

**77 Additional Marine Bivalve Species from Wakayama Prefecture
— A Supplement to A CATALOGUE OF MOLLUSCS OF
WAKAYAMA PREFECTURE,
THE PROVINCE OF KII-I. by T. Habe**

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In 1981, Tadashige Habe published a comprehensive catalogue of the bivalve mollusks of Wakayama Prefecture that has since become a fundamental source for the study of the subtropical and warm temperate bivalve fauna around Japan. Various investigators and shell collectors, including Takashi Okutani, Kin'ichi Sakurai, Eiji Tsuchida, Taiji Kurozumi, Shin'ichi Ikebe, and Yasuo Koyama, have since collected and reported a number of additional bivalves. In this paper the author records 77 marine bivalve species from Wakayama Prefecture collected mainly by Messrs. Tanaka, Nagai, Tsuchida, Ikebe and Koyama. This work is chiefly based on a manuscript and photographs prepared by Yasuo Koyama. The original citation, bibliography and some important synonyms are given for each species. Some are not illustrated, because no specimens were examined. Almost all the material studied is currently housed in the Wakayama Prefecture Museum in Kainan City. Bivalve specimens donated by Shin'ichi Ikebe to the Kyushu University Museum were also examined.

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Class BIVALVIA Linnaeus, 1758 Nimaigai-ko

Subclass PROTOBRANCHIA Pelseneer, 1889 Gensai-ako

Family Nuculidae Gray, 1824 Kurumigai-ka

Genus *Nucula* Lamarck, 1799 Mame-kurumigai-zoku

1799 *Nucula* Lamarck, Mem. Soc. Hist. Nat. Paris, 87. Type (M): *Arca nucleus* Linnaeus, 1758.

Nucula sp. Pl. 3, fig. 1.

Loc. Off Shionomisaki, 650 m (Nagai).

Remarks. Shell small, not exceeding 4 mm in length, subtrigonal, with distinct prodissoconch. Outer surface nearly smooth, except for irregularly scattered growth lines and faint radial threads. Inner ventral margin finely crenulated.

Family Mallettiidae H. & A. Adams, 1858 Sumizome-sodegai-ka

Genus *Bathymalletia* Kuroda & Habe, 1971 Sumizome-sodegai-zoku

1971 *Bathymalletia* Kuroda & Habe in Kuroda et al., Sea Shells Sagami Bay, 504-505, 318. Type (OD): *Malletia inaequilateralis* Habe, 1951.

- Bathymalletia takaii* (Okutani, 1968) Takai-sodegai (Kuroda) Pl. 3, fig. 5.**
 1968 *Malletia takaii* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 11-12, pl. 1, fig. 3.
 1977 *Bathymalletia takaii*: Habe, Syst. Moll. Japan, Biv. Scaph., 19.
 1985 *Bathymalletia takaii*: Tsuchida, Nanki-Seibutsu, 27(2), 98, pl. 2, fig. 10.
 1994 *Bathymalletia takaii*: Tsuchida, Bull. Mar. Sci. Fish. Kochi Univ., (14), 75, pl. 1, figs. 5-6.
 1999 *Malletia takaii*: Higo et al., Cat. Bib. Mar. Shell-bear. Moll. Japan, 410.
 2000 *Pseudomalletia takaii*: Kurozumi & Tsuchida, Mar. Moll. Japan, 836-837, pl. 416, figs. 1a-b.
 Loc. Off Tanabe, 975-1112 m (Tsuchida), southwest of Kushimoto, 500 m (Nagai), and off Shionomisaki, 650 m (Nagai).
 Dist. Off Miyake Is. (type locality). Izu Archipelago to Shikoku.

Family Neilonellidae Schyleiko, 1989 Hatomugi-sodegai-ka

Genus *Neilonella* Dall, 1881 Hatomugi-sodegai-zoku

- 1881 *Neilonella* Dall, Bull. Mus. Com. Zool. Harvard, 9, 125. Type (OD): *Leda* (*Neilonella*) *corpulenta* Dall, 1881.
- Neilonella soyoae* Habe, 1958 Soyo-hatomugi-sodegai (Habe) Pl. 3, fig. 2.**
 1958 *Neilonella soyoae* Habe, Publ. Seto Mar. Biol. Lab., 6 (3), 245.
 1961 *Neilonella soyoae*: Habe, Col. Ill. Shells Japan, 2 (ed. 1), 108, pl. 48, fig. 11.
 1966 *Neilonella soyoae*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 5.
 1968 *Neilonella soyoae*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 11.
 1985 *Neilonella soyoae*: Tsuchida, Nanki-Seibutsu, 27 (2), 98, pl. 2, fig. 11.
 1995 *Neilonella soyoae*: Tsuchida & Kurozumi, Jour. Nat. Hist. Mus. Inst. Chiba, 3(2), 183, figs.9-2, 9-3.
 2000 *Neilonella soyoae*: Kurozumi & Tsuchida, Mar. Moll. Japan, 836, 839, pl. 416, fig. 3.
 Loc. Off Tanabe, 975-1112 m (Tsuchida), southwest of Kushimoto, 500 m (Nagai), off Shionomisaki, 280 m (Nagai).
 Dist. Off Yakushima Is., Kagoshima Pref. (type locality). Choshi to southern Kyushu (Habe, 1961).
- Neilonella japonica* Okutani, 1962 Nippon-hatomugi-sodegai (Okutani) Pl. 3, fig. 3.**
 1962 *Neilonella japonica* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 7-8, pl. 1, figs. 3, 6, pl. 4, fig. 6.
 1966 *Neilonella japonica*: Okutani, Bull. Tokai Reg. Fish. Lab., (46), 5.
 1968 *Neilonella japonica*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 10-11.
 1985 *Neilonella japonica*: Tsuchida, Nanki-Seibutsu, 27(2), 98.
 1994 *Neilonella japonica*: Tsuchida, Bull. Mar. Sci. Fish. Kochi Univ., (14), 76, pl. 1, fig. 7.
 2000 *Neilonella japonica*: Kurozumi & Tsuchida, Mar. Moll. Japan, 836, 839, pl. 416, fig. 4.
 Loc. Off Tanabe, 975-1112 m (Tsuchida, type locality), off Shionomisaki, 1400 m (Nagai).
 Dist. Sagami Bay (type locality) to off Kochi, Shikoku.
- Neilonella kirai* Habe, 1953 Kira-hatomugi-sodegai (Oyama) Pl. 3, fig. 4.**
 1953 *Neilonella kirai* Habe, Venus, 17(3): 131, 137.
 1961 *Saccella kirai*: Habe, Col. Ill. Shells Japan, 2, 108, pl. 48, fig. 14.
 2000 *Jupiteria* (*Costanuculana*) *kirai*: Kurozumi & Tsuchida, Mar. Moll. Japan, 840, 843, pl. 418, fig. 23.

Loc. Off Kii-Oshima Is., 200 m (Nagai).
Dist. Tosa Bay (type locality) to Kyushu.

Family Tindariidae Verrill & Bush, 1897 Mijin-sodegai-ka

Genus *Tindaria* Bellardi, 1875 Mijin-sodegai-zoku

1875 *Tindaria* Bellardi, Monogr. Nucleoliti Terr. Terz. Piemonte e Liguria, 28. Type (M):
Tindaria arata Bellardi, 1875.

Tindaria cf. *similis* Okutani, 1962 Fukami-sodegai (Okutani), Yomosugara-sodegai (Shikama) Pl. 3, fig. 6.

1962 *Tindaria similis* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 6-7, pl. 1, fig. 4; pl. 4, fig. 12.

2000 *Tindaria similis*: Kurozumi & Tsuchida, Mar. Moll. Japan, 838-839, pl. 417, fig. 2.

Loc. Off Wabuka, Kushimoto, 600 m (Nagai).

Dist. Off Aogashima Is., Izu Archipelago, 3150-3350 m (type locality).

Family Nuculanidae H. & A. Adams, 1858 Robaigai-ka

Genus *Nuculana* Link, 1807 Shiwa-robaigai-zoku

1807 *Nuculana* Link, Besch. Nat. Samml. Univ. Rostock, (3), 155. Type (M): *Arca rostrata* Chemnitz, 1774 (n.n.) [= *Arca pernula* Mueller, 1779].

Subgenus *Thestyleda* Iredale, 1929 Arabori-robaigai-azoku

1929 *Thestyleda* Iredale, Rec. Austral. Mus., 17, 158, 187. Type (OD): *Leda lamsayi* E. A. Smith, 1885.

Nuculana (*Thestyleda*) *sagamiensis* Okutani, 1962 Sagami-arabori-robaigai (Shikama) Pl. 3, fig. 7.

1962 *Nuculana* (*Thestyleda*) *sagamiensis* Okutani, Bull. Tokai Reg. Fish. Res. Lab. (32), 10-11, pl. 1, figs. 8-9; pl. 4, fig. 4.

1968 *Nuculana* (*Thestyleda*) *sagamiensis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 12-13.

1977 *Nuculana* (*Thestyleda*) *sagamiensis*: Habe, Syst. Moll. Japan, Biv. Scaph., 21.

2000 *Nuculana* (*Thestyleda*) *sagamiensis*: Kurozumi & Tsuchida, Mar. Moll. Japan, 840-841, pl. 418, figs. 11a-b.

Loc. Off Shionomisaki, 180-200 m (Nagai).

Dist. Sagami Bay (type locality). Southern Hokkaido to Kii Peninsula.

Nuculana (*Thestyleda*) *subscalata* Okutani, 1962 Tsugino-enaga-robaigai (Okutani) Pl. 4, fig. 1.

1962 *Nuculana* (*Thestyleda*) *subscalata* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 9-10, pl. 1, figs. 17-18.

1968 *Nuculana* (*Thestyleda*) *subscalata*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 12.

1985 *Nuculana subscalata*: Tsuchida & Okutani, Venus, 44 (3): 151-152, pl. 1, fig. 4.

2000 *Nuculana* (*Thestyleda*) *subscalata*: Kurozumi & Tsuchida, Mar. Moll. Japan, 840-841, pl. 418, fig. 14.

Loc. Off Shionomisaki, 1200 m (Nagai).

Dist. Off Izu-Oshima (type locality) and Miyakejima Is.; Sagami Bay.

Nuculana (Thestyleda) tanseimaruae Tsuchida & Okutani, 1985 (Tansei-) Enaga-robaigai (Tsuchida & Okutani) Pl. 2, fig. 1.

1962 *Nuculana (Thestyleda) scalata* (not Prashad, 1932): Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 9, pl. 1, fig. 19.

1985 *Nuculana tanseimaruae* Tsuchida & Okutani, Venus, 44(3), 149-152, 154, pl. 1, figs. 1-3, pl. 2, figs. 1, 3.

1995 *Nuculana (Thestyleda) tanseimaruae*: Tsuchida & Kurozumi, Jour. Nat. Hist. Mus. Inst. Chiba, 3(2), 183-184, figs. 9-4, 9-5.

2000 *Nuculana (Thestyleda) tanseimaruae*: Kurozumi & Tsuchida, Mar. Moll. Japan, 840-841, pl. 418, fig. 16.

Loc. Kii Channel, 455-492 m (Tsuchida & Okutani, type locality); off Wabuka, Kushimoto, 600 m (Nagai); off southwest of Shionomisaki, 600 m (Nagai); off Shionomisaki, 450-500 m (Nagai).

Dist. Kii Channel.

Nuculana (Thestyleda) kiiensis Tsuchida & Okutani, 1985 Kii-shakushi-robaigai (Tsuchida & Okutani)

1985 *Nuculana kiiensis* Tsuchida & Okutani, Venus, 44(3), 152-155, pl. 1, figs. 5-7, pl. 2, figs. 2, 4.

1995 *Nuculana (Thestyleda) kiiensis*: Tsuchida & Kurozumi, Jour. Nat. Hist. Mus. Inst. Chiba, 3(2), 185, fig. 6.

2000 *Nuculana (Thestyleda) kiiensis*: Kurozumi & Tsuchida, Mar. Moll. Japan, 840-841, pl. 418, fig. 15.

Dist. Kii Channel.

Loc. Kii Channel, 353-416 m (Tsuchida & Okutani, type locality); off Boso Peninsula, 507-578 m (Tsuchida & Kurozumi, 1995).

Nuculana (Thestyleda) kawamurai Habe, 1961 Kawamura-robaigai (Habe)

1961 *Nuculana kawamurai* Habe, Col. Ill. Shells Japan, 2, 109, app. 35, pl. 48, fig. 25.

2000 *Nuculana (Thestyleda) kawamurai*: Kurozumi & Tsuchida, Mar. Moll. Japan, 838, 841, pl. 417, fig. 7.

Loc. Off Kushimoto, 230 m (Nagai), southwest of Kushimoto, 300 m (Nagai).

Dist. Off Choshi (type locality) to Enshunada Sea.

Genus *Tenuileda* Habe, 1977 Kagero-sodegai-zoku

1977 *Tenuileda* Habe, Syst. Moll. Japan, Biv. Scaph., 21, 23. Type (OD): *Nuculana conceptionis ikebei* Suzuki & Kanehara, 1936.

Tenuileda ikebei (Suzuki & Kanehara, 1936) Kagero-sodegai (Habe) Pl. 4, fig. 2.

1936 *Nuculana conceptionis ikebei* Suzuki & Kanehara, Jour. Geol. Soc. Japan, 43 (510), 182, pl. 10, figs. 16-18.

1962 *Nuculana ikebei*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 8-9, pl. 1, figs. 10-11.

1966 *Nuculana ikebei*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 5-6.

1968 *Nuculana ikebei*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 12.

1977 *Tenuileda ikebei*: Habe, Syst. Moll. Japan, 23, pl. 4, figs. 13-14.

1999 *Tenuileda ikebei*: Higo et al., Cat. Bib. Mar. Shell-bear. Moll. Japan, 411-412.

Loc. Wabuka, Kushimoto, 600 m (Nagai).

Dist. Sagami Bay to Kii Peninsula.

Subclass PTERIOMORPHIA Beurlen, 1944 Yokukei-ako

Family Arcidae Lamarck, 1809 Funegai-ka

Genus *Bathyarca* Kobelt, 1891 Watazoko-egai-zoku

1891 *Bathyarca* Kobelt, Syst. Conch.-Cab., N.F., 8(2), 213-214. Type (SD Verrill & Bush, 1896):
Arca pectunculoides Scacchi, 1834.

Bathyarca nipponica Okutani, 1962 Sagami-watazoko-egai (Okutani) Pl. 4, fig. 3.

1962 *Bathyarca nipponica* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32): 13-14.

1964 *Bathyarca nipponica*: Okutani, Venus, 23(2), 83-84, fig. 5.

1977 *Bathyarca nipponica*: Habe, Syst. Moll. Japan, Biv. Scaph., 35.

Loc. Off Shionomisaki, 420 m (Ikebe).

Dist. Sagami Bay (type loc.) to Kii Peninsula.

Genus *Mimarcaria* Iredale, 1939 Chigo-washinohagai-zoku

1939 *Mimarcaria* Iredale, Sci. Rep. Great Barrier Reef Exp., 5(6), 267. Type (OD): *Mimarcaria saviolum* Iredale, 1939.

Mimarcaria cf. *aizoi* (Sakurai, 1969) Ryugu-washinohagai (Sakurai) Pl. 4, figs. 4a-b

1969 *Barbatia* (*Ustularca*) *aizoi* Sakurai, Venus, 28(3), 131-133.

1995 *Barbatia* (*Ustularca*) *aizoi*: Hasegawa & Saito, Moll. Type Spec. Sakurai Coll., 7, pl. 6, fig. 4.

Loc. Off Kushimoto (Ikebe).

Dist. Shikoku to Kyushu (Goto Islands).

Family Philobryidae Bernard, 1897 Shirasunagai-modoki-ka

Genus *Cratis* Hedley, 1915

1915 *Cratis* Hedley, Proc. Linn. Soc. N. S. Wales, 39, 698. Type (OD): *Cratis progressa* Hedley, 1915.

Cratis ohashii Hayami & Kase, 1993 Ohashi-shirasunagai-modoki (Hayami & Kase) Pl. 4, figs. 5a-b.

1993 *Cratis ohashii* Hayami & Kase, Bull. Univ. Mus. Univ. Tokyo, (35), 40-41, figs. 111-120.

2000 *Cratis ohashii*: Okutani, Mar. Moll. Japan, 860-861, pl. 428, fig. 3.

Loc. Off Shionomisaki (Ikebe).

Dist. Iejima and Shimojishima Islets, Okinawa (Hayami & Kase, 1993); off Shionomisaki.

Family Mytilidae Rafinesque, 1825 Igai-ka

Genus *Perna* Philippson, 1788 *Perna*-igai-zoku

1788 *Perna* Philippson, Diss. Nova Test. Gen., 20. Type (SD Soot-Ryen, 1955): *Perna*

magellanica Philippson, 1788 [= *Mya perna* Linnaeus, 1758].

***Perna viridis* (Linnaeus, 1758) Midori-igai (Shikama) Pl. 4, figs. 6a-b.**

1758 *Mytilus viridis* Linnaeus, Syst. Nat., ed. 10, 1, 706.

1791 *Mytilus smaragdinus* Gmelin, Syst. Nat., ed. 13, 3359.

1855 *Mytilus viridis*: Hanley, Ipsa Linnaei Conch., 145.

1952 *Mytilus viridis*: Dodge, Bull. Amer. Mus. Nat. Hist., 100, 218-119.

1964 *Mytilus (Chloromya) smaragdinus* (sic): Shikama, Select. Shells World, 2, 43, pl. 21, fig. 14.

1977 *Perna viridis*: Habe, Syst. Moll. Japan, Biv. Scaph., 51.

Loc. Wakayama (north bank, river mouth of Kinokawa; Saikazaki; Tanoura fishery port); Yura-cho and Hidaka-cho, Hidaka-gun; Hinomisaki (Ikebe); Tanabe Bay; Kushimoto (Imahara).

Dist. Indo-West Pacific (Taiwan and southwards).

Genus *Adipicola* Dautzenberg, 1927

1927 *Adipicola* Dautzenberg, Res. Camp. Sci. Prince de Monaco, 72, 274. Type (M): *Modiolarca? pelagica* Forbes in Woodward, 1854.

***Adipicola longissima* (Thiele & Jaeckel, 1932) Suehiro-mayuigai (Horikoshi & Tsuchida) Pl. 4, figs. 7a-b.**

1932 *Myrina longissima* Thiele & Jaeckel, Deut. Tief-See Exp., 170, pl. 1, fig. 3.

1984 *Adipicola longissima*: Horikoshi & Tsuchida, Venus, 43(1), 86-100, figs. 1-7.

1999 *Adipicola longissima*: Higo et al., Cat. Bib. Shell-bear. Mar. Moll. Japan, 420.

2000 *Adipicola longissima*: Kurozumi, Mar. Moll. Japan, 868-869, pl. 432, fig. 28.

Loc. Off Susami, 432-468 m (Koyama).

Dist. West of Sumatra (1° 48.9'N, 96° 53'E, 1143 m) (type locality); Philippines.

Genus *Lithophaga* [Roeding, 1798] Shiginohashigai-zoku

1798 *Lithophaga* [Roeding], Mus. Bolten., (2), 156. Type (M): *Lithophaga mytuloides* [Roeding, 1798][= *Mytilus lithophagus* Linnaeus, 1758].

Subgenus *Leiosolenus* Carpenter, 1856 Ishimategai-azoku

1856 *Leiosolenus* Carpenter, Cat. Mazatlan Shells, 130. Type (M): *Leiosolenus spatiosus* Carpenter, 1856.

***Lithophaga (Leiosolenus) obesa* (Philippi, 1847) Sekitori-ishimategai (Kuroda) Pl. 4, fig. 8.**

1847a *Modiola (Lithophagus) obesa* Philippi, Zeitsch. f. Malakozool., 4, 118.

1847b *Modiola (Lithophagus) obesa* Philippi, Abb. u. Besch., 5/19, 6/20, pl. 2, fig. 2.

1938 *Lithophaga hawaia* Dall, Bartsch & Rehder, Bull. Burnice P. Bishop Mus., (153), 56-57, pl. 11, figs. 9-10.

1939 *Lithophaga obesa suspecta* Iredale, Sci. Rep. Great Barrier Reef Exp., 5, 422-423, pl. 6, fig. 20.

1979 *Lithophaga obesa*: Wilson, Rec. Austral. Mus., 32(13), 474-476, figs. 17(1a-b).

1984 *Lithophaga (Leiosolenus) obesa*: Kleemann, Jour. Moll. Stud., 50, 218-223, figs. 25-28.

1997 *Lithophaga (Leiosolenus) obesa*: Wang, Fauna Sinica, Mollusca: Bivalvia: Order Mytiloida,

132-134, fig. 55.

Loc. Takatomi, Kushimoto (Tanaka).

Dist. Red Sea; Sri Lanka; Andaman Isls.; New Caledonia; Philippines; northern Western Australia; Queensland; New South Wales; Amami Is., Japan; Tahiti (Wilson, 1979; Kleeman, 1984).

Subgenus *Diberus* Dall, 1898 Kongo-ishimategai-azoku

1898 *Diberus* Dall, 1898, Trans. Wagner Free Inst., 3(4), 799. Type (OD): *Modiola plumula* Hanley, 1843.

Lithophaga (Diberus) cf. canalifera Hanley, 1844 Kongo-ishimategai (Kuroda) Pl. 4, fig. 10.

1844 *Lithodomus canaliferus* Hanley, Proc. Zool. Soc. Lond., for 1844, 16-17.

1857 *Lithodomus canaliferus*: Reeve, Conch. Icon., 10, *Lithodomus* sp. 25, pl. 4, fig. 25.

1977 *Lithophaga (Diberus) canalifera*: Habe, Syst. Moll. Japan, Biv. Scaph., 62.

1997 *Lithophaga (Diberus) canalifera*: Wang, Fauna Sinica, Mollusca: Bivalvia: Order Mytiloidea, 149-150, fig. 62.

Loc. Kamiura, Kushimoto (Tanaka).

Dist. Amami Island and southwards. Philippines (type locality).

Lithophagus (Diberus) divaricalx Iredale, 1939 Suehiro-ishimategai (Kuroda) Pl. 4, fig. 9.

1939 *Lithophaga divaricalx* Iredale, Sci. Rep. Great Barrier Reef Exp., 5, 420, pl. 6, fig. 23.

1979 *Lithophaga divaricalx*: Wilson, Rec. Austral. Mus., 32(13), 473-474, figs. 18-1a-b.

1984 *Lithophaga (Diberus) divaricalx*: Kleemann, Jour. Moll. Stud., 50, 193, fig. 1.

1997 *Lithophaga (Diberus) divaricalx*: Wang, Fauna Sinica, Mollusca: Bivalvia: Order Mytiloidea, 150-151, fig. 63.

Loc. Sakai, Minabe (Minaga).

Dist. Philippines; Queensland and northern Western Australia (Wilson, 1979).

Family Glycymerididae Newton, 1916 Tamakigai-ka

Genus *Tucetona* Iredale, 1931 Uchiwagai-zoku

1931 *Tucetona* Iredale, Rec. Austral. Mus., 18, 202-203, 231. Type (OD) - *Pectunculus flabellatus* Tenison-Woods, 1878.

Tucetona cf. sibogae Matsukuma, 1982 Karekusa-uchiwagai (Matsukuma) Pl. 2, fig. 2.

1982 *Tucetona* sp.: Matsukuma, Venus, 41(3), 157, pl. 1, figs. 2, 4, 6.

Loc. Off Kushimoto (Tsuchida); off Shionomisaki, 100 m (Nagai).

Dist. Amami Is. to Kii Peninsula, Japan.

Family Limidae Rafinesque, 1815 Minogai-ka

Genus *Lima* Bruguière, 1797 Minogai-zoku

1797 *Lima* Bruguière, Ency. Meth., 1, pl. 206. Type (T): *Lima alba* Cuvier, 1797 [= *Ostrea lima* Linnaeus, 1758].

Lima sagamiensis Masahito, Kuroda & Habe in Kuroda et al., 1971 Sagami-maruminogai (Masahito, Kuroda & Habe) Pl. 5, fig. 1.

1943 *Lima (Lima) tomlini* Prashad (part): Oyama, Conch. Asiatica, 1, 60-61, pl. 12, figs. 8a-b.

1971 *Lima sagamiensis* Masahito et al. in Kuroda et al., Sea Shells Sagami Bay, 582, 372, pl. 83, figs. 1-2.

2000 *Lima sagamiensis*: Hayami, Mar. Moll. Japan, 890-891, pl. 443, fig. 7.

Loc. Sakai, Minabe (Ikebe).

Dist. Sagami Bay (type locality) to Kii Peninsula.

Lima ogasawarensis Habe, 1993 Ogasawara-minogai (Habe) Pl. 2, fig. 3.

1993 *Lima ogasawarensis* Habe, Venus, 52(2): 117-119, figs. 1-3.

Loc. Suga fishing port, Kamiura, Kushimoto (Tanaka).

Dist. Chichijima Is., Ogasawara Isls. (type locality). Kii Peninsula.

Genus *Limatula* Wood, 1839 Yuki-banegai-zoku

1839 *Limatula* Wood, Ann. Mag. Nat. Hist., n.s., 3(4), 235. Type (SD Gray, 1847): *Pecten subauriculatus* Montagu, 1808.

Limatula choshiensis Kuroda & Habe in Habe, 1961 Choshi-yuki-banegai (Kuroda)

1961 *Limatula choshiensis* Kuroda & Habe in Habe, Col. Ill. Shells Japan, 2 (ed. 1), 119, app. 37, pl. 54, fig. 2.

2000 *Limatula (Limatula) choshiensis*: Hayami, Mar. Moll. Japan, 894-895, pl. 445, fig. 33.

Loc. Off Wabuka, Kushimoto, 600 m (Nagai).

Dist. Off Choshi (type locality).

Family Pectinidae Rafinesque, 1815 Itayagai-ka

Genus *Delectopecten* Stewart, 1930 Hari-nadeshikogai-zoku

1930 *Delectopecten* Stewart, Acad. Nat. Sci. Phila., Spec. Publ., (3), 37, 118. Type (OD): *Pecten (Pseudamussium) vancouverensis* Whiteaves, 1893.

Delectopecten alcocki (Smith, 1904) Ginrin-hari-nadeshikogai (Tsuchida & Kurozumi) Pl. 5, fig. 2.

1904 *Pecten alcocki* Smith, Ann. Mag. Nat. Hist., [7]14, 13.

1967 *Pecten alcocki*: Knudsen, Sci. Rep. John Murray Exp., 11(3), 282-284, text-fig. 19; pl. 2, figs. 3-4.

1981 *Delectopecten alcocki*: Poutiers, Mem. MUSORSTOM, (91), 331, pl. 1, fig. 1.

1994 *Delectopecten alcocki*: Tsuchida, Bull. Mar. Sci. Fish. Kochi Univ., (14), 77, pl. 2, figs. 5-6.

1995 *Delectopecten alcocki*: Tsuchida & Kurozumi, Jour. Nat. Hist. Mus. Inst. Chiba, 3(2), 185, figs. 9-9, 9-10.

1995 *Delectopecten alcocki*: Dijkstra, Mem. Mus. Nat. Hist. Nat., 167, 50-51, figs. 111-114, 147-150.

Loc. Off Shionomisaki, 600 m (Nagai).

Dist. South India (type locality); west Sumatra and east Africa (Thiele & Jaeckel, 1937); Philippines (Knudsen, 1967); off Kochi, Shikoku (Tsuchida, 1994).

Delectopecten vancouverensis (Whiteaves, 1893) O-hari-nadeshikogai (Habe & Ito) Pl. 5, fig. 3.

- 1893 *Pecten (Pseudamussium) vancouverensis* Whiteaves, Ottawa Naturalist, 7(9), 133.
 1897 *Pecten randolphi* Dall, Nautilus, 11(8), 86.
 1902 *Pecten randolphi*: Dall, Proc. U.S. Nat. Mus., 24(1264), 559, pl. 40, fig. 2.
 1965 *Delectopecten randolphi*: Habe & Ito, Shell World Col., 1, 118-119, pl. 38, fig. 12.
 2000 *Delectopecten vancouverensis*: Coan et al., Biv. Seashells W. N. Amer., 227-228, pl. 40.
 Loc. Kushimoto (Ikebe).
 Dist. Guaymas, Sonora, Mexico to Alaska, Kamchatka, and northern Japan (Coan et al., 2000).

Genus *Juxtamussium* Iredale, 1939

- 1939 *Juxtamussium* Iredale, Sci. Rep. Great Barrier Reef Exp., 5(6), 347, 368. Type (OD): *Juxtamussium oblectatum* Iredale, 1939.

Juxtamussium maldivense (E. A. Smith, 1903) Maldives-nishikigai (Habe & Okutani)

- 1903 *Pecten maldivensis* E. A. Smith, Fauna Maldive Laccadive Arch., 2, 622, pl. 36, figs. 19-20.
 1939 *Juxtamussium oblectatum* Iredale, Sci. Rep. Great Barrier Reef Exp., 5(6), 368, pl. 5, figs. 27-27a.
 1972 *Juxtamussium maldivense*: Waller, Veliger, 14(3), 250-254, figs. 7, 19-20, 111-127.
 1991 *Juxtamussium maldivense*: Rombouts, Guidebook Pecten Shells, 60, pl. 26, fig. 7.
 1999 *Juxtamussium maldivensis* (sic): Higo et al., Cat. Bib. Shell-bear. Moll. Japan, 444.
 Loc. Off Shionomisaki (Ito).
 Dist. Maldives (type locality); Philippines; Great Barrier Reef (Iredale, 1939); Marshall Isls. (Waller, 1972).

Family Propeamussidae Abbott, 1954 Watazoko-tsukihigai-ka

Genus *Propeamussium* de Gregorio, 1884 Watazoko-tsukihigai-zoku

- 1884 *Propeamussium* de Gregorio, Nat. Sicil., 3, 119. Type (OD): *Pecten (Propeamussium) ceciliae* de Gregorio, 1884.

Propeamussium siratama (Oyama, 1951) Shiratama-tsukihigai (Oyama) Pl. 5, fig. 4.

- 1951 *Ctenamussium (Micramussium) siratama* Oyama, Ill. Cat. Japan. Shells, (13), 80, pl. 13, figs. 5-7.
 1964 *Propeamussium (Micramussium) siratama*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 8, pl. 1, fig. 8.
 1994 *Propeamussium siratama*: Tsuchida, Bull. Mar. Sci. Fish. Kochi Univ., (14), 77, pl. 2, fig. 3.
 2000 *Propeamussium siratama*: Hayami, Mar. Moll. Japan, 912-913, pl. 454, fig. 6.
 Loc. Off Wabuka, Kushimoto, 600 m (Ikebe); off Shionomisaki, 500 m (Nagai).
 Dist. Off Manazuruzaki, Sagami Bay (type locality).

Genus *Cyclopecten* Verrill, 1897 Uroko-hari-nadeshikogai-zoku

- 1897 *Cyclopecten* Verrill, Trans. Connect. Acad. Arts Sci., 10, 43, 70. Type (SD Sykes et al., 1898): *Pecten pustulosus* Verrill, 1893.

Cyclopecten bistratus (Dall, 1916) Koshi-hari-nadeshikogai (Hayami) Pl. 5, fig. 5.

- 1916 *Pseudamussium bistratum* Dall, Proc. U. S. Nat. Mus., 52(2183), 404, not *Pecten bistratus* DeFrance, 1825.

- 1962 *Cyclopecten bistrriatus*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 18, pl. 5, figs. 1-1a.
 1966 *Cyclopecten bistrriatus*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 8, pl. 1, fig. 5.
 1985 *Cyclopecten bistrriatus*: Tsuchida, Nanki Seibutsu, 27(2), 98, pl. 2, fig. 14.
 1994 *Cyclopecten bistrriatus*: Tsuchida, Bull. Mar. Sci. Fish. Kochi Univ., (14), 77, pl. 2, fig. 4.
 2000 *Cyclopecten bistrriatus*: Coan et al., Biv. Seash. W. N. America, 247-248, pl. 46, figs.
 Loc. Off Tanabe, 975-1112 m (Tsuchida); off Shionomisaki, 600 m (Nagai);
 Uragami, Nachi-Katsuura (Ikebe).
 Dist. Oregon to Baja California (Coan et al., 2000); Sagami Bay (Okutani, 1962,
 1966); Kii Peninsula (Tsuchida, 1985); Tosa Bay (Tsuchida, 1994).

Cyclopecten nakaii Okutani, 1962 Nakai-nishikigai (Shikama) Pl. 5, fig. 6.

- 1962 *Cyclopecten nakaii* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 18-19, pl. 2, fig. 6; pl. 5,
 figs. 3-3a.
 1968 *Cyclopecten nakaii*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 16, pl. 1, fig. 5.
 1988 *Cyclopecten nakaii*: Hayami, Trans. Proc. Palaeont. Soc. Japan, (150), figs. 2-7, 2-8.
 1995 *Cyclopecten nakaii*: Tsuchida & Kurozumi, Jour. Nat. hist. Mus. Inst. Chiba, 3(2), 185, figs.
 9-7, 9-8.
 2000 *Cyclopecten nakaii*: Hayami, Mar. Moll. Japan, 913-914, pl. 455, figs. 13a-b.
 2001 *Cyclopecten nakaii*: Higo et al., Cat. Bibl. Mar. Shell Bear. Moll. Japan, Types, 158, fig.
 B522.
 Loc. Off Wabuka, Kushimoto, 500 m (Nagai); off Kushimoto, 150 m (Nagai); off
 Shionomisaki, 250 m (Nagai).
 Dist. Sagami Bay (type locality).

Cyclopecten nipponensis Okutani, 1962 Nippon-watazoko-nadeshikogai (Hayami)
 Pl. 5, fig. 7.

- 1962 *Cyclopecten nipponensis* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 17-18, pl. 5, figs.
 2-2a.
 1968 *Cyclopecten nipponensis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 15-16.
 2000 *Cyclopecten nipponensis*: Hayami, Mar. Moll. Japan, 914-915, pl. 455, fig. 15.
 Loc. Off Esuzaki, Susami, 1200 m (Nagai).
 Dist. Miyakejima Is., Izu Archipelago (type locality).

Genus *Chlamydella* Iredale, 1929

- 1929 *Chlamydella* Iredale, Rec. Austral. Mus., 17, 164. Type(OD): *Cyclopecten favus* Hedley,
 1902.

Chlamydella incubata Hayami & Kase, 1993 Komochi-hari-nadeshikogai (Hayami &
 Kase) Pl. 5, fig. 8.

- 1993 *Chlamydella incubata* Hayami & Kase, Bull. Univ. Mus. Univ. Tokyo, (35), 62-65.
 2000 *Chlamydella incubata*: Hayami, Mar. Moll. Japan, 914-915, pl. 455, fig. 17.
 Loc. Shimokusui, Gobo (Ikebe).
 Dist. Shimoji, Irabu, and Ie Islets, Okinawa; Amami-Oshima; Kii Peninsula; Izu
 Peninsula.

Genus *Parvamussium* Sacco, 1897 Oboro-tsukihigai-zoku

- 1897 *Parvamussium* Sacco, Boll. Mus. Zool. Anat. Comp. Univ. Torino, 12, 102. Type (OD):
Pecten duodecimlamellatus Bronn, 1831.

Parvamussium sp. Pl. 2, fig. 4.

Loc. Off Shionomisaki, 320 m (Nagai).

Dist. Southern New Caledonia.

Family Spondylidae Gray, 1826 Umigikugai-ka

Genus *Spondylus* Linnaeus, 1758 Umigikugai-zoku

1758 *Spondylus* Linnaeus, Syst. Nat., ed. 10, 1, 690. Type (SD Schmidt, 1818): *Spondylus gaederopus* Linnaeus, 1758.

Spondylus varius Sowerby, 1829 Mizuiri-shojogai (Hirase)

1827 *Spondylus varius* Sowerby, Obs. Rem. Shells Stutchbury, 1.

1847 *Spondylus varians* Sowerby, Thes. Conch., 1, 426-427, pl. 86, fig. 21 (only).

1960 *Spondylus varius*: Oyama, Moll. Shells, (4), *Spondylus* (2), fig. 7.

2001 *Spondylus varius*: Lamprell, Mem. Mus. Natn. Hist. Nat., 185, 155-157, fig. 14G.

Loc. Kii (Teramachi Coll., Toba Aquarium, juvenile).

Dist. Amami Isls. and southwards (Habe, 1977). Solomon Isls., Philippines, New Caledonia, northwestern Australia, Great Barrier Reef (Lamprell, 2001); Polynesia (Sowerby, 1847).

Family Ostreidae Rafinesque, 1815 Itabo-gaki-ka

Genus *Saccostrea* Dollfus & Dautzenberg, 1920 Ohaguro-gaki-zoku

1920 *Saccostrea* Dollfus & Dautzenberg, Mem. Soc. Geol. France, Paleont. Mem., 27, 471. Type (OD): *Ostrea sacculus* Dujardin, 1835 [= *Ostrea cucullata* Born, 1778].

Saccostrea parasitica (Gmelin, 1791) Kuro-heri-gaki (Habe & Kosuge)

1791 *Ostrea parasitica* Gmelin, Syst. Nat., ed. 13, 3336.

1819 *Ostrea mytiloides* Lamarck, Hist. Nat. Anim. s. Vert., 6(1), 207.

1993 *Striostrea parasitica*: Bernard et al., Cat. Liv. Mar. Biv. Moll. China, 46.

1999 *Striostrea parasitica* (Gmelin, 1791): Higo et al., Cat. Bib. Shell-bear. Moll. Japan, 440.

Loc. Tsubaki, Shirahama (Habu).

Dist. Australia; Indonesia; Philippines; South China Sea (Bernard et al., 1993).

Remarks. The place where specimens collected by Habu are kept is unknown.

Saccostrea cucullata (Born, 1778) Ohaguro-gaki-modoki (Nishimura, Kurozumi & Kimura) Pl. 6, fig. 1.

1778 *Ostrea cucullata* Born, Ind. rerum nature. mus. Caesarei Vindobonensis, 100.

1936 *Ostrea glomerata*: Hiro, Venus, 6(1), 36, 41, 42.

1964 *Ostrea glomerata*: Johnson, Bull. U. S. Nat. Mus., 239, 84.

1981 *Saccostrea glomerata*: Torigoe, Jour. Sci. Hiroshima Univ., [B], div. 1(Zool.), 29(2), 310-311, 332, pl. 3, fig. 5, pl. 21, 1-6.

1998 *Saccostrea cucullata*: Nishimura et al., Chiribotan, 28(4), 85-88, pl. 1, figs. 1-4.

Loc. Nishihiro, Hirokawa, Arita County (Minaga); Tanabe Bay (Minaga); Shirahama (Kubota); river mouth of Tondagawa, Shirahama (Ogaki).

Dist. Okinawa Is. and southwards (Torigoe, 1981); Palau (Hiro, 1936); New Zealand (Gould, 1850, type locality).

Subclass HETERODONTA Neumayr, 1884 Ishi-ako**Family Thyasiridae Dall, 1901** Hanashigai-ka**Genus *Axinulus* Verrill & Bush, 1898** Yogore-hanashigai-zoku

1898 *Axinulus* Verrill & Bush, Proc. U. S. Nat. Mus., 20, 790. Type (OD): *Axinulus brevis* Verrill & Bush, 1898.

Axinulus simplex (Verrill & Bush, 1898) Yogore-hanashigai (Okutani) Pl. 2, fig. 5.

1898 *Cryptodon* (*Axinulus*) *simplex* Verrill & Bush, Proc. U. S. Nat. Mus., 20(1139), 791, pl. 92, figs. 3-4.

1962 *Axinulus simplex*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 25, pl. 4, fig. 11.

Loc. Off Shionomisaki, 500 m (Nagai).

Dist. North Atlantic (type locality). Sagami Bay (Okutani, 1962).

Family Ungulinidae H. & A. Adams, 1857 Futabashiragai-ka**Genus *Cycladicama* Valenciennes in Rousseau, 1854** Shiogamagai-zoku

1854 *Cycladicama* Valenciennes in Rousseau, Voy. Pole Sud., 5, 116. Type (OD): *Cycladicama luciniformis* Valenciennes in Rousseau, 1854 [= *Cyrenoida oblonga* Sowerby in Deshayes, 1855].

Cycladicama oblonga (Sowerby in Deshayes, 1855) Nekoze-shiogamagai (Kuroda) Pl. 6, fig. 2.

1855 *Cyrenella oblonga* Sowerby in Deshayes, PZSL, for 1854, 341.

1856 *Cyrenoida oblonga* Hanley, Cat. Rec. Biv. Shells, 353, suppl. pl. 15, fig. 6.

1961 *Cycladicama oblonga*: Habe, Col. Ill. Shells Japan, 2 (ed. 1), 124, pl. 56, fig. 9.

1988 *Cycladicama oblonga*: Tsuchida, Chiribotan, 19(3), 67-68, fig. 3.

2001 *Cycladicama oblonga*: Robba et al., Boll. Malac., 38(5-8), 79, pl. 7, fig. 9.

2001 *Cycladicama luciniformes* (sic) Valenciennes in Rousseau, 1854: Swennen et al., Moll. South. Gulf Thailand, 78, fig. 088.

Loc. Off Shionomisaki, 160 m (Nagai).

Dist. Philippines (type locality). Gulf of Thailand (Robba et al., 2001; Swennen et al., 2001); Ujung Pandang, Indonesia (Tsuchida, 1988); Taiwan.

Family Montacutidae Clark, 1855 Bunbuku-yadorigai-ka**Genus *Fronsella* Laseron, 1956** Hanabiragai-zoku

1956 *Fronsella* Laseron, Rec. Austral. Mus., 24(2), 9. Type (OD): *Fronsella adipata* Laseron, 1956.

Fronsella philippinensis Habe & Kanazawa, 1981 Philippines-hanabiragai (Habe & Kanazawa)

1981 *Fronsella philippinensis* Habe & Kanazawa, Venus, 40(3), 123-125, figs. 2-7.

1981 *Fronsella sipunculicola* Habe & Kanazawa, Venus, 40(3), figs. 2-7 (objective junior synonym of *Fronsella philippinensis*).

Loc. Sakai, Minabe (Habu). Off Shionomisaki, 160 m (Nagai).

Dist. Mactan Is., Philippines (type locality).

Family Carditidae Fleming, 1820 Tomayagai-ka

Genus *Megacardita* Sacco in Bellardi & Sacco, 1889 Fumigai-zoku

1889 *Megacardita* Sacco in Bellardi & Sacco, Moll. Terr. Terz. Piemonte e Liguria, **27**, 9. Type (OD): *Venericardia jouanneti* Basterot, 1825.

Megacardita coreensis (Deshayes, 1854) Hataune-fumigai (Kuroda) Pl. 6, fig. 3.

1854 *Cardita coreensis* Deshayes, Proc. Zool. Soc. Lond., for **1852**, 101.

1961 *Venericardia (Megacardita) coreensis*: Habe, Col. Ill. Shells Japan, **2** (ed. 1), 122, pl. 55, fig. 10.

1969 *Venericardia (Megacardita) (err. pro -cardita) coreensis*: Takahashi & Okamoto, Cat. Fukuoka, **73**, pl. 19, fig. 11.

1975 *Megacardita coreensis*: Okutani & Habe, Gakken, **2**, 111, 247, fig.

2000 *Megacardita coreensis*: Matsukuma, Mar. Moll. Japan, 942-943, pl. 469, fig. 6.

Loc. Off Shionomisaki, 160 m (Nagai).

Dist. Korea (type locality). Genkainada Sea (Takahashi & Okamoto, 1969).

Family Cardiidae Lamarck, 1809 Wadachi-zarugai-ka

Genus *Regozara* Iredale, 1936 Ichigo-zarugai-zoku

1936 *Regozara* Iredale, Rec. Austral. Mus., **19**(5), 275. Type (OD): *Regozara olivifer* Iredale, 1936 [= *Cardium reeveanum* Dunker, 1852].

Regozara flavus (Linnaeus, 1758) Ryukyu-zarugai (Hirase)

1758 *Cardium flavum* Linnaeus, Syst. Nat., ed. 10, 680.

1992 *Acrosterigma flava*: Lamprell & Whitehead, Biv. Austral., **1**, pl. 29, fig. 193.

1997 *Vasticardium flavum*: Vidal, Zoosystema, **19**(2-3), 239-241, figs. 1, 4a.

Loc. Shirahama (Kubota).

Dist. Eastern Indonesia to Western Carolines.

Genus *Vasticardium* Iredale, 1927 Zarugai-zoku

1927 *Vasticardium* Iredale, Rec. Austral. Mus., **16**, 75. Type (OD): *Vasticardium nebulosum* Iredale, 1927.

Vasticardium pectiniforme (Born, 1780) Asa-zarugai (Kuroda) Pl. 6, fig. 4.

1780 *Cardium pectiniforme* Born, Testacea, 49, pl. 3, fig. 10.

1954 *Vasticardium compunctum* Kuroda (MS): Kira, Col. Ill. Shells Japan, **1**, 111, pl. 55, fig. 8.

1997 *Vasticardium pectiniforme*: Vidal, Zoosystema, **19**(2-3), 244-248, figs. 2C, F-G, 3A, 4B-F.

2000 *Regozara flavum*: Matsukuma, Mar. Moll. Japan, 948-949, pl. 472, fig. 7.

Loc. Kamiura, Kushimoto (Tanaka).

Dist. Tropical Indian Ocean, Southeast Asia, eastern Australia, southwestern Japan, Fiji, and Western Carolines (Vidal, 1997).

Family Tridacnidae Lamarck, 1819 Shakogai-ka**Genus *Tridacna* Bruguière, 1797** O-jakogai-zoku

1797 *Tridacna* Bruguière, Tabl. Ency. Meth. Vers Test., pl. 235. Type (subsequent monotypy Lamarck, 1799): *Chama gigas* Linnaeus, 1758.

Subgenus *Flodacna* Iredale, 1937 Hire-jakogai-azoku

1937 *Flodacna* Iredale, Austral. Zool., 8(4), 238. Type (OD): *Tridacna squamosa* Lamarck, 1819.

Tridacna (Flodacna) squamosa Lamarck, 1819 Hire-jakogai (Mokuhachifu) Pl. 6, fig. 5.

1819 *Tridacna squamosa* Lamarck, Hist. Nat. Anim. s. Vert., 6(1), 106.

1965 *Tridacna (Chametrachea) squamosa*: Rosewater, Indo-Pacific Moll., 1(6), 380-383, pls. 263, 267, 285.

Loc. Off Sumisaki, Kushimoto, 8 m (Manabe); stranded at Ogokuda, Shionomisaki.

Dist. East Africa to eastern Melanesia. Ambon, Moluccas (type locality).

Family Mesodesmatidae Gray, 1840 Chidori-masuogai-ka**Genus *Monterosatus* Beu, 1971** Kohazegai-zoku

1971 *Monterosatus* Beu, Jour. Malac. Soc. Austral., 2(1), 125, new name for *Nesis* Locard, 1899. Type (M): *Nesis prima* Locard, 1899.

Monterosatus amamiensis Sakurai & Habe, 1973 Kohazegai (Sakurai & Habe)

1973 *Monterosatus amamiensis* Sakurai & Habe, Venus, 32(1): 4-6, figs. 1-2.

1995 *Monterosatus amamiensis*: Hasegawa & Saito, 1995, Illustr. Checklist Sakurai Coll., 7, 28, pl. 7, fig. 5 (holotype).

2000 *Monterosatus amamiensis*: Matsukuma, Mar. Moll. Japan, 968-969, pl. 482, fig. 4 (holotype).

Loc. Kamiura, Kushimoto (Kawabe).

Dist. Amami-Oshima Is. (type locality).

Family Tellinidae Blainville, 1814 Nikkogai-ka**Genus *Loxoglypta* Dall, Bartsch & Rehder, 1938** Shibori-zakuragai-zoku

1938 *Loxoglypta* Dall, Bartsch & Rehder, Bull. Bernice P. Bishop Mus., (153), 192. Type (OD): *Tellina obliquilineata* Conrad, 1837.

Loxoglypta transcalpta (Sowerby, 1915) Hasume-zakuragai (Kuroda) Pl. 6, fig. 6.

1915 *Macoma transcalpta* Sowerby, Ann. Mag. Nat. Hist., [8]16, 169, pl. 10, fig. 11.

1977 *Jactellina (Loxoglypta) transculpta* (sic): Habe, Syst. Moll. Japan, Biv. Scaph., 203.

1993 *Jactellina transcalpta*: Bernard et al., Cat. Liv. Mar. Biv. Moll. China, 93.

1999 *Loxoglypta transculpta*(sic): Higo et al., Cat. Bib.. Mar. Shell-bear. Moll. Japan, 487.

Loc. Tsuinoura, mouth of Tonda river (Yoshida); Kamiura, Kushimoto (Minaga).

Dist. East China Sea; Taiwan (Bernard et al., 1993). Hirado, Japan (type locality).

Genus *Scutarcopagia* Pilsbry, 1918 Same-zaragai-zoku

1918 *Scutarcopagia* Pilsbry, Proc. Acad. Nat. Sci. Phila., **69**, 332. Type (OD): *Tellina scobinata* Linnaeus, 1758.

Scutarcopagia scobinata (Linnaeus, 1758) Same-zaragai (Iwakawa) Pl. 6, fig. 7.

1758 *Tellina scobinata* Linnaeus, Syst. nat., ed. 10, 676.

1918 *Tellia (Arcopagia) elizabethae* Pilsbry, Proc. Acad. Nat. Sci. Phila., **69**, 331-332, pl. 22, fig. 8.

1938 *Scutarcopagia scobinata elizabethae*: Dall, Bartsch & Rehder, 1938, Bull. Burmice P. Bishop Mus., (153), 183-184, pl. 47, figs. 1-4.

1965 *Scutarcopagia scobinata*: Scarlato, Stud. Mar. Sinica, (8), 68-69, pl. 6, fig. 4.

1977 *Scutarcopagia scobinata*: Habe, Syst. Moll. Japan, Biv. Scaph., 200.

1992 *Tellina (Scutarcopagia) scobinata*: Lamprell & Whitehead, 1992, Biv. Austral., **1**, pl. 47, fig. 347

1995 *Scutarcopagia scobinata*: Bosch et al., Seashells E. Arabia, 256, fig. 1144.

Loc. Hatakeshima, Shirahama (Okoba); Ogokuda, Shionomisaki (Maeiwa, Minaga).

Dist. Arabian Sea, Southeast Asia, New Caledonia, Australia, southern Japan, Hawaii.

Genus *Elliptotellina* Cossmann, 1866 Chijimi-himezaragai-zoku

1866 *Elliptotellina* Cossmann, Ann. Soc. Malac. Belg., **21**, 71. Type (OD): *Donax tellinella* Lamarck, 1805.

Elliptotellina kikaizimana (Nomura & Zinbo, 1934) Kikai-himezaragai (Tsuchida & Ikebe) Pl. 7, fig. 1.

1934 *Tellina kikaizimana* Nomura & Zinbo, [2]16, 157, pl. 5, figs. 19a-b.

1989 *Elliptotellina kikaizimana*: Kaneko, Venus, **48**(1), 54.

1991 *Elliptotellina kikaizimana*: Tsuchida & Ikebe, Nanki Seibutsu, **33**(2), 71, pl. 3, figs. 4-5.

Loc. Off Shionomisaki, 70 m (Kaneko, Ikebe).

Dist. Andaman Sea, off Phuket (PMBC); New Caledonia; Yakushima Is., 77-82 m (Tsuchida), Kikaijima Islet, Kagoshima (Pleistocene, type locality); Zenisu submarine bank, Izu Archipelago (Tsuchida & Ikebe, 1991); Chichijima Island, Bonin Isls., 120 m (Nagai).

Elliptotellina flabellum (Viader, 1951) Arabori-himezaragai (Matsukuma, new vernacular name) Pl. 7, fig. 3.

1951 *Psammobia flabellum* Viader, Mauritius Inst. Bull., **3**(2), 143, pl. 5, fig. 3.

1958 *Asaphis nana* Powell, Rec. Auckland Inst. Mus., **5**, 75, pl. 9, fig. 5.

1991 *Elliptotellina* sp.: Tsuchida & Ikebe, Nanki Seibutsu, **33**(2), 71, pl. 3, figs. 6-7.

1993 *Agnomyax nana*: Willan, Rec. Australian Mus., Suppl., (18), 90-91, fig. 372.

Loc. Off Shionomisaki (Ikebe).

Dist. Andaman Sea, off Phuket (PMBC); Kermadec Isls. (Powell, 1958; Willan, 1993); Kumejima (Nagai) Is., 150 m (Nagai) and Tokashiki (Tsuchida & Ikebe, 1991), Okinawa; Zenisu submarine bank, Izu Archipelago (Tsuchida & Ikebe, 1991); Ogasawara Isls., 120 m (Nagai).

Elliptotellina sp. Kinu-himezaragai (Matsukuma, new vernacular name) Pl. 7, fig. 3.

Loc. Off Kushimoto (Ikebe).

Dist. Yonagunijima Is., Okinawa (Nagai); Yakushima Is., Kagoshima, 77-82 m (Tsuchida).

Genus *Jactellina* Iredale, 1929 Goshiki-zakuragai-zoku

1929 *Jactellina* Iredale, Mem. Queensland Mus., 9, 266. Type (OD): *Tellina obliquaria* Deshayes, 1855.

Jactellina obliquistriata (Sowerby, 1868) Goshiki-zakuragai (Gunpin) Pl. 6, fig. 8.

1868 *Tellina obliquistriata* Sowerby, Conch. Icon., 17, *Tellina* pl. 44, sp. 256, figs. 256a-c.

1965 *Exotica obliquistriata*: Scarlato, Stud. Mar. Sinica, (8), 88, pl. 12, fig. 2.

1993 *Jactellina obliquistriata*: Bernard et al., Cat. Liv. Mar. Biv. Moll. China, 92.

Loc. Ogokuda, Shionomisaki, Kushimoto (Minaga).

Dist. South China Sea; Taiwan (Bernard et al., 1993).

Family Semelidae Stoliczka, 1870 Asajigai-ka

Genus *Abra* Lamarck, 1818 Ryugu-zakuragai-zoku

1818 *Abra* Lamarck, Hist. Nat. Anim. s. Vert., 5, 492. Type (SD Herrmannsen, 1846): *Maetra tenuis* Montagu, 1818.

Abra philippinensis (E. A. Smith, 1885) Tsuya-ryugu-zakuragai (Tsuchida)

1885 *Semele (Abra) philippinensis* E. A. Smith, Rep. Challenger, Zool., 13, 86, pl. 5, fig. 3.

1985 *Abra philippinensis*: Tsuchida, Nanki Seibutsu, 27(2), 98-99, pl. 2, fig. 15.

Loc. Off Tanabe (Tsuchida).

Dist. Panay Is., Philippines (type locality).

Family Psammobiidae Fleming, 1828 Shio-sazanamigai-ka

Genus *Kermadysmea* Powell, 1958 Sudare-masuogai-zoku

1958 *Kermadysmea* Powell, Rec. Auckland Inst. Mus., 5, 73. Type (OD): *Kermadysmea galathea* Powell, 1958.

Kermadysmea galathea Powell, 1958 Sudare-yoshigai (Okutani) Pl. 7, fig. 4.

1958 *Kermadysmea galathea* Powell, Rec. Auckland Inst. Mus., 5, 74, pl. 10, fig. 4.

1983 *Kermadysmea galathea*: Okutani, World Seashells Rarity Beauty, 12, pl. 47, fig. 7.

1985 *Kermadysmea galathea*: Lan, Galaxy of Seashells, 167, fig.

1989 *Kermadysmea galathea*: Matsukuma, Mem. Nat. Sci. Mus., (22), 108-110, figs. 4-5, pl. 3, figs. 1-11.

1993 *Gari (Kermadysmea) galathea*: Willan, Rec. Austral. Mus., Suppl., (18), 59-60, figs. 194-196, 398.

Loc. Off Shionomisaki, 80 m (Nagai).

Dist. Reunion; Kermadec Isls. (Powell, 1958, type locality); Taiwan (Lan, 1985); Okinawa (Matsukuma, 1989).

Genus *Gobraeus* Brown, 1844 Ezo-masuogai-zoku

1844 *Gobraeus* Brown, Ill. Conch. Great Brit. Ireland, ed. 2, 102. Type (M): *Solen vespertinus* Gmelin, 1791 [= *Tellina depressa* Pennant, 1777].

Gobraeus oriens (Deshayes, 1855) Hanayaka-masuogai (Habe & Kosuge) Pl. 2, fig. 6.

1855 *Psammobia oriens* Deshayes, Proc. Zool. Soc. Lond., for 1854, 318.

1880 *Gari oriens*: Bertin, Nouv. Arch. Mus. D'Hist. Nat., [2], 3, 124.

1966 *Dysmea occidens* (Gmelin): Habe & Kosuge, Shells World Col., 2, 172, pl. 67, fig. 2 (non Gmelin, 1791).

1978 *Gari (Dysmea) tongana* (Quoy & Gaimard): Cernohorsky, Trop. Pac. Mar. Shells, 186, pl. 68, fig. 2 (non Quoy & Gaimard, 1835).

1986 *Gari (Dysmea) occidens*: Springsteen & Leobrera, Shells Philippines, 305, pl. 86, fig. 26 (non Gmelin, 1791).

1989 *Dysmea oriens*: Matsukuma, Mem. Nat. Sci. Mus. Tokyo, (22), 106-107, pl. 1, figs. 4-7.

1993 *Gari (Gobraeus) castrensis oriens*: Willan, Rec. Austral. Mus., Suppl., (18), 52-55, figs. 214-222, 395.

Loc. Takatomi, Kushimoto (Tanaka).

Dist. Madagascar; Loyalty Isls., New Caledonia; Queensland; Philippines; southern China; Japan; Tonga (Willan, 1993).

Genus *Soletellina* Blainville, 1824 Murasakigai-zoku

1824 *Soletellina* Blainville, Dict. Sic. Nat., 32, 350. Type (M): *Soletellina radiata* Blainville, 1824 [= *Solen diphos* Linnaeus, 1771].

Soletellina petalina (Deshayes, 1855) Ashibe-masuo-gai (Noda) Pl. 7, fig. 5.

1855 *Psammobia petalina* Deshayes, Proc. Zool. Soc. London, for 1854, 320-321.

1857 *Psammobia petalina*: Reeve, Conch. Icon., 7, *Psammobia* sp. 53, pl. 7, fig. 53.

1880 *Gari petalina*: Bertin, Nov. Arch. Mus. Hist. Nat. Paris, [2], 3, 127.

1992 *Soletellina petalina*: Lamprell & Whitehead, Biv. Australia, pl. 55, fig. 414.

1993 *Soletellina (Soletellina) petalina*: Willan, Rec. Australian Mus., Suppl., (18), 82-83, figs. 331-335, 411.

2001 *Soletellina petalina*: Noda, Chiribotan, 31(4), 91-97, pl. 1, figs. 1-6, pl. 2, fig. 1.

2002 *Soletellina (Soletellina) petalina*: Fukuda & Willan, Yuriyagai, 8(2): 57-61, figs. 1-7.

Loc. Mouth of Kinokawa river, Wakagawa river, Nagusahama, Nunobiki, Wakayama (Noda); Nishihiro, Hirokawa, Arita County (Noda); Takinai, Tanabe (Tanaka); Hatakeshima, Shirahama (Manabe).

Dist. Philippines; northern Australia; Chinese Sea; Fiji.

Family Solenidae Lamarck, 1809 Mategai-ka**Genus *Solen* Linnaeus, 1758** Mategai-zoku

1758 *Solen* Linnaeus, Syst. Nat., ed. 10, 672. Type (SD Schumacher, 1817): *Solen vagina* Linnaeus, 1758.

Solen kikuchii Cosel, 2002 Chigo-mategai (Habe) Pl. 7, fig. 6.

1999 *Solen dunkerianus*: Higo, Callomon & Goto 1999, Cat. Mar. Shell-bear. Moll. Japan, 481.

2000 *Solen dunkerianus*: Matsukuma, Mar. Moll. Japan, 990-991, pl. 493, fig. 9.

2002 *Solen kikuchii* Cosel, Collectanea Malacologica, 310-315, text-figs 12-13, col.-pl. 34, figs 1-4

Loc. Nagusahama, Nunobiki, Wakayama (Noda).

Dist. Ariake Sea (type locality).

Family Trapezidae Lamy, 1920 Funagatagai-ka

Genus *Glossocardia* Stoliczka, 1870 Tsukiyomigai-zoku

1870 *Glossocardia* Stoliczka, Mem. Geol. Surv. India, [6]3, 189. Type (OD): *Cypricardia obesa* Reeve, 1843.

Glossocardia stoliczkana Prashad, 1932 Mikado-tsukiyomigai (Tsuchida & Tanaka) Pl. 7, fig. 7.

1932 *Glossocardia stoliczkana* Prashad, Monogr. Siboga Exp., 53c, 148-149, pl. 8, figs. 15-18.

1995 *Glossocardia stoliczkana*: Matsukuma & Habe, Mem. Mus. Nat. d'Hist. Nat., 167, 92-94, figs. 14(?), 17, 20, 39(?).

Loc. Off Shionomisaki, 100 m (Nagai).

Dist. Mindoro, Panay, Cebu (?), and Sulu Archipelago (type locality), Philippines; Loyalty Islands, New Caledonia (Matsukuma & Habe, 1995).

Family Vesicomidae Dall, 1908 Otohime-hamaguri-ka

Genus *Calyptogena* Dall, 1891 Shirourigai-zoku

1891 *Calyptogena* Dall, Proc. U. S. Nat. Mus., 14, 189. Type (M): *Calyptogena pacifica* Dall, 1891.

Subgenus *Archivesica* Dall, 1908 Akebigai-azoku

1908 *Archivesica* Dall, Bull. Mus. Comp. Zool. Harvard, 43, 418. Type (OD): *Callocardia gigas* Dall, 1890.

Calyptogena (Archivesica) kawamurai (Kuroda, 1943) Akebigai (Kuroda)

1943 *Akebiconcha kawamurai* Kuroda, Japan. Jour. Malac., 13(1-4): 14-18, text-figs. 1-3.

1983 *Akebiconcha kawamurai*: Okutani, World Seash. Rar. Beauty, 12, pl. 46, fig. 9 (holotype).

1991 *Akebiconcha kawamurai*: Matsukuma et al., World Seash. Rar. Beauty, rev. enl., 187, pl. 150, fig. 3 (holotype).

2000 *Calyptogena (Archivesica) kawamurai*: Okutani, Mar. Moll. Japan, 998-999, pl. 497, fig. 15 (holotype).

2001 *Akebiconcha kawamurai*: Higo et al., Cat. Bib. Mar. Shell-bear. Moll. Japan, Types, 175, B1114 (holotype).

Loc. Off Tanabe (Tsuchida); off Kushimoto (Tsuchida).

Dist. Off Odawara, Sagami Bay (type locality).

Family Veneridae Rafinesque, 1815 Marusudaregai-ka

Genus *Veremolpa* Iredale, 1930 Hime-kanokoasari-zoku

- 1930 *Veremolpa* Iredale, Rec. Austral. Mus., **17**, 397. Type (OD): *Veremolpa ethica* Iredale, 1930 [= *Venus scabra* Hanley, 1845].

Veremolpa scabra (Hanley, 1845) Taiwan-hime-kanokoasari (Kuroda) Pl. 7, fig. 8.

- 1845 *Venus scabra* Hanley, Proc. Zool. Soc. Lond., for **1844**, 161.
 1853 *Venus scabra* Hanley, Thes. Conch., 2(14), 718, pl. 157, figs. 101-102.
 1856 *Venus scabra* Hanley, Suppl. Descr. Cat., 361, pl. 16, fig. 24.
 1977 *Timoclea scabra*: Fischer-Piette & Vukadinovic, Mem. Mus. Nat. d'Hist. Nat., nouv. ser., [A], Zool., **106**, 69-70, pl. 8, figs. 86-96, pl. 9, fig. 97.
 Loc. Off Kushimoto, 80 m (Nagai).
 Dist. Australia (Hanley, 1853).

Genus *Katelsia* Roemer, 1857 Sudare-hamaguri-zoku

- 1857 *Katelsia* Roemer, Krit. Unters. Venus, 17. Type (SD Kobelt, 1881): *Venus scalarina* Lamarck, 1818.

Katelsia japonica (Gmelin, 1791) Sudare-hamaguri (Mokuhachifu) Pl. 7, fig. 9.

- 1791 *Venus japonica* Gmelin, Syst. Nat., ed. 13, **1**(6), 3279.
 1791 *Venus striata* Gmelin, Syst. Nat., ed. 13, **1**(6): 3279.
 1798 *Venus porcata* Roeding, Mus. Bolten., (2): 182.
 1818 *Venus tristis* Lamarck, Hist. Nat. Anim. s. Vert., **5**: 614.
 1818 *Venus vulvina* Lamarck, Hist. Nat. Anim. s. Vert., **5**: 614.
 1818 *Venus flammea* Lamarck, Hist. Nat. Anim. s. Vert., **5**: 616, non *Venus flammea* Gmelin, 1791.
 1971 *Marcia japonica*: Fischer-Piette & Métivier, Mem. Mus. Nat. Hist. Nat., new ser., ser. A, Zool., 71: 59-61, pl. 12, figs. 10-12, 13-15, 16, pl. 13, 1-8.
 1977 *Katelsia japonica*: Habe, Syst. Moll. Japan, Biv. Scaph., 267.
 2000 *Katelsia japonica*: Matsukuma, Mar. Moll. Japan, 1014-1015, pl. 505, fig. 59.
 Loc. Rivermouth of Hikigawa river (Maeiwa); Yukashigata, Yukawa, Nachi-Katsuura (Yoshida).
 Dist. Kyushu and southwards (Habe, 1977).

Genus *Sunettina* Pfeiffer, 1869 Beni-wasuregai-zoku

- 1869 *Sunettina* Pfeiffer, Syst. Conch.-Cab., **11**(1), 86. Type (M): *Cytherea solanderii* Gray, 1825.

Sunettina langfordi Habe, 1953 Okinawa-wasuregai (Habe), Langford-wasuregai (Kuroda) Pl. 7, fig. 10.

- 1953 *Sunettina langfordi* Habe, Venus, **17**(3), 132, 139-140.
 1961 *Sunetta (Cyclosunetta) langfordi*: Habe, Col. Ill. Shells Japan, **2**, 130, pl. 58, fig. 15.
 1977 *Sunettina langfordi*: Habe, Syst. Moll. Japan, Biv. Scaph., 272.
 Loc. Kamiharaido, Gobo (Minaga).
 Dist. Itoman, Okinawa (type locality); Amami-Oshima; Hachijojima.

Family Petricolidae Deshayes, 1839 Iwahorigai-ka

Genus *Petricola* Lamarck, 1801 Iwahorigai-zoku

- 1801 *Petricola* Lamarck, Syst. Anim. s. Vert., 121. Type (SD Schmidt, 1818): *Petricola costata*

Lamarck, 1818 [= *Venus lapicida* Gmelin, 1791].

Petricola sp. Usukara-shiotsugai (Habe) Pl. 7, fig. 11.

2002 *Petricola* sp. cf. *lithophaga*: Kurozumi & Okamoto, *Venus*, **61**(1-2): 111.

Loc. Nagusahama, Wakayama (Noda).

Dist. Inland Sea of Japan; Osaka Bay; Tokyo Bay (Kurozumi & Okamoto, 2002).

Family Glauconomidae Gray, 1853 Hanagumorigai-ka

Genus Glauconome Gray, 1828 Hanagumorigai-zoku

1828 *Glauconome* Gray, *Spicil. Zool.*, 6. Type (M): *Glauconome chinensis* Gray, 1828.

Glauconome chinensis Gray, 1828 Hanagumorigai (Hirase) Pl. 7, fig. 12.

1828 *Glauconome chinensis* Gray, *Spicil. Zool.*, (1-2), 6.

1954 *Glauconome chinensis*: Kira, *Col. Ill. Shells Japan*, **1**, 116, pl. 58, fig. 16.

1977 *Glauconome chinensis*: Habe, *Syst. Moll. Japan*, **277**, pl. 59, figs. 16-17.

2000 *Glauconome chinensis*: Matsukuma, *Mar. Moll. Japan*, 1000-1001, pl. 498, fig. 1.

Loc. Nishihiro beach, Hirokawa, Arita-gun (Minaga).

Dist. Ariake Sea; Inland Sea of Japan; Tokyo Bay. Korea; China.

Subclass ANOMALODESMATA Dall, 1889 Ijintai-ako

Family Myochamidae Bronn, 1862 Mitsukado-katabiragai-ka

Genus Myadropsis Habe, 1960 Yamazaki-suemonogai-zoku

1960 *Myadropsis* Habe, *Publ. Seto Mar. Biol. Lab.*, **8**(2), 293. Type (OD): *Thracia transmontana* Yokoyama, 1922.

Myadropsis brevispinosus Habe, 1962 Toge-yamazaki-suemonogai (Habe) Pl. 8, fig. 1.

1962 *Myadropsis brevispinosus* Habe, *Col. Ill. Shells Japan*, **2** (ed. 2), 142-143, app. 46, pl. 64, fig. 8.

1977 *Myadropsis brevispinosa*: Habe, *Syst. Moll. Japan*, 309, pl. 65, figs. 3-4.

2000 *Myadropsis brevispinosus*: Okutani, *Mar. Moll. Japan*, 1034-1035, pl. 515, fig. 7.

Loc. Off Shirahama, 30 m (Nagai).

Dist. Boso Peninsula to Kyushu. Tomioka, Amakusa (type locality).

Family Periplomatidae Dall, 1895 Ryugu-hagoromogai-ka

Genus Periploma Schumacher, 1817 Ryugu-hagoromogai-zoku

1817 *Periploma* Schumacher, *Essai Vers Test.*, 115. Type (M): *Periploma inaequalvis* Schumacher, 1817 [= *Corbula margaritacea* Lamarck, 1801].

Subgenus Halistrepta Dall, 1904 Chijiwa-ryugu-hagoromogai-azoku

1904 *Halistrepta* Dall, *Nautilus*, **15**, 123. Type (M): *Periploma sulcata* Dall, 1904.

Periploma (Halistrepta?) pacifica Okutani, 1962 Izuno-hagoromogai (Okutani) Pl. 8, fig. 2.

1962 *Periploma (Halistrepta?) pacifica* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 31, pl. 3, fig. 5; pl. 4, fig. 2.

2000 *Periploma (Halistrepta) pacifica*: Okutani, Mar. Moll. Japan, 1034, 1037, pl. 515, fig. 2.

Loc. Wabuka, Kushimoto, 550 m; off Shionomisaki, 600 m (Nagai).

Dist. Off Miyakejima Is. (type locality).

Family Tracidae Stoliczka, 1870 Suemonogai-ka

Genus *Asthenothaerus* Carpenter, 1864 Semata-suemonogai-zoku

1864 *Asthenothaerus* Carpenter, Ann. Mag. Nat. Hist., [3], 13, 311. Type (M): *Asthenothaerus villosior* Carpenter, 1864.

Asthenothaerus isaotakii Okutani, 1964 Taki-suemonogai (Okutani) Pl. 8, fig. 3.

1964 *Asthenothaerus isaotakii* Okutani, Venus, 23(2), 84-85, text-fig. 6.

2000 *Asthenothaerus isaotakii*: Okutani, Mar. Moll. Japan, 1038-1039, pl. 517, fig. 6.

Loc. Off Shionomisaki, 300-350 m (Nagai); southwest of Shionomisaki, 500 m (Nagai).

Dist. Sagami Bay (type locality) and Enshunada Sea.

Family Verticordiidae Stoliczka, 1871 Otohime-gokorogai-ka

Genus *Halicardia* Dall, 1895 Nippon-otohime-gokorogai-zoku

1895 *Halicardia* Dall, Proc. U. S. Nat. Mus., 17(1032), 697. Type (OD): *Mytilimeria flexuosa* Verrill & Smith in Verrill, 1881.

Halicardia nipponensis Okutani, 1957 Nippon-otohime-gokorogai (Shikama) Pl. 2, fig. 7.

1957 *Halicardia nipponensis* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (17), 28, pl. 1, figs. 2-3, 6-7.

1961 *Halicardia nipponensis*: Habe, Col. Ill. Shells Japan, 2, 145, pl. 65, fig. 5.

1962 *Halicardia (Halicardia) nipponensis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 31-32, pl. 2, fig. 3; pl. 4, fig. 13.

1962 *Halicardia nipponensis*: Shikama, Sci. Rep. Yokohama Nat. Univ., [2], 8, 54, pl. 3, figs. 8a-c.

1966 *Halicardia nipponensis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 9.

1968 *Halicardia nipponensis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 17-18.

2000 *Halicardia nipponensis*: Okutani, Mar. Moll. Japan, 1040-1041, pl. 518, fig. 6.

Loc. Off Shionomisaki, 600 m (Nagai).

Dist. Kashimanada Sea; Sagami Bay (type locality); off Sanriku.

Genus *Haliris* Dall, 1886 Uneshige-gokorogai-zoku

1886 *Haliris* Dall, Bull. Mus. Comp. Zool. Harvard, 12(6), 287. Type (OD): *Verticordia fischeriana* Dall, 1881.

Subgenus *Setaliris* Iredale, 1930 Hishi-otohime-gokorogai-azoku

1930 *Setaliris* Iredale, Rec. Austral. Mus., 17, 388. Type (OD): *Verticordia setosa* Hedley, 1907.

Haliris (Setaliris) makiyamai (Habe in Kuroda, 1952) Hishi-otohime-gokorogai (Kuroda) Pl. 8, fig. 4.

1952 *Verticordia (Haliris) makiyamai* Habe in Kuroda, Venus, 17(1): 10, pl. 1, figs. 8-9.

1977 *Haliris (Setaliris) makiyamai*: Habe, Syst. Moll. Japan, Biv. Scaph., 316, pl. 66, fig. 5.

2000 *Haliris (Setaliris) makiyamai*: Okutani, Mar. Moll. Japan, 1040-1041, pl. 518, fig. 3.

Loc. Sakai, Minabe (Ikebe).

Dist. Izu Isls. to Kyushu.

Genus *Lyonsiella* M. Sars in G. Sars, 1872 Mijin-kigokorogai-zoku

1872 *Lyonsiella* M. Sars in G. Sars, Remark. Forms Life, 25. Type (M): *Pecchiolia abyssicola* G. Sars, 1872.

Lyonsiella parva Okutani, 1962 Mijin-kigokorogai (Okutani) Pl. 8, fig. 5.

1962 *Lyonsiella parva* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 29, pl. 3, fig. 7.

1966 *Lyonsiella parva*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 9, pl. 1, fig. 9.

1968 *Lyonsiella parva*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 17.

2000 *Lyonsiella parva*: Okutani, Mar. Moll. Japan, 1040-1041, pl. 518, fig. 7.

Loc. Off Tanami, Kushimoto, 400 m (Nagai).

Dist. Off Miyake Is. (type locality) and Sagami Bay.

Genus *Euciroa* Dall, 1881 Gin-sunagogai-zoku

1881 *Euciroa* Dall, Bull. Mus. Comp. Zool. Harvard, 9, 106. Type (OD): *Verticordia elegantissima* Dall, 1881.

Euciroa millegemmata Kuroda & Habe, 1952 Chirimen-gin-sunagogai (Kuroda) Pl. 8, fig. 6.

1952 *Euciroa millegemmata* Kuroda & Habe in Kuroda, Japan. Jour. Malac., 17(1), 14, pl. 1, figs. 12-15.

1977 *Euciroa millegemmata*: Habe, Syst. Moll. Japan, Biv. Scaph., 317.

Loc. Off Tanabe, 216 m (Koyama).

Dist. Off Kochi (type locality).

Family Poromyidae Dall, 1886 Sunamegai-ka**Genus *Cetoconcha* Dall, 1886** Bidoro-sunamegai-zoku

1886 *Cetoconcha* Dall, Bull. Mus. Comp. Zool. Harvard, 12(6), 280. Type (OD): *Lyonsia bulla* Dall, 1878.

Cetoconcha tenuissima Okutani, 1966 Yowa(-bidoro)-sunamegai (Habe)

1966 *Cetoconcha tenuissima* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 9-10, pl. 1, fig. 6; text-fig. 5.

2000 *Cetoconcha tenuissima*: Okutani, Mar. Moll. Japan, 1042-1043, pl. 519, fig. 7.

Loc. Off Tanami, 400 m (Nagai).

Dist. Off Hachijo Is. (type locality).

Remarks. The place where the specimens collected by Nagai are kept is unknown.

Family Cuspidariidae Dall, 1886 Shakushigai-ka

Genus *Cuspidaria* Nardo, 1840 Shakushigai-zoku

1840 *Cuspidaria* Nardo, Atti Riun. Sci. Ital., 1(1839), 202. Type (M): *Cuspidaria typus* Nardo, 1840 [= *Tellina cuspidata* Olivi, 1792].

Cuspidaria obtusirostris Okutani, 1962 Watazoko-shakushigai (Okutani) Pl. 8, fig. 7.

1962 *Cuspidaria obtusirostris* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 34-35, pl. 3, fig. 16; pl. 5, figs. 5-5a.

1966 *Cuspidaria obtusirostris*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (46), 10, pl. 1, fig. 10.

1968 *Cuspidaria obtusirostris*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 19.

2000 *Cuspidaria obtusirostris*: Okutani, Mar. Moll. Japan, 1044-1045, pl. 520, fig. 9.

Loc. Off Esuzaki, Susami, 700 m (Nagai).

Dist. Izu Archipelago and Sagami Bay (type locality).

Cuspidaria sadoensis Okutani & Ito, 1983 Mijin-shakushigai (Okutani & Ito) Pl. 8, fig. 8.

1983 *Cuspidaria sadoensis* Okutani & Ito, Venus, 42(2), 167-169.

2000 *Cuspidaria sadoensis*: Okutani, Mar. Moll. Japan, 1044-1045, pl. 520, fig. 15.

Loc. Off Kushimoto, 400 m (Ikebe).

Dist. Sado Strait (type loc.) and Kii Peninsula.

Cuspidaria mitis Prashad, 1932 Yowa-shakushigai (Shikama) Pl. 8, fig. 9.

1932 *Cuspidaria mitis* Prashad, Monogr. Siboga Exp., 53c, 328, pl. 7, figs. 7-7a.

1962 *Cuspidaria* cf. *mitis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 33, pl. 3, fig. 13; pl. 5, figs. 7-7a.

1968 *Cuspidaria mitis*: Okutani, Bull. Tokai Reg. Fish. Res. Lab., (56), 18-19.

2000 *Cuspidaria mitis*: Okutani, Mar. Moll. Japan, 1044-1045, pl. 520, fig. 10.

Loc. Off Shionomisaki, 500 m (Nagai).

Dist. Java Sea (type locality).

Cuspidaria kyushuensis Okutani, 1962 Kyushu-shakushigai (Okutani) Pl. 8, fig. 10.

1962 *Cuspidaria kyushuensis* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 35, pl. 3, fig. 12.

2000 *Cuspidaria kyushuensis*: Okutani, Mar. Moll. Japan, 1044-1045, pl. 520, fig. 11.

Loc. Off Shionomisaki, 550-600 m (Nagai).

Dist. Off Kushikino (type locality).

Genus *Cardiomya* A. Adams, 1864 Hime-shakushigai-zoku

1864 *Cardiomya* A. Adams, Ann. Mag. Nat. Hist., [3], 13, 208. Type (M): *Neaera gouldiana* Hinds, 1843.

Cardiomya nipponica (Okutani, 1962) Sekiguchi-hime-shakushigai (Okutani & Sakurai) Pl. 2, fig. 8.

1962 *Cuspidaria* (*Cardiomya*) *abyssicola nipponica* Okutani, Bull. Tokai Reg. Fish. Res. Lab., (32), 35-36, pl. 3, figs. 14-15, pl. 5, figs. 6-6a.

1964 *Cardiomya nipponica*: Okutani & Sakurai, Bull. Nat. Sci. Mus. Tokyo, 7(1), 22-23, Fig. 2;

pl. 1, fig. 6.

2000 *Cardiomya nipponica*: Okutani, Mar. Moll. Japan, 1046-1047, pl. 521, fig. 22.

Loc. Off Kushimoto, 400 m (Ikebe).

Dist. Sagami Bay (type locality), Kashimanada Sea.

Cardiomya kashimana Okutani & Sakurai, 1964 Ara-hime-shakushigai (Okutani & Sakurai) Pl. 8, fig. 11.

1964 *Cardiomya kashimana* Okutani & Sakurai, Bull. Nat. Sci. Mus. Tokyo, 7(1), 22-23, text-fig. 1; pl. 1, figs. 3-4.

1995 *Cardiomya kashimana*: Tsuchida & Kurozumi, Jour. Nat. Hist. Mus. Inst. Chiba, 3(2), 185.

2000 *Cardiomya kashimana*: Okutani, Mar. Moll. Japan, 1046-1047, pl. 521, fig. 25.

Loc. Off Shionomisaki, 110 m (Nagai).

Dist. Kashima-Nada Sea, 200-360 m; Sagami Bay, 740-1030 m.

Cardiomya robiginosa Okutani & Sakurai, 1964 Sabi-hime-shakushigai (Okutani) Pl. 8, fig. 12.

1964 *Cardiomya robiginosa* Okutani & Sakurai, Bull. Nat. Sci. Mus. Tokyo, 7(1), 23-24, pl. 1, fig. 7.

2000 *Cardiomya robiginosa*: Okutani, Mar. Moll. Japan, 1046-1047, pl. 521, fig. 24.

Loc. Off Shionomisaki, 500 m (Nagai).

Dist. Sagami Bay (type locality).

P L A T E S

PLATE 2

- 1 *Nuculana (Thestyleda) tanseimaruae* Tsuchida & Okutani, 1985
(Tansei-) Enaga-robaigai, 15.3 × 5.89 mm, off Shionomisaki, 450-500 m
- 2 *Tucetona cf. sibogae* Matsukuma, 1982
Karekusa-uchiwagai, 15.1 × 15.8 mm, off Shionomisaki, 100 m
- 3 *Lima ogasawarensis* Habe, 1993
Ogasawara-minogai, 8.70 × 11.8 mm, Suga fishing port, Kamiura,
Kushimoto
- 4 *Parvamussium* sp.
6.56 × 8.35 mm, off Shionomisaki, 320 m
- 5 *Axinulus simplex* (Verrill & Bush, 1898)
Yogore-hanashigai, 4.09 × 3.79 mm, off Shionomisaki, 500 m
- 6 *Gobraeus oriens* (Deshayes, 1855)
Hanayaka-masuogai, 55.3 × 29.3 mm, Takatomi, Kushimoto
- 7 *Halicardia nipponensis* Okutani, 1957
Nippon-otohime-gokorogai, 35.6 × 39.0 mm, off Shionomisaki, 600 m
- 8 *Cardiomya nipponica* (Okutani, 1962)
Sekiguchi-hime-shakushigai, 11.6 × 6.12 mm, off Kushimoto, 400 m

PLATE 2

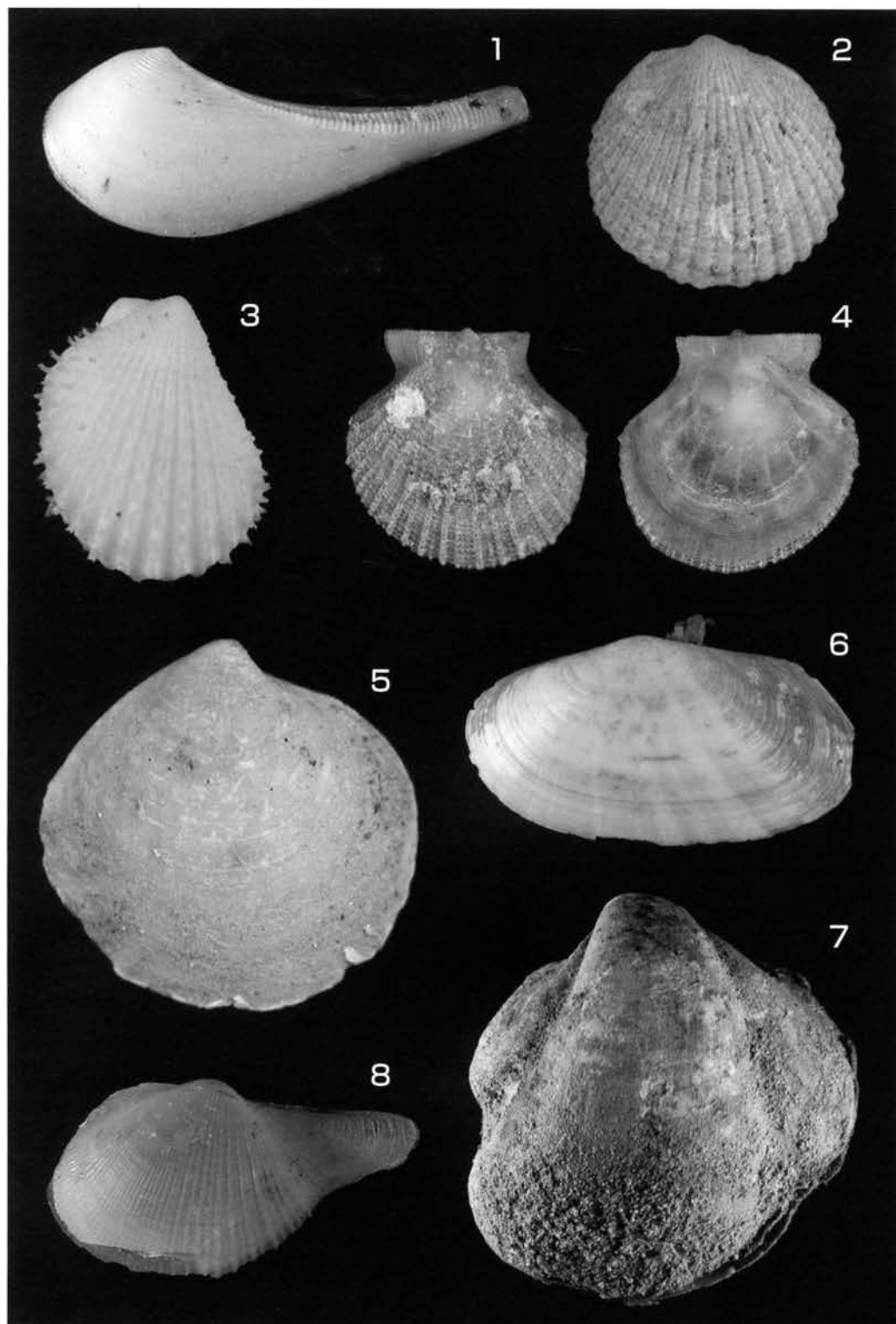


PLATE 3

- 1 *Nucula* sp.
3.14 × 2.61 mm, off Shionomisaki, 650 m
- 2 *Neilonella soyoae* Habe, 1958
Soyo-hatomugi-sodegai, 10.3 × 7.19 mm, southwest of Kushimoto,
500 m
- 3 *Neilonella japonica* Okutani, 1962
Nippon-hatomugi-sodegai, 6.12 × 5.17 mm, off Shionomisaki, 1400m
- 4 *Neilonella kirai* Habe, 1953
Kira-hatomugi-sodegai, 11.2 × 7.41 mm, off Kii-Oshima, 200 m
- 5 *Bathymalletia takaii* (Okutani, 1968)
Takai-sodegai, 12.0 × 7.42 mm, off Shionomisaki, 650 m
- 6 *Tindaria* cf. *similis* Okutani, 1962
Fukami-sodegai, 4.28 × 3.91 mm, off Wabuka, Kushimoto, 300 m
- 7 *Nuculana (Thestyleda) sagamiensis* Okutani, 1962
Sagami-arabori-robaigai, 7.66 × 3.68 mm, off Shionomisaki, 180-200 m

PLATE 3

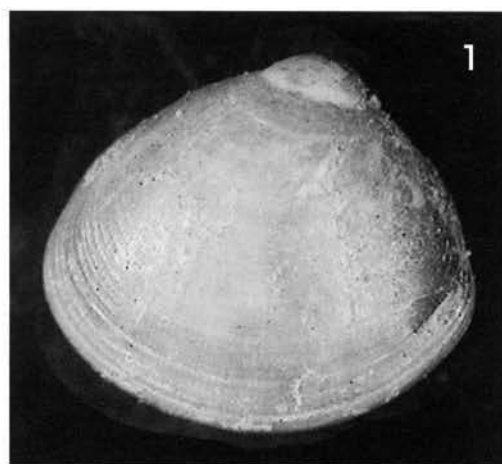


PLATE 4

- 1 *Nuculana (Thestylea) subscalata* Okutani, 1962
Tsugino-enaga-robaigai, 10.5 × 3.98 mm, off Shionomisaki, 1200 m
- 2 *Tenuileda ikebei* (Suzuki & Kanehara, 1936)
Kagero-sodegai, 13.1 × 6.85 mm, Wabuka, Kushimoto, 600 m
- 3 *Bathyarca nipponica* Okutani, 1962
Sagami-watazoko-egai, 5.01 × 3.70 mm, off Shionomisaki, 420 m
- 4a,b *Mimarcaria cf. aizoi* (Sakurai, 1969)
Ryugu-washinohagai, 9.48 × 5.52 mm, off Kushimoto
- 5a,b *Cratis ohashii* Hayami & Kase, 1993
Ohashi-shirasunagai-modoki, 2.37 × 2.75 mm, off Shionomisaki
- 6a,b *Perna viridis* (Linnaeus, 1758)
Midori-igai, 47.9 × 98.1 mm, Kushimoto
- 7a,b *Adipicola longissima* (Thiele & Jaeckel, 1932)
Suehiro-mayuigai, 21.3 × 9.57 mm, off Susami, 432-468 m (b: animal
in fruit of Nippa-palm)
- 8 *Lithophaga (Leiosolenus) obesa* (Philippi, 1847)
Sekitori-ishimategai, 55.2 × 22.4 mm, Takatomi, Kushimoto
- 9 *Lithophaga (Diberus) divaricalx* Iredale, 1939
Suehiro-ishimategai, 21.3 × 9.57 mm, Sakai, Minabe
- 10 *Lithophaga (Diberus) cf. canalifera* Hanley, 1844
Kongo-ishimategai, 30.0 × 10.5 mm, Kamiura, Kushimoto

PLATE 4

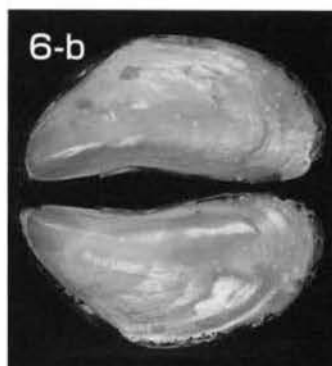
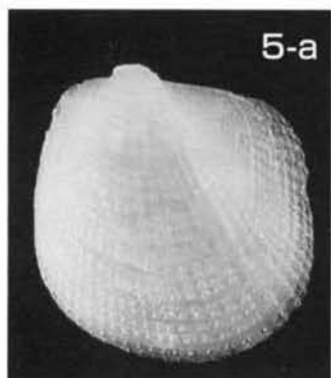
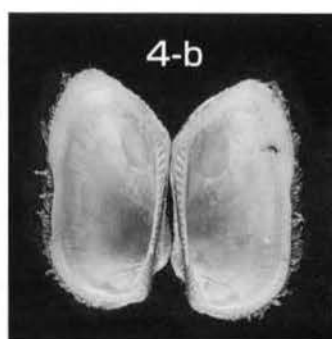
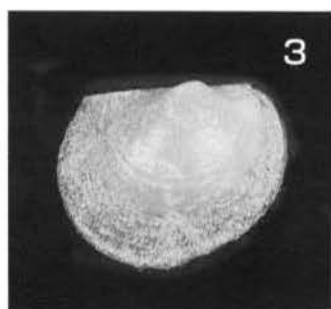


PLATE 5

- 1 *Lima sagamiensis* Masahito, Kuroda & Habe in Kuroda et al., 1971
Sagami-maru-minogai, 3.73 × 4.37 mm, Sakai, Minabe
- 2 *Delectopecten alcocki* (Smith, 1904)
Ginrin-hari-nadeshikogai, 15.9 × 16.6 mm, off Shionomisaki, 600 m
- 3 *Delectopecten vancouverensis* (Whiteaves, 1893)
O-hari-nadeshikogai, 14.9 × 13.9 mm, Kushimoto
- 4 *Propeamussium siratama* (Oyama, 1951)
Shiratama-tsukihigai, 11.0 × 10.4 mm, off Shionomisaki, 500 m
- 5 *Cyclopecten bistratus* (Dall, 1916)
Koshi-hari-nadeshikogai, 6.34 × 6.64 mm, off Shionomisaki, 600 m
- 6 *Cyclopecten nakaii* Okutani, 1962
Nakai-nishikigai, 9.45 × 10.4 mm, off Wabuka, Kushimoto, 500 m
- 7 *Cyclopecten nipponensis* Okutani, 1962
Nippon-watazoko-nadeshikogai, 5.50 × 5.32 mm, off Esuzaki,
Susami, 1200 m
- 8 *Chlamydella incubata* Hayami & Kase, 1993
Komochi-hari-nadeshikogai, 15.9 × 16.4 mm, Shimokusui, Gobo

PLATE 5

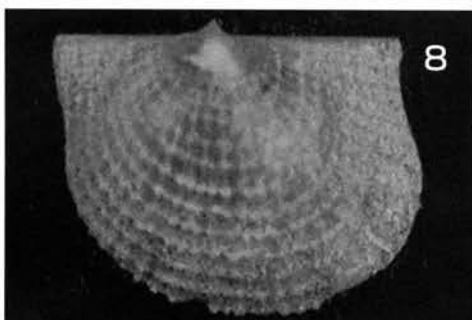
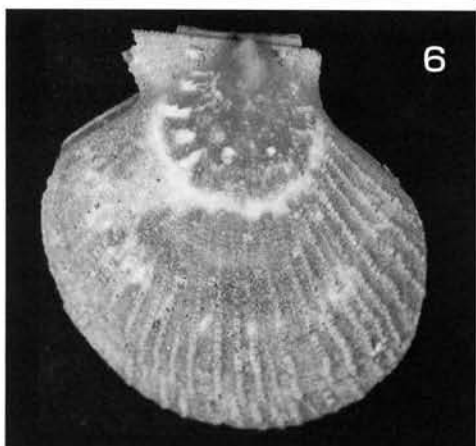
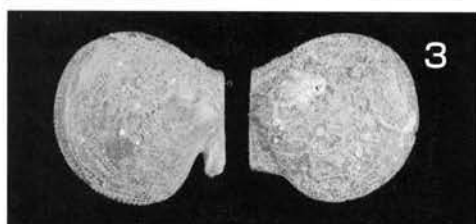
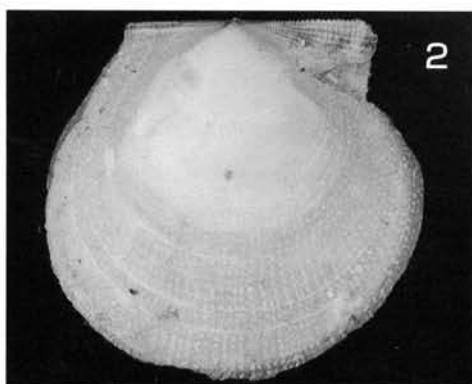


PLATE 6

- 1 *Saccostrea cucullata* (Born, 1778)
Ohaguro-gaki-modoki, 44.1 × 39.9 mm, Nishihiro, Hirokawa, Arita
- 2 *Cycladicama oblonga* (Sowerby in Deshayes, 1855)
Nekoze-shiogamagai, 14.4 × 18.0 mm, off Shionomisaki, 160 m
- 3 *Megacardita coreensis* (Deshayes, 1854)
Hataune-fumigai, 6.94 × 7.99 mm, off Shionomisaki, 160 m
- 4 *Vasticardium pectiniforme* (Born, 1780)
Asa-zarugai, 24.7 × 38.3 mm, Kamiura, Kushimoto
- 5 *Tridacna (Flodacna) squamosa* Lamarck, 1819
Hire-jakogai, 118 × 72.6 mm, stranded at Ogokuda, Shionomisaki
- 6 *Loxoglypta transcalpta* (Sowerby, 1915)
Hasume-zakuragai, 16.6 × 9.17 mm, Tsuinoura, mouth of Tonda river
- 7 *Scutarcopagia scobinata* (Linnaeus, 1758)
Same-zarugai, 37.9 × 41.8 mm, stranded at Ogokuda, Shionomisaki
- 8 *Jactellina obliquistriata* (Sowerby, 1868)
Goshiki-zakuragai, 9.44 × 7.43 mm, stranded at Ogokuda, Shionomisaki

PLATE 6

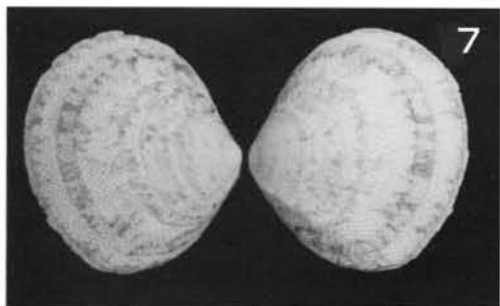
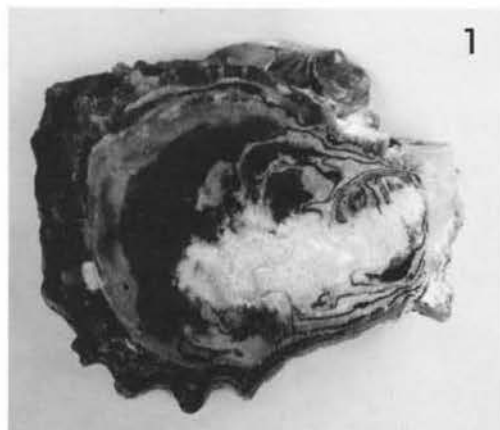


PLATE 7

- 1 *Elliptotellina kikaizimana* (Nomura & Zinbo, 1934)
Kikai-himezaragai, 10.8 × 6.20 mm, off Shionomisaki, 70 m
- 2 *Elliptotellina* sp.
Kinu-himezaragai (new vernacular name), 9.72 × 5.64 mm, off Shionomisaki, 100 m
- 3 *Elliptotellina flabellum* (Viader, 1951)
Arabori-himezaragai (new vernacular name), 9.67 × 4.87 mm, off Shionomisaki, Kushimoto
- 4 *Kermadysmea galatheae* Powell, 1958
Sudare-yoshigai, 52.8 × 28.8 mm, off Shionomisaki, 80 m
- 5 *Soletellina petalina* (Deshayes, 1855)
Ashibe-masuogai, 16.1 × 8.61 mm, Nunobiki, Wakayama
- 6 *Solen kikuchii* Cosel, 2002
Chigo-mategai, 20.9 × 7.47 mm, Nagusahama, Wakayama
- 7 *Glossocardia stoliczkana* Prashad, 1932
Mikado-tsukiyomigai, 22.9 × 7.47 mm, off Shionomisaki, 100 m
- 8 *Veremolpa scabra* (Hanley, 1845)
Taiwan-hime-kanokoasari, 9.76 × 8.31 mm, off Kushimoto, 80 m
- 9 *Katelysia japonica* (Gmelin, 1791)
Sudare-hamaguri, 48.7 × 41.7 mm, Yukashigata, Yukawa, Nachi-Katsuura
- 10 *Sunettina langfordi* Habe, 1953
Okinawa-wasuregai, 16.3 × 11.5 mm, Kamiharaido, Gobo
- 11 *Petricola* sp.
Usukara-shiotsugai, 13.6 × 9.06 mm, Nagusahama, Wakayama
- 12 *Glaucanome chinensis* Gray, 1828
Hanagumorigai, 23.7 × 13.9 mm, Nishihiro beach, Hirokawa, Arita

PLATE 7

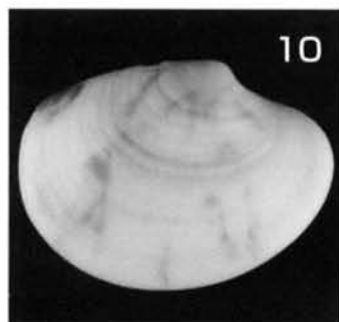
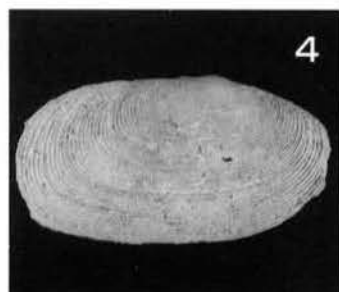


PLATE 8

- 1 *Myadropsis brevispinosus* Habe, 1962
Toge-yamazaki-suemonogai, 7.98 × 4.16 mm, off Shirahama, 30 m
- 2 *Periploma (Halistrepta?) pacifica* Okutani, 1962
Izuno-hagoromogai, 8.01 × 5.83 mm, Wabuka, Kushimoto, 550 m
- 3 *Asthenothaerus isaotakii* Okutani, 1964
Taki-suemonogai, 5.82 × 4.58 mm, off Shionomisaki, 300-350 m
- 4 *Haliris (Setaliris) makiyamai* (Habe in Kuroda, 1952)
Hishi-otohime-gokorogai, 36.1 × 4.80 mm, Sakai, Minabe
- 5 *Lyonsiella parva* Okutani, 1962
Mijin-kigokorogai, 5.78 × 5.06 mm, off Tanami, Kushimoto, 400 m
- 6 *Euciroa millegemmata* Kuroda & Habe, 1952
Chirimen-gin-sunagogai, 15.5 × 12.8 mm, off Tanabe, 216 m
- 7 *Cuspidaria obtusirostris* Okutani, 1962
Watazoko-shakushigai, 7.57 × 5.46 mm, off Esuzaki, Susami, 700 m
- 8 *Cuspidaria sadoensis* Okutani & Ito, 1983
Mijin-shakushigai, 4.13 × 2.15 mm, off Kushimoto, 400 m
- 9 *Cuspidaria mitis* Prasad, 1932
Yowa-shakushigai, 15.9 × 7.13 mm, off Shionomisaki, 500 m
- 10 *Cuspidaria kyushuensis* Okutani, 1962
Kyushu-shakushigai, 12.8 × 9.39 mm, off Shionomisaki, 550-600 m
- 11 *Cardiomya kashimana* Okutani & Sakurai, 1964
Ara-hime-shakushigai, 11.6 × 6.12 mm, off Shionomisaki, 110 m
- 12 *Cardiomya robiginosa* Okutani & Sakurai, 1964
Sabi-hime-shakushigai, 21.3 × 12.9 mm, off Shionomisaki, 500 m

PLATE 8

