

# Supplement and New Records to Bivalve and Scaphopod Fauna around the Nansei Islands, Southwestern Japan

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**Abstract** Additional material of the bivalve and scaphopod specimens collected from insular shelf, slope and bathyal depths in the Nansei Islands area supplements the distribution records and new occurrences to the previous results. Among 53 bivalves and 5 scaphopods in the present material, two new species (*Tellinangulus corbuloides* sp. nov. and *Euciroa subspinosa* sp. nov.), and a single species new to Japan (*Tindaria weberi*) are included. Twenty-three species are re-recorded, and seven were not identified to the species level.

**Key words:** Bivalves, scaphopods, new species, supplement, Nansei Islands.

## Introduction

Since the previous report on the bivalves and scaphopods collected under the project “Deep-sea fauna and pollutants around the Nansei Islands” conducted by the National Science Museum Tokyo (NSMT) was completed (Okutani, 2005), new more material of the same source, particularly 2004 collection, became available for study. They not only supplement to the distribution records of some species, but also contain new taxa to be added to the molluscan fauna around Nansei Islands.

## Material

The present report treats only the live taken specimens as was so in the previous paper. The geographical coverage is similar to that of the previous study (Fig. 1). See the previous report (Okutani, 2005) for the format.

## Taxonomy

[Species names with an asterisk indicate those already appeared in the previous report (Okutani, 2005). Jn: Japanese name]

## CLASS BIVALVIA

### Subclass Protobranchia

Family Nuculidae Gray, 1824

- A. *Leionucula niponica* (Smith, 1885) [Jn: Kurumigai]  
*Material examined:* TY04-02 (1: 11.4 mm).
- B. *Lamellinucula tokyoensis* Yokoyama, 1920  
[Jn: Yosenami-kurumigai]  
*Material examined:* TY04-02 (4: 3.8–5.5).

Family Malletiidae H. Adams & A. Adams, 1858

3. \* *Bathymalletia inequilateralis* (Habe, 1954)  
[Jn: Sumizome-sodegai]  
*Material examined:* TY04-02 (2: 6.8, 13.1).

Family Neilonellidae Allen, 1978

4. *Neilonella soyoae* Habe, 1958 [Jn: Soyohatomugi-sodegai]  
*Material examined:* TY04-02 (1: 7.4).
5. *Neilonella* sp.  
*Material examined:* TY04-02 (2: 4.3, 5.4).

Family Tindariidae Verrill & Bush, 1897

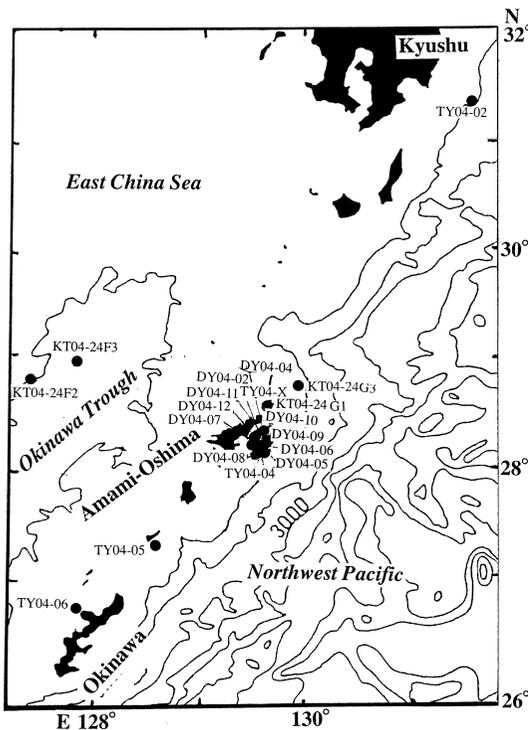


Fig. 1. Positive stations for the present material.

6. *Tindaria weberi* (Prashad, 1932) [New Jn: Fukure-mijin-sodegai] (Fig. 2A)

*Material examined*: TY04-02 (1: 5.0).

*Remarks*: A single specimen from off southern Kyushu at a depth of 528–523 m almost agrees with *Neilonella weberi* described from Siboga St. 271 (5°46. 7'S, 134°0'E, 1788 m). The Siboga specimen measured 4.3×3.8×3 mm (Prashad, 1932), while the present specimen measures 5.0×4.2×3.5. The identification was made on the basis of thick, ovate shell, with very close proportions, ornamented by regular commarginal riblets, slightly opisthogyrous umbo. According to the original description, this species has a thick hinge plate carrying ten teeth on the anterior arc, and 16 on the posterior arc, but this character was not examined on the present specimen for fear of destroying a sole specimen when forced to open. The lack of edentulous space between both arcs, possession of commarginal riblets, and shortness of posterior region of the shell indicate that the present species is allo-

cated to the genus *Tindaria*.

Family Nuculanidae H. Adams & A. Adams, 1858

7. \* *Nuculana (Thestyleda) tanseimaruae* Tsuchida & Okutani, 1985 [Jn: Tansei-enagatobai] (Fig. 2D)

*Material examined*: TY04-02 (7: 9.5–16.4).

*Remarks*: Since the original description from off Kii Peninsula, 353–416 m, this species has been collected from bathyal depths, such as from off Boso Peninsula, 507–578 m (Tsuchida & Kurozumi, 1995). The present collection was also from a depth of 528–523 m.

8. *Jupiteria (Saccella) confusa* (Hanley, 1860) [Jn: Genroku-sodegai]

*Material examined*: TY04-04 (2: 7.6, 8.6).

**Subclass Pteriomorphia**

Family Arcidae Lamarck, 1809

9. *Arca avellana* Lamarck, 1819 [Jn: Funegai]

*Material examined*: TY04-05 (2: 6.9, 10.8).

10. \* *Mimarcaria matsumotoi* Habe, 1958 [Jn: Chigo-washinoha]

*Material examined*: TY04-05 (2: 8.5, 10.1).

11. \* *Mimarcaria aizoi* (Sakurai, 1969) [Jn: Ryugu-washinoha]

*Material examined*: KT04-24-F2 (1: 7.9).

12. \* *Bentharca rubrotincta* Kuroda & Habe, in Habe, 1958 [Jn: Akafu-kumasaka-yadori] (Fig. 2C)

*Material examined*: DY04-02 (1: 4.8), DY04-11 (1: 9.6).

*Remarks*: The type locality of this species was *Soyo-Maru* St. 322 in the Bungo Straits, 110 m. Therefore, the previous and present discoveries of this species in the Nansei Islands are slight southern range extensions. Habe (1961) originally gave the Japanese name “Akafu-kumasaka-yadorigai”, but later (1977) “Aka-kumasaka-egai” to this species. Higo & Goto (1993) used “Akafu-kumasaka-yadori”. The erroneous name, “Akakumasaka-egai” was used in

Table 1. Collection data of the present material.

Cruise-Sta.	Date	Position (N. lat. & E. long.)	Depth (m)	Gear*
KT04-24-F2	22/10/2004	28°46.17', 127°19.10'—28°47.00', 127°19.68'	974–997	BT
KT04-24-F3	22/10/2004	28°57.07', 127°46.51'—28°57.88', 127°47.11'	1094–1105	BT
KT04-24-G1	22/10/2004	28°33.13', 129°38.08'—28°33.25', 129°38.17'	175–178	BT
KT04-24-G3	22/10/2004	28°42.10', 129°58.29'—28°42.20', 129°59.56'	293–320	BT
TY04-02	17/05/2004	31°26.20', 131°39.84'—31°25.65', 131°39.62'	528–523	BT
TY04-04	25/05/2004	28°09.20', 129°31.50'—28°09.58', 129°31.89'	334–332	BT
TY04-05	21/05/2004	27°19.78', 128°31.32'	177	DG
TY04-06	23/05/2004	26°49.27', 127°51.56'—26°49.32', 127°52.49'	331	BT
TY04-X	21/05/2004	28°22.37', 129°15.97'—28°22.28', 129°15.43'	290	BT
DY04-02	23/06/2004	28°19.59', 129°46.33'—28°20.09', 129°46.55'	152–157	DG
DY04-04	23/06/2004	28°23.85', 129°43.30'—28°23.99', 129°43.30'	52–46	DG
DY04-05	24/06/2004	28°09.95', 129°40.40'—28°10.45', 129°40.52'	500–471	DG
DY04-06	24/06/2004	28°12.42', 129°39.32'—28°13.06', 129°39.36'	364–335	DG
DY04-07	24/06/2004	28°15.95', 129°37.92'—28°16.64', 129°38.21'	208–195	DG
DY04-08	25/06/2004	28°13.01', 129°32.09'—28°13.47', 129°32.15'	219–213	DG
DY04-09	25/06/2004	28°13.99', 129°30.74'—28°14.33', 129°30.90'	153–151	DG
DY04-10	25/06/2004	28°14.19', 129°28.88'—28°14.45', 129°28.97'	104–103	DG
DY04-11	25/06/2004	28°17.50', 129°32.55'—28°17.64', 129°32.78'	54–51	DG
DY04-12	25/06/2004	28°16.19', 129°35.31'—28°16.47', 129°35.62'	123–117	DG

\* BT: Beam trawl; DG: Dredge.

the previous paper (Okutani, 2005).

13. *Bentharca* sp.

*Material examined*: TY04-X (1: 7.1).

14. *Bathyarca nipponica* Okutani, 1962. [Jn: Sagami-watazoko-egai] (Fig. 2B)

*Material examined*: TY04-02 (3: 3.7–3.8).

*Remarks*: This tiny species was originally described from Sagami Bay, 550–700 m deep (Okutani, 1962). The present occurrence was from off southern Kyushu, 528–523 m. This is the first record of this species outside Sagami Bay, and thus represents a range extension of this species. The specimen erroneously depicted as *B. sagamiensis* by Matsukuma & Okutani (2000) is this species.

15. *Bathyarca* sp.

*Material examined*: KT04-24-F3 (1: 4.2).

16. *Acar soyoae* Habe, 1958 [Jn: Soyo-mimiegai]

*Material examined*: KT04-24-F2 (2: 5.7, 6.3); TY04-X (1: 5.9).

17. *Spinearca fausta* (Habe, 1953) [Jn: Moeshima-mimiegai]

*Material examined*: KT04-24-F2 (1: 5.1); TY04-05 (1: 4.0).

18. \* *Limopsis obliqua* A. Adams, 1863 [Jn: Naname-shirasunagai]

*Material examined*: TY04-X (4: 4.2–5.6).

Family Mytilidae Rafinesque, 1815

19. \* *Modiolus margaritaceus* (Nomura & Hatai, 1940) [Jn: Mame-hibarigai]

*Material examined*: DY04-10 (7: 7.8–13.1).

Family Limidae Rafinesque, 1815

20. *Ctenoides suavis* Masahito, Kuroda & Habe in Kuroda, Habe & Oyama, 1971 [Jn: Tenninhanegai] (Fig. 2H)

*Material examined*: TY04-X (1: 13.6).

*Remarks*: This species was originally described from Sagami Bay, 80–87 m, based on the collection of the Imperial Household Biological Laboratory. Habe (1977, 1981) gave its geographical range from Sagami Bay to Kyushu, 50–200 m. The present collection was from 290 m, and represents a slight range extension.

Family Pectinidae Rafinesque, 1815

Family Limopsidae Dall, 1895

21. *Delectopecten alcocki* (Smith, 1904) [Jn: Ginrin-harinadeshiko] (Fig. 2F, G)

*Material examined*: KT04-24-F2 (1: 19.1).

*Remarks*: This delicate scallop was originally described from the *Investigator* collection from a depth of 786 m at 7°17'N, 76°54'E (lectotype designated by Dijkstra, 1995). The geographical range in the Pacific down south from the Chesterfield Island up north to the Philippines via the Sea of Sumatra (Knudsen, 1967; Dijkstra 1991, 1995). But, this species has recently been recorded from further north up to the Japanese waters, such as off Boso Peninsula, 550 m (Tsuchida & Kurozumi, 1995) and off Tosa Bay, 996–1801 m (Tsuchida, 1994). The present discovery links the southern tropical and northern temperate distributional areas in the Northwest Pacific.

Family Propeamussidae Abbott, 1954

22. \**Propeamussium rubrotinctum* (Oyama, 1951) [Jn: Oboro-tsukihi]

*Material examined*: TY04-06 (4: 5.8–10.9).

23. *Propeamussium siratama* (Oyama, 1951) [Jn: Shiratama-tsukihi] (Fig. 2E)

*Material examined*: KT04-24-F3 (6: 7.0–7.7); TY04-02 (5: 6.6–8.1).

*Remarks*: Since the original description from Japan, this species has recently been recorded from New Caledonia, 316–533 m, and Indonesia, 283–285 m (Dijkstra & Kastoro, 1997).

24. *Propeamussium watsoni* (Smith, 1885) [Jn: Shintei-tsukihi]

*Material examined*: KT04-24-F2 (4: 29.4–37.6).

*Remarks*: Since the R/V *Soyo-Maru* trawled

this species from off Bayonnaise Rocks, Izu Islands, 2140–2150 m for the first time in Japan (Okutani, 1962), this species has occasionally been collected from bathyal to upper abyssal depths in the Japanese waters (*e.g.* Tsuchida, 1994).

25. \**Parvamussium scitulum* (Smith, 1885) [Jn: Kumadori-tsukihi]

*Material examined*: KT04-24-G3 (1: 7.0).

26. \**Parvamussium toyoshiomaruae* Okutani, 2005 [Jn: Kakuroku-motorinishiki]

*Material examined*: KT04-24-G3 (1: 6.9).

*Remarks*: This species was described based on the specimens from off the Amami-Oshima Island, 288–311 m, by the R/V *Toyoshio-Maru* during the 2001 survey (St. TY01-07).

*P. aldeynzeri* Dijkstra, 2004 from the Philippines exhibits a certain affinity to this species, but Dijkstra's species has whitish translucent shell and apparent intercalated secondary riblets unlike this species, which has an orange-colored shell with more numbers of radial riblets that are seldom intercalated by secondary ones.

Family Spondylidae Gray, 1826

27. *Spondylus* sp.

*Material examined*: KT04-24-F2 (1 juv.: 5.6); DY04-05 (1 juv.: 4.1).

*Remarks*: Both specimens are so small that it is inconclusive whether they are conspecific or separate species. Both were obtained from relatively deep bottom (974–997 m, and 500–471 m) for this family.

Family Plicatulidae Watson, 1930

Fig. 2. Noteworthy species treated in this paper. A. *Tindaria weberi* (SL=5.0 mm) TY04-02; B. *Batharca nipponica* (SL=3.8 mm) TY04-02; C. *Bentharca rubrotincta* (SL=4.8 mm) DY04-02; D. *Nuculana tanseimaruae* (SL=16.4 mm) TY04-02; E. *Propeamussium siratama* (SL=8.1 mm) TY04-02; F, G. *Delectopecten alcocki* (SL=19.1 mm) KT04-24-F2; H. *Ctenoides suavis* (SL=13.6 mm) TY04-X; I. *Tellinella patagiata* (SL=9.6 mm) DY04-02; J. *Semelangulus tokubeii* (SL=9.1 mm) DY04-11; K–M. *Tellinangulus corbuloides* sp. nov. (Holotype: SL=9.8 mm) DY04-09; N. *Glans millegrana* (SL=5.9 mm) TY04-06; O. *Cardita kyushuensis* (SL=25.9 mm) KT04-24-G1; P. *Callanaitis hiraseana* (SL=15.5 mm) DY04-12; Q. *Offadesma* sp. (SL=10.5 mm) TY04-02; R. *Euciroa subspinosa* sp. nov. (Holotype: SL=6.0 mm) TY02-11; S. *Entalina cornucopiae* (SL=20.8 mm) TY04-02.



28. *Plicatula horrida* Dunker, 1882 [Jn: Ishigaki-modoki]  
*Material examined*: TY04-05 (1: 4.4).
29. \* *Plicatula muricata* Sowerby, 1873 [Jn: Mogura-no-te]  
*Material examined*: KT04-24-G1 (2: 10.8, 11.9); DY04-02 (1: 11.0).

Family Dimyidae Rafinesque, 1815

30. *Dimya filipina* Bartsch, 1913 [Jn: Ishigaki]  
*Material examined*: KT04-24-G1 (1: 8.6).

Subclass Heterodonta

Family Thyasiridae Dall, 1901

31. *Parathyasira kawamurai* (Habe, 1951) [Jn: Kawamura-hanashigai]  
*Material examined*: TY04-02 (1: 8.3).
32. *Axinulus kelliaeformis* Okutani, 1962 [Jn: Sagami-maru-hanashigai]  
*Material examined*: TY04-02 (1: 4.8).  
*Remarks*: This species is now known from Sagami Bay to the Nansei Isalands at bathyal depths.
33. *Axinulus* sp.  
*Material examined*: TY04-02 (1: 5.1).

Family Carditidae

34. \* *Cardita kyushuensis* (Okutani, 1963) [Jn: Nikuiro-tomayagai] (Fig. 2O)  
*Material examined*: KT04-24-G1 (1: 25.9).  
*Remarks*: This species was originally described based on dead valves dredged from insular shelf of Uji Islands, west coast of Kyushu. Habe (1981) gave its range from Kii Peninsula to Kyushu.
35. *Glans millegrana* (Nomura & Zinbo, 1934) [Jn: Hana-fumigai] (Fig. 2N)  
*Material examined*: TY04-06 (1: 5.9).  
*Remarks*: Since the first discovery of living specimens from off Tanegashima Island (Okutani, 1958), no published report on the occurrence has been available, except for Habe (1961,

1977) who gave the distribution range of this species as “Tanegashima Island to Amamai Group”. The present discovery corroborates Habe’s data.

36. \* *Glans quadrangularis* (Namura & Zinbo, 1934) [Jn: Shikaku-fumigai]  
*Material examined*: DY04-04 (1: 6.5).

Family Chamidae Lamarck, 1809

37. \* *Amphichama argentata* (Kuroda & Habe, 1958) [Jn: Unmo-zaru]  
*Material examined*: TY04-05 (1: 11.1).
38. *Chama* sp.  
*Material examined*: KT04-24-G1 (1: 4.2).  
*Remarks*: A very small juvenile specimen does not permit the positive identification.

Family Crassatellidae Férussac, 1822

39. \* *Indocrassatella oblongata* (Yokoyama, 1920) [Jn: Watazoko-moshio]  
*Material examined*: DY04-12 (1: 10.1).
40. \* *Indocrassatella quadratus* (Noda, 1980) [Jn: Okinawa-moshio]  
*Material examined*: DY04-12 (1: 6.1).  
*Remarks*: Following Noda (1980), the generic name *Crassatellites* was used in the previous list (Okutani, 2005). But, it seems to be better to consider this species to be congeneric with the preceding species.

Family Cardiidae Lamarck, 1809

41. \* *Frigidocardium exasperatum* (Sowerby, 1841) [Jn: Shimo-oki-zaru]  
*Material examined*: DY04-10 (1:6.3).
42. \* *Laevicardium undatopictum* (Pilsbry, 1904) [Jn: Madara-chigotori]  
*Material examined*: DY04-10 (1: 8.5).

Family Tellinidae Blainville, 1814

43. \* *Nitidotellina minuta* (Lischke, 1872) [Jn: Uzu-zakura]  
*Material examined*: DY04-05 (2: 7.7, 9.0);

DY04-12 (1: 7.5).

44. *Tellinella patagiata* (Prashad, 1932) [Jn: Hina-zakura] (Fig. 2I)

*Material examined*: DY04-02 (2: 8.6, 9.6).

*Remarks*: This tellinid was originally described from *Siboga* St. 260 (5°36.5'S, 132°55.2'E: 90 m). It is characterized by yellow shell ornamented by spaced, sharply edged, commarginal riblets. Habe (1981) reported this species from Wakayama Prefecture.

45. *Cadella narutoensis* Habe, 1960 [Jn: Marukusabizara]

*Material examined*: DY04-11 (1: 13.2).

46. *Semelangulus tokubeii* Habe, 1951 [Jn: Kome-zakura] (Fig. 2J)

*Material examined*: DY04-11 (1: 9.1).

47. *Tellinangulus corbuloides* sp. nov. [New Jn: Kodaki-zakura] (Fig. 2K–M)

*Type locality*: DY04-09: 28°13.99'N, 129°30.74'E–28°14.33'N, 129°30.90E, 153–151 m, Amami-Oshima Island.

*Type material*: Holotype (NSMT-Mo 73819); paratype (NSMT-Mo 73820).

*Description*: Shell small, rather thick, inequivalve, inequilateral. Shell pale yellowish in external color, ornamented by spaced, flat commarginal riblets, which is minutely frilled in postero-ventral region. Many very delicate radial lines present all over. These radial lines interrupted by commarginal riblets, representing delicate reticulation. Brownish periostracum present only along ventral margin. Two pronounced radial ridges running from umbo to postero-ventral corner, creating short rostrum-like appearance towards tip. Beaks low, almost orthogyrous. Antero-dorsal margin nearly straight, continuous to round anterior margin, then to gently round ventral margin. Immediately ahead of “rostrum” tip with shallow concavity at posterior ventral margin. “Rostrum” tip obliquely truncated, with acute angle below and obtuse angle above, and weakly skewed to right. Postero-dorsal margin that carries external ligament ascending straight to umbo.

Internal surface shining with iridescent sheen. External commarginal sculpture vaguely visible

from inside. Right valve slightly larger than left. Hinge plate very narrow, with low, bump-like anterior lateral tooth. Anterior cardinal tooth rather small, followed by strong, nearly vertical, bifurcated posterior cardinal tooth. A deep socket between anterior cardinal tooth and vertical anterior ramus of posterior cardinal tooth. Posterior ramus weaker, forerun by shallower socket. Posterior lateral tooth indistinct. Pallial line not reaching to posterior adductor scar, but terminating ahead of level of anterior rim of posterior adductor scar. Sinus not traceable. Left valve lacking anterior lateral tooth. Anterior cardinal tooth thick, and posterior one thin and oblique. Anterior cardinal tooth bifurcated with shallow socket between both rami. Socket between vertically situated posterior ramus of anterior cardinal tooth and posterior cardinal tooth deep. Posterior lateral tooth representing low bump. Condition of the pallial line likewise terminating on way to reaching posterior adductor scar. Sinus not apparent.

*Measurements* (shell length×shell height×shell width in mm):

Holotype 9.8×6.1×3.3; paratype 9.4×6.1×3.1.

*Etymology*: The species name is derived from a superficial resemblance to the Corbulidae, such as an inequivalve shell with skewed posterior end, which is weakly rostrate, and with periostracum along the ventral margin.

*Remarks*: This is the first species belonging to the genus *Tellinangulus* Thiele, 1934 in the Japanese waters. This species differs from *Tellinangulus aethiopica* (Thiele, 1931) from *Valdivia* St. 244, off Dar es Salaam, Tanzania, 50 m, in having a lower and longer shell. According to the definition by Cox *et al.* (1969), *Tellinangulus* lacks AII and PI. The posterior lateral tooth of the right valve of the present species is vestigial in contrast to the apparent anterior lateral. The anterior lateral tooth of the left valve is completely wanting in the present species.

Family Glossidae Gray, 1847

48. *Meiocardia moltkiana* (Gmelin, 1791) [Jn:

## Kanokoshibori-kohone]

*Material examined*: DY04-10 (1: 10.7).

*Remarks*: Kira (1959) and Habe (1977) regarded a tropical Indo-Malaysian species, *M. sanguineomaculata* (Dunker, 1882) as a synonym of this species, but Matsukuma & Habe (1995) recently reviewed all members of the genus *Meiocardia*, clarifying the validities of both taxa.

## Family Veneridae Rafinesque, 1815

49. *Callanaitis hiraseana* Kuroda, 1930 [Jn: Yume-hamaguri] (Fig. 2P)

*Material examined*: DY04-12 (1: 15.5).

50. *Veremolpa mindanensis* (Smith, 1885) [Jn: Adeyaka-hime-kanokoasari]

*Material examined*: DY04-09 (1: 8.0).

51. *Circe (Redicirce) sulcata* Gray, 1838 [Jn: Tomo-shiraogai]

*Material examined*: DY04-09 (1: 9.0).

## Subclass Anomalodesmacea

## Family Periplomatidae Dall, 1895

52. *Offadesma* sp. (Fig. 2Q)

*Material examined*: TY04-02 (1: 10.5).

*Remarks*: A single specimen seems to represent a new species. However, the fracture on the right valve does not permit to open the shell. Thus the description awaits until more specimens will be obtained in future.

## Family Euciroidae Dall, 1894

53. *Euciroa subspinosa* sp. nov. [New Jn: Hina-ginsunago] (Fig. 2R)

*Type locality*: TY02-11: 26°32.18'N, 127°43.96'E–26°32.64'N, 127°44.29'E, 404–349 m, off Nago Bay, Okinawa Island.

*Type material*: Holotype (NSMT-Mo 73821); paratype (NSMT-Mo 73822).

*Description*: Shell small, thin, fragile, opaque, almost equivalve, inequilateral. Beaks acute, situated at about one-third anteriorly,

weakly prosogyrous. Anterior to antero-ventral margin round, but postero-ventral margin straight and ascending. Posterior margin round with an obtuse angle at meeting point with straight dorsal margin. Strong ridge running from umbo to postero-ventral corner. Anterior to this ridge, about 11 radial ribs with few intercalated ones present. They all bearing spaced, rather acute, small scales. Very weakly scaled riblets present posterior to ridge. Lunule narrow, demarcated by low ridge. Escutcheon rather indistinct. Internal surface lustrous, exhibiting radial grooves corresponding to external radial ribs. Right valve with curved, strong cardinal tooth and narrow posterior or lateral tooth. Left valve with narrow, bifurcated cardinal tooth bordering resilifer, and a weak postero-lateral lamina. Lithodesma heart-shaped. Muscle scars not traceable.

*Measurements (shell length×shell height×shell width in mm)*:

Holotype 6.0×2.5×1.8; Paratype 6.2×4.2×—.

*Remarks*: This fragile species is close to *Euciroa spinosa* Thiele & Jaeckel, 1931 from the *Valdivia* Sts. 242 and 245, and off Dar es Salaam, Tanzania, western Indian Ocean, 404–463 m, particularly in possession of radial ribs carrying spaced and acute scales. However, Thiele & Jaeckel's species has more ribs (18 in number) and more roundly convex ventral margin. The present species is characterized by having a low shell with straightly ascending postero-ventral margin. No other members of the genus *Euciroa*, which usually has globose shell, are comparable with this new species (see Poutiers & Bernard, 1995).

## CLASS SCAPHOPODA

## Order Dentaliida

## Family Dentaliidae Gray, 1834

1. \* *Antalis tibanum* (Nomura, 1940) [Jn: Migaki-tsunogai]

*Material examined*: KT04-24-G3 (1: 41.9); TY04-X (1: 33.9); DY04-02 (1: 18.1); DY04-06 (1: 22.7); DY04-07 (2: 23.7, 37.9); DY04-

12 (1: 22.1).

2. \* *Striidentalium rhabdotum* (Pilsbry, 1905)  
[Jn: Muchi-tsunogai]  
*Material examined*: TY04-02 (16: 19.1-43.8).

Family Laevidentaliidae Palmer, 1974

3. \* *Laevidentalium coruscum* (Pilsbry, 1905)  
[Jn: Shirazaya-tsunogai]  
*Material examined*: TY04-02 (3: 26.7–41.8).

Family Gadiliniidae Chistikov, 1975

4. \* *Episiphon subrectum* (Jeffreys, 1883) [Jn: Rosoku-tsunogai]  
*Material examined*: DY04-09 (1: 26.5).

### Order Gadilina

Family Entalinidae Chistikov, 1979

5. *Entalina cornucopiae* (Boissevain, 1906) [Jn: Odayaka-mikado-tsunogai] (Fig. 2S)  
*Material examined*: TY04-02 (2: 16.5, 20.8).

### Discussion

The present study supplements to the previous inventory of insular shelf, slope and bathyal bivalve and scaphopod fauna of the Nansei (Shoto) Islands (Okutani, 2005). In this study, 53 bivalves and five scaphopods were recognized. Among them, 23 species (40.3%) were already recorded in this region by the previous paper. Seven of them were identified only to the generic level, because the most of them were tiny juveniles. *Offadesma* sp. seems to represent a new species, but a sole, fragile specimen was not subjected to close examination. Two spondylids were from relatively great depths for the family, but identifications of them remained at the generic level.

A single specimen of *Tindaria weberi* (Prashad, 1932) represents a new addition to the Japanese fauna. The type locality of this species

is near Aru Island, New Guinea. Along with *Ledella procumbens* in the previous report, this is another range extension of the *Siboga* species to southwestern Japan. A new species *Euciroa subspinosa* sp. nov. is described herein. The holotype and a paratype specimens were discovered from the previous material (TY02-11), but they had accidentally been ignored during the previous investigation. Another new species *Tellinangulus corbuloides* sp. nov. was discovered from the supplementary materials. The rest of 28 species represent either occurrences within the distribution range, or new discoveries from the Nansei Islands region, such as *Bathyarca nipponica*, *Ctenoides suavis*, *Delectopecten alcocki*, and *Tellinella patagiata* among others.

Together with the previous report, the project “Deep-sea fauna and pollutants in Nansei Islands, 2001–2004” conducted by the National Science Museum Tokyo yielded 154 bivalves and 8 scaphopods containing five new bivalves and a single new scaphopod from catches of ten cruises of four vessels. The lists, notes and descriptions in the present and previous reports contribute the understanding of the shallow to bathyal molluscan fauna in Nansei Islands extending from the southern tip of Kyushu to Okinawa.

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