Description of a new species in the *Siratus pliciferoides* group (Gastropoda: Muricidae) from the Philippines

Roland HOUART
Research Associate
Institut royal des Sciences naturelles de Belgique
Rue Vautier, 29, B-1000 Bruxelles, Belgium
roland.houart@skynet.be

KEYWORDS. Philippines, Gastropoda, Muricidae, *Siratus* n. sp.

ABSTRACT. A new species of *Siratus* is described from Balut Island, Philippines. It is compared with *Siratus pliciferoides* (Kuroda, 1942). The synonymy of *Siratus pliciferoides* is reviewed and commented.

RESUME. Une nouvelle espèce de *Siratus* est décrite de l'île de Balut aux Philippines. Elle est comparée à *Siratus pliciferoides* (Kuroda, 1942). La synonymie de *Siratus pliciferoides* est passée en revue et commentée.

INTRODUCTION

The *Siratus pliciferoides* group contains four names usually considered to be monospecific: *Chicoreus pliciferoides* (Figs 4-7, 15) was described by Kuroda (1942: 81) as a substitute name for *Murex pliciferus* Sowerby, 1841 which was preceded by, and thus a homonym of, *M. pliciferus* Bivona-Bernardi, 1832. The species occurs widely in an area consisting of the Philippines, the China Seas, Taiwan and southern Japan.
Murex (Siratus) propinquus was described by Kuroda & Azuma in Azuma (1961: 300) for a quite similar shell from Japan but with a comparatively lower spire, a shorter siphonal canal and a broader last teleoconch whorl. This form is currently known from Western Australia as well as from the Philippines, Taiwan and Japan (Figs 8-10).
A third name, *Siratus hirasei* was given by Shikama (1973: 5) who described another form from Japan, with broad varices, short spines and broad, straight, short siphonal canal as illustrated here (Figs 11-12).
Finally, *S. vicdani* was described by Kosuge (1980: 55) who separated it from both *S. alabaster* (Reeve, 1845) and *S. pliciferoides*. It differs from the latter by having angulate shouldered spire whorls and more strongly webbed varices (Figs 13-14).
Siratus pliciferoides being the oldest available name, all the other names were considered objective junior synonyms by Vokes (1971: 86), Fair (1976: 69) and Radwin & D'Attilio (1976: 107), for *Siratus propinquus* only, the other shells having been described after Vokes (1971). Fair (1976) and Radwin & D'Attilio (1976) probably were not aware of the description of *Siratus hirasei* in a little-known Japanese publication.
Houart (1992: 110) and Merle et al (2011: 100) also considered all these names as being conspecific.

Since 1992, I had the opportunity to examine numerous specimens of all these forms from the geographical distribution area and I am less certain about some of these names being synonym of *S. pliciferoides*. Maybe eventual DNA researches will confirm or invalidate the validity of these names.
Another new species, probably part of this group, is here described for the first time from the Philippines.

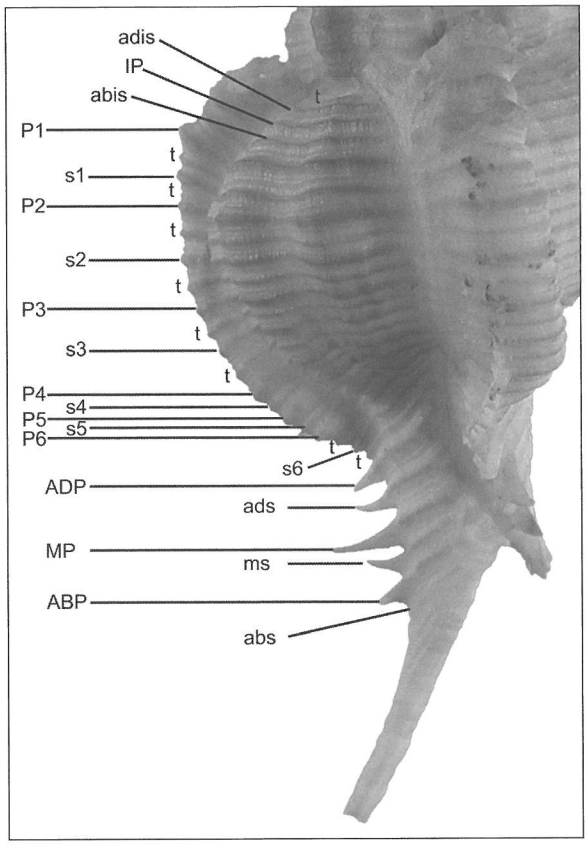
Abbreviations

Repository

EGS coll. : Collection of Evelyn Guillot de Suduiraut
IRSNB: Institut royal des Sciences naturelles de Belgique, Bruxelles, Belgium.
MNHN: Muséum national d'Histoire naturelle, Paris, France.
RH coll. : Collection of the author.

Terminology used to describe the spiral cords (after Merle, 1999 and 2001) (Text Fig. 1)

P: primary cord; **s:** secondary cord; **t:** tertiary cord; **ad:** adapical (or adapertural); **ab:** abapical (or abapertural); **IP:** infrasutural primary cord (primary cord on subsutural ramp); **adis:** adapical infrasutural secondary cord (on subsutural ramp); **abis:** abapical infrasutural secondary cord (on subsutural ramp); **P1:** shoulder cord; **P2-P6:** primary cords of the convex part of the teleoconch whorl; **s1-s6:** secondary cords of the convex part of the teleoconch whorl (example: s1 = secondary cord between P1 and P2; s2 = secondary cord between P2 and P3, etc.); **ADP:** adapertural primary cord on the siphonal canal; **MP:** median primary cord on the siphonal canal; **ABP:** abapertural primary cord on the siphonal canal; **ads:** adapertural secondary cord on the siphonal canal; **ms:** median secondary cord on the siphonal canal; **abs:** abapertural secondary cord on the siphonal canal.



Text Fig. 1. Spiral cords terminology (paratype MNHN)

SYSTEMATICS

Family **MURICIDAE** Rafinesque, 1815
Subfamily **MURICINAE** Rafinesque, 1815
Genus ***Siratus*** Jousseaume, 1880
Type species, by original designation: *Purpura Sirat* "Adanson" Jousseaume, 1880 (= *Murex senegalensis* Gmelin, 1791), Recent, Brazil.

Siratus evelynae n. sp.
Text Figs 1-2, Figs 1-3

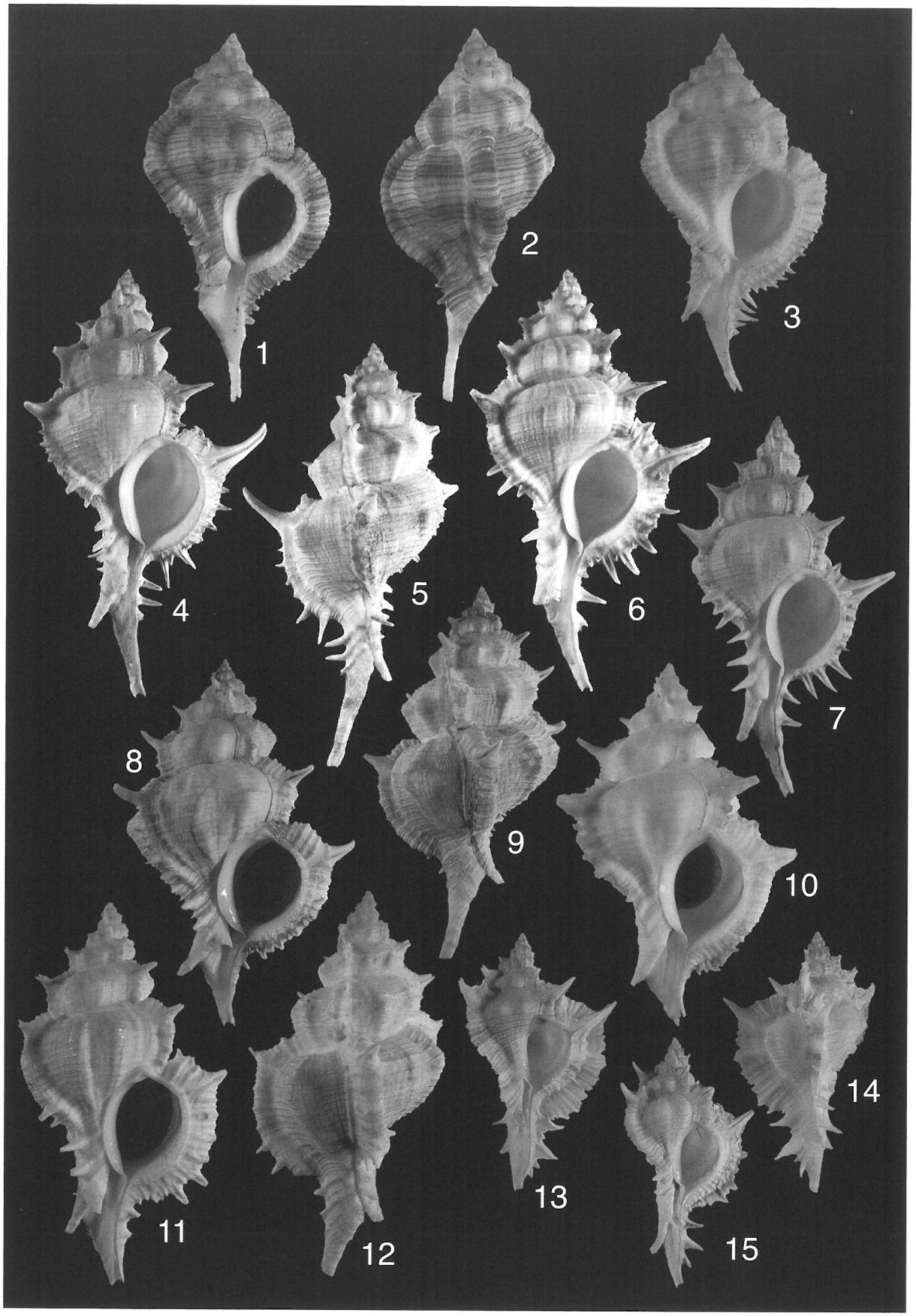
Type material. Philippines, Digos, Davao del sur, coral rubble, 150-200 m, by tangle nets, holotype IRSNB IG.32073/MT2574.
Paratypes: Philippines, Balut Island, south of Mindanao, in 400 m, by tangle net, 1 MNHN IM-2010-19527; Digos, Davao, in 400 m, by tangle nets, 2 RH coll.; Davao, coral rubble, sandy mud, 200-400 m, by tangle net, 1 RH coll, 1 EGS coll.

Distribution. Currently only known from the type material: Philippines, south of Mindanao, live in 150-400 m, by tangle nets.

Description. Shell medium sized for the genus, up to 112 mm in height (paratype EGS). Height/width ratio 2.0-2.2. Slender, biconical, broadly ovate, heavy, very weakly spinose, tuberculate. Subsutural ramp broad, strongly sloping, convex. Creamy white or light tan with tan, brown or dark brown spiral cords. Aperture white.
Spire high, acute, with a teleoconch of 8 broadly convex, weakly shouldered, nodose whorls. Suture weakly adpressed. Protoconch unknown.
Axial sculpture of teleoconch whorls consisting of high, broad, rounded ribs and high, narrow, rounded varices. Two first teleoconch whorls eroded. Three varices and two intervarical broad ribs from third to last whorl. Last whorl occasionally with two broad and one narrow ribs on last portion of whorl, between second and apertural varix. Spiral sculpture of low, narrow, primary, secondary, tertiary cords and narrow threads. Spiral sculpture of shoulder ramp of last teleoconch whorl consisting of adis, IP and abis with a tertiary cord between each. Convex part of last teleoconch whorl of P1 (shoulder cord), t, s1, t, P2, t, s2, t, P3, t, s3, t, P4, s4, P5, s5, P6, t, s6, t, ABP, abs, MP, ms, ABP, abs. Few threads and secondary cords occasionally of same strength and height; occasionally with a few additional narrow threads.
Aperture moderately large, roundly ovate. Columellar lip narrow, smooth, with strong, low parietal tooth at adapical extremity. Lip adherent. Anal notch deep, narrow. Outer lip erect, crenulated with numerous, elongate, narrow denticles within, many of them split. Siphonal canal long, 39-43% of total shell length., broad adapically, abruptly tapered and very narrow abapically, weakly recurved dorsally.
Operculum dark brown, ovate, inverted tear-shaped, with apical nucleus and 9 or 10 concentric ridges at outer surface. Attached surface with 10 growth lines and broad, callused rim.
Radula unknown.

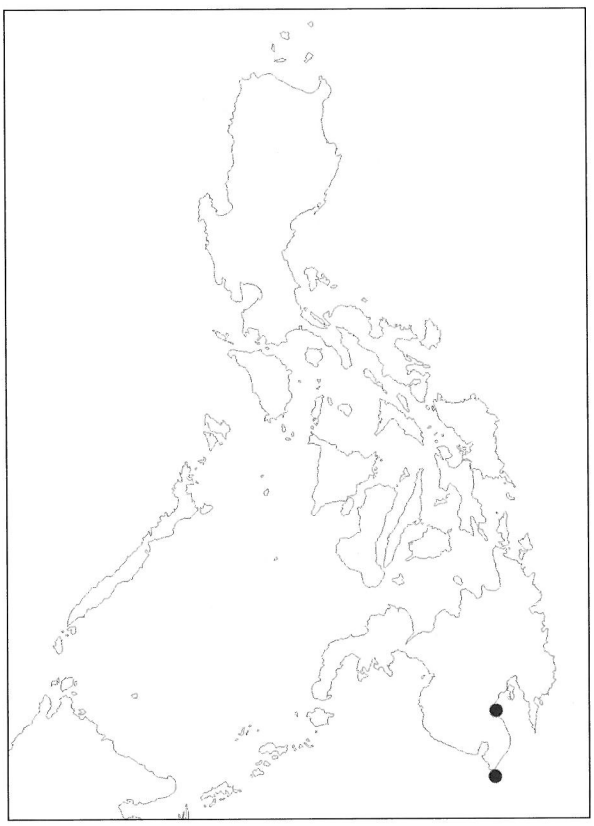
Figures 1-15

1-3. *Siratus evelynae* n. sp.
1-2. Philippine, Digos, Davao del sur, coral rubble, 150-200 m, holotype IRSNB IG.32073/MT2574 , 83.3 mm; **3.** Balut Island, south of Mindanao, in 400 m, paratype MNHN IM-2010-19527, 81.7 mm.
4-7. *Siratus pliciferoides* (Kuroda, 1942). **4-5.** Northeast of Taiwan, RH, 134 mm; **6.** Philippines, Bohol, RH, 128.4 mm; **7.** Japan, Tosa, RH, 113.5 mm; **8-10.** *Siratus pliciferoides* "form" *propinquus* Kuroda & Azuma, 1961; **8-9.** Northeast of Taiwan, RH, 106.4 mm; **10.** West Australia, Port Hedland, RH, 93.2 mm; **11-12.** *Siratus pliciferoides* "form" *hirasei* Shikama, 1973, Japan, Minabe, RH, 96.1 mm; **13-14.** *Siratus pliciferoides* "form" *vicdani* Kosuge, 1980, Philippines, Mactan, RH, 38.4 mm; **15.** *Siratus pliciferoides* (Kuroda, 1942), Philippines, juvenile, RH, 38.2 mm.


1
2
3
4
5
6
7
8
9
10
11
12
13
14
15

Remarks. *Siratus evelynae* is probably related to the *Siratus pliciferoides* group, however it differs consistently from *S. pliciferoides* and related forms in being more strongly biconical, in having a last teleoconch whorl with a more sloping shoulder ramp, giving the shell a more rounded shape *vs* shouldered in *S. pliciferoides* and related forms, and in starting a broad siphonal canal but promptly tapering to become very narrow at its abapical extremity.
Siratus evelynae also differs in having a spineless shell except for a series of short, acute, broadly open, webbed spines abapically. The new species also has a lower spire compared to the shell height, being of 27-28% of total shell height in *S. evelynae* n. sp. *vs* 37-39% in *S. pliciferoides* and 41-46% in *Siratus propinquus* or the "*propinquus*" form, whatever it may be. The two other names are strongly related to *S. pliciferoides* and do not need to be compared here, although illustrated (Figs 11-14).

Etymology. I am very happy to dedicate this new species to Evelyn Guillot de Suduiraut, wife of the late well-known Emmanuel Guillot de Suduiraut.



Text Fig. 2. Distribution map

ACKNOWLEDGEMENTS

I am greatly indebted to Evelyn Guillot de Suduiraut and to her daughter Jackylen to having brought my attention to this interesting species and for the gift of the holotype. Many thanks also to John Wolff, Lancaster, Pennsylvania, USA, for checking the English text and to Claude Vilvens, Oupeye, Belgium for critical comments.

REFERENCES

Azuma, M. 1961. Descriptions of six new species of Japanese marine Gastropoda. *Venus* 21(3): 296-303.

Fair, R.H. 1976. *The Murex Book, an illustrated catalogue of Recent Muricidae* (Muricinae, Muricopsinae, Ocenebrinae), Sturgis Printing Co., Honolulu, Hawaii: 1-138.

Houart, R. 1992. The genus *Chicoreus* and related genera (Gastropoda: Muricidae) in the Indo-West Pacific. *Mémoires du Muséum national d'Histoire naturelle*, (A), 154: 1-188.

Kosuge, S. 1980. Descriptions of three new species of the family Muricidae (Gastropoda: Muricacea). *Bulletin of the Institute of Malacology, Tokyo* 1(4): 53-58.

Kuroda, T. 1942. Two Japanese murices whose names have been preoccupied. *Venus* 12(1-2): 80-81.

Merle, D. 1999. *La radiation des Muricidae (Gastropoda : Neogastropoda) au Paléogène: approche phylogénétique et évolutive.* Paris. Unpublished thesis, Muséum national d'Histoire naturelle : i-vi, 1-499.

Merle, D. 2001. The spiral cords and the internal denticles of the outer lip in the Muricidae: terminology and methodological comments. *Novapex* 2 (3): 69-91.

Merle, D., Garrigues, B. & Pointier, J.P. 2011. *Fossil and Recent Muricidae of the World –Part Muricinae-* Ed. Conchbooks, D-55546 Hackenheim: 1-648.

Radwin G. & D'Attilio, A. 1976. *Murex shells of the world. An illustrated guide to the Muricidae.* Stanford University Press, Stanford: 1-284.

Shikama, T. 1973. Description of new marine Gastropoda from the East and South China Seas. *Science Reports of the Yokohama National University* 20: 1-8.

Vokes, E.H. 1971. Catalogue of the genus *Murex* Linné (Mollusca: Gastropoda. Muricinae, Ocenebrinae. *Bulletin of American Paleontology* 61 (268): 1-141.