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Conidae from the Solomon Islands: some taxonomic problems

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Introduction: During the 4th International Cone Meeting in the RBINS in Brussels (1 October 2016), the present auhor discussed some taxonomic problems concerning the **Conidae** from the Solomon Islands. After 7 travels to the Solomon Islands between 1987 and 2012, with stays at 26 localities in Choiseul, New Georgia, Guadalcanal, Florida Islands., Malaita and Makira, his Solomon Islands' collection keeps 115 species of **Conidae**. Many specimens were obtained from the late Ann Kengalu and her divers; also from Brian Bailey and Ron Moylan.

During the Cone Meeting, he argued that his experience in the world of cone collectors had taught him that as soon as someone describes something new, others try to "kill" him. Yet, as long as synonymy has not been truly proved, the author and the taxon he introduced should be respected. He explained it by means of the case of *Conus patamakanthini* Delsaerdt, 1997, which was a good step to some taxonomic problems in **Conidae** from the Solomon Islands..

Conus patamakanthini Delsaerdt, 1997

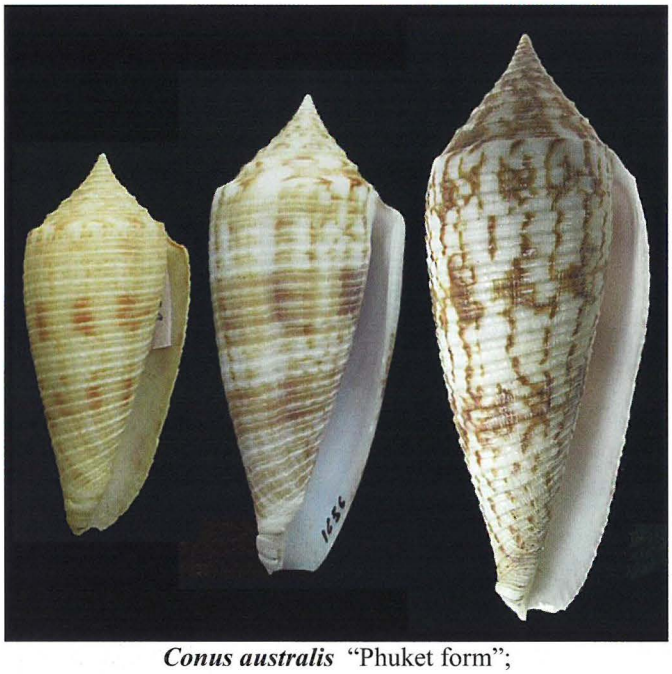
In July 1994, during my journey to Thailand and Phuket I met Somnuk Patamakanthin and his son Somwang. They showed me a unique *Conus* specimen from their exceptional collection they could not identify. After a comparative study at home, I became convinced that it was a new species. In 1997 I travelled to Thailand and Phuket again. A second specimen was shown, trawled at the same locality. The first one became the holotype in the description, the second one a paratype (see photo below). The new species was named in honour of S. Patamakanthin. In the discussion it was compared with *Conus australis* Holten, 1802, *Conus duplicatus* Sowerby, 1823, *Conus armadillo* Shikama, 1971 and *Conus ranonganus* da Motta, 1978.

Holotype and paratype of ***Conus patamakanthini***
89.9 and 83.8 mm

By the end of 1998, a fourth and fifth specimen were trawled. The fourth specimen was a present for my collection, length 75mm.

Filmer (2001: 211) considered it "a valid species or possibly a subspecies of *C. australis* Holten, 1802". I informed Filmer that *C. patamakanthini* could not be a subspecies as it is found together at the same locality and at the same depth with *C. australis* "Phuket form". Filmer (2009) corrected his earlier opinion: *C. patamakanthini* is a valid species.

On several websites *C. patamakanthini* is degraded to a synonym of *C. australis*. It seems to be based on the World Register of Marine Species (WoRMS), which reads: "Status: unaccepted / Accepted name: *C. australis* / Source of synonymy: Tucker J.K. & Tenorio M.J. (2013)...". Yet, on another website, Christophe Roux disagrees with WoRMS: he considers *C. patamakanthini* a valid species and adds "visiblement le grand frère de *C. nimbosus*".



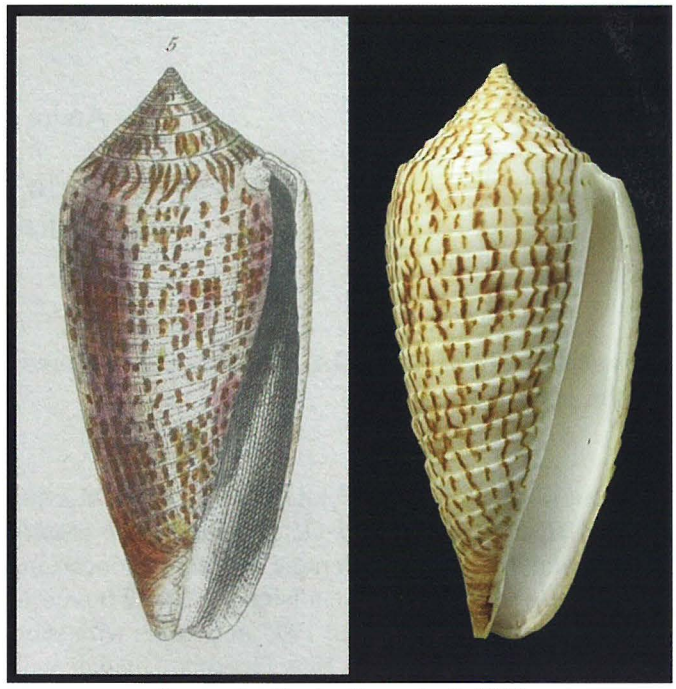
Conus australis "Phuket form";
Specimen on the left from Vietnam, 82.4 mm

The same C. Roux keeps one specimen of *C. patamakanthini* in his collection. M.J. Tenorio (pers. comm. during the Cone Meeting) does not. On the photo of *C. australis* above, a specimen found at the type locality of *C. patamakanthini* (Racha Noi, island south of Phuket) is shown. The second specimen was also found south of Phuket. Both illustrate the "Phuket form", while the third illustrates the well-known form from the East and South China Sea. This specimen was collected off the Vietnamese coast. Specimens of *C. patamakanthini* have a stable general form, sculpture and pattern. A transitional form to *C. australis* is unknown. So, in my opinion there is no reason to synonymise it and it is a valid species.

Conus duplicatus Sowerby I, 1823.

We now discuss a species from the Solomon Islands, for which we need Sowerby's (1823) *The Genera of Recent and Fossil Shells.* Two plates illustrate the **Conidae**. On plate 267, *Conus bullatus* (fig. 1-2), *Conus dormitor Solander* in Brander, 1788 (fig. 3, a fossil species from England), *C. australis* (fig. 4) and *C. duplicatus* n. sp. (fig. 5) are shown. The figured type is hereby illustrated, together with a specimen from the Solomon Islands (coll. present author).

Sowerby's description of *C. duplicatus*: "a hitherto un-described species, it is very elegantly shaped and beautiful marked; it is now in the cabinet of the Rev. Dr. Goodall. We have named it *C. duplicatus*, the following are its characters: C. gracilis, subventricosus, spira breviuscula, acuta; anfractu ultimo superne rotundato, lineis transversis duplicatis impresso; testa alba maculis, strigisque fulvis ornata". The most important characteristics translated: transverse paired spiral grooves; shell white, decorated with reddish spots and streaks.



Conus duplicatus Sowerby I, 1823

The holotype could not be traced. Rev. Dr. Joseph Goodall was provost of Eaton College. His cabinet, also including a collection of shells, was sold at an auction in 1840. Most of the shells were stored at the NHMUK (London), but not this holotype. Therefore Sowerby's figure was considered as the representative of the holotype by Coomans, Moolenbeek & Wils (1985. 8: 179). They considered *C. duplicatus* a valid species, distinct from *C. australis, C. armadillo* and *Conus kuroharai* (Habe, 1965). The Solomon Islands were designated the type locality.

Two years after Coomans, Moolenbeek & Wils an article by D. Röckel was published in Hawaiian Shell News (HSN, September 1987: 3). He identified one specimen from Cebu as Sowerby's *C. duplicatus* and noted: "Maybe an ecological subspecies of *C. australis* or a valid species".

In 1992 the specimens dredged in the Solomon Islands were described by Korn & Röckel and named *C. gabryae.* Röckel, Korn & Kohn (1995: 202. *C. australis*) considered *C. duplicatus* just an ecological form of *C. australis* and consequently a synonym. The argumentation: "*C. duplicatus* matches deep subtidal shells from the Philippines in shape and sculpture". *C. gabryae* was accepted as a subspecies of *C. australis*, restricted to the Solomon Islands.

The question remains which opinion is the correct one: either Coomans, Moolenbeek & Wils (1985), who considered *C. duplicatus* the species from the Solomons

or Röckel, Korn & Kohn (1995), who considered *C. duplicatus* a mere form of *C. australis* and *C. gabryae* a subspecies of *C. australis* from the Solomon Islands?

Until his death, E. Wils remained convinced that *C. duplicatus* is the species from the Solomons. In my opinion, Coomans, Moolenbeek & Wils (1985) were right. Yet, WoRMS now reads: *C. gabryae* unaccepted; accepted name *C. australis*. *C. duplicatus* unaccepted; accepted name *C. australis*. Source: Tucker & Tenorio (2013).

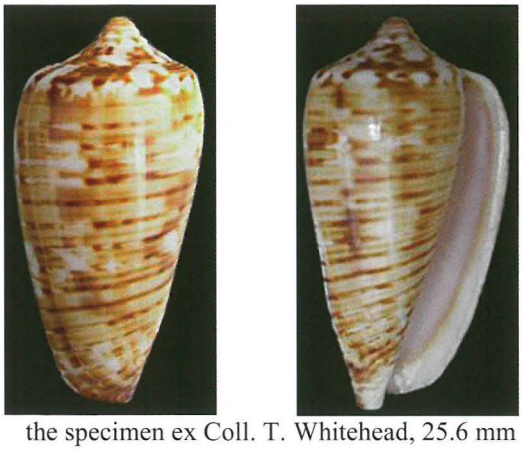
On Plate 2 the 8 specimens in my collection, all dredged by Brian Bailey near the Russell Islands, W of Guadalcanal, are shown.

Conus broderipii Reeve, 1843 or
Conus zandbergeni Filmer & Moolenbeek, 2010

For many years, specimens from the Philippines and Solomon Islands were identified as *C. broderipii* as they resembled its holotype. Jon Singleton once sent me two specimens from the Solomon Islands and also identified them as *C. broderipii*. In 2010, Filmer & Moolenbeek described *C. zandbergeni*. The latter differs from *C. broderipii* by its larger size, a higher spire, the more ovate shape and the colour of the interior which is pink or pale violet instead of white in *C. broderipii*.

Röckel, Korn & Kohn (1995: pl. 39, figs. 30-32) figured specimens from the Philippines and identified them as "?*C. broderipii*", but they actually belong to *C. zandbergeni*. The specimens from the Solomon Islands formerly considered to be *C. broderipii* must also be identified as *C. zandbergeni*.

During my visit (1995, on my way to the Solomon Islands), I received a specimen from Thora Whitehead (Brisbane) which had been collected at Marau Sound (SE Guadalcanal) and which had been identified by her as "*C. broderipii*". Gabriella Raybaudi (1992: 60) provisionally identified that specimen "*C.* cf. *scalptus* or *C. sertacinctus* auctorum (non Röckel)".



the specimen ex Coll. T. Whitehead, 25.6 mm

Röckel, Korn & Kohn (1995: pl. 40, figs. 1-3) illustrate the syntype and two specimens of *C. scalptus* Reeve, 1843. On the same plate (figs 8-9), two specimens from the Solomon Islands are identified as"?*C. sertacinctus* dark form", but they belong to the same rare species figured above.

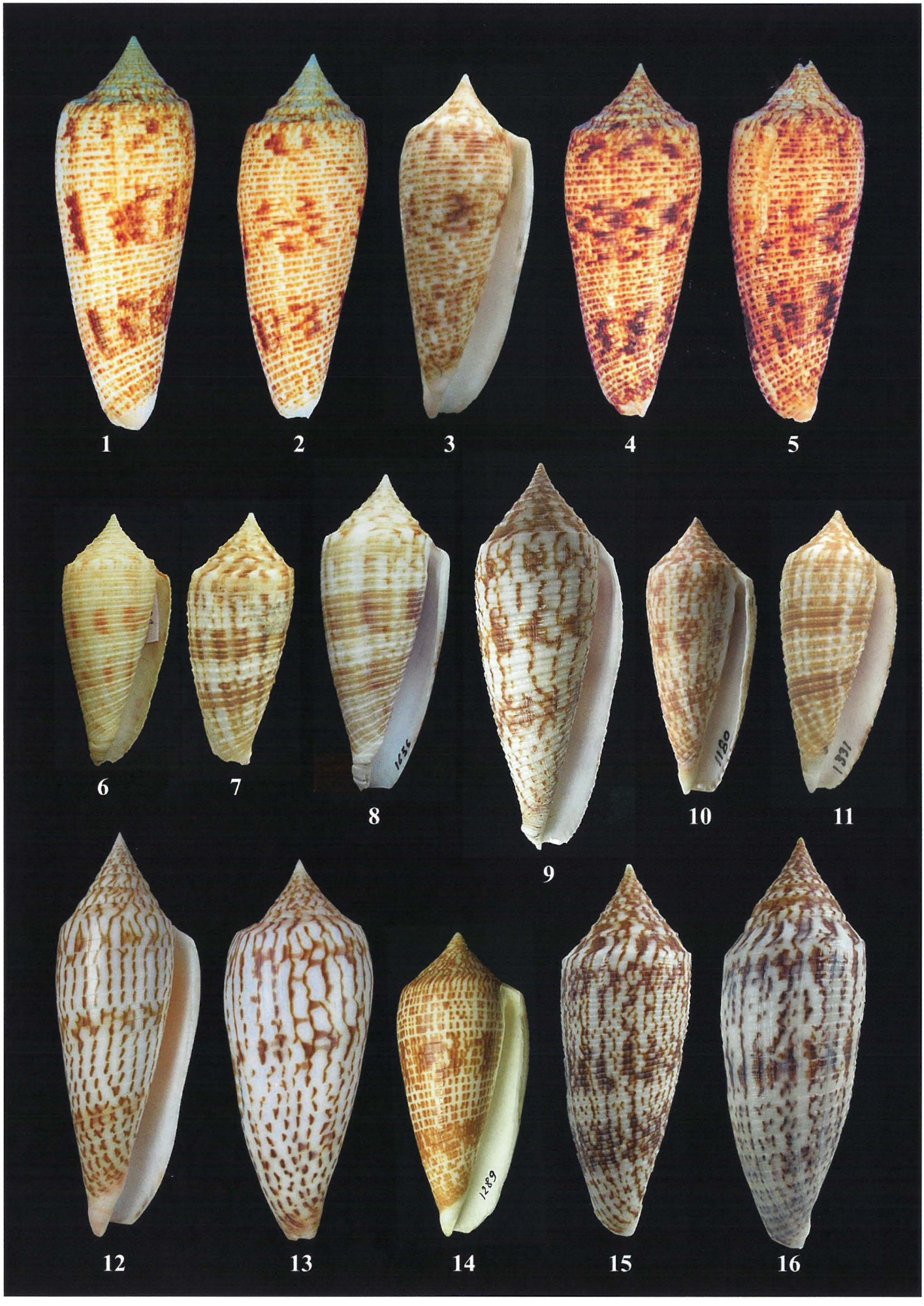
Plate 1

1-5: ***Conus patamakanthini*** Delsaerdt, 1997.
- **1:** 89.9 x 32.3 mm. Holotype
  Dredged at about -120 m in the area south of Racha Noi (= island south of Phuket Island), W. Thailand
- **2:** 82.8 x 30.7 mm. Paratype
  Collected at the type locality
- **3:** 74.6 x 28.6 mm. In Coll. author (reg.: 1640)
  south of Racha Noi, 80–120m deep
- **4:** 76.0 x 29.2 mm. In Coll. Patamakanthin
  south of Racha Noi, 80–120m deep
- **5:** 77.5 x 29.2 mm. In Coll. Patamakanthin
  south of Racha Noi, 80–120m deep

6-11, 15-16: ***Conus australis*** Holten, 1802.
- **6:** 50.5 x 21.4 mm. In Coll. author (reg.: 1639)
  80-120m; south of Racha Noi. "Phuket form"
- **7:** 64.3 x 22.5 mm. In Coll. author (reg.: 1274)
  Chusa: south of Phuket. "Phuket form"
- **8:** 65.0 x 23.3 mm. In Coll. author (reg.: 1656)
  80 – 120m; south of Phuket. "Phuket form"
- **9:** 82.4 x 30.7 mm. In Coll. author (reg.: 1706)
  Dr. Thach: Nha Trang, Vietnam
- **10:** 61.6 x 24.2 mm. In Coll. author (reg.: 1180)
  M. Montilla: Tayabas Bay, Luzon, Philippines
- **11:** 63.4 x 26.1 mm. In Coll. author (reg.: 1331)
  M. Montilla: Bohol, Philippines
- **15:** 84.5 x 29.7 mm. In Coll. author (reg.: 2180)
  Off Dong Tou, Zhejiang Prov., China. 2014
- **16:** 91.8 x 33.1 mm. In Coll. author (reg.: 2180)
  Off Dong Tou, Zhejiang Prov., China. 2014

12-13: ***Conus ranonganus*** da Motta, 1978.
- **12:** 90.2 x 30.5 mm. In Coll. author (reg.: 1612)
  Racha Island, south of Phuket, W Thailand
- **13:** 84.5 x 33.6 mm. In Coll. author (reg.: 1612)
  Racha Island, south of Phuket, W Thailand

14: ***Conus armadillo*** Shikama, 1971.
66.6 x 29.7 mm. In Coll. author (reg.: 1289)
Off Bohol, Philippines. Deep water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G. Raybaudi (recent pers. comm.) commented on these shells: "If this could be an extreme colour form of *sertacinctus*, then it could also have been an extreme colour form of *scalptus"*. She likewise confirmed that specimens like mine are nowadays still considered to belong to *C. sertacinctus* Röckel, 1986. Yet, the colour inside the aperture is violet with a darker violet fringe whereas specimens of *C. sertacinctus* always have a white or yellowish inner aperture. Thus the question remains whether they really belong to *C. sertacinctus.*

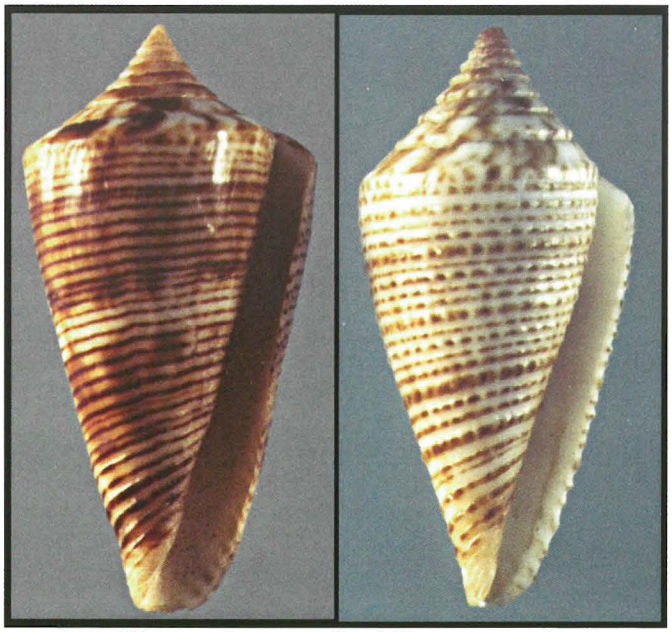
Conus. papuensis Coomans & Moolenbeek, 1982 and ***Conus moylani*** Delsaerdt, 2000

Before 1995 an uncommon species from the Solomon Islands was known by advanced Cone collectors as *C. polygrammus* Tomlin, 1937, a new name for *C. multilineatus* Sowerby, 1875 (non Pecchioli, 1864). The holotype is kept in the National Museum of Wales.

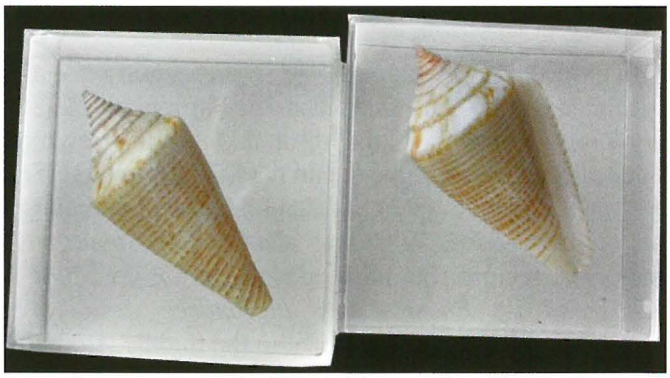
In 1982, Coomans and Moolenbeek described *C. papuensis* from the type locality "Hansa Bay, New Guinea". In their description, the authors discussed *C. filicinctus* Schepman, 1913 from Indonesia, *C. polygrammus* from the Solomon Islands and *C. furvus* forma *aegrotus* Reeve, 1849 from the Philppines. *C. papuensis* was described as having a stepped spire and a last whorl with pustulated spiral cords. In 1991, I published two exceptional specimens of *C. polygrammus* and *C. papuensis* of the same length next to each other in Gloria Maris.

Röckel, Korn & Kohn (1995: 164-165) not only synonymised *C. filicinctus* with *Conus. voluminalis* Reeve, 1843 , but also *C. multilineatus* Pecchioli, 1864 and its new name *C. polygrammus* with *C. furvus* Reeve, 1843. They accepted *C. papuensis* as a valid species and they remarked that "Specimens from Solomon Islands and Papua New Guinea, with largely smooth last whorl are only provisionally assigned to *C. papuensis*, because they may be subadult specimens of *C. voluminalis*".

Advanced Cone collectors suggested me to describe these "smooth specimens" from the Solomon Islands as they were lacking a name. Ron Moylan donated the holotype. He mentioned that he could usually find one or two specimens per year during his dives in Marau Sound, SE Guadalcanal. Brian Bailey informed me that he had collected the species near the Florida Islands (in front of Honiara) and dredged near the Russell Islands.



"Conus polygrammus" and ***Conus papuensis*** in Gloria Maris (1991) two exceptional specimens, both 26 mm, in Coll. J. de Visser



Conus papuensis 23 and 24 mm, from Hansa Bay (in Coll. author)

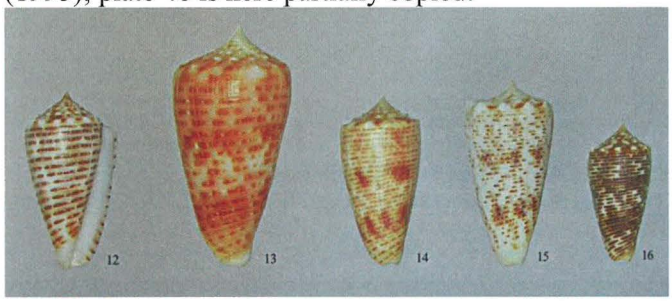
Filmer (2009) accepted *C. moylani* as a valid species. WoRMS, however, reads: *C. moylani* unaccepted and synonym of *C. papuensis.* In my opinion, *C. papuensis*, at first sight characterised by its highly elevated stepped spire and by its last whorl with granulated cords, is a valid species. *C. moylani,* with straight last whorl, conical and broader than *C. papuensis*, the spire not stepped, is another valid species. The specimens from the Solomons known as "*C. polygrammus*" before 1995 must be identified *C. moylani.*

Conus proximus proximus Sowerby II, 1859 and ***Conus proximus cebuensis*** Wils, 1990

After studying hundreds of specimens, Wils described *C. proximus cebuensis.* Type locality: "Punta Engano, Mactan Isl., Cebu, Philippines". Paratype 5 is kept in my collection.

Above: ***Conus proximus proximus*** from the Solomon Islands
Below: ***Conus proximus cebuensis*** from the Philippines

But now the beautiful book by Röckel, Korn & Kohn (1995); plate 48 is here partially copied:



You immediately recognise *C. proximus cebuensis* in the specimen on the left (indeed from the Philippines) and *C. proximus proximus* in the third and fourth specimen (indeed from the Solomons) and the fifth (from Fiji). The first on the left, completely resembling the type material of *C. p. cebuensis* Wils, was identified "*C. proximus*" only. The second was misidentified as "*C. proximus* f. *cebuensis*" [is *Phasmoconus alexandrei* Monnier & Limpalaër, 2012]. The specimen in the middle (from the Solomons) was misidentified "*C. proximus* f. *cebuensis*". It is obvious that localities and names were mixed and therefore *C. p. cebuensis* was declared to be just a form and synonym of *C. proximus.* This opinion was followed by Filmer (2001). Yet, Limpelaër & Monnier (2012) considered *C. cebuensis* a valid species. *C. cebuensis* is also accepted as a valid species in WoRMS.

Plate 2

1-9: ***Conus duplicatus*** Sowerby I, 1823
1: Sowerby I, 1823: pl. 267, fig. 5
2: 59.3 x 26.1 mm. In Coll. author (reg.: 05892)
3: 58.1 x 24.9 mm. In Coll. author (reg.: 02024)
4: 64.1 x 27.1 mm. In Coll. author (reg.: 08712)
5: 56.6 x 24.4 mm. In Coll. author (reg.: 03832)
6: 60.4 x 29.4 mm. In Coll. author (reg.: 03832)
7: 43.6 x 17.6 mm. In Coll. author (reg.: 03832)
8: 41.1 x 17.7 mm. In Coll. author (reg.: 04028)
9: 39.0 x 15.9 mm. In Coll. author (reg.: 04028)
Specimens fig. 2-9 were dredged by Brian Bailey near Russell Islands, Solomon Islands (1992-1995).

10: ***Conus kuroharai*** (Habe, 1965)
63.3 x 28.8 mm. In Coll. author (reg.: 1171).
Balut Island, 1990, Mindanao, Philippines.

11-14: ***Conus tmetus*** Tomlin, 1937
11: 48.1 x 20.7 mm. In Coll. author (reg.: 04790)
12: 53.2 x 22.3 mm. In Coll. author (reg.: 02089)
13: 54.7 x 24.8 mm. In Coll. author (reg.: 04025)
14: 53.4 x 23.7 mm. In Coll. author (reg.: 04167)

Leg. T. Ataban, 1995 (11), leg. Kengalu's team of divers, 1987 (12) and 1992 (13), leg. C. Munday,1995 (14): Kakambona reefs, Guadalcanal, Solomon Islands.

15: ***Conus ochroleucus*** Gmelin, 1791
64.6 x 25.3 mm. In Coll. author (reg.: 448)
V. Dan: Batangas, Philippines

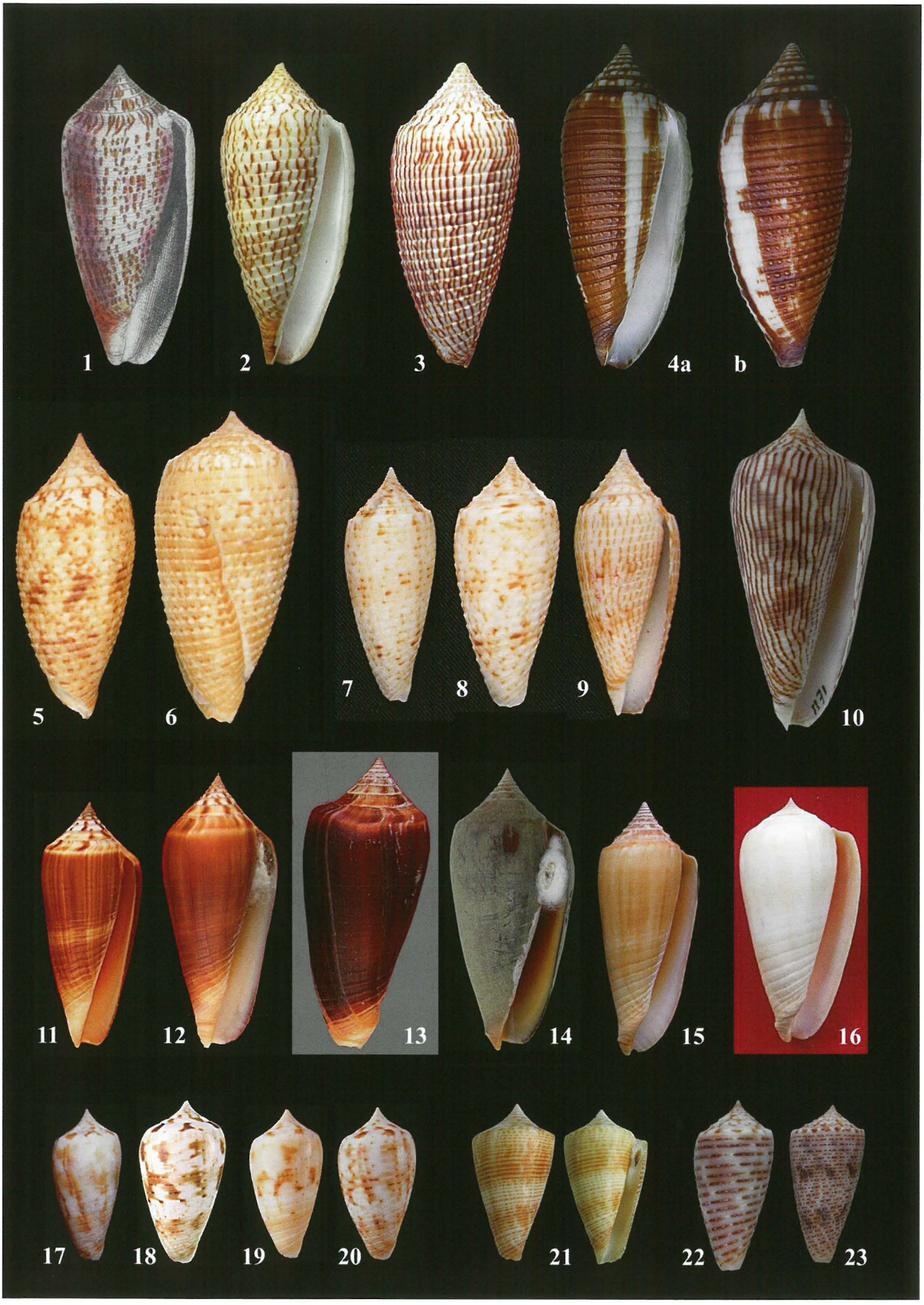
16: ***Conus flavus*** Röckel, 1985
53.5 x 35.7 mm. In Coll. author (reg.: 03805)
Leg. C. Munday, 7.1992: Kakambona, Guadalcanal

17-20: ***Conus zandbergeni*** Filmer & Moolenbeek, 2010
17: 32.3 x 15.4 mm. In Coll. author (reg.: 04525)
18: 34.5 x 18.2 mm. In Coll. author (reg.: 94525)
Ex Coll. Singleton: Marau Sound, Guadalcanal, Solomon Islands.
19: 31.5 x 16.4 mm. In Coll. author (reg.: 1111)
20: 31.7 x 16.5 mm. In Coll. author (reg.: 1111)
Siasi, Sulu, Phillipines

21: ***Conus moylani*** Delsaerdt, 2000. Paratype 1
30.5 x 15.2 mm. In Coll. author (reg.: 04885)
Leg. Ron Moylan: Makina Passage, Marau Sound, Guadalcanal, Solomon Islands

22: ***Conus cebuensis*** Wils, 1990. Paratype 5
33.3 x 16.5 mm. In Coll. author (reg. 831).
M. Montilla: Mactan Isl., Cebu, Philippines.

23: ***Conus proximus*** Sowerby II, 1859
30.5 x 15.2 mm. In Coll. author (reg. 880)
Leg. Kengalu's team of divers: area W of Honiara, Guadalcanal, Solomon Islands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Conus tmetus Tomlin, 1937
Conus ochroleucus Gmelin, 1791
Conus flavus Röckel, 1985

C. tmetus is a new name for *C. sulciferus* A. Adams, 1854 (non Deshayes, 1835). In my collection a growth series is kept, collected by the Kengalu's team of divers on the reefs of Kakambona, W of Honiara. The specimens below range from 22.4 mm to 35.9 mm in length.

The adults were described as *Conus pilkey* Petuch, 1974, but the whole growth series (also see Plate 2)) clearly shows that all belong to the same species [which was already proved in *Gloria Maris* 32(5-6): 69-72; pl. 7].

Röckel, Korn & Kohn (1995: 115) considered *C. tmetus* a subspecies of *Conus ochroleucus* Gmelin, 1791, which was also accepted by Filmer (2001). *C. ochroleucus* is a well-known species in the Philippines; it can only be confused with *C. flavus*. It appears that the subspecies *C. ochroleucus tmetus* is generally accepted. Its distribution: Papua New Guinea, Solomons, Fiji and Vanuatu. *C. flavus*, type locality Luzon in the Philippines, also occurs unto Fiji, but is rarely found in the Solomon Islands (only one specimen in my collection of **Conidae** from the Solomon Islands).

Conus spiculum Reeve, 1849

C. spiculum is of questionable identity. During my visit to Thora Whitehead in Brisbane (July 1995), I also met Jon Singleton. They kept specimens of *C. spiculum* in their collections and at that time they were convinced that it was a valid species. Two opinions are found: either *C. spiculum* is just a juvenile form of *Conus generalis* Linnaeus, 1767 or *C. spiculum* is a valid species. Reeve's two syntypes are kept in NHMUK (London), length 23 and 22 mm. I had sent a photo of the syntypes to Colin Munday and he should keep it in mind while diving. When I met Colin in Honiara he surprised me with two specimens collected by him in the reefs of Kakambona. He could only find these two. The specimens completely resemble Reeve's syntypes; length 20.3 and 20.8 mm.

Conus spiculum Syntypes NHMUK

Röckel, Korn & Kohn (1995: 177) just dedicate one line to this species: "*C. spiculum* was based on 2 juvenile specimens". This opinion was followed by Filmer (2001). Yet, seven years later he stated: "a juvenile of *C. generalis* or possibly a valid species".

Photographed together: ***Conus spiculum*** from Kakambona and juveniles of ***Conus generalis*** from Papua New Guinea (Coll. author)

In 2010, Jon Singleton (in *The Cone Collector*, part 14) changed his mind: he also became convinced that *C. spiculum* was just the juvenile form of *C. generalis*.

The two specimens in my collection are still labelled "*C. spiculum*" (which is a correct identification, whatever the taxonomic status may be) — a precious souvenir to remember a friend, the late Colin Munday.

Conus nahoniaraensis da Motta, 1986
Conus sertacinctus Röckel, 1986
Conus solomonensis Delsaerdt, 1992
Conus zebra Lamarck, 1810

In 1986, two new species were described from the Solomon Islands.*C. nahoniaraensis* is easy to identify by its bluish grey ground colour. Type locality "in shallow water off Honiara", but during my stays I never saw Kengalu's team of divers bring a single specimen out of the water. The specimens in my collection were collected in Marau Sound, SE Guadalcanal.

In my alphabetical review of the Conidae from the Solomon Islands (part 3: explanation of plate 5), I considered *C. nahoniaraensis* a form and thus synonym of *C. zebra.* That was also the opinion of Röckel, Korn & Kohn (1995: 203) and of Filmer (2001 and 2011). Yet, we all made a mistake.

above: ***Conus nahoniaraensis***
below: ***Conus sertacinctus*** with periostracum
(Coll. author)

After my second stay on the Solomon Islands (1992) and with some fifty specimens, I could understand the species complex and I described *C. solomonensis* sp. nov. Specimens of the new species were distinguished in details by Röckel from *C. nahoniaraensis* and his *C. sertacinctus*, but he identified them as "*C. mulderi* Fulton, 1936". So I travelled to the NHMUK (London) to study the holotype of *C. mulderi.* I was astonished: the holotype did not resemble my specimens at all, but it belongs to *C. stramineus* Lamarck, 1810. No doubt anymore, back home I described *C. solomonensis.* Holotype and paratypes were deposited in the NHMUK. Paratypes were distributed to RBINS (Brussels), ZMA (Amsterdam) and the collections of D. Röckel, G. Raybaudi and J. de Visser.

Röckel, Korn & Kohn (1995) did not only synonymise *C. solomonensis* with *C. sertacinctus*, but also *C. nahonia-raensis* with *C. zebra.* I still keep the letter in which D. Röckel expressed his disappointment about that decision by the two other authors.

Filmer (2001) synonymised both *C. solomonensis* and *C. nahoniaraensis* with the valid species *C. zebra.* He also considered *C. sertacinctus* a valid species. After my article in La Conchiglia (1997) and a personal letter to him, Filmer (2009) also considered *C. solomonensis* a valid species. Filmer (2011: 37) repeated that opinion.

Two valid species in Coll. author.

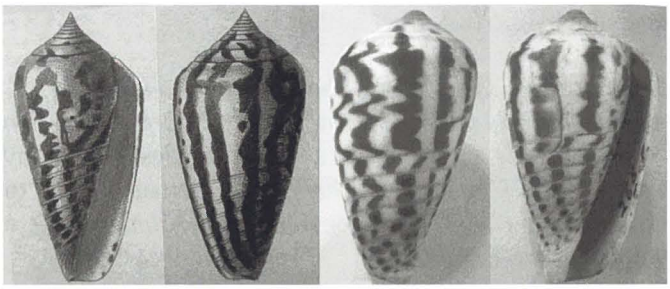
C. sertacinctus and *C. solomonensis* have a distinct protoconch, a distinct ground colour, a distinct pattern on the last whorl, a distinct interior colour, a distinct colour of the periostracum, a distinct colour of the animals and there are minor differences in their radulae (fide G. Raybaudi in pers. comm.). Both species can easily be distinguished: a white or yellowish interior colour: *C. sertacinctus*. *C. solomonensis* has a violet interior.

I am convinced that *C. nahoniaraensis, C. sertacinctus* and *C. solomonensis* are related but separate species.

C. zebra belongs to the same complex of species, but is a fourth species. G. Raybaudi (1992) wrote a critical review of the opinions concerning *C. zebra*. The holotype, selected by Kohn (1981), is in MNHN. It is presumed to be Lamarck's type, but is does not bear the usual original number inside, nor does it match the size as indicated by Lamarck (29 mm). It is a beached, badly eroded

specimen from a vague locality "Océan Asiatique". The apex and base of the type as figured in Kiener (1849-50: pl. 76, fig. 2) have been "repaired". G. Raybaudi's conclusion: the holotype of *C. zebra* is unrecognisable.

In Coll. Wils (now in RBINS), one specimen which very closely resembles the holotype of *C. zebra* is kept (see below). It was collected by the late Rev. Jan vander Riet in the Ata'a Cove, east of Malaita, in the Solomon Islands. It is also a beached specimen; length 32 mm.



Conus zebra
Left: as figured in Kiener.
Right: the specimen in Coll. Wils, from Ata'a, Malaita.

A second specimen in Coll. vander Riet, labelled "*C. zebra*", was given to the present author by his widow L. Rigaux. It measures 20.7 x 9.5mm.

above left: specimen ex Coll. vander Riet, now Coll. author.
above right and below left: specimens collected in Mbuma.
below right: the specimen collected near Honiara.

During my stays on Malaita *C. zebra* was in my mind day and night. I found two worn specimens in Mbuma (see photo above). It is possible that they belong to *Conus radiatus* Gmelin, 1791. Their length is 22.9 and 22.6 mm. Still, maybe the one specimen that was live-collected by the Kengalu's team of divers near Honiara at night in July 1987, is a fresh *C. zebra*. Measurements 30.0 x 14.4 mm. The ventral side has somewhat a zigzag pattern, like in the holotype. There is a violet colour inside the shell. But it remains unclear whether it is the species described by Lamarck.

Filmer (2011: 10-12) made an excellent review of earlier contributions to *C. zebra*. He concluded that *C. zebra* is a valid species "distinguished from all others except *C. nahoniarensis*".

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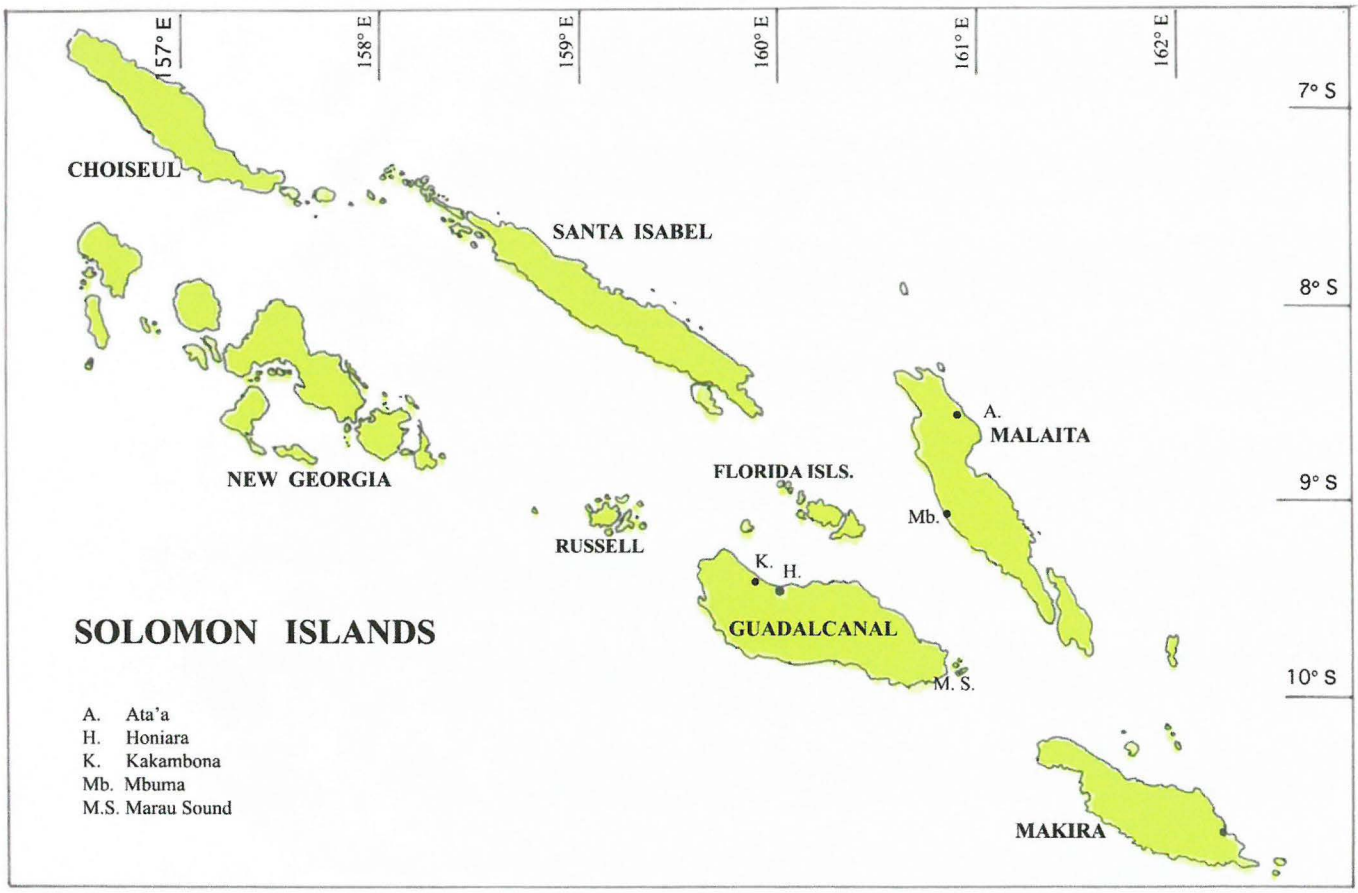

Addendum 1: Map of the Solomon Islands indicating the localities mentioned in the taxonomic part