae Gray, 1847

Subfamily Rissoinae Gray, 1847

Genus *Alvania* Risso, 1826

Type species: *Alvania europea* Risso, 1826.

110. *Alvania ferruginea* A. Adams, 1861

[*Alvania ferruginea* A. Adams, 1861a: 138; Higo *et al.*, 1999: 99; Kantor and Sysoev, 2006: 67, pl. 33 B].

Type locality: Hakodate Bay, Sangar Strait.

Distribution: Asian low-boreal species; I rare.

Habitat: 67–101 m; sand and muddy sand

111. *Alvania reticulatum* (Golikov, 1986)

[*Punctulum reticulatum* Golikov, 1986b: 88-89, fig. 4; Kantor and Sysoev, 2006: 75, pl. 36 J]

Type locality: Rynda Bay (Southern Primorye, East Sea).

Distribution: Asian low-boreal species; I, II; uncommon.

Habitat: 240–880 m; sandy mud

Genus *Lucidestea* Laseron, 1956

Type species: *Lucidestea vitrea* Laseron, 1956.

112. *Lucidestea ornata* Golikov and Kussakin in Golikov and Scarlato, 1967

[*Falsisetia ornata* Golikov and Scarlato, 1967: 35, fig. 26; *Lucidestea ornata*: Higo *et al.*, 1999: 100; Kantor and Sysoev, 2006: 79, pl. 38 L-M].

Type locality: Posjet Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; uncommon.

Habitat: intertidal –4 m; rock and stones in algae and eelgrass

Genus *Mohrensternia* Stoliczka, 1868

Type species: *Rissoa angulata* Eichwald, 1864.

113. *Mohrensternia derjugini* Golikov and Licharev in Golikov and Scarlato, 1985

[*Mohrensternia derjugini* Golikov and Scarlato, 1985: 387, fig. 2; Kantor and Sysoev, 2006: 70, pl. 34 B].

Type locality: Svobodny Cape, southeastern Sakhalin (Sea of Okhotsk)

Distribution: Asian low-boreal species; I rare.

Habitat: 100–190 m; muddy sand

Genus *Onoba* H. et A. Adams, 1852

Type species: *Turbo striatus* J. Adams, 1852.

114. *Onoba auriwillii axicostata* Golikov and Gulbin, 1978.

[*Onoba auriwillii axicostata* Golikov and Gulbin, 1978; 194-195, figs. 2, 9, 10 Higo *et al.*, 1999: 100 Kantor and Sysoev, 2006: 71-72, pl. 34 I].

Type locality: South Kurile Islands.

Distribution: Asian low-boreal species; I, IV, VII, VIII; uncommon.

Habitat: 12–70 m; rock, stone and sand with shells

115. *Onoba castanella* (Dall, 1887)

[*Alvania castanella* Dall, 1887: 307-308, pl. 3, fig. 5 *Onoba castanella*: Higo *et al.*, 1999: 100; *Alvania mighelsi*: Kantor and Sysoev, 2006: 67-68, pl. 33 A].

Type locality: none designated.

Distribution: Pacific boreal species I, III, V, VI, VIII; uncommon.

Habitat: 15-74 m; rock and stones, and pebbles and shells

116. *Onoba compsa* Barch in Golikov, Gulbin, and Sirenko, 1987.

[*Onoba compsa* Golikov, Gulbin, and Sirenko, 1987: 33-34, pl. III, fig. 2; Kantor and Sysoev, 2006: 72, pl. 35 I].

Type locality: Sovetskaya Gavan Bay, Tatar Strait

Distribution: Asian low-boreal species; II, III, IV, VIII; uncommon.

Habitat: 6-70 m; sand with shells

117. *Onoba laticingulata* Golikov and Kussakin, 1978.

[*Onoba laticingulata* Golikov and Kussakin, 1978: 115-116, fig. 75; Kantor and Sysoev, 2006: 73, pl. 35 F].

Type locality: Paramushir Island (North Kurile Islands).

Distribution: Pacific high-boreal species (mainly), extending to low-boreal waters IV, V rare.

Habitat: 5-9.5 m; stones and rock

118. *Onoba tenuistriata* Golikov, Gulbin, and Sirenko, 1987.

[*Onoba tenuistriata* Golikov, Gulbin, and Sirenko, 1987: 34, pl. III, fig. 3; Kantor and Sysoev, 2006: 74, pl. 36 E].

Type locality: Moneron Island (East Sea).

Distribution: Asian low-boreal species; VIII rare.

Habitat: 50-70 m; sand with shells

Genus *Pusilina* Monterosato, 1884

Type species: *Rissoa pusilla* Philippi, 1836.

119. *Pusilina plicosa* (Smith, 1875).

[*Hydrobia plicosa* Smith, 1875: 103-104; *Alvania plicosa*: Higo *et al.*, 1999: 98; Min *et al.*, 2004: 143, fig. 271; *Pusilina plicosa*: Kantor and Sysoev, 2006: 76, pl. 37 A].

Type locality: Aomori Bay (northeastern Honshu).

Distribution: Asian low-boreal species; I-VIII; abundant  
Habitat: intertidal -32 m; rock and stones usually in algae

Genus *Setia* H. et A. Adams, 1852

Type species: *Rissoa pulcherrima* Jeffreys, 1848.

120. *Setia candida* A. Adams, 1861.

[*Setia candida* A. Adams, 1861a: 136; Kantor and Sysoev, 2006: 78, pl. 38 E].

Type locality: Sado Island (East Sea).

Distribution: Asian low-boreal species; I, III, VI rare.

Habitat: 11-33 m; sand and muddy sand

Family Stenothyridae Tryon, 1866

Genus *Stenothyra* Benson, 1856

Type species: *Nematura deltae* Benson, 1836.

121. *Stenothyra hokkaidoensis* Kuroda, 1962.

[*Stenothyra japonica hokkaidonis* Kuroda, 1962: 61, pl. 4, fig. 3; Higo *et al.*, 1999: 108; Kantor and Sysoev, 2006: 116, pl. 51 M].

Type locality: Teshio (Hokkaido, East Sea).

Distribution: Asian low-boreal species; I, VI; uncommon (brackish water lagoon-estuarine species)

Habitat: 0-1 m; sand and muddy sand

122. *Stenothyra recondite* Lindholm, 1929

[*Stenothyra recondita* Lindholm, 1929: 305; Kantor and Sysoev, 2006: 116-117, pl. 51 L; *Stenothyra japonica*: Higo *et al.*, 1999: 108].

Type locality: Estuary of Tumannaja River (southern Posjet Bay, Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I, VI; uncommon (brackish water lagoon-estuarine species)

Habitat: 0-1 m; sand and muddy sand

Family Truncatellidae Gray, 1840

Genus *Teinostoma* H. et A. Adams, 1853

Type species: *Teinostoma politum* A. Adams (SD Cossmann, 1918).

123. *Teinostoma atomaria* (A. Adams, 1861)

[*Ethalia atomaria* A. Adams, 1861b: 305-306;

*Teinostoma atomaria*: Kantor and Sysoev, 2006: 117, pl. 52 N].

Type locality: Shan-Tung (China).

Distribution: Asian subtropical-low-boreal species; I, V, VII rare.

Habitat: 0–33 m; sand and muddy sand

Superfamily Tonnoidea Suter, 1913 (1825)

Family Ranellidae Gray, 1854

Genus *Fusitriton* Cossmann, 1903

Type species: *Triton cancellatus* Lamarck, 1816.

124. *Fusitriton oregonensis* (Redfield, 1846)

[*Triton oregonense* Redfield, 1846: 165–166, pl. 11 fig. 2; *Fusitriton oregonensis*: Higo *et al.*, 1999: 155; Min *et al.*, 2004: 183, fig. 431; Kantor and Sysoev, 2006: 119, pl. 53 B; *Fusitriton galea* : Higo *et al.*, 1999: 155; Min *et al.*, 2004: 183, fig. 432].

Type locality: Straits of St. Juan de Fuca, Oregon (northwestern America).

Distribution: Pacific boreal species II, III, VI, VIII; uncommon.

Habitat: 15–120 m; rock and stones, sand with pebbles, and muddy sand

Superfamily Velutinoidea Gray, 1842

Family Velutinidae Gray, 1842

Subfamily Capulaeinae Golikov et Gulbin, 1990

Genus *Piliscus* Lovén, 1859

Type species: *Capulus radiatus*, Sars, 1851.

125. *Piliscus commodus* (Middendorff, 1851)

[*Pilidium commodum* Middendorff, 1851: 214, pl. 17, figs. 4–11; *Capulaeinae commoda*: Higo *et al.*, 1999: 142 (in part); *Piliscus commoda*: Kantor and Sysoev, 2006: 125, pl. 57 E (in part)].

Type locality: Tugur Bay (southern coast of the Sea of Okhotsk).

Distribution: Pacific boreal species, mainly Asian species extending to Arctic waters I, VI, VII, VIII rare.

Habitat: 36–60 m; muddy sand, stones.

Note. Many malacologists combine this species with *Piliscus radiatus* Sars, 1851. However, the *Piliscus commodus* shell consists of 2 whorls. Its embryonic

shell is small and forms a complete whorl not pressed against the posterior slope of the shell. The *Piliscus radiatus* shell consists of 1.5 whorls, and its embryonic shell is large, forming a curved horn pressed against the posterior slope (Gulbin and Golikov, 1997).

Subfamily Velutinae Gray, 1840

Genus *Cartilagovelutina* Golikov et Gulbin, 1990

Type species: *Velutina beringensis* Derjugin, 1950.

126. *Cartilagovelutina chondrina* (Bartsch in Derjugin, 1950)

[*Velutina chondrina* Derjugin, 1950: 16–17, fig. 11 pl. 2, fig. 11 pl. 5, fig. 5; *Cartilagovelutina chondrina*: Kantor and Sysoev, 2006: 120, pl. 53 E].

Type locality: Peter the Great Bay (East Sea).

Distribution: Asian boreal species; I, II, VII rare.

Habitat: 63–150 m; muddy sand

127. *Cartilagovelutina cristata* (Derjugin, 1950)

[*Velutina cristata* Derjugin, 1950: 16–17, fig. 11 pl. 2, fig. 11 pl. 5, fig. 5; *Cartilagovelutina cristata*: Kantor and Sysoev, 2006: 120, pl. 53 D].

Type locality: Tauiskaya Inlet (Sea of Okhotsk).

Distribution: Asian boreal species (mainly Sea of Okhotsk) VII; one record only

Habitat: depth unknown, muddy sand

Genus *Ciliatovelutina* Golikov et Gulbin, 1990

Type species: *Velutina lanigera* Møller, 1842.

128. *Ciliatovelutina capillata* (Derjugin, 1950)

[*Velutina capillata* Derjugin, 1950: 14–15, fig. 9 pl. 1, fig. 9 pl. 4, fig. 5; *Ciliatovelutina capillata*: Kantor and Sysoev, 2006: 120–121, pl. 54 C].

Type locality: Sakhalin, Sea of Okhotsk.

Distribution: Asian boreal species (mainly Sea of Okhotsk) VII; one record only

Habitat: 15 m rock

129. *Ciliatovelutina nana* (Bartsch in Derjugin, 1950)

[*Velutina nana* Derjugin, 1950: 12–13, fig. 6 pl. 1, fig.

6 pl. 4, fig. 6; *Ciliatovelutina nana*: Kantor and Sysoev, 2006: 121, pl. 54 B].

Type locality: East Sea.

Distribution: Asian boreal species; I, II, III, VI, VIII; uncommon.

Habitat: 1-349 m; sand with pebbles and muddy sand, rock and stones (rare)

Genus *Limneria* H. et A. Adams, 1851

Type species: *Limneria caspiensis* H. and A. Adams, 1851.

130. *Limneria prolongata* (Carpenter, 1864)

[*Velutina prolongata* Carpenter, 1864: 628, 661 *Limneria conica* Higo *et al.*, 1999: 142; Min *et al.*, 2004: 169, fig. 383; *Limneria bulla*: Higo *et al.*, 1999: 142; Min *et al.*, 2004: 171, fig. 384; *Limneria prolongata*: Kantor and Sysoev, 2006: 121-122, pl. 54 F-F'].

Type locality: Neach Bay, Vancouver Island.

Distribution: Pacific boreal species I, II, III, IV, VI, VII, VIII; common.

Habitat: 2-94 m; muddy sand, pebbles, rock

131. *Limneria undata bifasciata* (Derjugin, 1950)

[*Velutina undata bifasciata* Derjugin, 1950: 10-11, fig. 3 pl. 1, fig. 3-3a pl.2, fig. 3; Kantor and Sysoev, 2006: 122, pl. 54 D].

Type locality: Peter the Great Bay, East Sea.

Distribution: Asian low-boreal subspecies of a boreal-arctic species; I, II rare.

Habitat: 33-355 m; muddy sand with pebbles

Genus *Marsenina* Gray, 1850

Type species: *Lamellaria prodita* Lovén, 1850 (= *Oxinoe glabra* Couthouy, 1838).

132. *Marsenina rhombica* (Dall, 1871)

[*Lamellaria rhombica* Dall, 1871: 122, pl. 15, figs. 4, 5; *Marsenina rhombica*: Higo *et al.*, 1999: 142; Kantor and Sysoev, 2006: 123, pl. 55 C].

Type locality: Monterey, California.

Distribution: Pacific boreal species I, II rare.

Habitat: 2-5 m rock

133. *Marsenina uchidai* (Habe, 1958)

[*Lamellaria uchidai* Habe, 1958: 14-15, pl. 1, fig. 11; *Marsenina uchidai*: Higo *et al.*, 1999: 142; Kantor and Sysoev, 2006: 123, pl. 55 D].

Type locality: Akkeshi Bay, Hokkaido

Distribution: Asian boreal species; I, II, IV, V, VI, VII, VIII; common

Habitat: 5-60 m; sand with pebbles and shells, stones

Genus *Velutella* Gray, 1847

Type species: *Bulla flexilis* Montagu, 1808 (= *Helix plicatilis* Müller, 1776).

134. *Velutella plicatilis* (Müller, 1776)

[*Helix plicatilis* Müller 1776: 242; *Velutina cryptospira* Middendorff, 1851: 216, pl. 25, figs. 8-10; Kantor and Sysoev, 2006: 124, pl. 57 A; *Velutina (Velutella) plicatilis plicatilis*: Higo *et al.*, 1999: 141-142; Min *et al.*, 2004: 169, fig. 380; *Velutina (Velutella) plicatilis cryptospira*: Higo *et al.*, 1999: 142 (in part, non *V. coriacea* Pallas, 1847); Min *et al.*, 2004: 169, fig. 381; *Velutella plicatilis*: Kantor and Sysoev, 2006: 123, pl. 55 F].

Type locality: Denmark and Norway.

Distribution: Boreal-arctic species; I, II, VII, VIII rare.

Habitat: 15-210 m; rock and stones

Genus *Velutina* Fleming, 1821

Type species: *Bulla velutina* Müller, 1776.

135. *Velutina bartschi* Derjugin, 1950

[*Velutina bartschi* Derjugin, 1950: 18-19, fig. 14 pl. 2, fig. 14 pl. 5, fig. 14; Kantor and Sysoev, 2006:123, pl. 56 E]

Type locality: Medny Island (Commander Islands).

Distribution: Asian boreal species; VII; one record only

Habitat: 5 m; stones

136. *Velutina coriacea* Pallas, 1788

[*Helix coriacea* Pallas, 1788: 234, pl. VII, figs. 31, 32; *Velutina plicatilis cryptospira*: Higo *et al.*, 1999: 142 (in part); *Velutina coriacea coriacea*: Kantor and Sysoev, 2006: 123-124, pl. 57 B]

Type locality: Kamchatka, Sea of Okhotsk.  
 Distribution: Asian boreal species I, III, VII, VIII rare.

Habitat: 7–20 m; rock and stones, and muddy sand

137. *Velutina pulchella* Derjugin, 1950

[*Velutina pulchella* Derjugin, 1950: 17, fig. 12 pl. 2, fig. 12 pl. 5, fig. 12; Kantor and Sysoev, 2006: 124, pl. 56 B].

Type locality: Laperus Strait (southern Sakhalin).

Distribution: Asian boreal species; I, II, VII, VIII rare.

Habitat: 5–110 m; rock and stones

138. *Velutina tarasovi* Derjugin, 1950

[*Velutina tarasovi* Derjugin, 1950: 15–16, fig. 10 pl. 2, fig. 10 pl. 4, fig. 10; Kantor and Sysoev, 2006: 125, pl. 56 A].

Type locality: Valentin Bay (southern Primorye, East Sea).

Distribution: Asian low-boreal species; II, III rare.

Habitat: 17–30 m; rock and stones

139. *Velutina velutina* (Müller, 1776)

[*Bulla velutina* Müller, 1776: 242; *Velutina laevigata*: Kantor and Sysoev, 2006: 124, pl. 56 D].

Type locality: Denmark and Norway.

Distribution: Boreal-arctic species; VII, one record only

Habitat: 15 m; rock

Subfamily Onchidiopsinae Golikov et Gulbin, 1990

Genus *Onchidiopsis* Berg, 1853

Type species: *Onchidiopsis groenlandica* Bergh, 1853.

140. *Onchidiopsis groenlandica* (Bergh, 1853)

[*Onchidiopsis groenlandica* Bergh, 1853: 106, pl. 2; Kantor and Sysoev, 2006: 127, pl. 58 J; *Onchidiopsis glacialis*: Higo *et al.*, 1999: 142].

Type locality: Greenland.

Distribution: Boreal-arctic species; VIII, one record only

Habitat: unknown

141. *Onchidiopsis gurjanovae* Derjugin, 1937

[*Onchidiopsis gurjanovae* Derjugin, 1937: 13–14, fig. 6 pl. 3, fig. 5 pl. 4, fig. 5; Kantor and Sysoev, 2006: 127, pl. 58 F].

Type locality: Rynda Bay (southern Primorye, East Sea)

Distribution: Asian boreal species; II, III rare.

Habitat: 86–187 m; sand with pebbles

142. *Onchidiopsis maculata* Derjugin, 1937

[*Onchidiopsis maculata* Derjugin, 1937: 14–15, figs. 7, 8 pl. 1, fig. 1 pl. 3, fig. 6 pl. 4, fig. 6 pl. 5, fig. 6; Kantor and Sysoev, 2005: 115: 127, pl. 58 H].

Type locality: Peter the Great Bay, East Sea.

Distribution: Asian boreal species; I, II, IV rare.

Habitat: 5–80 m; muddy sand with stones

143. *Onchidiopsis nadinae* Derjugin, 1937

[*Onchidiopsis nadinae* Derjugin, 1937: 17–18, figs. 10, 11 pl. 3, fig. 8 pl. 4, fig. 8 pl. 5, fig. 8; Kantor and Sysoev, 2006: 127, pl. 58 I].

Type locality: western Kamchatka, Sea of Okhotsk

Distribution: Asian boreal species VIII; one record only

Habitat: 80 m shells

144. *Onchidiopsis variegata* Derjugin, 1937

[*Onchidiopsis variegata* Derjugin, 1937: 15–16, fig. 9 pl. 2, fig. 1 pl. 3, fig. 7 pl. 4, fig. 7 pl. 5, fig. 7; Kantor and Sysoev, 2006: 128, pl. 58 C].

Type locality: Peter the Great Bay, East Sea.

Distribution: Asian boreal species I, II, VII rare.

Habitat: 110–630 m; muddy sand with stones

Group Ptenoglossa

Superfamily Epitonioidea Berry, 1910 (1812)

Family Epitoniidae Berry, 1910 (1812)

Genus *Acirsa* Mörch, 1857

Type species: *Turritella costulata* Mighels and Adams, 1842.

145. *Acirsa ochotensis* (Middendorff, 1848)

[*Scalaria ochotensis* Middendorff, 1848: 1; *Acirsa ochotensis*: Higo *et al.*, 1999: 174; Kantor and Sysoev, 2006: 128, pl. 59 A–B]

Type locality: Sea of Okhotsk (southern region)

Distribution: Asian boreal species V; one record only  
Habitat: 10 m; rock.

Genus **Boreoscala** Kobelt, 1902

Type species: *Scalaria greenlandica* Perry, 1811.

146. **Boreoscala greenlandica** (Perry, 1811)  
[*Scalaria greenlandica* Perry, 1811: pl. 28, fig.8;  
*Boreoscala greenlandica*: Higo *et al.*, 1999: 179; Min *et al.*, 2004: 197, fig. 489; Kantor and Sysoev, 2006: 128, pl. 59 E].

Type locality: Greenland.

Distribution: Boreal-arctic species; I; one record only  
Habitat: 62 m; muddy sand

147. **Boreoscala rarecostulata** Golikov in Golikov and Scarlato, 1967

[*Boreoscala rarecostulata* Golikov and Scarlato, 1967: 48, fig. 36; Kantor and Sysoev, 2006:129, Pl. 59 D].

Type locality: Posjet Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; one record only

Habitat: 17 m; muddy sand

Genus **Papyriscala** Boury, 1909

Type species: *Scalaria latifasciata* Sowerby, 1878

148. **Papyriscala tricincta** Golikov in Golikov and Scarlato, 1967

[*Papyriscala tricincta* Golikov and Scarlato, 1967: 49, fig. 37; Kantor and Sysoev, 2006: 130, pl. 59 C].

Type locality: Posjet Bay (Peter the Great Bay, East Sea).

Distribution: Asian low-boreal species; I; one record only

Habitat: 1.5–5 m; muddy sand

Superfamily Eulimoidea Philippi, 1853

Family Eulimidae Philippi, 1853

Genus **Amamibalcis** Kuroda et Habe, 1950

Type species: *Amamibalcis kawamurai* Kuroda and Habe, 1950.

149. **Amamibalcis yessoensis** Rybakov and Yakovlev, 1993

[*Amamibalcis yessoensis* Rybakov and Yakovlev, 1993: 47-49, fig. 1a-e; Higo *et al.*, 1999: 191; Kantor and Sysoev, 2006: 130, pl. 59 C].

Type locality: Moneron Island, East Sea.

Distribution: Asian low-boreal species; I, III; VIII; single records only

Habitat: 15–20 m; parasitic in holothurians

Genus **Melanella** Bowdich, 1822

Type species: *Melanella dufrensei* Bowdich, 1822.

150. **Melanella conspicuus** (Golikov in Golikov and Scarlato, 1985)

[*Balcis conspicuuus* Golikov and Scarlato, 1985: 438, fig. 16; *Melanella conspicuous*: Kantor and Sysoev, 2006: 131, pl. 59 J].

Type locality: Tatar Strait (northern part)

Distribution: Asian low-boreal species; IV; one record only  
Habitat: 34 m; mud

151. **Melanella kuronamako** (Habe, 1952)

[*Balcis kuronamako* Habe 1952: 73-74, pl. VI, fig. 20; *Melanella kuronamako*: Higo *et al.*, 1999: 187; Kantor and Sysoev, 2006: 131].

Type locality: Kii Peninsula, central Honshu

Distribution: Asian low-boreal species; I, II, III, IV, VI, VII, VIII; common.

Habitat: intertidal –40 m; rock and mud, parasitic on echinoderms

Superfamily Triphoroidea Gray, 1847

Family Cerithiopsidae H. et A. Adams, 1854

Genus **Cerithiopsis** Forbes et Hanley, 1849

Type species: *Murex tuberculatus* Montagu, 1803.

152. **Cerithiopsis janira** Bartsch in Golikov and Scarlato, 1967

[*Cerithiopsis janira* Golikov and Scarlato, 1967: 42-43, fig. 33; Kantor and Sysoev, 2006: 135, pl. 60 J].

Type locality: East Sea.

Distribution: Asian low-boreal species; I, II, IV, VIII; single records only

Habitat: intertidal –100 m; sand with shells, boulders

153. *Cerithiopsis stejnegeri* Dall, 1884  
 [Cerithiopsis stejnegeri Dall, 1884: 345-346, pl. 2, fig. 4; Higo *et al.*, 1999: 172; Min *et al.*, 2004: 191, fig. 467; Kantor and Sysoev, 2006: 135, pl. 60 F].  
 Type locality: Kamchatka Island, Aleutian Islands.  
 Distribution: Pacific boreal species; I, VII, VIII; common.  
 Habitat: intertidal -20 m; rock and stones

Family Newtoniellidae Korobkov, 1955

Subfamily Eumetullinae Golikov and Starobogatov, 1975

Genus *Furukawaia* Kuroda and Habe, 1954

Type species: *Furukawaia fukuensis* Kuroda and Habe in Habe, 1961.

154. *Furukawaia fukuensis* Kuroda and Habe in Habe, 1961

[*Furukawaia fukuensis* Habe, 1961: 28, app.9, pl. 12, fig. 26; Higo *et al.*, 1999: 173; Kantor and Sysoev, 2006: 138, pl. 61 L F].

Type locality: Fukui Prefecture, Honshu (East Sea).  
 Distribution: Asian subtropical-low-boreal species; II, III, VII, VIII; uncommon.  
 Habitat: 10-100 m; sand with pebbles and shells, stones

155. *Furukawaia habei* Golikov and Gulbin, 1978  
 [*Furukawaia habei* Golikov and Gulbin, 1978: 219-220, figs. 24, 8, 25 Higo *et al.*, 1999: 173; 138, pl. 61 K].

Type locality: Zelenyi Island, southern Kuril Islands  
 Distribution: Asian boreal species IV, VIII rare.  
 Habitat: 70-115 m; sand, and sand with shells

Genus *Laskeya* Iredale 1919

Type species: *Tuirritella costulata* Møller, 1842.

156. *Laskeya striata* (Gulbin, 1982)  
 [*Eumetula striata* Gulbin, 1982: 70-71, text-fig.; Kantor and Sysoev, 2006: 137-138, pl.61 H].  
 Type locality: Bering Island, Commander Islands.  
 Distribution: Asian boreal species VIII; one record only  
 Habitat: 115 m; sand with shells

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