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# New species and new records of bathyal living Pectinoidea (Bivalvia: Propeamussiidae: Pectinidae) from the Southwest Pacific

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## KEY WORDS

Mollusca,  
Bivalvia,  
Pectinoidea,  
Propeamussiidae,  
Pectinidae,  
Southwest Pacific,  
bathyal,  
new species,  
new records.

## ABSTRACT

Nineteen species of Pectinoidea (16 Propeamussiidae, 3 Pectinidae) are herein listed. All species from the Solomon Islands (9 species), and New Caledonia (Norfolk Ridge [7], main island of New Caledonia [1], Grand Passage [1], Coral Sea [1]) are new records. Two Propeamussiidae species are new to science: *Parvamussium orbiculatum* n. sp. (Solomon Islands and Coral Sea) and *Parvamussium perspicuum* n. sp. (Vanuatu). One pectinid species from Vanuatu (*Juxtamussium* sp.) will be described later, when more material becomes available.

## RÉSUMÉ

*Nouvelles espèces et signalisation de Pectinoidea de l'étage Bathyal (Bivalvia: Propeamussiidae: Pectinidae) originaire du sud-ouest du Pacifique.*

Dix-neuf espèces de Pectinoidea (16 Propeamussiidae, 3 Pectinidae) sont listées dans ce travail. Toutes les espèces sont de nouvelles occurrences pour les Îles Salomon (9), et la Nouvelle-Calédonie (Ride de Norfolk [7], Lagune [1], Grand Passage [1], Mer de Corail [1]). Deux Propeamussiidae sont nouveaux pour la science : *Parvamussium orbiculatum* n. sp. (Îles Salomon et Mer de Corail) et *Parvamussium perspicuum* n. sp. (Vanuatu). Une espèce de Pectinidae du Vanuatu (*Juxtamussium* sp.) sera décrite plus tard lorsque d'autres spécimens auront été récoltés.

## MOTS CLÉS

Mollusca,  
Bivalvia,  
Pectinoidea,  
Propeamussiidae,  
Pectinidae,  
Pacifique sud-ouest,  
bathyal,  
espèces nouvelles,  
nouvelles signalisations.

## INTRODUCTION

This paper deals with bathyal living new pectinoid species and records from the southwestern Pacific dredged and trawled by the Musorstom French cruises (1993–2008) to New Caledonia (BATHUS 1, 1993; CONCALIS, 2008; EBISCO, 2005; NORFOLK 2, 2003; TERRASSES, 2008), Solomon Islands (SALOMON 2, 2004; SALOMONBOA 3, 2007), and the Vanuatu Archipelago (BOA 1, 2005).

The present specimens are additional new species and new records to the Pectinoidea from the same regions recorded in the following previous publications (Dijkstra 1995, 2001; Dijkstra & Marshall 1997, 2008; Dijkstra & Maestrati 2008, 2012).

All studied material is deposited in the MNHN.

## ABBREVIATIONS AND TEXT CONVENTIONS

## REPOSITORIES

|       |                                                       |
|-------|-------------------------------------------------------|
| NHMUK | National History Museum of United Kingdom, London;    |
| MNHN  | Muséum national d'Histoire naturelle, Paris;          |
| NBCN  | Naturalis Biodiversity Center, Leiden;                |
| RMNH  | Nationaal Natuurhistorisch Museum, Leiden (now NBCN); |
| ZMA   | Zoologisch Museum, Amsterdam (now part of NBCN).      |

## STATION DATA

|    |                               |
|----|-------------------------------|
| CP | chalut à perche (beam trawl); |
| DW | drague Warén (Warén dredge).  |

## OTHER ABBREVIATIONS

|        |                                     |
|--------|-------------------------------------|
| D      | depth “thickness of paired valves”; |
| H      | height;                             |
| lv     | left valve(s);                      |
| rv     | right valve(s);                     |
| spm(s) | live-taken specimens;               |
| stn    | station;                            |
| W      | width.                              |

## SYSTEMATICS

Superfamily PECTINOIDEA Rafinesque, 1815  
Family PROPEAMUSSIIDAE Abbott, 1954

Genus *Propeamussium* de Gregorio, 1884

*Propeamussium meridionale*  
(Smith, 1885)

*Amussium meridionale* Smith, 1885: 316, pl. 24, figs 1–1a.

MATERIAL EXAMINED. — **Southern Indian Ocean.** 50°01'S, 123°00'E, 3292 m (“*Challenger*” stn 158), lectotype spm (NMHUK 1887.2.9.337), designated by Dijkstra (1995: 19).

**Solomon Islands.** SALOMON 2, stn CP 2182, 08°47'S, 159°38'E, 762–1060 m, 1 lv. — Stn CP 2249, 07°31'S, 156°18'E, 782–884 m, 5 lv. — Stn CP 2250, 07°29'S, 156°17'E, 845–970 m, 51 spms, 2 lv, 2 rv.

DISTRIBUTION. — See Dijkstra & Maestrati (2008: 83). Now also Solomon Islands, live in 845–970 m.

*Propeamussium sibogai*  
(Dautzenberg & Bavay, 1904)

*Amussium sibogai* Dautzenberg & Bavay, 1904: 207, figs 1–4.

MATERIAL EXAMINED. — **Indonesia.** Bali Sea, 7°15'S, 115°15'E, 289 m (“*Siboga*” stn 12), holotype spm (ZMA Moll. 3.04.001).

**Norfolk Ridge.** NORFOLK 2, stn DW 2142, 23°01'S, 168°17'E, 550 m, 1 spm, 1 lv. TERRASSES, stn DW 3119, 22°52'S, 167°23'E, 570–590 m, 1 lv, 3 rv.

DISTRIBUTION. — See Dijkstra & Maestrati (2008: 84). Now also Norfolk Ridge, live in 550 m.

*Propeamussium watsoni*  
(Smith, 1885)

*Amussium watsoni* Smith, 1885: 309, pl. 22, figs 8–8c.

MATERIAL EXAMINED. — **New Guinea.** NE-region, 2°23'S, 144°04'E, 1957 m (“*Challenger*” stn 218), lectotype spm (NMHUK 1887.2.9.3307), designated by Dijkstra (1995: 24).

**Norfolk Ridge.** TERRASSES, stn DW 3041, 23°59'S, 169°44'E, 800–840 m, 1 rv. — Stn DW 3044, 23°49'S, 169°46'E, 650–690 m, 1 rv. — Stn DW 3120, 22°44'S, 167°15'E, 320–360 m, 1 rv (fragment).

DISTRIBUTION. — See Dijkstra & Maestrati (2010: 335). Now also Norfolk Ridge, only single valves in 320–840 m.

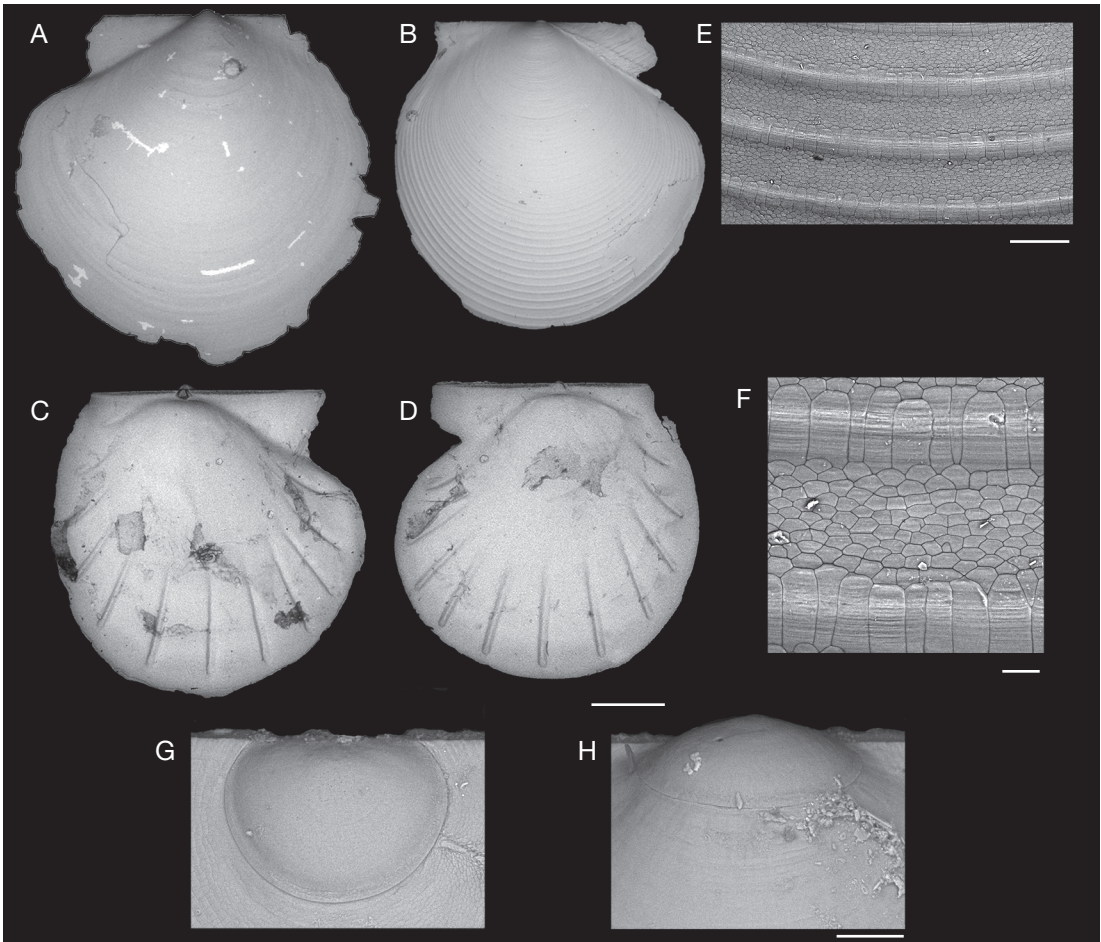


FIG. 1. — *Parvamussium orbiculatum* n. sp.: **A, B, E, F**, holotype MNHN 25749; **A**, external view of the left valve; **B**, external view of the right valve; **E**, detail of the commarginal striae of the external side of the right valve; **F**, idem, detail inter striae; **C, D, G, H**, paratype MNHN 25750; **C**, internal view of the left valve; **D**, internal view of the right valve; **G**, Prodissoconch of the right valve; **H**, prodissoconch of the left valve. Scale bars: A-D, 1 mm; E, 100  $\mu$ m; F, 20  $\mu$ m; G, H, 50  $\mu$ m.

Genus *Parvamussium* Sacco, 1897

*Parvamussium carbaseum* Dijkstra, 1991

*Parvamussium carbaseum* Dijkstra, 1991: 9, figs 11-21.

**MATERIAL EXAMINED.** — **Indonesia.** Banda Sea, NW of Binongko, Tukang Besi Islands, 5°54'S, 123°58.4'E, 390 m ("SNELLIUS-II, stn 4.031), holotype lv (RMNH 56534). **New Caledonia Main Land.** BATHUS 1, stn DW 654, 21°17'S, 165°57'E, 237-298 m, 2 lv.

**DISTRIBUTION.** — See Dijkstra (1991: 9). Now also New Caledonia, only single valves in 237-298 m.

*Parvamussium ina*  
(Dautzenberg & Bavay, 1912)

*Amussium ina* Dautzenberg & Bavay, 1912: 32, pl. 28, figs 18-21.

**MATERIAL EXAMINED.** — **Indonesia.** Sumbawa, N-coast, Saleh Bay, 8°19'S, 117°41'E, 274 m ("Siboga" stn 312), lectotype spm (ZMA Moll. 3.12.011), designated by Dijkstra & Kastoro (1997: 248).

**Solomon Islands.** SALOMON 2, stn DW 2281, 8°41'S, 157°24'E, 250-252 m, 1 lv. — Stn CP 2287, 8°41'S, 157°24'E, 253-255 m, 1 spm.

DISTRIBUTION. — See Dijkstra & Kastoro (1997: 248). Now also Solomon Islands, live in 253–255 m.

*Parvamussium orbiculatum* n. sp.  
(Fig. 1A–H)

TYPE MATERIAL. — Solomon Islands, SALOMON 2, stn CP 2176, 9°09'S, 158°59'E, 600–875 m, holotype spm (MNHN 25749). — Same data, paratype spm (MNHN 25750).

TYPE LOCALITY. — Solomon Islands, SW Russell Island, 9°09'S, 158°59'E, 600–875 m (SALOMON, stn CP 2176).

ETYMOLOGY. — Shell disc circular (Latin *orbiculatus*, adjective meaning circular).

OTHER MATERIAL EXAMINED. — Coral Sea. EBISCO, stn DW 2543, 21°10'S, 158°38'E, 670–745 m, 1 spm.

DESCRIPTION

Shell up to c. 5 mm high, fragile, circular, inequivalve, hyaline, whitish, left valve slightly more convex than right valve, auricles subequal, umbonal angle about 110°.

Both valves with 11 short internal ribs, commencing in late ontogeny, an auricular riblet on posterior auricle. External sculpture clearly visible from interior.

Left valve disc and auricles smooth and glossy with some weak commarginal growth lines.

Right valve with evenly spaced commarginal lirae. Auricles with delicate and weak commarginal lamellae, more prominent on anterior auricle and more closely spaced on posterior. Radial ridge along byssal fasciole. Hinge line straight, with a few scales near dorsal margin, more prominent on anterior auricle. Byssal notch shallow, byssal fasciole small.

Dimension of holotype: H 5.0 mm, W 5.0 mm, D 1.4 mm.

REMARKS

The present species is morphologically close to *Parvamussium multiliratum* Dijkstra, 1995, known from the lower bathyal and upper abyssal southwestern Pacific, but differs in size (*P. orbiculatum* n. sp. 5 mm, *P. multiliratum* 8 mm in height), in sculpture (*P. orbiculatum* n. sp. left valve smooth,

*P. multiliratum* with commarginal lamellae), in internal ribbing (*P. orbiculatum* n. sp. 11 short ribs, *P. multiliratum* 14 long ribs with 2 rudimentary).

*Parvamussium perspicuum* n. sp.  
(Fig. 2A–H)

TYPE MATERIAL. — Vanuatu. BOA 1, stn CP 2480, 16°44'S, 167°49'E, 632–677 m, holotype spm (MNHN 25747). — Same data, paratype spm (MNHN 25748).

TYPE LOCALITY. — Vanuatu Archipelago, SE Malekula, Banc de Chauliac, 16°44'S, 167°49'E, 632–677 m (BOA 1, stn CP 2480).

ETYMOLOGY. — Shell disc translucent (Latin *perspicuus*, adjective meaning translucent).

DISTRIBUTION. — Vanuatu Archipelago, live in 632–677 m depth.

DESCRIPTION

Shell up to c. 4 mm in height, fragile, nearly circular, weakly inflated, left valve more convex than right valve, inequivalve, almost equilateral, anterior auricle slightly larger than posterior, left valve more translucent than right valve.

Left valve disc smooth and hyaline. Anterior auricle with a few growth lines laterally, posterior auricle opaque whitish with weak, delicate, closely spaced commarginal sculpture laterally.

Right valve disc semi-translucent with commarginal lirae, closely spaced in early growth stage, wider in adult stage. Auricles with commarginal growth lines, hinge scaly antero-dorsally on anterior auricle. Byssal notch moderately deep, byssal fasciole narrow. Internal ribs 8, commencing 1.5 mm from the top margin towards 1 mm from the ventral margin, small in early growth stage to prominent broad in adult stage.

Dimensions of holotype: H 4.2 mm, W 4.2 mm, D 1.0 mm.

REMARKS

*Parvamussium perspicuum* n. sp. and *Parvamussium torresi* (Smith, 1885), known from the bathyal southwestern Pacific, have both a smooth left valve disc, but other characters differ, i.e. in size (*P. perspicuum* n. sp. up to 4 mm, *P. torresi* up to 12 mm



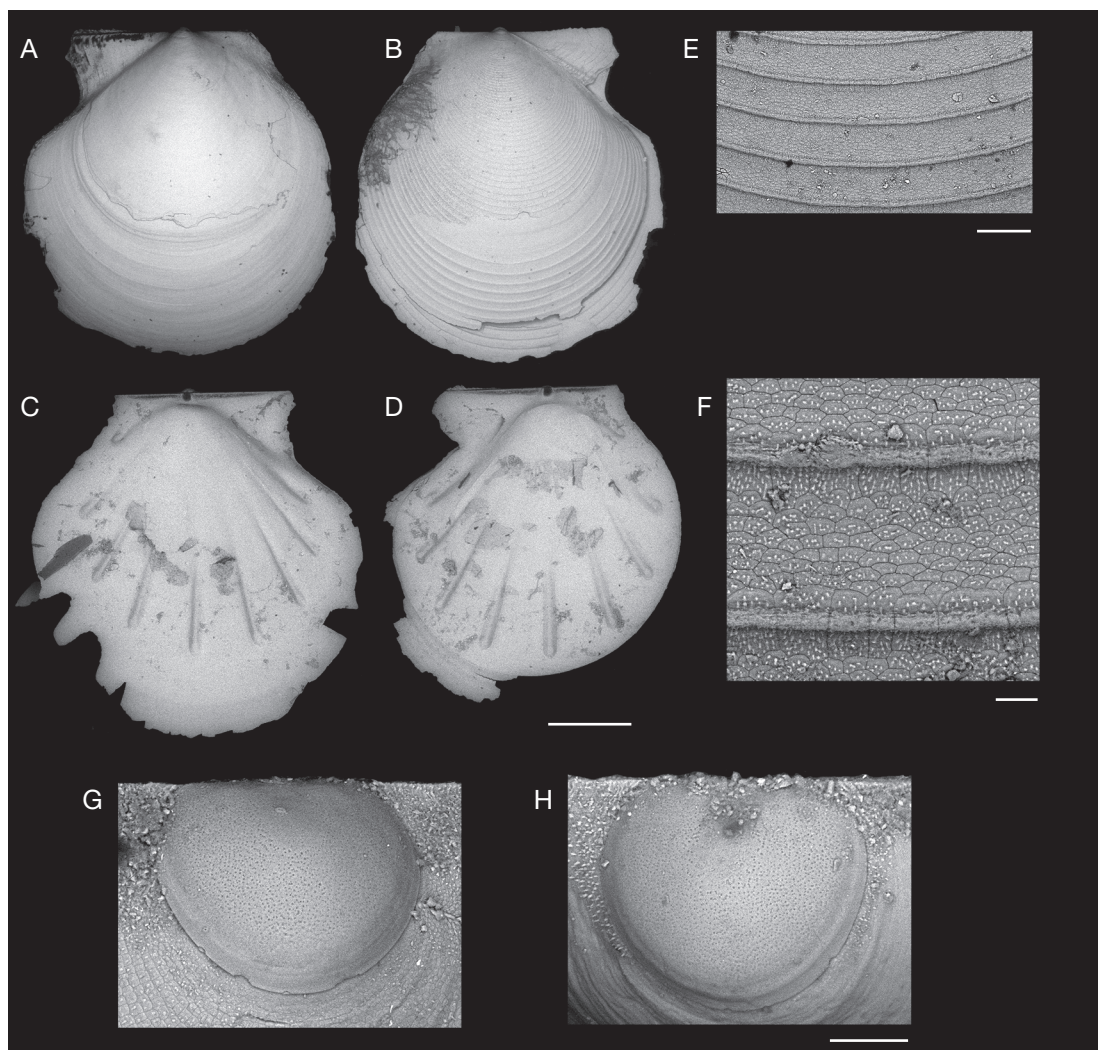


FIG. 2. — *Parvamussium perspicuum* n. sp.: **A, B, E, F**, holotype MNHN 25747; **A**, external view of the left valve; **B**, external view of the right valve; **E**, detail of the commarginal striae of the external side of the right valve; **F**, idem, detail inter striae; **C, D, G, H**, paratype MNHN 25748; **C**, internal view of the left valve; **D**, internal view of the right valve; **G**, Prodissoconch of the right valve; **H**, prodissoconch of the left valve. Scale bars: A-D, 1 mm; E, 100 µm; F, 20 µm; G, H, 50 µm.

in height), in transparency (*P. perspicuum* n. sp. left valve glossy and hyaline, *P. torresi* semi-translucent or opaque whitish), in sculpture (*P. perspicuum* n. sp. has a completely smooth left valve disc, *P. torresi* has delicate closely spaced commarginal lamellae near the ventral margin), and in number of internal ribs (*P. perspicuum* n. sp. 8, *P. torresi* 10–12 with one or two interstitial rudimentary riblets).

### *Parvamussium retiolum* Dijkstra, 1995

*Parvamussium retiolum* Dijkstra, 1995: 29, figs 39–42, 97.

**MATERIAL EXAMINED.** — **Coral Sea.** Chesterfield Islands, 19°47'S, 158°44'E, 685–700 m (MUSORSTOM 5 stn CP 363), holotype spm (MNHN 21171).

**Solomon Islands.** SALOMON 2, stn CP 2181, 8°47'S, 159°40'E, 645–840 m, 1 lv.

DISTRIBUTION. — See Dijkstra & Maestrati (2008: 94). Now also Solomon Islands, only a single valve in 645-840 m.

*Parvamussium scitulum* (Smith, 1885)

*Amussium scitulum* Smith, 1885: 312, pl. 23, figs 4-4b.

MATERIAL EXAMINED. — **Papua New Guinea**. S-region, 9°59'S, 139°42'E, 51 m ("Challenger" stn 188), lectotype lv (NMHUK 1887.2.9.3319/1), designated by Dijkstra (1995: 31).

**Solomon Islands**. SALOMONBOA 3, stn DW 2840, 10°25'S, 161°22'E, 121-180 m, 2 lv, 1 rv. — Stn DW 2841, 10°26'S, 161°23'E, 142-260 m, 2 lv.

**Norfolk Ridge**. NORFOLK 2, stn DW 2133, 23°01'S, 168°18'E, 215-270 m, 1 rv.

DISTRIBUTION. — See Dijkstra & Maestrati (2010: 339). Now also Solomon Islands and Norfolk Ridge, only single valves in 121-270 m.

*Parvamussium squalidulum* Dijkstra, 1995

*Parvamussium squalidulum* Dijkstra, 1995: 32, figs 47-50.

MATERIAL EXAMINED. — **Lord Howe Rise**. Kelso Bank, 24°11'S, 159°35'E, 270 m (MUSORSTOM 5 stn DW 277), holotype spm (MNHN 21169).

**Norfolk Ridge**. TERRASSES, stn DW 3107, 23°01'S, 168°23'E, 380-440 m, 1 rv.

DISTRIBUTION. — See Dijkstra & Maestrati (2010: 340). Now also Norfolk Ridge, only a single valve in 380-440 m.

*Parvamussium texturatum*  
(Dautzenberg & Bavay, 1912)

*Amussium texturatum* Dautzenberg & Bavay, 1912: 37, pl. 27, figs 19-22.

MATERIAL EXAMINED. — **Philippines**. Sulu Archipelago, 6°08'N, 121°19'E, 275 m ("Siboga" stn 105), holotype spm (ZMA Moll. 3.12.022).

**Solomon Islands**. SALOMON 2, stn DW 2173, 9°07'S, 159°02'E, 201-231 m, 3 lv.

DISTRIBUTION. — See Dijkstra & Maestrati (2008: 94). Now also Solomon Islands, only single valves in 201-231 m.

*Parvamussium undisonum*  
Dijkstra, 1995

*Parvamussium undisonum* Dijkstra, 1995: 37, figs 55-58.

MATERIAL EXAMINED. — **Loyalty Islands**. 20°48'S, 167°05'E, 700 m (MUSORSTOM 6 stn DW 489), holotype spm (MNHN 21421).

**Norfolk Ridge**. TERRASSES, stn DW 3036, 22°41'S, 168°58'E, 800 m, 1 spm, 2 lv.

DISTRIBUTION. — See Dijkstra & Maestrati (2010: 340). Now also Norfolk Ridge, live in 800 m.

Genus *Cyclopecten* Verrill, 1897

*Cyclopecten cancellus* Dijkstra, 1991

*Cyclopecten cancellus* Dijkstra, 1991: 21, figs 66-70.

MATERIAL EXAMINED. — **Indonesia**. Off SW Salayer, 6°22.4'S, 120°26.3'E, 130-155 m (SNELLIUS-II stn 4.153), holotype lv (RMNH 56560).

**Grand-Passage**. CONCALIS, stn DW 3001, 18°32'S, 163°09'E, 390-400 m, 1 lv.

DISTRIBUTION. — See Dijkstra & Maestrati (2008: 97). Now also New Caledonia, only a single valve in 390-400 m.

*Cyclopecten kermadecensis*  
(Smith, 1885)

*Pecten kermadecensis* Smith, 1885: 302, pl. 21, figs 7-7a.

MATERIAL EXAMINED. — **Kermadec Islands**. N of Raoul Island, 28°33'S, 177°50'W, 1097 m ("Challenger" stn 171), holotype spm (NMHUK 1887.2.9.3279).

**Norfolk Ridge**. NORFOLK 2, stn DW 2080, 25°20'S, 168°19'E, 764-816 m, 1 rv.

DISTRIBUTION. — See Dijkstra & Marshall (2008: 19). Now also Norfolk Ridge, only a single valve in 764-816 m.

Genus *Catillopecten* Iredale, 1939

*Catillopecten murrayi* (Smith, 1885)

*Pecten murrayi* Smith, 1885: 303, pl. 22, figs 1-1a.

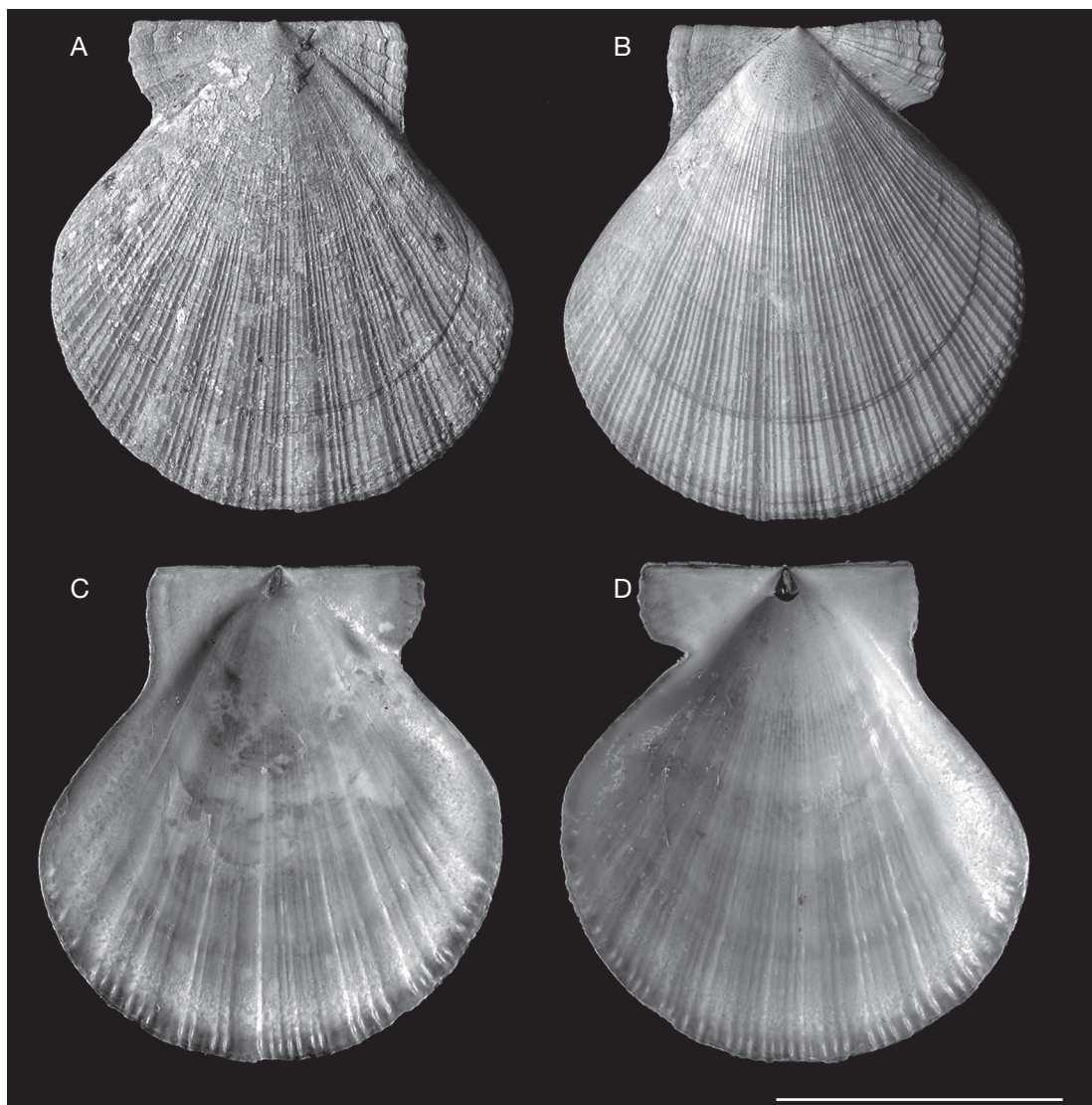


FIG. 3. — *Juxtamusium* sp.: A–D, pair valve; A, external view of the left valve; B, external view of the right valve; C, internal view of the left valve; D, internal view of the right valve. Scale bar: 1 cm.

**MATERIAL EXAMINED.** — **Australia.** Queensland, E of Cape York, 12°08'S, 145°10'E, 2561 m ("Challenger" stn 184), holotype spm (NMHUK 1887.2.9.3281).

**Solomon Islands.** SALOMONBOA 3, stn CP 2781, 9°04'S, 159°38'E, 1230–1306 m, 1 spm.

**DISTRIBUTION.** — See Dijkstra & Marshall (2008: 39). Now also Solomon Islands, live in 1230–1306 m. The depth range of the present species is now remarkably extended from 1230 m to 2930 m.

*Catillopecten transluscens*  
(Dautzenberg & Bavay, 1912)

*Pecten* (*Cyclopecten*) *transluscens* Dautzenberg & Bavay, 1912: 30, pl. 27, figs 5–6.

**MATERIAL EXAMINED.** — **Indonesia.** Makassar Strait, 0°34.6'N, 119°08.5'E, 1301 m ("Siboga" stn 88), holotype spm (ZMA Moll. 3.12.008).



TABLE 1. — Present bathyal Pectinoidea from the Southwest Pacific. Abbreviations: **NC**, New Caledonia; **o**, presently added species; **x**, previous recorded species (Dijkstra, 1995, 2001; Dijkstra & Maestrati, 2008, 2012).

| Species                                                      | Solomons | Vanuatu | NC | Norfolk Ridge |
|--------------------------------------------------------------|----------|---------|----|---------------|
| 7 (here added)                                               | 10       | 1       | 1  | 7             |
| 59 (Total number)                                            | 34       | 28      | 34 | 29            |
| <b>Propeamussiidae</b>                                       |          |         |    |               |
| <i>Propeamussium alcocki</i> (Smith, 1894)                   | x        | x       | x  | x             |
| <i>Propeamussium andamanicum</i> (Smith, 1894)               |          | x       | x  |               |
| <i>Propeamussium caducum</i> (Smith, 1885)                   | x        | x       | x  |               |
| <i>Propeamussium jeffreysii</i> (Smith, 1885)                |          | x       |    |               |
| <i>Propeamussium ina</i> (Dautzenberg & Bavay, 1912)         | o        |         |    |               |
| <i>Propeamussium investigatoris</i> (Smith, 1906)            | x        | x       | x  | x             |
| <i>Propeamussium meridionale</i> (Smith, 1885)               | o        | x       | x  | x             |
| <i>Propeamussium richeri</i> Dijkstra, 2001                  |          |         | x  |               |
| <i>Propeamussium rubrotinctum</i> (Oyama, 1951)              | x        | x       | x  | x             |
| <i>Propeamussium sibogai</i> (Dautzenberg & Bavay, 1904)     | x        | x       | x  | o             |
| <i>Propeamussium siratama</i> (Oyama, 1951)                  | x        | x       | x  |               |
| <i>Propeamussium watsoni</i> (Smith, 1885)                   |          | x       | x  | o             |
| <i>Parvamussium araneum</i> Dijkstra, 1991                   | x        | x       |    |               |
| <i>Parvamussium biformatum</i> Dijkstra & Maestrati, 2008    | x        |         |    |               |
| <i>Parvamussium cancellorum</i> Dijkstra & Marshall, 2008    |          |         | o  | x             |
| <i>Parvamussium carbaceum</i> Dijkstra, 1991                 |          |         | o  |               |
| <i>Parvamussium cristatellum</i> (Dautzenberg & Bavay, 1912) | x        | x       | x  |               |
| <i>Parvamussium dautzenbergi</i> (Dijkstra, 1990)            | x        |         |    |               |
| <i>Parvamussium multiliratum</i> Dijkstra, 1995              |          | x       | x  |               |
| <i>Parvamussium musorstomi</i> Dijkstra, 2001                | x        |         |    |               |
| <i>Parvamussium orbiculatum</i> Dijkstra & Maestrati, 2013   | o        |         |    |               |
| <i>Parvamussium pauciliratum</i> (Smith, 1903)               | x        |         |    |               |
| <i>Parvamussium perspicuum</i> Dijkstra & Maestrati, 2013    |          | o       |    |               |
| <i>Parvamussium reticulatum</i> Dijkstra, 1995               |          | x       | x  |               |
| <i>Parvamussium retiolium</i> Dijkstra, 1995                 | o        | x       | x  | x             |
| <i>Parvamussium scitulum</i> (Smith, 1885)                   | o        | x       | x  | o             |
| <i>Parvamussium squalidulum</i> Dijkstra, 1995               |          | x       | x  | o             |
| <i>Parvamussium texturatum</i> (Dautzenberg & Bavay, 1912)   | o        |         | x  | x             |
| <i>Parvamussium thetidis</i> (Hedley, 1902)                  |          |         |    | x             |
| <i>Parvamussium torresi</i> (Smith, 1885)                    | x        |         | x  | x             |
| <i>Parvamussium undisonum</i> Dijkstra, 1995                 | x        |         | x  | o             |
| <i>Parvamussium undosum</i> Dijkstra, 1991                   | x        |         |    | x             |
| <i>Parvamussium vesiculatum</i> Dijkstra, 1995               | x        | x       | x  | x             |
| <i>Parvamussium virgatum</i> Dijkstra, 1991                  | x        |         |    |               |
| <i>Cyclopecten bavayi</i> Dijkstra, 1990                     | x        |         |    |               |
| <i>Cyclopecten cancellus</i> Dijkstra, 1991                  |          | x       |    |               |
| <i>Cyclopecten horridus</i> Dijkstra, 1995                   |          |         | x  |               |
| <i>Cyclopecten kapalae</i> Dijkstra, 1990                    | x        | x       |    | x             |
| <i>Cyclopecten kermadecensis</i> (Smith, 1885)               |          |         |    | o             |
| <i>Cyclopecten pellucidulus</i> Dijkstra, 1995               |          |         |    | x             |
| <i>Catillopecten murrayi</i> (Smith, 1885)                   | o        |         |    |               |
| <i>Catillopecten translucens</i> (Dautzenberg & Bavay, 1912) | o        |         |    |               |
| <b>Cyclochlamyidae</b>                                       |          |         |    |               |
| <i>Cyclochlamys bacata</i> Dijkstra & Marshall, 2008         |          |         |    | x             |
| <i>Cyclochlamys wangellicca</i> Dijkstra & Marshall, 2008    |          |         |    | x             |
| <i>Chlamydeella favus</i> (Hedley, 1902)                     |          |         | x  |               |
| <b>Entoliidae</b>                                            |          |         |    |               |
| <i>Pectinella aequoris</i> Dijkstra, 1991                    |          | x       | x  | x             |
| <b>Pectinidae</b>                                            |          |         |    |               |
| <i>Cryptopecten bullatus</i> (Dautzenberg & Bavay, 1912)     | o        | x       | x  | x             |

TABLE 1. — Continuation.

| Species                                                      | Solomons | Vanuatu | NC | Norfolk Ridge |
|--------------------------------------------------------------|----------|---------|----|---------------|
| <i>Cryptopecten nux</i> (Reeve, 1853)                        | x        | x       | x  | x             |
| <i>Delectopecten alcocki</i> (Smith, 1904)                   | x        |         | x  |               |
| <i>Delectopecten fosterianus</i> (Powell, 1933)              |          |         |    | x             |
| <i>Delectopecten musorstorni</i> Poutiers, 1981              | x        | x       | x  | x             |
| <i>Pseudohinnites levii</i> Dijkstra, 1989                   | o        | x       | x  | o             |
| <i>Hyalopecten mireilleae</i> Dijkstra, 1995                 |          | x       | x  |               |
| <i>Hyalopecten tydemani</i> (Dijkstra, 1990)                 | x        |         |    |               |
| <i>Ciclopecten fluctuatus</i> (Bavay, 1904)                  |          | x       |    |               |
| <i>Talochlamys pulleineanus</i> (Tate, 1887)                 |          |         |    | x             |
| <i>Veprichlamys kiwaensis</i> (Powell, 1933)                 |          |         | x  |               |
| <i>Laevichlamys deliciosa</i> (Iredale, 1939)                | x        |         | x  | x             |
| <i>Mimachlamys kauaiensis</i> (Dall, Bartsch & Rehder, 1938) |          |         | x  |               |

**Solomon Islands.** SALOMON 2, stn CP 2268, 7°49'S, 156°53'E, 632-640 m, 1 spm.

**DISTRIBUTION.** — See Dijkstra & Maestrati (2008: 100). Now also Solomon Islands, live in 632-640 m.

Family PECTINIDAE Rafinesque, 1815

Genus *Pseudohinnites* Dijkstra, 1989

*Pseudohinnites levii* Dijkstra, 1989

*Pseudohinnites levii* Dijkstra, 1989: 29, figs 1-3.

**MATERIAL EXAMINED.** — New Caledonia. SE of New Caledonia, 23°25'S, 167°53'E, 965 m (BIOCAL stn DW 70), holotype spm (MNHN 21417).

**Solomon Islands.** SALOMON 2, stn CP 2197, 8°24'S, 159°23'E, 897-1057 m, 1 lv, 1 rv. — Stn CP 2273, 8°32'S, 157°43'E, 732-839 m, 4 lv. — Stn CP 2274, 8°32'S, 157°43'E, 750-841 m, 1 lv, 1 rv. — Stn CP 2276, 8°42'S, 157°38'E, 814-980 m, 2 lv. — Stn CP 2277, 8°41'S, 157°37'E, 786 m, 2 lv, 1 rv. — Stn CP 2289, 8°36'S, 157°29'E, 623-627 m, 1 lv.

**Norfolk Ridge.** NORFOLK 2, stn DW 2080, 25°20'S, 168°19'E, 764-816 m, 1 spm.

**DISTRIBUTION.** — See Dijkstra & Maestrati (2010: 344). Now also Solomon Islands and Norfolk Ridge, live in 764-816 m.

Genus *Juxtamusium* Iredale, 1939

*Juxtamusium* sp. A  
(Fig. 3A-D)

**MATERIAL EXAMINED.** — Vanuatu. BOA 1, stn 16°42'S, 167°53'E, 91-103 m, 1 spm.

**REMARKS.** — The present specimen is morphologically closest to *Juxtamusium maldivense* (Smith, 1903), known from the western and northwestern Indian Ocean and western and southwestern Pacific, but differs by several characters: in having a weakly undulated shell disc (*J. maldivense* is always flat), in having more delicate irregularly spaced radial riblets (*J. maldivense* with fewer, more prominent radial riblets), in lacking the pseudotenolium on the left valve (present in *J. maldivense*), and in having carinate sculpture on the inner side (undulated in *J. maldivense*).

In shape the present specimen looks like a species of *Anguipecten* Dall, Bartsch & Rehder, 1938, somewhat like a juvenile of *Anguipecten lamberti* (Souverbie in Souverbie & Montrouzier, 1874), but could be clearly differentiated by the oblique internal ligament (typical for *Juxtamusium*). This species will be described, when more material becomes available for comparison.

Genus *Cryptopecten*

Dall, Bartsch & Rehder, 1938

*Cryptopecten bullatus*

(Dautzenberg & Bavay, 1912)

*Pecten chlamys bullatus* Dautzenberg & Bavay, 1912: 17, pl. 27, figs 1-2.

**MATERIAL EXAMINED.** — **Philippines.** Sulu Archipelago, 6°08'N, 121°19'E, 275 m ("Siboga" stn 105), holotype spm (ZMA Moll. 3.12.006).

**Solomon Islands.** SALOMON 2, stn CP 2184, 8°17'S, 160°00'E, 464-523 m, 1 lv.

**DISTRIBUTION.** — See Dijkstra & Maestrati (2010: 350). Now also Solomon Islands, only a single valve in 464-523 m.

## DISCUSSION

Fifty nine bathyal pectinoid species are now known from the Southwest Pacific (see Table 1), of which 34 species (7 Pectinidae, 27 Propeamussiidae) from the Solomon Islands, 28 species (1 Entoliidae, 6 Pectinidae, 21 Propeamussiidae) from Vanuatu Archipelago, 34 species (1 Cyclochlamydidae, 1 Entoliidae, 9 Pectinidae, 23 Propeamussiidae) from New Caledonia, and 29 species (2 Cyclochlamydidae, 1 Entoliidae, 7 Pectinidae, 19 Propeamussiidae) from the Norfolk Ridge. The present species from the south-western region of the Pacific is part of the tropical Indo-West Pacific and could be compared with other regional records of bathyal Pectinoidea from the Indonesian Archipelago (Dijkstra & Kastoro 1997, 43 species), Wallis and Futuna (Dijkstra 2001, 24 species), Fiji (Dijkstra & Maestrati 2008, 30 species), and Tonga (Dijkstra & Maestrati 2008, 26 species).

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