On a Small Collection of Chitons from Papua New Guinea
(Mollusca: Polyplacophora)

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Abstract: Three species of Polyplacophora, Callistochiton granifer, Chiton (Tegulaplax) hululensis and Leptoplax unica, are recorded from Papua New Guinea for the first time. The occurrence of Lucilina lamellosa in New Guinea is also confirmed from new material. Specific diagnostic features are illustrated and short notes are given on each species. In addition, a compilation of Polyplacophora known from the New Guinea region is provided.

Keywords: Mollusca, Polyplacophora, Pacific Ocean, Papua New Guinea, distribution

Introduction

The Papua New Guinea zoogeographic region spans 462840 km², extending from 1° S to 11° S and from the Indonesian Border (140°55’ E) to the Solomons (156° E). Although situated between two faunistic hotspots, namely the diverse Indonesian region (see Nierstrasz, 1905; Strack, 2001; Burghardt et al., in press) and the Australian region (Cotton, 1964; Gowlett-Holmes, 2001), the polyplacophoran fauna of the Papuan region has been investigated only sparsely, most notably by Ashby (1923) and Leloup (1981). Since then, only a few additional species have been reported from New Guinea (e.g. Kaas & Van Belle, 1985, 1985a, 1994), most of them new to science. This report is based on recently collected material that includes new reports for Papua New Guinea, often extending the known range of distribution of these species. An up-to-date species listing of the chitons known from New Guinea is presented together with a reference list of relevant sources.

Abbreviations: AMS — Australian Museum Sydney, Australia; MNHN — Muséum national d’Histoire naturelle, Paris, France; NHM — Natural History Museum, London, UK; pd — partly disarticulated specimen (used for Scanning Electron Microscopy); PNG — Papua New Guinea; FLMNH — Florida Museum of Natural History, Florida, USA; UF — University of Florida, Florida, USA.

Systematics

Class Polyplacophora Gray, 1821
Subclass Neoloricata Bergenhayn, 1955
Order Chitonida Thiele, 1909
Suborder Chitonina Thiele, 1909
Superfamily Chitonoidea Rafinesque, 1815
Family Callistoplacidae Pilsbry, 1893

Genus Callistochiton Dall, 1879
Type species: Callistochiton palmulatus Carpenter MS, Dall, 1879, designated by monotypy.
Genus distribution: Tropical and subtropical waters, Oligocene-Holocene.

Callistochiton granifer Hull, 1923
(Figs. 1A, 2A-F, 3, 4)

Callistochiton granifer Hull, 1923: 161, pl. 25, figs. 5–8.

Type: Holotype, AMS C. 009306 [not seen].

Type locality: Australia: Queensland, Palm Island, 18°40´ S, 146°33´ E, 27 m.

Material examined: UF 327877 — 1 specimen, 11.2 × 5.8 mm (curled), PNG, leg. J. Starmer, 1 June 1998 (PNG-065), 75% ethanol.

Habitat: The species is known to inhabit muddy to somewhat coarser sediments, bathymetrically from 0–53 m. In Indonesia it was mainly found under pieces of dead coral, under stones, or sometimes mixed in with algae (personal observation).

Distribution: The species is known from Australia, New Caledonia, the Coral Sea, Samoa, American Samoa, and Indonesia. This new record fills the gap between the Indonesian and the Queensland reports.

Remarks: The single specimen agrees well with material examined from other localities (Samoa Island, New Caledonia, and Indonesia). Other congeners in the New Guinea region are:
Callistochiton belliatus Kaas & Van Belle, 1994, Callistochiton biakensis Kaas & Van Belle, 1994 and Callistochiton squamigercostatus Kaas & Van Belle, 1994. Based on the original descriptions, Callistochiton granifer Hull, 1923 differs from C. belliatus by having 12–14 slits in the head valve (Fig. 2D), a coarser tegmentum sculpture (Figs. 2A–C), and fewer radial ribs on the dorsal girdle scales (about 8 in contrast to 11 in C. belliatus) (Fig. 3A). Likewise, it can be separated from C. squamigercostatus by the more broadly spaced (and fewer) radial ribs on the head valve, the more triangular shape of the tail valve with a more posterior mucro, the lack of distinct longitudinally arranged latticed riblets in the intermediate valves, and by stronger (and fewer) radial ribs on the dorsal girdle scales, which reach the distal end of the scales. C. biakensis has

fewer radial ribs on the terminal valves, a reticulated tegumentum, and a rectangular second valve.

The specimen examined herein has a 3.5 mm long radula (Fig. 4), of which 1.7 mm were taken up by the radula bolster. The radula consists of 48 rows of teeth, of which 39 appeared to be already mineralized.

A detailed description of this species was given by Kaas & Van Belle (1994: 190; fig 78). This account adds the first SEM images of the girdle elements and the radula (Figs. 3, 4).

Family Chitonidae Rafinesque, 1815
Subfamily Chitoninae Rafinesque, 1815

Genus Chiton Linnaeus, 1758
Type species: Chiton tuberculatus Linnaeus, 1758, subsequent designated by Dall (1879: 297).
Genus distribution: Worldwide except for the cold-temperate regions, excluding South America, Cretaceous-Holocene.

Subgenus Tegulaplax Iredale & Hull, 1926
Type species: Chiton howensis Hedley & Hull, 1912 = Ischnochiton hululensis E. A. Smith, 1903 (fide Kaas, 1979: 866), by original designation.
Subgenus distribution: Tropical and subtropical waters of the Indo-Pacific, also in the Mediterranean Sea, Holocene.
Chiton (Tegulaplax) hululensis (E. A. Smith, 1903)

(Figs. 1B, 2G–L, 5)

Ischnochiton hululensis E. A. Smith, 1903: 619, pl. 36, figs. 3–6.

Type: Holotype, NHM 1903.9.17.27.

Type locality: Maldives, Kaafu Atoll, Hulhule, 04°10′ 59″ N, 73°31′ 58″ E [Stn. IX], 1.8–11 m [1–6 fathoms].

Material examined: UF 323452 — 1 specimen, 9.6 × 5.4 mm, PNG: West New Britain, Kimbe Bay, Walindi Plantation Resort, reef flat, off jetty/boat mooring, sand and small patch reef, 2–10 m, 05°26′ 12″ S, 150°05′ 17″ E, leg. L. Kirkendale, 19 June 2003 (LAK-144), 95% ethanol. UF 297697 — 1 specimen (bold marked material indicates the specimen used for SEM-study), 10.2 × 5.3 mm, PNG: north coast of Basilisk Bay, Hiliwau, 1–4 m, under rocks, 10°45′ 39″ S, 150° 42′ 45″ E, leg. Gustaf Paulay, 27 May 1998 (GP-552), 75% ethanol.

Habitat: The species bathymetrically ranges from 0–45 m. It may be found under rubble, dead shells, and stones. According to data with material in the ZSM collection the species has a preference for fine to moderately coarse coral sand.

Distribution: For distribution comments for this species see Schwabe (2004: 3170); this new record is just a logical continuation of known occurrences.

Remarks: The excellent descriptions of this species by Kaas (1979: 866, pl. 2, figs. 11–19),
Strack (1993: 12, pl. 3, fig. 9, pl. 7, figs. 8–9), Saito (1998: 153, figs. 2H, 5), and Dell’Angelo & Smriglio (2001: 184, pls. 62–63, fig. 112) fits well with the specimens presented herein. It is the first time that detailed illustrations of the tegmentum (Figs. 2G–I), the radula (Fig. 5A), and the perinotum (Figs. 5B–D) of a specimen from outside the Red Sea area are given.

Subfamily Toniciinae Pilsbry, 1893

Genus Lucilina Dall, 1882

_Type species:_ Chiton confossus Gould, 1846 = _Chiton lamellosus_ Quoy & Gaimard, 1835 (fide Thiele, 1909b: 98), subsequent designation by Pilsbry (1893: 210).

_Genus distribution:_ Indo-Pacific Ocean, Pliocene – Holocene.

**Lucilina lamellosa** (Quoy & Gaimard, 1835)

(Figs. 1C, 6A–F, 7)

_Chiton lamellosus_ Quoy & Gaimard, 1835: 386, pl. 74, figs. 29–32.

_Type:_ Lectotype, MNHN, selected by Strack (1986: 194).

_Type locality:_ Tonga Tabou.

**Material examined:** UF 295047 — 1 specimen: ca. 19 × 12 mm (curled), PNG: Louisades Archipelago, Deboyne Islands lagoon, northwest side of Nivani Islet, under rocks, 7–10 m, 10°47′ 28″ S, 152°23′ 05″ E, leg. Gustaf Paulay, 30 May 1998 (GP-554), 75% ethanol. UF 294972 — 1 specimen: ca. 17 × 10.3 mm (curled), PNG: Louisades Archipelago, west side of Pana Voli Udi Island, 2–8 m, 11°02′ 31″ S, 152°28′ 43″ E, leg. Gustaf Paulay, 1 June 1998 (GP-560A), 75% ethanol. UF 322183 — 1 specimen, ca. 17 × 10.3 mm (curled), PNG: Bismarck Archipelago west end Sabben Island group, Sabben Point fore reef, gentle coral slope with abundant _Halimeda_ cover, 3–25 m, 02°08′ 51″ S, 146°10′ 26″ E, leg. L. Kirkendale, 29 June 2003 (LAK-166), 95% ethanol. UF 323808 — 1 specimen, 15 × 9.2 mm, PNG: Bismarck Archipelago South New Hannover, East of Cape Botiangin fore reef, small cut at steep wall dive with abundant ledges, 3–25 m, 2°40′ 26″ S, 150°11′ 57″ E, leg. L. Kirkendale, 1 July 2003 (LAK-168), 95% ethanol. UF 322444 — 2 specimens, ca. 12 × 7.9 mm and ca. 25 × 12 mm (curled), PNG: West New Britain, Kimbe Bay, Venessa’s reef dive site, fore reef, long narrow reef ridge/patch reef, 3–37 m, 5°17′ 39″ S, 150°07′ 42″ E, leg. L. Kirkendale, 17 June 2003 (LAK-142), 95% ethanol.

_Description:_ Animal elongate oval. Coloration highly variable, generally tones of chestnut brown and greyish-green dominant. Valves appear smooth except for longitudinal to transverse lamellae on head valve and post-mucronal area, which are very fine and more distinct along diagonal ridges (Figs. 6A–C). Lamellae interrupted by radial rows of large lenses (diameter up to 48.35 µm), appearing as silver-black dots. Lenses have their highest density in lateral areas along valve margin. Head valve semicircular with wide V-shaped posterior margin. Intermediate valves broadly rectangular, with straight posterior margin on both sides of protruding apex. Jugal area slightly or not elevated, but distinguishable by coloration and smoother sculpture. Lateral areas slightly elevated. Tail valve broadly triangular with rounded posterior edge. Mucro situated at posterior fourth, directed slightly forwards, and elevated. Post-mucronal area short but very steep. Articulamentum thick and white (Figs. 6D–F), forming large apophyses and insertion plates. Apophyses connected by short jugal lamina, distinctly crenulated in middle. Insertion plates roughly pectinated on outside. Insertion teeth rather short, slightly forward-directed with sharp edges. Slit formula of disarticulated specimen: 8/1/14. Slit rays indistinct, and not visible on tail valve. Valves surrounded by wide, uniform, “naked” girdle. Dorsally covered with very small calcareous spicules, which measure 10 × 6 µm and deeply embedded in very thick cuticle (Fig.
7B). In addition more slender spicules (17 × 4 μm) can be found distributed randomly over girdle (Fig. 7C). Ventrally, radial rows of short rectangular scales, which measure 30 × 25 μm with distinct radial ribs (Fig. 7D).

Central tooth of radula (Fig. 7A) measures 70 μm × 19 μm and has a single broad and slightly forward-directed blade. Basal shaft of central tooth slightly extended. First lateral tooth nearly twice as long as central one. First lateral measures 120 μm × 28 μm; shaft simple and slender with single inwardly directed blade. Second lateral tooth with shaft 195 μm long; tooth strongly keeled in upper part, bearing large, roundish head with 3–4 denticles. Innermost denticle smallest and only well developed in few rows. Second denticle from inside longest, with keeled elevated

back; sharply pointed, whereas tips of remaining denticles more obtuse. Spoon-like uncinal tooth ca. 200 μm long.

Ctenidia holobranchially arranged.

**Distribution.** The species has a wide Indo-Pacific distribution. It occurs from Australia to the Andaman Sea (the latter a new record from the author’s collection: 1045 [h]). The easternmost record is from Tutuila Island (American Samoa) (also in the author’s collection).

Suborder Acanthochitonina Bergenhayn, 1930
Superfamily Cryptoplacoidea H. & A. Adams, 1858
   Family Acanthochitonidae Pilsbry, 1893
   Subfamily Acanthochitoninae Pilsbry, 1893

**Genus Leptoplax** Dall, 1882

**Type species:** *Chiton coarctatus* Sowerby, 1841, designated by monotypy.

**Genus distribution:** Indo-Pacific Ocean, Holocene.

**Leptoplax unica** (Nierstrasz, 1905)
(Figs. 1D, 6G–L, 8–10)

*Acanthochites (Notoplax) unicus* Nierstrasz, 1905: 62, pl. 1, fig. 20; pl. 4, figs. 115–117; pl. 5, fig. 118.
Type: Holotype, ZMA 1899.05.07.

Type locality: Indonesia, “bank between the Bahuluwang and Tambolungan Islands, South of Saleyer, Siboga Exp. Station 66”, 8–10 m, bottom, dead coral, *Halimeda, Lithothamnion*. The type locality is herein restricted to halfway between Pulau Bahuluang and Pulau Tambulongan, 6˚32’32”’S 120˚25’34”’E.

Material examined: UF 322108 — 1 specimen, *ca.* 8 × 6.5 mm (curled), PNG: off Port Moresby, Motupore Island, Motupore Island Research Station, reef flat, turbid, shallow live
and dead reef, 1–2 m, 9°35’ S, 147°17’ E, leg. L. Kirkendale, 15 June 2003 (LAK-140), 95% ethanol. UF 297697 — 3 specimens, ca. 7.2 × 4 mm, ca. 10.7 × 6.9 mm (curled) and ca. 11.4 × 7 mm (curled), PNG: north coast of Basilisk Bay, Hiliwau, 1-4 m, under rocks, 10°15’ 39’’ S, 150°42’ 45’’ E, leg. Gustaf Paulay, 27 May 1998 (GP-552), 75% ethanol.

**Description:** Animal elongate oval. Valves subcarinated and moderately elevated. Coloration varies from cream to dark yellowish, generally speckled with darker tones. Wide perinotum extends between valves. Head valve semicircular with nearly straight posterior valve margin. Tegmentum covers only about 50% of entire dorsal valve surface (Fig. 6G, Fig. 8A). Intermediate valves trapezoidal with anterior margin only half width of posterior one (Fig. 6H, Fig. 8B). Apex
beaked. Posterior and anterior valve margins straight. Jugal area wedge-shaped, occupying whole width of anterior tegmentum portion. Tail valve round with nearly central, slightly elevated mucro (Fig. 6I, Fig. 8D, Fig. 9A). Jugal zone of tail valve much narrower than on intermediate valves, appearing nearly parallel-sided. Tegmentum (Figs. 8C, E) sculpture consists of drop-shaped, moderately raised granules (ca. 93 × 60 µm), arranged more or less symmetrically (radially) on head valve, pleural areas, and ante-mucronal area. Granules less regularly arranged and more roundish in pleuro-lateral and post-mucronal areas. Granules have central macroesthete (ca. 8.5 µm in diameter) and two microesthetes (ca. 6.6 × 11.6 µm), which lie in open end of granule. Jugal zone bears irregularly arranged micropores with diameter up to 12.5 µm. Somewhat smaller pores (up to 10 µm) present among granules.

Articulamentum well developed and thickened, white with large areas of pinkish red; dorsal side, in particular, nearly completely red except for apophyses (Figs. 6J–L). Apophyses wide, wing-shaped and unconnected. 5 slits in head valve, appearing broad and short on ventral side to groove-like on dorsal side. Intermediate valves with single slit on each side. Beside slit rays, dorsal grooves present that correspond with enlarged “diagonal ridge”. Disarticulated specimen has 9 slits in tail valve; slit rays indistinct and dorsal grooves resemble pectination.

Perinotum very wide and fleshy. 18 tufts of rather long white spicules, approximately 20 per tuft. Spicules up to 205 µm long, slender and only slightly curved in upper half (Fig. 9B). Main dorsal coverage small slender, sharply pointed spicules (Figs. 9B–D), 10.6 × 3.5 µm in size, interrupted by two other kinds of spicules. Fist kind are thick, their upper half curved, obtusely pointed, with fine oblique and irregular riblets. These spicules attain length up to 150 µm (Fig. 11C). Other kind much smaller, up to 32 µm in length, straight, smooth, and sharply pointed (Fig. 11D). Randomly arranged among two kinds of spicules are also straight, conical, obtusely pointed spicules measuring up to 200 µm in length. Ventral girdle shows dense coverage of sharp to obtusely pointed spicules that may attain length of 75 µm (Figs. 9E–F).

Central radular tooth rectangular, 24 µm in length, with simple forwardly directed blade (Figs. 10A–B). First lateral tooth wing-shaped, covering basal half of central tooth, latter slightly keeled in this region. Second lateral tooth with shaft about 100 µm long bearing a tricuspid head. Innermost denticle sharpest and largest and more keeled dorsally than others. Major uncinal tooth slender, about 113 µm long, bearing spoon-like extended head with or without slightly pointed edge.

Due to curled condition of specimens exact number of ctenidia could not counted, but they extend anteriorly beneath valves v-iv.
**Distribution:** The species was known so far from the type locality only. The herein presented material extends its distributional range southwards.

**Remarks:** The use of the genus *Leptoplax* for acanthochitonids with a multifissured tail valve and short sutural tufts on a wide perinotum is controversial. Gowlett-Holmes (1991) separated the Australasian genus *Notoplax* H. Adams, 1861 from the genus *Leptoplax*. While Van Belle (1999) did not follow this opinion, radula studies of Saito (2004) have shown that generic separation is justified.

**Discussion**

The Papuan chiton fauna has never been investigated in detail. Besides two short papers on chitons from Papua New Guinea by Ashby (1923) and Leloup (1981), there are only sporadic literature records of chitons of New Guinea, which is divided politically into the Indonesian province of Iriyan Jaya in the west and the country of Papua New Guinea in the east. A list of taxa recorded so far from this region may be found under ‘Appendix’.

In addition to the present taxa, three unidentified chitons were obtained during an investigation of the Raja Ampat Islands (Wells, 2002a). The table contains only taxa explicitly reported from New Guinea, and not even nearby vicinities. The compilation includes a total of 19 species belonging to 7 families and 12 genera. All species have a wider distribution than New Guinea except for *Parachiton fornix* (Kaas & Van Belle, 1985), *Callochiton cinnabaris* Kaas & Van Belle, 1985, *Callistochiton biakensis* Kaas & Van Belle, 1994, *Callistochiton bellatus* Kaas & Van Belle, 1994 and *Callistochiton squamigerocostatus* Kaas & Van Belle, 1994. The ecology and distribution of these latter species are still too little known to consider them endemic to the New Guinea region. Of species reported from New Guinea, only *Ischnochiton* (Haploplax) *adelaenidis* (Reeve, 1847) was previously known exclusively from Australia, whereas *Notoplax holosericea* (Nierstrasz, 1905) seems to be a typical Indonesian faunistic element. It is likely that a thorough investigation of this island, as well of its satellite islands, will greatly increase our knowledge of the distribution of Asian and Oceanian chitons. Species such as *Nierstraszella lineata* (Nierstrasz, 1905), reported from Vanuatu and Indonesia, probably also occur in New Guinea. The same is true of chitons reported from the Molluccas (e.g. Strack, 2001). It seems that the chiton fauna is highly diverse, as is that of the Indonesian region (personal observation), but that individuals occur only in low numbers. That is likely the reason why chitons of the New Guinea region have been largely neglected, even though it would seem that this region could serve as a bridge between the Asian and Oceanian chiton faunas and thus should be of the utmost interest in understanding the extent of connectivity between these regions.

It would also be interesting to assess the contribution of chitons to the molluscan diversity of the region but unfortunately such estimates are not yet possible. Only the results of the Raja Ampat Islands Expedition might provide some basis for speculation. During this expedition a total of 699 mollusc species were obtained, of which only three were chitons. If the true number of chitons is least 6 times larger (as in this study) then one gains an appreciation of the contribution that chitons make to the biodiversity of this region.

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References


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**Appendix**

**Annotated checklist of Polyplacophora occurring in the New Guinea region**

**Family Leptochitonidae** Dall, 1889

*Parachiton fornix* (Kaas & Van Belle, 1985) comb. nov.

*Reference:* Kaas & Van Belle (1985: 182; fig. 86) as *Leptochiton (Parachiton) fornix* sp. nov.

*Remarks:* Following the recent use of the genus *Parachiton* (Thiele, 1909a) as explained in Saito (1996), the species is recombined herein.

*Parachiton acuminatus* (Thiele, 1909)

*Reference:* Thiele (1909a: 13; pl. 1, figs. 61–73) as *Lepidopleurus acuminatus* n. sp.


**Family Callochitonidae** Plate, 1901

*Callochiton cinnabaris* Kaas & Van Belle, 1985

Family Ischnochitonidae Dall, 1889

*Ischnochiton (Haploplax) adelaidensis* (Reeve, 1847)

*Remarks*: *Ischnochiton (Haploplax) misimaensis* Ashby, 1923 (Ashby, 1923: 282; pl. 16, figs. 6, 6a–c), *Ischnoradsia papuaensis* Ashby, 1923 (Ashby, 1923: 227; pl. 17, figs. 2a–c), and *Chiton vangoethemi* Leloup, 1981 (Leloup, 1981: 2; figs. 1–2) originally described from New Guinea were shown to be conspecific with *I. adelaidensis* by Kaas & Van Belle (1994: 77).

*Ischnochiton (Haploplax) quoyanus* Thiele, 1909

*Remarks*: The species originally described by Quoy & Gaimard (1835: 396; pl. 75, figs. 43–47) as *Chiton tessellatus* from New Guinea was preoccupied by *Chiton tessellatus* Wood, 1815. Thiele (1909a: 83; pl. 8, fig. 30) solved this taxonomic conflict by renaming the species.

Family Callistoplacidae Pilsbry, 1893

*Callistochiton biakensis* Kaas & Van Belle, 1994

*Callistochiton bellatus* Kaas & Van Belle, 1994

*Callistochiton squamigercostatus* Kaas & Van Belle, 1994

*Callistochiton granifer* Hull, 1923

*Remarks*: According to Hermann Strack (the Netherlands, personal communication) the Indonesian specimens may be a new species and are under study. Most probably the following interpretations refer also to this new species.

*Callistochiton lyellii*; Leloup (1981: 4).

*Callistochiton undulata*; Nierstrasz (1905: 106; 1905a: 157).

*Acanthopleura gemmata* (de Blainville, 1825)

*Remarks*: The following synonyms were also described from New Guinea: *Chiton aculeatus* “Gmelin”; Quoy & Gaimard, 1835: 373 (syn. by Ferreira,1986: 226).


*Acanthopleura spinigera* (Sowerby, 1840) by Nierstrasz, 1905a: 152 (syn. by Ashby, 1922: 29).

*Acanthopleura granulata* [non *Acanthopleura granulata* (Gmelin, 1791)]; Leloup 1981: 1 (syn. nov. herein).

*Acanthopleura spinosa* (Bruguière, 1792)

*Remarks*: According to Hermann Strack (the Netherlands, personal communication) the Indonesian specimens may be a new species and are under study. Most probably the following interpretations refer also to this new species.

*Onithochiton lyelli*; Leloup (1981: 4).

*Onithochiton undulata*; Nierstrasz (1905: 106; 1905a: 157).

*Acanthopleura gemmata* (de Blainville, 1825)

*Remarks*: The following synonyms were also described from New Guinea: *Chiton aculeatus* “Gmelin”; Quoy & Gaimard, 1835: 373 (syn. by Ferreira,1986: 226).


*Acanthopleura spinigera* (Sowerby, 1840) by Nierstrasz, 1905a: 152 (syn. by Ashby, 1922: 29).

*Acanthopleura granulata* [non *Acanthopleura granulata* (Gmelin, 1791)]; Leloup 1981: 1 (syn. nov. herein).

*Acanthopleura spinosa* (Bruguière, 1792)

*Remarks*: According to Hermann Strack (the Netherlands, personal communication) the Indonesian specimens may be a new species and are under study. Most probably the following interpretations refer also to this new species.

*Squamopleura miles* (Carpenter in Pilsbry, 1893)

Family Cryptoplacidae Ashby, 1928
Cryptoplax oculatus (Quoy & Gaimard, 1835)
Reference: Quoy & Gaimard (1835: 411) ["provient de la Nouvelle-Guinée ou de Vanikoro"].
Remarks: Specimens reported in Leloup (1981: 3) as Cryptoplax striata (Lamarck, 1819), may probably be juveniles of this species.

Family Acanthochitonidae Pilsbry, 1893
Notoplax holosericea (Nierstrasz, 1905)
Reference: Nierstrasz (1905: 66; pl. 2, fig. 23, pl. 5, figs. 130-133) as Acanthochites (Loboplax) holosericeus nov. spec.
Remarks: For taxonomic decision see Kaas & Van Belle (1980).
Leptoplax unica (Nierstrasz, 1905)
Reference: Herein.

バブアニューギニアから採集された多板類4種について

E. シュワーベ

要約

バブアニューギニアの多板類相についての研究はほとんど行われていない。同地より4種の多板類が採集されたので報告する。3種、Callistochiton granifer Hull, Chiton (Tegulaplax) hululensis (E. A. Smith), およびLeptoplax unica Nierstrasz, は同地からの初記録である。Lucilina lamellosa (Quoy & Gaimard) の分布も確認された。各種について種の標微の形態をカラー写真と電子顕微鏡写真で示した。また、これまでに同地から報告されている全種、7科12属19種のリストを作成した。このリストには新組み合わせ1、新異名1が含まれる。