

# Review of the Shell-bearing Gastropods in the Russian Waters of the East Sea (Sea of Japan). IV. Heterobranchia

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## ABSTRACT

Based on investigation of archive collections of A.V. Zhirmunsky Institute of Marine Biology of the Far-Eastern Branch of the Russian Academy of Sciences (Vladivostok) and O.A. Scarlato 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 (Sea of Japan), consisting of 331 species and subspecies, has been identified. The fourth part of the Review includes 46 species of Heterobranchia (Allogastropoda, Opistobranchia, and Pulmonata). Each species is assigned to a biogeographic grouping in the study area. Its type locality and habitat (depth and substrate) are also documented.

**Key words:** Gastropoda, East Sea (Sea of Japan), 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 opistobranchs, and 1 pulmonate. The second part of this review includes 101 species in Sorbeoconcha and Hypogastropoda (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, 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 the Russian waters of the East Sea.

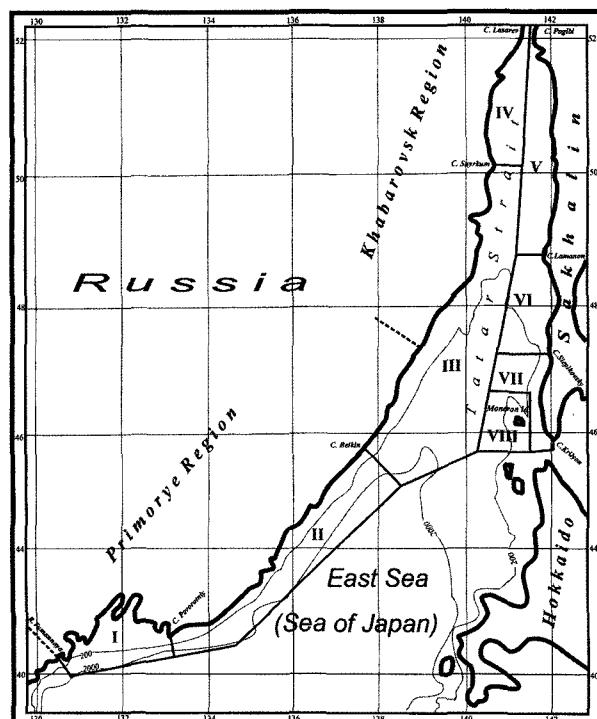


Fig. 1. The Faunal zones in the Russian Waters of the East Sea (Sea of Japan).

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The classification of gastropod mollusks developed by Bouchet and Rocroi (2005) is used in the paper up to 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

Heterobranchia  
Allogastropoda

Superfamily Acteonoidea d'Orbigny, 1843

Family Acteonidae d'Orbigny, 1843

Genus **Japonactaeon** Taki, 1956

Type species *Actaeon tornatilis* var. *nipponensis* Yamakawa, 1911.

287. **Japonactaeon** sp.

[*Japonactaeon nipponensis* (Yamakawa, 1911) : Martynov, 1997: 77]

Distribution: I; uncommon.

Habitat: 0.5-1.5 m; muddy sand.

Note. This is a new undescribed species (Chaban and Martynov, 2006)

Superfamily Mathidoidea Dall, 1889

Family Mathildidae Dall, 1889

Genus **Turritellopsis** G.O. Sars, 1878

Type species: *Turritella acicula* Stimpson, 1851 (= *Turritellopsis stimpsoni* Dall, 1919).

287. **Turritellopsis stimpsoni** Dall, 1919

[*Turritellopsis acicula* var. *stimpsoni* Dall, 1919: 347-348; *Turritellopsis acicula stimpsoni*: Higo et al., 1999: 89; *Turritellopsis stimpsoni*: Kantor and Sysoev, 2006: 238-239, pl. 121 A].

Type locality: Northern Norway (Arctic Ocean).

Distribution: Boreal-arctic species; I, IV; single records only.

Habitat: 10-520 m; mainly muddy sand and sand, less frequently with pebbles.

Superfamily Omalogyroidea G.O. Sars, 1878

Family Omalogyridae G.O. Sars, 1878

### Genus **Ammonicera** Vayssiere, 1893

Type species: *Homalogryra fischeriana* Montesorato, 1869 (= *Turbo bicarinata* Mühlfeld, 1816).

288. **Ammonicera shornikovi** Chernyshev, 2003

[Chernyshev, 2003: 109-110, fig. 2 A-D; Kantor and Sysoev, 2006: 247, pl. 123 A].

Type locality: Primorye region, Tatar Strait (East Sea).

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

Habitat: 12-18 m; rock.

289. **Ammonicera vladivostokensis** Chernyshev, 2003

[Chernyshev, 2003: 107, 109, fig. 1 C-F; Kantor and Sysoev, 2006: 247, pl. 123 B].

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

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

Habitat: Intertidal; stones.

### Superfamily Pyramidelloidea Gray, 1840

#### Family Pyramidellidae Gray, 1840

Note. The taxonomy of this family has not been adequately studied and remains highly confused. In the present review we follow the nomenclature of Higo et al., 1999.

### Genus **Chemnitsia** D'Orbigny, 1839

Type species: *Melania campanellae* Philippi, 1836.

290. **Chemnitzia multigyrata** (Dunker, 1882)

[*Turbanilla multigyrata* Dunker, 1882: 79, tab. XIII, fig. 18-20; Kantor and Sysoev, 2006: 246, pl. 122 J; *Chemnitzia multigyrata*: Higo et al., 1999: 375; Min, 2004: 293, fig. 874].

Type locality: Korea Strait.

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

Habitat: 3-33 m; muddy sand.

### Genus **Chrysallida** Carpenter, 1856

Type species: *Chemnitzia communis* C.B. Adams, 1852

291. **Chrysallida substantilla** Golikov in Golikov and Scarlato, 1967

[Golikov and Scarlato, 1967: 73, fig. 56; Kantor and Sysoev, 2006: 240-241, pl. 121 J].

Type locality: Peter the Great Bay (East Sea).  
 Distribution: Asian low-boreal species; I; rare.  
 Habitat: 5-20 m; muddy sand.

#### Genus *Cingulina* A. Adams, 1860

Type species: *Cingulina circinnata* A. Adams, 1860.  
 292. ***Cingulina cingulata*** (Dunker, 1860)  
 [*Turbanilla cingulata* Dunker, 1860: 239; *Cingulina cingulata*: Higo et al., 1999: 381; Min, 2004: 297, fig. 888; Kantor and Sysoev, 2006: 241, pl. 121 M].  
 Type locality: Nagasaki Harbor, Kyushu (East China Sea).  
 Distribution: Asian subtropical-low-boreal species; I, II; rare.  
 Habitat: Intertidal-70 m; rock and stones; parasitic on polychaetes.

#### Genus *Derjuginella* Habe, 1958

Type species: *Stylopsis rufofasciata* E. A. Smith, 1875  
 293. ***Derjuginella rufofasciata*** (E.A. Smith, 1875)  
 [*Stylopsis rufo-fasciata* E.A. Smith, 1875: 103; *Derjuginella rufofasciata*: Higo et al., 1999: 378; Min, 2004: 295, fig. 880; *Pyrgolampros rufofasciata*: Kantor and Sysoev, 2006: 245, pl. 122 M].  
 Type locality: East coast of Hokkaido (Japan).  
 Distribution: Asian low-boreal species; I, II, III, IV, V, VI, VII; common.  
 Habitat: Intertidal-72 m; mainly sand and muddy sand.

#### Genus *Iolaea* A. Adams, 1867

Type species: *Iole scitula* Adams, 1860.  
 294. ***Iolaea dubia*** Golikov and Kussakin in Golikov and Scarlato, 1967  
 [*Iolaea dubia* Golikov and Scarlato, 1967: 77-78, fig. 64; Higo et al., 1999: 368; Kantor and Sysoev, 2006: 242, pl. 121 K].  
 Type locality: Peter the Great Bay (East Sea).  
 Distribution: Asian low-boreal species; I; rare.  
 Habitat: 8-12 m; rock and stones.

#### Genus *Liostomia* G.O. Sars, 1878

Type species: *Turbanilla clavula* Lovén, 1846.  
 295. ***Liostomia minutissima*** Golikov in Golikov and Scarlato, 1967

[*Liostomia minutissima* Golikov and Scarlato, 1967: 71, fig. 53; Kantor and Sysoev, 2006: 242, pl. 121 P].  
 Type locality: Peter the Great Bay (East Sea).  
 Distribution: Asian low-boreal species; I; rare.  
 Habitat: 7-69 m; mud and muddy sand.

#### Genus *Menestho* Møller, 1842

Type species: *Turbo albulus* Fabricius, 1780.  
 296. ***Menestho exaratissima*** Dall and Bartsch, 1906  
 [*Odostomia (Menestho) exaratissima* Dall and Bartsch, 1906: 357, 358, pl. 19, fig. 3, 7; *Menestho exaratissima*: Higo et al., 1999: 368; *Menestho exarata*: Kantor and Sysoev, 2006: 242-243, pl. 122 A].  
 Type locality: Hakodate Bay, Sangar Strait (Japan).  
 Distribution: Asian low-boreal species; I, II, IV-VIII; common.  
 Habitat: 7-60 m; mainly sand and muddy sand.

#### Genus *Odostomia* Fleming, 1817

Type species: *Turbo plicata* Montagu, 1803  
 297. ***Odostomia culta*** Dall and Bartsch, 1906  
 [*Odostomia culta* Dall and Bartsch, 1906: 361, pl. 26, fig. 9; Higo et al., 1999: 359; Kantor and Sysoev, 2006: 244, pl. 122 G].  
 Type locality: Hakodate Bay, Sangar Strait (Japan).  
 Distribution: Asian subtropical-low-boreal species; I, III, IV, V; common.  
 Habitat: Intertidal-47 m; mainly sand and muddy sand.

#### 298. ***Odostomia fujitanii*** Yokoyama, 1927

[*Odostomia fujitanii* Yokoyama, 1927: 419-420, pl. 47, fig. 15; Higo et al., 1999: 359; Kantor and Sysoev, 2006: 244, pl. 122 E].  
 Type locality: Tokyo City (fossil).  
 Distribution: Asian low-boreal species; I, IV, VII; rare.  
 Habitat: Intertidal-60 m; sand and muddy sand.

#### Genus *Parthenina* Bucquoy, Dautzenberg and Dollfus., 1883

Type species: *Turbo interstinctus* Montagu, 1803.  
 299. ***Parthenina affectuosa*** (Yokoyama, 1927)  
 [*Odostomia (Egilina) affectuosa* Yokoyama, 1927: 420, pl. 42, fig. 10; *Parthenina affectuosa*: Higo et al.,

1999: 365; Min, 2004: 287 fig. 838; *Turbanilla affectuosa*: Kantor and Sysoev, 2006: 246].

Type locality: Tokyo City (fossil).

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

Habitat: 1-48 m; stones and pebbles.

300. *Parthenina gracilis* (Yokoyama, 1926)

[*Odostomia (Egilina) gracilis* Yokoyama, 1926: 279, pl. 32, fig. 19; *Egilina gracilis* Kantor and Sysoev, 2006: 241, pl. 121, fig. L].

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

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

Habitat: 1.5-19 m; sand and muddy sand.

Genus *Phasianema* S. Wood, 1842

Type species: *Phasianema sulcatus*, Wood, 1842.

301. *Phasianema lirata* (A. Adams), 1860

[*Isapis lirata* A. Adams, 1860: 120; *Phasianema lirata*: Higo et al., 1999: 383; *Phasianema phycophyllum* Kantor and Sysoev, 2006: 245, pl. 122 H].

Type locality: Mishima, East Sea.

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

Habitat: 1.5-30 m; rock and stones.

Genus *Syrnola* A. Adams, 1860

Type species: *Syrnola gracillima* A. Adams, 1860.

302. *Syrnola serotina* A. Adams, 1863

[*Syrnola serotina* A. Adams, 1863: 234; Higo et al., 1999: 371; *Styloptigma serotina*: Kantor and Sysoev, 2006: 245, pl. 122 L].

Type locality: Boso Peninsula, Eastern Honshu (Japan).

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

Habitat: 2.2 m; muddy sand.

Superfamily Ringiculoidae Philippi, 1853

Family Ringiculidae Philippi, 1853

Genus *Microglyphis* Dall, 1902

Type species: *Actaeon curtulus* Dall, 1890.

303. *Microglyphis japonicus* (Habe, 1952)

[*Hyporingicula japonica* Habe, 1952: 73, 76, fig. 5;

Higo et al., 1999: 386; Chaban and Martynov, 2006: 249, pl. 124 C].

Type locality: Southern Shikoku, Japan.

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

Habitat: 100-137 m; mud.

Superfamily Rissoelloidea Gray, 1850

Family Rissoellidae Gray, 1850

Genus *Jeffreysina* Thiele, 1925

Type species: *Jeffreysia globularis* Jeffreys, 1852.

304. *Jeffreysina elatior* Golikov, Gulbin and Sirenko, 1987

[*Jeffreysina elatior* Golikov et al., 1987: 35-36, pl. 3, fig. 6; Kantor and Sysoev, 2006: 248, pl. 123 D].

Type locality: Moneron Island (East Sea).

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

Habitat: 10-17 m; rock.

305. *Jeffreysina golikovi* Gulbin 1979

[*Jeffreysina golikovi* Gulbin 1979: 88-89, fig. 1, 2; Kantor and Sysoev, 2006: 248, pl. 123 E].

Type locality: Vanino Bay, Primorye Region (East Sea).

Distribution: Asian boreal species; III; rare.

Habitat: 0.3 m; rock.

306. *Jeffreysina violacea* Golikov and Kussakin in Golikov and Scarlato, 1971

[*Jeffreysina violacea* Golikov and Scarlato, 1971: 191-193, fig. 4; Kantor and Sysoev, 2006: 248, pl. 123 F].

Type locality: Kunashir Island (Kurile Islands).

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

Habitat: Intertidal-3-4 m; rock, stones and mud.

Opisthobranchia

Cephalaspidea

Superfamily Diaphanoidea Odhner, 1914

Family Diaphanidae Odhner, 1914

Genus *Diaphana* Brown, 1827

Type species: *Diaphana minuta* Brown, 1827.

307. *Diaphana hiemalis* (Couthouy, 1839)

[*Bulla hiemalis* Couthouy, 1839: 180-181, pl. 4, fig. 5;

*Diaphana tibai*: Higo *et al.*, 1999: 395; *Diaphana hiemalis*: Chaban and Martynov, 2006: 250, pl. 124 F].

Type locality: Massachusetts Bay (U. S. A.)

Distribution: Boreal-arctic species; I; uncommon.

Habitat: 170-2300 m; sand, muddy sand.

### 308. *Diaphana minuta* Brown, 1827

[*Diaphana minuta* Brown, 1827: 38, fig. 7-8; Chaban and Martynov, 2006: 250, pl. 124 I; *Diaphana watanabei*: Higo *et al.*, 1999: 395].

Type locality: Loch Torridon, Scotland.

Distribution: Amphiboreal species; I; uncommon.

Habitat: 32-40 m; muddy sand.

Superfamily Haminoeoidea Pilsbry, 1895

Family Haminoeidae Pilsbry, 1895

Genus *Cylichnatys* Kuroda and Habe, 1952

Type species: *Bullinella striata* Yamakawa, 1911 (= *Haminea angusta* Gould, 1859).

### 309. *Cylichnatys angusta* (Gould, 1859)

[*Haminea angusta* Gould, 1859: 139; *Cylichnatys angusta*: Higo *et al.*, 1999: 395; Min, 2004: 309, fig. 940; Chaban and Martynov, 2006: 252, pl. 125 A-B].

Type locality: Izu Peninsula, central Honshu, Japan.

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

Habitat: 5-29 m; muddy sand.

Superfamily Philinoidea Gray, 1850

Family Philinidae Gray, 1850

Genus *Philine* Ascanius, 1772

Type species: *Philine quadripartita* Ascanius, 1772 (= *Bulla aperta* Linnaeus, 1767).

### 310. *Philine argentata* Gould, 1859

[*Philine argentata* Gould, 1859: 139; Higo, al., 1999: 390; Min, 2004: 305, fig. 924; Chaban and Martynov, 2006: 256, pl. 127 C-D].

Type locality: Hakodate Bay, Japan.

Distribution: Asian subtropical low-boreal species; I, III, IV, VIII; common.

Habitat: 4-1600 m; sand, mud, muddy sand.

### 311. *Philine scalpta* A. Adams, 1862

[*Philine scalpta* A. Adams, 1862: 160; Chaban and Martynov, 2006: 257, pl. 127 G-H]

Type locality: Korea Strait.

Distribution: Asian subtropical species; I; common.

Habitat: 1-21 m; sand, mud, muddy sand.

Note. Higo *et al.*, (1999: 390) noted this species as a junior synonym of *P. vitrea* Gould, 1859. They are different species, in our opinion, because they exhibit differences in their fine sculpture: *P. scalpta* with "shell … engraved by wavy, transverse, distant impressed lines", but *P. vitrea* with "shell … marked with sinuous concentric waves" (Pilsbry, 1895: 6-7).

### Genus *Yokoyamaia* Habe, 1950

Type species: *Philine ornatissima* Yokoyama, 1927.

### 312. *Yokoyamaia ornatissima* (Yokoyama, 1927)

[*Philine ornatissima* Yokoyama, 1927: 408, pl. 46, fig. 6; *Yokoyamaia ornatissima*: Higo *et al.*, 1999: 391; Chaban and Martynov, 2006: 257, pl. 127 I-J].

Type locality: Tokyo City, Japan (fossil).

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

Habitat: 1.5-48 m; sand, muddy sand.

### Family Aglajidae Pilsbry, 1895

### Genus *Melanochlamys* Cheeseman, 1881

Type species: *Melanochlamys cylindrica* Cheeseman, 1881

### 313. *Melanochlamys diomedea* (Bergh, 1893)

[*Doridium diomedaeum* Bergh, 1893: 133; *Melanochlamys diomedea*: Chaban and Martynov, 2006: 252, pl. 125 I].

Type locality: Kodiak Island, (Gulf of Alaska).

Distribution: Pacific subtropical-boreal species; I-IV; uncommon.

Habitat: 1-80 m; mud, sand, in eelgrass (*Zostera* sp.)

### Genus *Philinopsis* Pease, 1860

Type species: *Philinopsis speciosa* Pease, 1860.

### 314. *Philinopsis gigliolii* (Tapparone-Canefri, 1874)

[*Aglaia gigliolii* Tapparone-Canefri, 1874: 110-111, pl. 1, fig. 18; *Philinopsis gigliolii*: Chaban and Martynov, 2006: 253, pl. 125 G-H].

Type locality: "Regione Giapponese" (Yokohama?).

Distribution: Pacific subtropical species; I; uncommon.  
Habitat: 2-10 m; sand, muddy sand.

Family Cylichnidae H. Adams & A. Adams, 1854

Genus "*Acteocina*" Gray, 1847

315. "*Acteocina*" *matusimana* (Nomura, 1939)  
[*Retusa matusimana* Nomura, 1939: 20; *Retusa (Decolifer) matusimanus*: Higo et al., 1999: 388; Min, 2004: 303 fig. 911; «*Acteocina*» *matusimana*: Chaban and Martynov, 2006: 253, pl. 126 A].

Type locality: Matusima Bay, Pacific coast of Honshu, Japan.

Distribution: Asian subtropical species; I; common.

Habitat: 0.5-20 m; muddy sand.

Note. This species belongs to a separate, still-undescribed genus.

Genus *Cylichna* Lovén, 1846

Type species: *Bulla cylindracea* Pennant, 1777.

316. *Cylichna alba* (Brown, 1827)

[*Volvaria alba* Brown, 1827: 3, pl. 19, figs. 43, 44; *Cylichna consobrina*: Higo et al., 1999: 393; Min, 2004: 307, fig. 935; *Cylichna alba*: Chaban and Martynov, 2006: 253-254, pl. 126 B-E].

Type locality: Greenock, England.

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

Habitat: 5-2400 m; sand, muddy sand.

Genus *Cylichnoides* Minichev, 1977

Type species: *Bulla occulta* Mighels and Adams, 1842.

317. *Cylichnoides occultus* (Mighels and Adams, 1842)

[*Bulla occulta* Mighels and Adams, 1842: 54, pl. 4, fig. 11; *Cylichnoides occulta*: Chaban and Martynov, 2006: 254, pl. 126 G].

Type locality: Westbrook, in the vicinity of Portland, Maine (U. S. A.).

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

Habitat: 55-190 m; sand, muddy sand.

Family Retusidae Thiele, 1925

Genus *Retusa* Brown, 1827

Type species: *Bulla obtusa* Montagu, 1803.

318. *Retusa instabilis* Minichev, 1971

[*Retusa instabilis* Minichev, 1971: 230, figs. 1 A, B, V, G, 2; Chaban and Martynov, 2006: 258-259, pl. 128 E].

Type locality: Possiet Bay, Peter the Great Bay, East Sea.

Distribution: Asian subtropical species; I; common.

Habitat: 0.4-4 m; sand, muddy sand.

319. *Retusa minima* Yamakawa, 1911

[*Retusa minima* Yamakawa, 1911: 47, pl. 11, figs. 21-24; Chaban and Martynov, 2006: 259, pl. 128 D-D'; *Sulcoretusa minima*: Higo et al., 1999: 389; Min, 2004: 303, fig. 918].

Type locality: Otake, Chiba Prefecture, central Honshu and Oji, Tokyo City (fossil).

Distribution: Asian subtropical species; I; common.

Habitat: 5-25 m; sand, muddy sand, mud.

320. *Retusa pertenuis* (Mighels, 1843)

[*Bulla pertenuis* Mighels, 1843: 346, pl. 16, fig. 3; *Retusa pertenuis*: Chaban and Martynov, 2006: 259-260, pl. 128 I].

Type locality: Casco Bay, Maine (U. S. A.).

Distribution: Boreal-arctic species; I, IV, V, VIII; common.

Habitat: 12-170 m; mud, sand, muddy sand.

321. *Retusa succincta* (A. Adams, 1862)

[*Tornatina succincta* A. Adams, 1862: 154; *Coleophysis succincta*: Higo et al., 1999: 389; Min, 2004: 303, fig. 915; *Retusa succincta*: Chaban and Martynov, 2006: 260, pl. 128 G].

Type locality: Tsushima and Awashima, East Sea

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

Habitat: 5-101 m; mud, muddy sand.

322. *Retusa toyamaensis* (Habe, 1956)

[*Pyrunculus toyamaensis* Habe, 1956: 67, pl. 4, fig. 6; Higo et al., 1999: 389; *Retusa cf. toyamaensis*: Chaban and Martynov, 2006: 260, pl. 129 B]

Type locality: Toyama Bay, eastern Noto Peninsula, East Sea.

Distribution: Asian subtropical low-boreal species; I,

III, V, VI, VII; common.

Habitat: 13-500 m; sand, mud, muddy sand.

Family Volvulellidae Abbot, 1974

Genus **Volvulella** Newton, 1891 (1850)

Type species: *Bulla acuminata* Bruguière, 1792.

323. ***Volvulella sculpturata*** Minichev, 1971

[*Volvulella sculpturata* Minichev, 1971: 235, fig. 4;  
Chaban and Martynov, 2006: 260, pl. 129 B]

Type locality: Possiet Bay, Peter the Great Bay, East Sea.

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

Habitat: 8-48 m; muddy sand.

Superfamily Runcinoidea H. Adams & A. Adams, 1854

Family Runcinidae H. & A. Adams, 1854

Genus **Runcinida** Burn, 1963

Type species: *Runcina elioti* Baba, 1937.

324. ***Runcinida marisae*** Chernyshev, 1998

[*Runcinida marisae* Chernyshev, 1998: 29-32, figs. 1,  
2; Chaban and Martynov, 2006: 261, pl. 130 A-B]

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

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

Habitat: Intertidal; algae-covered stones (*Corallina  
pilulifera*).

Thecosomata

Family Limacinidae Gray, 1840

Genus **Limacina** Bosc, 1817

Type species: *Clio helicina* Phipps, 1774

325. ***Limacina helicina*** (Phipps, 1774)

[*Clio helicina* Phipps, 1774: 195; *Limacina helicina*:  
Higo *et al.*, 1999: 400; *Limacina helicina helicina*:  
Kantor and Sysoev, 2006: pl. 129 J, *Limacina helicina  
ochotensis*: Kantor and Sysoev, 2006: pl. 129 I].

Type locality: Arctic seas.

Distribution: Boreal-arctic species.

Habitat: Pelagic species.

Aplysiomorpha (=Anaspidea)

Superfamily Aplycioidea Lamarck, 1809

Family Aplysiidae Lamarck, 1809

Genus **Aplysia** Linnaeus, 1767

Type species: *Aplysia depilans* Gmelin, 1791.

326. ***Aplysia juliana*** Quoy and Gaimard, 1832

[*Aplysia juliana* Quoy and Gaimard, 1832: 309, pl. 24,  
figs. 5, 6; Min, 2004: 313, fig. 961; Martynov and  
Chaban, 2006: 263, pl. 130 C, D]

Type locality: Mauritius, Indian Ocean.

Distribution: Tropical-subtropical species; VIII; rare.

Habitat: 15-25 m, rock and stones.

327. ***Aplysia parvula*** Guilding in Mörch, 1863

[*Aplysia parvula* Mörch, 1863: 22; Min, 2004: 315, fig.  
964; Martynov and Chaban, 2006: 263-264, pl. 130 E].

Type locality: St. Thomas Island, Lesser Antilles,  
West Indies.

Distribution: Tropical-subtropical species; I, VIII;  
rare.

Habitat: Intertidal-6 m, rock and stones.

Nudipleura

Family Pleurobranchidae Gray, 1827

Genus **Berthella** Blainville, 1825

Type species: *Berthella porosoa* Blainville, 1825.

329. ***Berthella californica*** (Dall, 1900)

[*Pleurobranchus californicus* Dall, 1900: 92-93;  
*Berthella californica*: Martynov, 2006: 267, pl. 131 I].

Type locality: San Pedro, California.

Distribution: Pacific boreal species; I, II; rare.

Habitat: Intertidal-12 m, substrate unknown.

Family Pleurobranchaeidae Pilsbry, 1896

Genus **Pleurobranchaea** Meckel in Leue, 1813

Type species: *Pleurobranchidium meckelii* Blainville,  
1825.

330. ***Pleurobranchaea japonica*** Thiele, 1925

[*Pleurobranchaea japonica* Thiele, 1925: 249, pl. 45,  
fig. 8; Min, 2004: 315, fig. 970; Martynov, 2006: 268].

Type locality: Kōbe, Japan

Distribution: Asian subtropical species; VIII; single  
juvenile specimen only.

Habitat: 5-7 m, substrate unknown.

Pulmonata

Superfamily Siphonarioidea Gray, 1827

- Family Siphonariidae Gray, 1827
- Genus *Siphonacmaea* Habe, 1958
- Type species: *Acmaea oblongata* Yokoyama, 1926.
331. *Siphonacmaea oblongata* (Yokoyama, 1926)  
[*Acmaea oblongata* Yokoyama, 1926: 288, pl. 34, fig. 14; Higo et al., 1999: 402; Kantor and Sysoev, 2006: 295, pl. 138 J].
- Type locality: Sado Island, East Sea (fossil).
- Distribution: Asian low-boreal species; I, II, VII, VIII; common.
- Habitat: Intertidal-3 m; sand, muddy sand, stones, in eelgrass and algae (*Sargassum* sp.).
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