

## About some marginelliform gastropods (Marginellidae Cystiscidae and Granulinidae) from French Guyana

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### ABSTRACT

The study of a small collection of millimetric marginelliform gastropods sampled off French Guyana allows to recognize the occurrence of three species previously described, namely *Eratoidea margarita* (Kiener, 1834), *E. sulcata* (d'Orbigny, 1842), and *E. acutulla* McCleery, 2011, and of 13 new species described as *Hyalina oblongata* n. sp., *Volvarina similis* n. sp., *V. vitrea* n. sp., *V. cornea* n. sp., *Prunum guyanensis* n. sp., *Eratoidea macleeryi* n. sp., *E. strangulata* n. sp., *E. inflata* n. sp., *E. angulosa* n. sp., *E. serratula* n. sp., *E. flavida* n. sp., *Gibberrula contracta* n. sp. and *Granulina ampla* n. sp. The phenotypic variability and the geographic distribution are documented mainly with the help of data obtained from the O.C.P.S. collection (Leiden Museum), and more incidentally with the help of the 2011 McCleery's revision of the Caribbean fauna of the genus *Eratoidea* Weinkauff, 1879.

### KEY WORDS

Guianese Plateau; French Guyana; specific diversity; phenotypic variability; sibling forms.

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### INTRODUCTION

The marine molluscs of French Guyana remain very poorly known, in the same way as the marine molluscs of the whole northeastern region of South America, from the Gulf of Paria (Venezuela and Trinidad) to the coasts of the Brazilian State of Maranhão. This subequatorial area is characterized by several big rivers flowing in the Atlantic Ocean at regular intervals, and by northwest oriented coastal currents maintaining quite homogeneous abiotic, edaphic and climatic conditions, despite local and seasonal variability concerning seawater salinity. An important activity of industrial fisheries is supported in this area since more than half a century, but exclusively geared towards shrimps and fishes of the continental platform, out of any interest for the benthic fauna, including for the marine molluscs.

The oceanographic cruises dedicated to the benthic fauna did neglect this region for a long time, the Dutch Expeditions O.C.P.S. (Onderzoek Continentaal Plat Suriname) managed off Suriname in 1966 and 1969 being the first noticeable benthic campaigns working in the area. The O.C.P.S. benthic catches came principally from small van Veen grabs allowing the sampling of limited amount of mostly endobenthic sediments. As a result, the malacological material sorted out from O.C.P.S. campaigns is composed overall of empty shells, mostly in worn or subfossil condition, with a high proportion of micro-gastropods shells. The O.C.P.S. material was entrusted to the Leiden Museum (RijksMuseum van Natuurlijke Historie, now NMNH) and after some lots were donated to the Natuurhistorisch Museum of Rotterdam, but in the present state this abundant material remains unexploited for the most part (Faber & Sliker, 2014).

The principal large-scale work about the marine molluscs from Suriname remains the article of Alteni (1975), who used hardly the resources of the O.C.P.S. collections.

In July and August 2014, the Muséum national d'Histoire naturelle (Paris, France) performed a dredging/trawling campaign on the continental shelf of French Guyana in the frame of the Tropical Deep-Sea Benthos Program, followed by a complementary diving expedition to the Iles du Salut in September/October 2014, mainly dedicated to the hard and mixed bottoms. During the years 2021–2022, this material was entrusted to Marien Faber and to David Massemin in view of a faunistic inventory, unpublished for now (pers. comm.).

The present author did check the O.C.P.S. marginellids collection in Leiden Leiden Museum on 1994, but after the access to this collection was not allowed.

The present work is dedicated to the revision of some tiny species from French Guyana belonging to a small collection of marginelliform gastropods trawled by shrimpers of Cayenne and entrusted to the author at the end of the years 1990. Few centimetric specimens of *Prunum marginatum* (Born, 1778), *P. prunum* (Gmelin, 1791) and *Marginella cloveri* Rios et Matthews, 1972 were also found in this small collection, but the revision of these well-documented species was not considered as relevant by itself, the study preferring to focus on the undocumented millimetric species.

The literature referring to the marine gastropods from French Guyana is very limited. The most noticeable work is the inventory and field guide published by Massemin et al. (2009). The literature dealing with marginelliform species from French Guyana is restricted to three articles: Rios & Matthews (1972) described the centimetric species *Marginella cloveri*, Faber (2006) described the centimetric species "*Persicula*" *bagne* - more probably a *Gibberula* species belonging to the species group *G. frumentum* (Sowerby, 1832) - and more recently Ortea (2022) thought he recognized the millimetric species *Plesiocystiscus mariae* (Espinosa et Ortea, 2002), originally described from Cuba, as belonging also to the fauna of French Guyana (2014 MNHN samplings and pictures).

## MATERIAL AND METHODS

The material under study consists in a small lot of millimetric marginelliform shells said to come from shrimpers of Cayenne, French Guyana ("Cayenne, crevettiers"), and it was possibly collected during the years 1980 or during the years 1990. This assumption is coming from the fact that the interest for the collection and the study of micro-marine molluscs began in a confidential way during the years 1980 and it has grown progressively during the years 1990. That was the time where methodical dredging/trawling public campaigns did rise, such as the French campaigns MUSORSTOM in the Philippines and in southwest Pacific, and where accidental catches of sediments by commercial trawlers were traded by shell dealers and enterprising hobbyists, for instance concerning the Spanish and Russian trawlers working off northwest Africa. Before this time, almost nobody cared about the micro-molluscan fauna accidentally caught by commercial trawlers.

The surroundings of Cayenne cannot be considered as sampling locality of the shells lot under study: since the years 1980, all the shrimpers fishing off French Guyana were based in Cayenne, but up to the end of the years 2000 they worked routinely all along the continental plateau of French Guyana, from the mouths of Moroni River to the mouths of Oyapock River. So, the specimens at hand could come from any place among the French part of the Guyanese continental plateau, and they may belong to a single catch of sediments accidentally grabbed by a bottom trawl, as well as to several catches. The most probable depth is the 30–60 m range, which was routinely exploited by local shrimpers for their principal resource in the years 1960–2000.

Due to these different reasons, we consider that the small lot under study can be labelled with a good level of likelihood as "*French Guyana, 30–60 m, eighties/nineties*". On the other hand, the specimens assembled in this lot seem to result from a partitioning process: we observe that only adult shells are occurring, out of any juvenile or subadult specimen, and that about all the specimens are in pretty good state, mostly deprived of damaged shells. This situation can only proceed from an intentional splitting of "collectable" specimens, possibly made by a shell dealer for a sale or possibly made by a hobbyist as a gift for a representative set.

Despite this situation, the lot under study presents a noticeable specific diversity and the quality of the material allows to handle a revision on the ground of shell features in pretty good conditions, even if the very limited number of specimens is depriving us of an overview on the intraspecific variability in most cases.

As additional references, we shall compare our specimens to the sketches of some marginelliform specimens from the O.C.P.S. collection performed in Leiden Museum on 1994, and to photos of the *Eratoidea* specimens from the 2014 MNHN campaign off French Guyana, mounted in two documentary plates kindly communicated by M. Faber and D. Massemin.

**ACRONYMS AND ABBREVIATIONS.** ANSP: Academia of Natural Sciences, Drexel University, Philadelphia; AWC: Andrew Wakefield collection; FBC: collection of the author; GPQC: Gregorio Pereira de Queiroz collection; MHNG: Muséum d'Histoire Naturelle, Genève; MNHN: Muséum national d'Histoire naturelle, Paris; MZUSP: Museu de Zoologia da Universidade de São Paulo; NHMUK: Natural History Museum United Kingdom, London; NMNH: National Museum of Natural History, Leiden. NMR: Natuurhistorisch Museum, Rotterdam; O.C.P.S.: Onderzoek Continentaal Plat Suriname; ad: adult; L: length size; oblique: narrow angle towards the vertical; spm: specimen.

## RESULTS

### *Systematics*

Familia MARGINELLIDAE J. Fleming, 1828  
Genus *Hyalina* Schumacher, 1817

TYPE SPECIES. *Hyalina pellucida* Schumacher, 1817 (= *Bulla pallida* Linnaeus, 1758) by monotypy.

***Hyalina oblongata* n. sp.** Figs. 1–4  
<https://www.zoobank.org/E45077E9-6F3C-44A5-8167-1A84DA84707C>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 11.2 mm, (Figs. 1–4); Holotype MHNG-MOLL-0151914.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 1–4). Light shell, outline subcylindrical, oblong; spire low, very short. Protoconch tiny, faintly teat-like. Labrum very thin, vertical and straight, quite angular at its anterior part. Aperture strongly widened in its lower part, base quite truncated and oblique; no stepped outer margin. Inner lip with four columellar plaits; first columellar plait small, gently arched and hidden under second plait; second plait thin and subvertical, connecting to first plait at ventral side of siphonal canal; first and second plaits making both together like bifurcate pattern; third plait spaced from second plait, stronger and quite oblique; fourth plait shorter, oblique and very thin. Ground colour vitreous grey-white.

DISTRIBUTION. At least from French Guyana.

ETYMOLOGY. The epithet refers to the oblong outline of the shell, from the Latin “*oblongus*”.

REMARKS. *Hyalina pallida* (Linnaeus, 1758) was firstly revised by Coan & Roth (1976), which selected a neotype in the Cuming collection (NHMUK, “West Indies”, L = 15.3 mm). Later, Boyer (2015) attempted to determine more precisely the identity of *H. pallida*, and tried to link the “*Hyalina pallida*” concept with living populations. In this frame, Boyer (2015) recognized *H. pallida* as a large and quite variable species ranging about all around the Caribbean Sea, besides several other congeneric species of narrower distribution. Boyer (2015, figs. 5–16) pictured photos of shells and live animals of specimens attributed to *H. pallida* from British Virgin Islands, Martinique, Grenada, Grenadines and Caribbean Panama.

*Hyalina oblongata* n. sp. (Figs. 1–4) differs noticeably from the “typical form” of *H. pallida*, due to its more cylindrical shell (versus more inflated with a more hooked anterior left side), its more oblique truncated base (versus rounded base) and its gently arched and short first columellar plait hidden under the second plait (versus produced angular first plait). *Hyalina oblongata* n. sp. seems to differ also from all the other *Hyalina* species described until now from the Caribbean Sea. The species described recently from southern Brazil as *H. cunhai* Minior, 2020 looks better to be a *Volvarina* species, due to its thick shell, squat outline and quite thickened arched labrum. A deeper study of this species is however required, on the ground of fully mature specimens.

Genus *Volvarina* Hinds, 1844

TYPE SPECIES. *Marginella nitida* Hinds, 1844 (= *Voluta mitrella* Risso, 1826), by subsequent designation (Redfield, 1871).

***Volvarina similis* n. sp.** Figs. 5–8  
<https://www.zoobank.org/52703667-8C49-4C3F-B0D3-7146D7F9933E>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 8.6 mm (Figs. 5–8); Holotype MHNG-MOLL-0151907 • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 8.8 mm; Paratype FBC.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 5–8). Shell quite thick, outline elongate oval-subcylindrical, club-shaped, quite inflated in its posterior part, more attenuated in its anterior part. Spire very short, protoconch large, protruding, teat-like. Labrum moderately thickened, faintly sinuous, quite angular at its upper third, connecting to the lower spire whorl, making a long and deep oblique anal canal; aperture moderately widened in its lower part, base quite truncated and oblique, no stepped outer margin. Four columellar plaits, quite oblique and regularly spaced, three lower ones being longer and subequal, fourth one being shorter and thinner. Ground colour opaque dirty white on the ventral side, ivory white on the dorsal side, near to yellowish in its upper part.

DISTRIBUTION. At least from French Guyana and Suriname.

ETYMOLOGY. The epithet refers to the phenetic similarity of our species with the shell of *V. affinis*, from the Latin “*similis*”.

REMARKS. The paratype is quite stouter than the holotype, but its belonging to the same species is evident in all the details.

For its shell features, *V. similis* n. sp. (Figs. 5–8) is closely matching *V. affinis* (Reeve, 1865), from St Thomas in the U.S. Virgin Islands. The three syntypes of *V. affinis* are in NHMUK, the larger one has 8.08 mm, its shell is thick, opaque white, shining, the outline is stouter and more oval than *V. similis* n. sp., which has a more cylindrical shape, the

protoconch of *V. affinis* is medium sized (versus larger and much bulging in *V. similis* n. sp.), its lower plait is much shorter and very oblique, the second and the third plaits are more arched and more protruding in the aperture, but for the other features and proportions, the two species look to be similar, especially about the shape of their aperture and about the labrum inserting, as well as for their spire pattern. These phenetic affinities lead to suggest a close phyletic relationship between these two species, which are considered to belong to the same *V. affinis* species group.

Some other white-shelled forms of *Volvarina* from Caribbean Sea present also some phenetic similarities with *V. affinis*, most of them ranging off Yucatan and the Greater Antilles, but some forms occur also in the Windward and Leeward Antilles. Few of these forms were proposed as good species, such as *V. abbreviata* (C.B. Adams, 1850), from Jamaica but possibly coming from ABC Islands, like several of the marginellas described by Adams (Wakefield, Boyer & McCleery, 2002). The type of *V. abbreviata* (ANSP) is a smaller, stouter very thick shell, and more rounded than *V. affinis* and *V. similis* n. sp., and it shows shorter, thicker and less oblique plaits (Clench & Turner, 1950: 248–249, pl. 32, fig. 8).

One specimen from Suriname (collected at 90 m) clearly belonging to *V. similis* was pictured from O.C.P.S. collection (L = 8.0 mm).

A white shelled *Volvarina* (L = 7.5 mm) displayed from Brazil in Vanin (2017) as sp. 37080 (*V. cf. abbreviata*) looks to be closer to *V. affinis* than to *V. similis* n. sp., as far as its shell morphology is concerned. This shell differs only from *V. affinis* by a narrower, more slender and suboval outline, by a short ogival spire with a tiny protoconch, by a longer first columellar plait and by the apparent absence of a fourth plait. This shell seems to belong to an undescribed Brazilian species from the *V. affinis* species group.

***Volvarina vitrea* n. sp.** Figs. 9–12  
<https://www.zoobank.org/2B951EB5-FB3D-4889-B4B3-4098CC5083EE>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 6.2 mm (Figs. 9–12); Holotype MHNG-MOLL-0151908

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 9–12). Shell quite light, vitreous white, elongate fusiform, gently attenuated towards the base, quite produced spire with low and wide protoconch. Labrum poorly thickened, slightly sinuous, inserting just below the lower suture; aperture narrow, poorly widened in its lower third. Four columellar plaits, regularly spaced, first one quite strong and sinuous, other ones more oblique, decreasing strongly in length and thickness.

DISTRIBUTION. At least from French Guyana.

REMARKS. *Volvarina vitrea* n. sp. (Figs. 9–12) presents some similarities with *V. pauli* De Jong et Coomans, 1988, a small white fusiform shelled species with thin oblique columellar plaits described from Aruba and Curaçao (holotype length: 5.5 mm). *Volvarina vitrea* n. sp. differs by a less oval, slenderer and club-shaped outline, and by a thicker, more protruding and more sinuous first columellar plait. No similar form is known from Brazil for now.

*Volvarina cornea* n. sp. Figs. 13–16  
<https://www.zoobank.org/6D711326-1849-4402-BEC9-000C59FBAB09>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 8.3 mm, (Figs. 13–16); Holotype MHNG-MOLL-0151909.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 13–16). Shell slender biconical, moderately thickened, gently tapering towards the base, high spire, large produced protoconch, left side of the base outline slightly hooked. Labrum angular, with double break in its upper part, connecting the last whorl just under the lower suture, lip thin and straight beside the long anal canal, much thickened below, external outline slightly concave in its two lower thirds, no stepped outer margin; aperture narrow, gently widened in its lower third, base quite rounded, gently oblique on the right side. Four columellar plaits, quite oblique, first plait quite concave in its lower part, making a quite sharp angle at its upper third, second plait quite straight and longer, third and fourth plaits decreasing in size and thickness, lower part of the last whorl is bumpy on its ventral side, with a long oblique varix on the left of the second and third plaits, and with a short varix at the base of the first plait. Horned colour

ground with four narrow brownish spiral bands on the last whorl, these bands being paired, two of them packed on the upper part of the whorl, the two other ones packed on the lower part, with an unbanded zone at the wider part of the whorl, narrow chalk-white fringe under the suture, ventral side of the labrum and area of the columella plaits whitish, small brownish mark at the lower quarter of the labrum, small brownish point on the top of the protoconch.

DISTRIBUTION. At least from French Guyana and Suriname.

ETYMOLOGY. The epithet refers to the horned colour ground of the shell, from the Latin “*corneus*”.

REMARKS. *Volvarina cornea* n. sp. (Figs. 13–16) resembles both *V. bavecchii* Cossignani, 2006 from Canopus Bank, off Fortaleza, Ceará, north-eastern Brazil, and *V. monchoi* Caballer, Espinosa et Ortea, 2013 from off Isla La Tortuga (0–1 m), Central Venezuela. *Volvarina cornea* n. sp. differs from *V. bavecchi* by its larger size (L = 8.3 mm instead of 6.6 mm), its wider outline, its more angular labrum, less convex lower part of the columella, four plaits thicker and less oblique, the first plait much shorter, the four narrow brownish bands on horned ground instead of three wide orange spiral bands on a whitish ground. On the other hand, the two species show about the same shape for their aperture, their spire and their protoconch, and an orange-brown mark occurs also on the top of the protoconch of *V. bavecchii*. *Volvarina cornea* n. sp. differs from *V. monchoi* by its larger size (8.3 mm instead of 4.72 mm), its higher non-stepped spire and its four narrow brownish spiral bands instead of a wide orange band on a vitreous white ground at the median part of the last whorl. For the rest, *V. cornea* shows important phenetic similarities with *V. monchoi*, principally for the outline and the bumpy lower ventral part of its body whorl (one subvertical varix), the shape of its aperture and the structure of its labrum. Even if these three species do not present very close affinities, they may however belong to a same super-species group, what remains to document on the ground of a deeper knowledge of the Caribbean and Brazilian *Volvarina*.

One specimen from Suriname (collected at 60–62 m) clearly belonging to *V. cornea* n. sp. was pictured from O.C.P.S. collection (L = 9.9 mm).

Genus *Prunum* Herrmannsen, 1852

TYPE SPECIES. *Voluta prunum* Gmelin, 1791, by monotypy.

*Prunum guyanensis* n. sp. Figs. 17–28  
<https://www.zoobank.org/B70FDA88-B1CB-4FB4-B749-669A77C5C35E>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 7.6 mm, (Figs. 17–18); Holotype MHNG-MOLL-0151910 • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 7.8 mm, (Figs. 13–16); Paratype 1 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 8.0 mm, (Figs. 13–16); Paratype 2 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 9.3 mm (Figs. 13–16); Paratype 3 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 7.7 mm, (Figs. 27–28); Paratype 4 MZUSP.

TYPE LOCALITY. French Guyana, 30–60 m depth.

OTHER MATERIAL EXAMINED. REPUBLIC OF TRINIDAD AND TOBAGO • 2 ad spm; Chacachacare island; 15 m depth; 29 Dec. 1996; scuba, L = 7.9 mm and 7.75 mm, legit Gary McIntosh; AWC.

BRAZIL • 1 ad spm; Para State, Amazonas River estuary; 80 m depth; L = 8.6 mm, coll. by local people; GPQC.

DESCRIPTION OF THE HOLOTYPE (Figs. 17, 18). Shell thick, rounded-oval, spire short pointing conical. Protoconch medium-sized, poorly bulging. Labrum thick, quite regularly arched, smooth inside, wide stepped outer margin. Inner lip with first columellar plait short, thin and very oblique, overhung by the long and thick second plait, moderately oblique; third plait also thick but shorter and sub-horizontal; fourth plait much shorter, looking like small tooth on parietal border; base is oval. Colour ground whitish on ventral side, light golden on dorsal side, three narrow brown spiral bands running on last whorl, upper band recovering suture, middle band being poorly visible, lower band encompassing area of columellar plaits.

DISTRIBUTION. Known from Trinidad (the straight on the northern side of the Gulf of Paria), southwards to the mouths of Amazonas River. Bathymetry: from 17 m to 80 m.

ETYMOLOGY. The epithet refers to the geographical region of Guyana where the species is distributed.

REMARKS. *Prunum guyanensis* n. sp. (Figs. 17–28) seems to have close affinities with the ubiquitous *P. marginatum* (Born, 1778), distributed from Southern Caribbean to Northern Brazil. These two species are sharing a similar oval shell outline and a short pointing conical spire, and also a similar shell decoration of three faint brown spiral bands on a tan ground. But the two species are deeply differing in the details: beyond its much smaller size, *P. guyanensis* n. sp. has a rounded section (instead of a dorso-ventrally compressed body whorl in *P. marginatum*), quite thinner, shorter and more contrasted columellar plaits (instead of stronger and longer plaits poorly decreasing in size, parallel and moderately oblique), and outer margin with simple step (instead of double-step in *P. marginatum*).

In addition to the specimens attributable to *P. guyanensis* n. sp. examined from Trinidad and from northern Brazil (cf. *supra*), one specimen from Suriname (collected at 25 m) belonging to the same species was pictured from O.C.P.S. collection (L = 8.8 mm) and a second specimen was recorded from the same lot (L = 8.85 mm).

The phenetic variability of *P. guyanensis* n. sp. in the waters of French Guyana looks to be very limited (Figs. 17–28), and despite its wide distribution (at least from the Gulf of Paria to the mouths of the Amazon River), the species does not show any kind of geographical changes along this range.

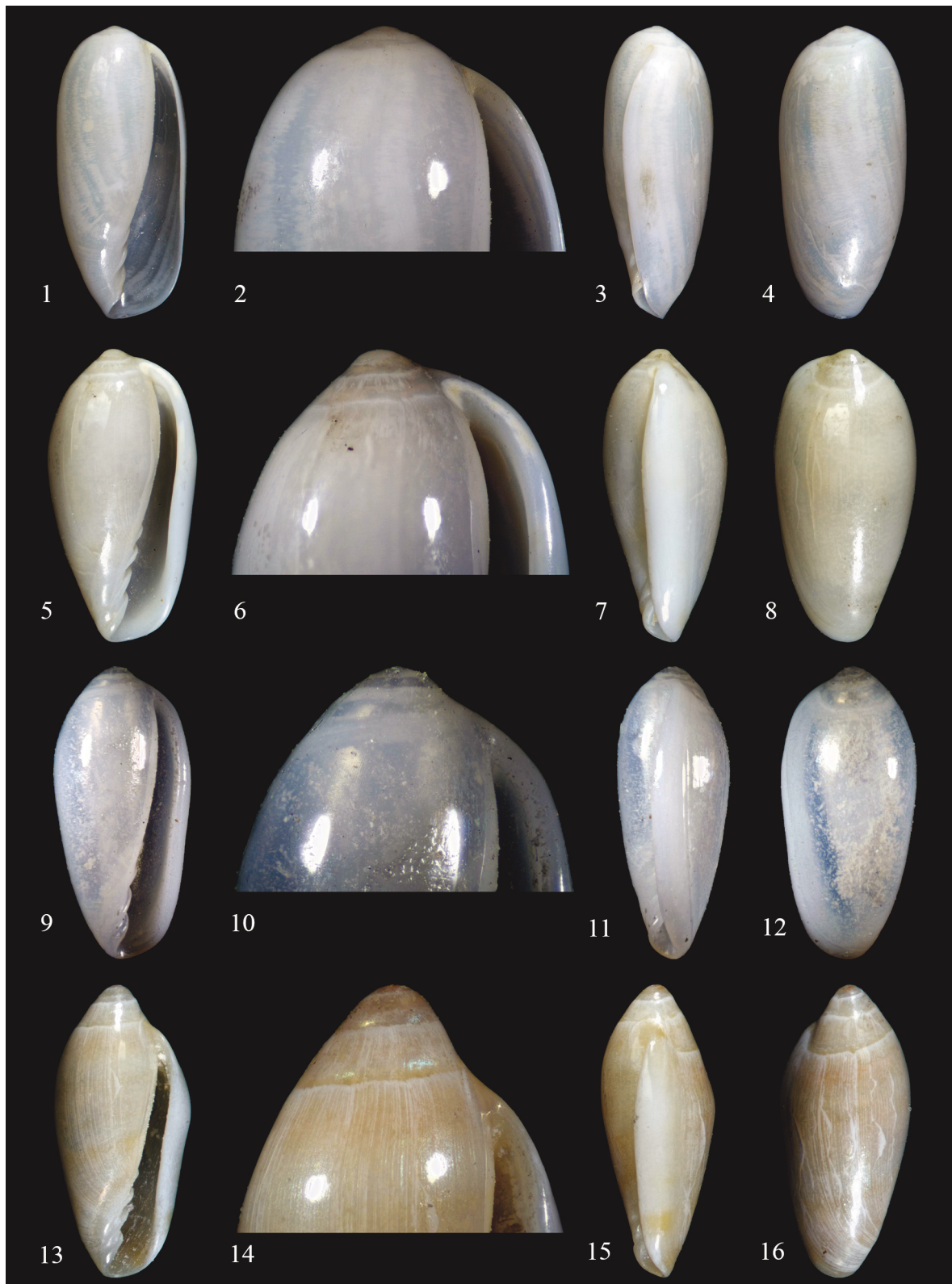
Genus *Eratoidea* Weinkauff, 1879

TYPE SPECIES. *Marginella margarita* Kiener, 1834, by subsequent designation (Cossmann, 1899).

Species group *Eratoidea margarita* (Kiener, 1834), sensu McCleery, 2011

*Eratoidea margarita* (Kiener, 1834) Figs. 29–32

TYPE MATERIAL. THE INDIAN SEAS • 1 spm;



Figures 1–4. *Hyalina oblongata* n. sp., holotype MHNG, L = 11.2 mm, Cayenne, shrimpers. Figures 5–8. *Volvarina similis* n. sp., holotype MHNG, L = 8.6 mm, Cayenne, shrimpers. Figures 9–12. *Volvarina vitrea* n. sp., holotype MHNG, L = 6.2 mm, Cayenne, shrimpers. Figures 13–16. *Volvarina cornea* n. sp., holotype MHNG, L = 8.3 mm, Cayenne, shrimpers.

Les mers des Indes; L = 7.7 mm; syntype MHNG 993.202. Wrongly reported as Lectotype by McCleery.

TYPE LOCALITY. Caribbean Sea (fide McCleery, 2011).

OTHER MATERIAL EXAMINED. ABC ISLANDS • 1 spm; Curaçao; FBC.

GRENADA • 3 spm; Grenada; 10 m depth; 1997; FBC ex-Gary McIntosh.

SAINT VINCENT AND GRENADINE • 1 spm; Saint Vincent; 10–12 m depth; FBC ex-Jacques Colomb.

VENEZUELA • 3 spm; La Blanquilla island; 10 m depth; FBC ex-Jacques Colomb.

ANGUILLA • 4 spm; Anguilla; 1991–1993; beached, legit F. Boyer; FBC.

DESCRIPTION. See redescription of the type in McCleery (2011: 80).

DISTRIBUTION. Not fully determined, at least from Eastern Caribbean Sea and Southern Caribbean. *Eratoidea margarita* is now recognized also from the Guianese Plateau.

REMARKS. Compared to the MHNG type and to most of the Caribbean specimens known to us (displayed by McCleery, 2011 or studied in FBC), the specimen examined from French Guyana presents a quite thicker and more biconical shell, a quite taller spire, a quite more subpyriform last whorl, and chiefly a larger and more bulbous protoconch. However, the morphological variability of *E. margarita* remains poorly documented, and due to its apparent wide distribution, simple geographical variants may occur. For instance, McCleery (2011) recognized as “form A” and “form B” two variants from southern Caribbean, without evident conclusion about their specific status. We propose to accept provisionally the population from French Guyana as belonging to *E. margarita* sensu stricto.

Species group *Eratoidea sulcata*, sensu McCleery, 2011

*Eratoidea sulcata* (d’Orbigny, 1842) Figs. 33–40  
Junior synonym: *Marginella striata* d’Orbigny, 1846.

TYPE MATERIAL. MARTINIQUE • 5 spm; Martinique; one pictured in McCleery (2011: 152), L = 3 mm; syntypes in NHMUK.

TYPE LOCALITY. Martinique.

OTHER MATERIAL EXAMINED. MARTINIQUE • 7 spm; Anses d’Arlet, Martinique; 5 m depth; L = 2.5 mm to 3.0 mm (Figs. 33–36); FBC.

FRENCH GUYANA • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.1 mm (Figs. 37–40); FBC.

DESCRIPTION. See original description and complementary description in McCleery (2011: 34–36).

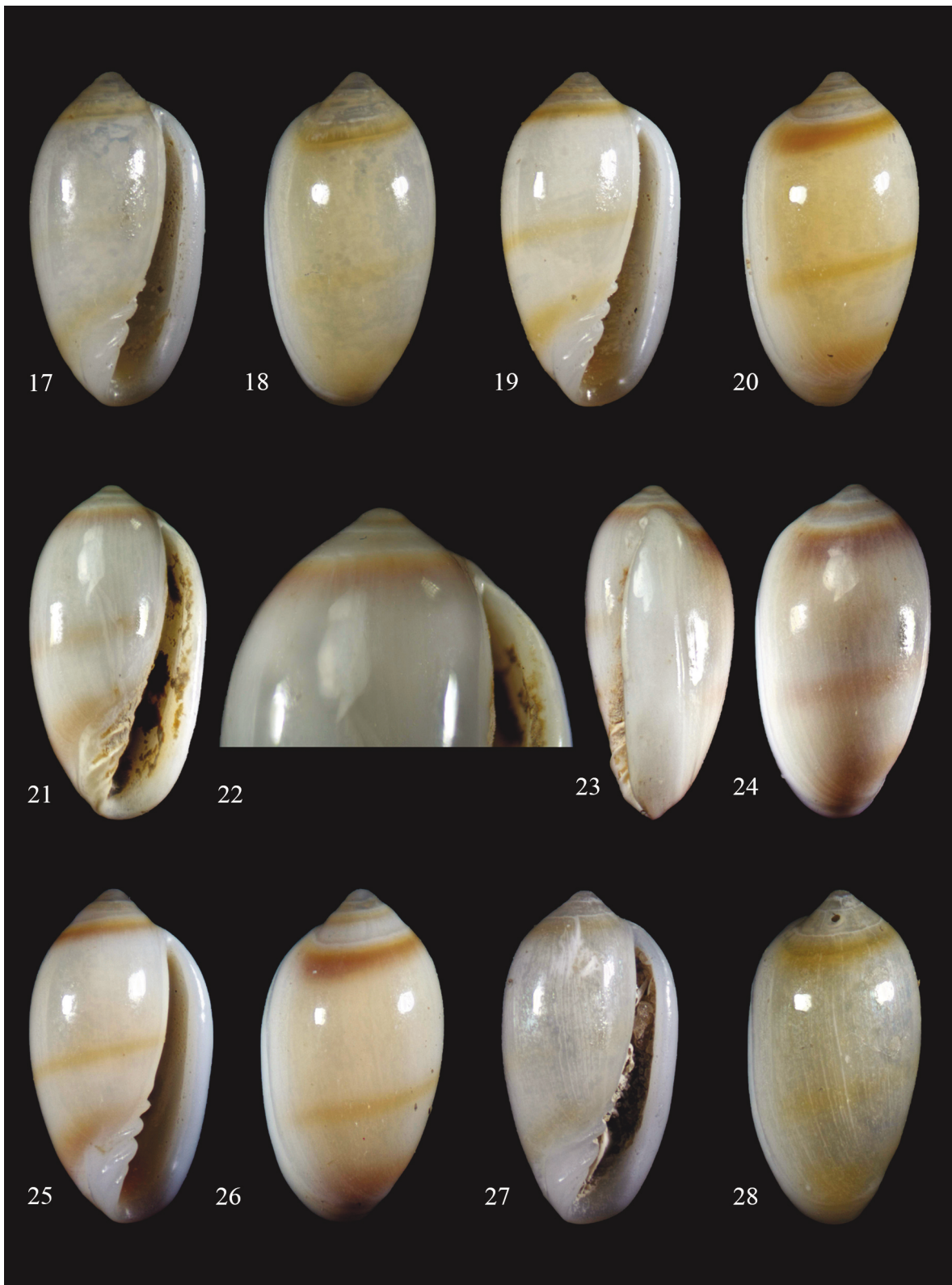
DISTRIBUTION. The geographical data given by authors are unclear (McCleery, 2011; Espinosa & Ortea, 2017), but it seems that *Eratoidea sulcata* (d’Orbigny, 1842) (Figs. 33–36) is distributed all along the Windward and Lesser Antilles, possibly also in Greater Antilles, besides various sibling species showing more restricted distribution ranges. The species is now recognized also from the Guianese Plateau.

REMARKS. The variability of the shell features of *E. sulcata* was not really documented by authors, despite their confirmation that it is the most common species from its group in Martinique (McCleery, 2011; Espinosa & Ortea, 2017). We observed numerous live specimens collected on rough sands at the foot of big rocks (4–5 m) in the Anses d’Arlet (southwestern Martinique): this population looked to be quite variable for its shell outline and axial ribs thickness, as well as for its colour decoration. The specimen examined from French Guyana is representative of one of the variants observed in the Anses d’Arlet among various intergrades (stout thick shell with wide orange spiral band) and it presents all the typical features of the species (protoconch, number and shape of the axial ribs, shape of the aperture and of the labrum). This situation is suggesting that some of the numerous sibling species recently described in the *E. sulcata* species group may prove to be simple phenetic variants of the nominal species.

*Eratoidea mccleryi* n. sp. Figs. 41–44  
<https://www.zoobank.org/047C4F06-17EF-4273-BDB6-C321A85BFEF7>

TYPE MATERIAL. FRENCH GUYANA • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.6 mm (Figs. 41–44); Holotype MHNG-MOLL-0151911.





Figures 17–18. *Prunum guyanensis* n. sp., holotype MHNG, L = 7.6 mm, Cayenne, shrimpers. Figures 19–26. Idem, paratypes 1–3 FBC, L = 7.8 mm, 8.0 mm and 9.3 mm, Cayenne, shrimpers. Figures 27, 28. Idem, paratype 4 MZUSP, L = 7.7 mm, Cayenne, shrimpers.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 41–44). Shell quite thick, outline stout biconical, body whorl slightly subpyriform, spire triangular, protoconch of 2.5 whorls, pointing, few axial ribs, long, thin and spaced. Labrum thick, low shoulder, small isolated upper tooth and five packed teeth below, decreasing in size towards the base; aperture quite narrow and oblique, base oval. Four columellar plaits, thick, three lower ones heavily forked at their distal end.

DISTRIBUTION. At least from French Guyana and Suriname.

ETYMOLOGY. From Tony McCleery, a dogged student who contributed a lot to a better knowledge of the diversity of the Caribbean marginelliform gastropods in the recent times.

REMARKS. *Eratoidea macleeryi* n. sp. (Figs. 41–44) differs mainly from *E. sulcata* by its more pointing protoconch of 2.5 whorls (instead of wide and low rounded protoconch of 1.5 whorl), by its thinner and more spaced axial ribs, and by its much smaller labial teeth.

One specimen from Suriname (collected at 56 m) apparently belonging to *E. macleeryi* n. sp. was pictured from O.C.P.S. collection (L = 3.05 mm). Despite a less squat outline, a thinner labial lip and unforked columellar plaits, the specimen from Suriname shares all the other original features of *E. macleeryi* n. sp., including the morphology of the axial ribs as well as the position and size of the labial teeth. The occurrence of forked or non-forked columellar plaits is proved to be variable at the specific level, at least in some species (cf. in McCleery, 2011).

Species group *Eratoidea lasallei*, sensu McCleery, 2011

*Eratoidea strangulata* n. sp. Figs. 45–52  
<https://www.zoobank.org/02EC1126-487B-45C0-A0DB-7C0D8844FB12>

TYPE MATERIAL. FRENCH GUYANA • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.1 mm (Figs. 45–46); Holotype MHNG-MOLL-0151912 • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.1 mm (Figs. 47, 48);

paratype 1 FBC • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.1 mm (Figs. 49, 50); paratypes 2 MZUSP • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.2 mm (Figs. 51, 52); paratypes 3 MZUSP.

TYPE LOCALITY. French Guyana, 30–60 m depth.

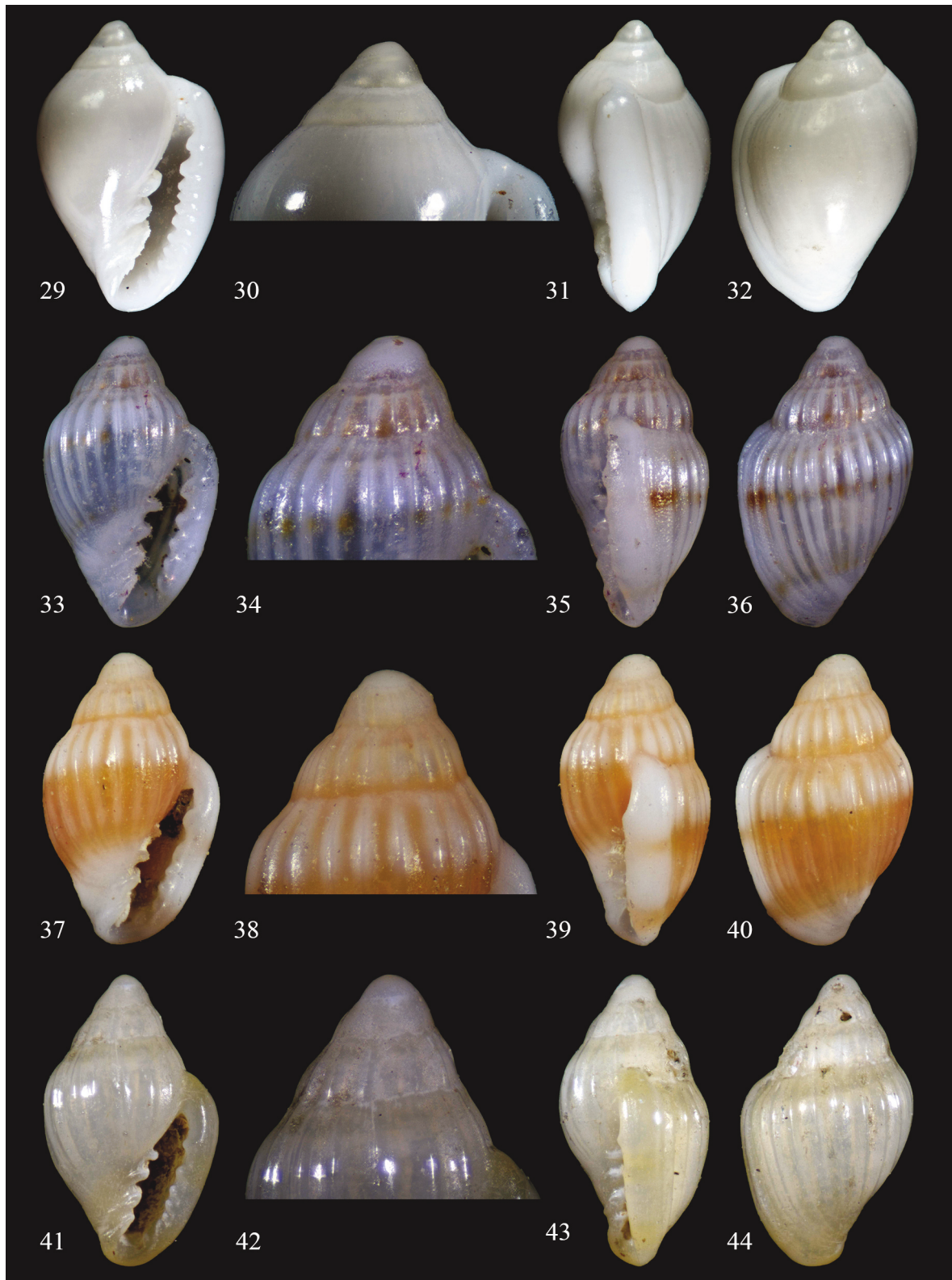
DESCRIPTION OF THE HOLOTYPE (Figs. 45, 46). Shell outline narrow biconical, moderately thickened, body whorl slightly subpyriform, axial ribs moderately thickened and spaced, spire strong with blunt top, convex sides, carved upper side of the whorls making a strangled figure, protoconch big and bulbous. Labrum low inserted with angular shoulder, faintly convex middle part, seven labial teeth regularly decreasing in size towards the base, outer margin thick and heavily stepped; aperture quite short and narrow at both tips. Four columellar plaits thick and spaced, heavily forked at their distal end, siphonal canal quite pinched. Two diffuse light golden wide spiral bands on a vitreous dirty white ground for the last whorl, same golden colour for the inner and outer parts of the siphonal canal and for the apex.

DISTRIBUTION. At least from French Guyana and northern Brazil (see below).

ETYMOLOGY. The epithet refers to the strangled outline of the upper part of the spire whorls, from the Latin “*strangulatus*”.

REMARKS. The type lot of *E. strangulata* n. sp. (Figs. 45–52) looks to be quite homogeneous, except for paratype 3 (Figs. 51, 52) which is a quite damaged shell with taller spire, less strangled top of the whorls and shorter aperture, but with not visible details for the inner labrum and for the columellar plaits. However, the details of the shell morphology (shape of the apex, axial ribs, labrum shoulder) allow to accept this shell in the type lot.

*Eratoidea strangulata* n. sp. is resembling principally to *E. acuta* McCleery, 2011, collected at 63 m off Cabo de la Vela, Colombia (L = 3.1 mm), and to *E. copiosa* McCleery, 2011, collected at 48 m off Tobago (L = 2.76 mm). *Eratoidea strangulata* n. sp. differs from *E. acuta* by a less wrapping inner labrum, a first columellar plait shorter and less oblique, and by the presence of diffuse colour bands. *Eratoidea strangulata* n. sp. differs from *E. copiosa* mainly by a more angular labial shoulder, a less



Figures 29–32. *Eratoidea margarita* (Kiener, 1834), FBC, L = 6.7 mm, Cayenne, shrimpers. Figures 33–36. *Eratoidea sulcata* (d’Orbigny, 1842), FBC, L = 2.5 mm, Martinique. Figures 37–40: idem, FBC, L = 3.1 mm, Cayenne, shrimpers. Figures 41–44. *Eratoidea macleeryi* n. sp., holotype MHNG, L = 3.6 mm, Cayenne, shrimpers.

wrapping inner labrum with less pointing and less packed teeth, and by the presence of diffuse light golden spiral on vitreous dirty white ground, instead of a uniform light golden-tan colour ground in *E. copiosa*. For the rest, the other morphological features of *E. acuta* and of *E. copiosa* are matching the variability range of *E. strangulata* and the three species must be considered as closely allied sibling species.

A colourful shell labelled as “*Eratoidea* n. sp.” (ref. 2012–43217) is pictured in the Faber-Massemmin’s file about the *Eratoidea* specimens documented from the 2014 MNHN Expedition to French Guyana. This specimen matches perfectly our new species *E. strangulata* n. sp., and its picture gives further precision of the full decoration of live collected specimens: four orange spiral bands on a creamy-white ground for the body whorl, the lower band encompassing only the siphonal canal, and the upper of the four bands straddling the lower suture; one orange band at the base of the upper spire whorls; a small orange mark just before the protoconch-teleoconch junction; three dark orange marks distributed on the ventral side of the labrum.

A shell of 3.5 mm, reported as “*Eratoidea lasallei* (Talavera & Princz, 1985)”, is pictured in Souza (1997: 38, fig. 6), and it is suggested to range off Amapá and Pará States (northern Brazil). This shell is provisionally considered as belonging to *E. strangulata* n. sp., despite its thinner and quite deformed labial lip which looks clearly to result from a growth accident, and despite the fact that the upper side of the whorls is not really carved: such kind of variation is drafted in our paratype n° 3 (Figs. 51, 52). Less carved upper side of the whorls might be a tendency in southern populations, and more carved upper side of the whorls might be a tendency in northern populations. This matter remains naturally to verify on the ground of more extensive material.

***Eratoidea inflata* n. sp.** Figs. 53, 54  
<https://www.zoobank.org/4693731D-760C-49D6-951E-2E7682265F26>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.9 mm (Figs. 53, 54); Holotype MHNG-MOLL-0151913.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 53, 54).

Shell outline inflated biconical, moderately thickened, body whorl slightly subpyriform, axial ribs thin, sharp and spaced, spire strong, blunt top, convex sides, upper side of the whorls carved, making a strangled figure; protoconch big and bulbous. Labrum low inserted, angular shoulder, faintly convex middle part, six labial teeth, second upper one being stronger, outer margin thick and heavily stepped; aperture quite short and quite narrow at both tips. Four columellar plaits thick and spaced, moderately forked at their distal end, siphonal canal quite pinched. Two diffuse light golden wide spiral bands on a vitreous dirty white ground for the dorsum.

DISTRIBUTION. At least from French Guyana.

ETYMOLOGY. The epithet refers to the inflated outline of the shell, from the Latin “*inflatus*”.

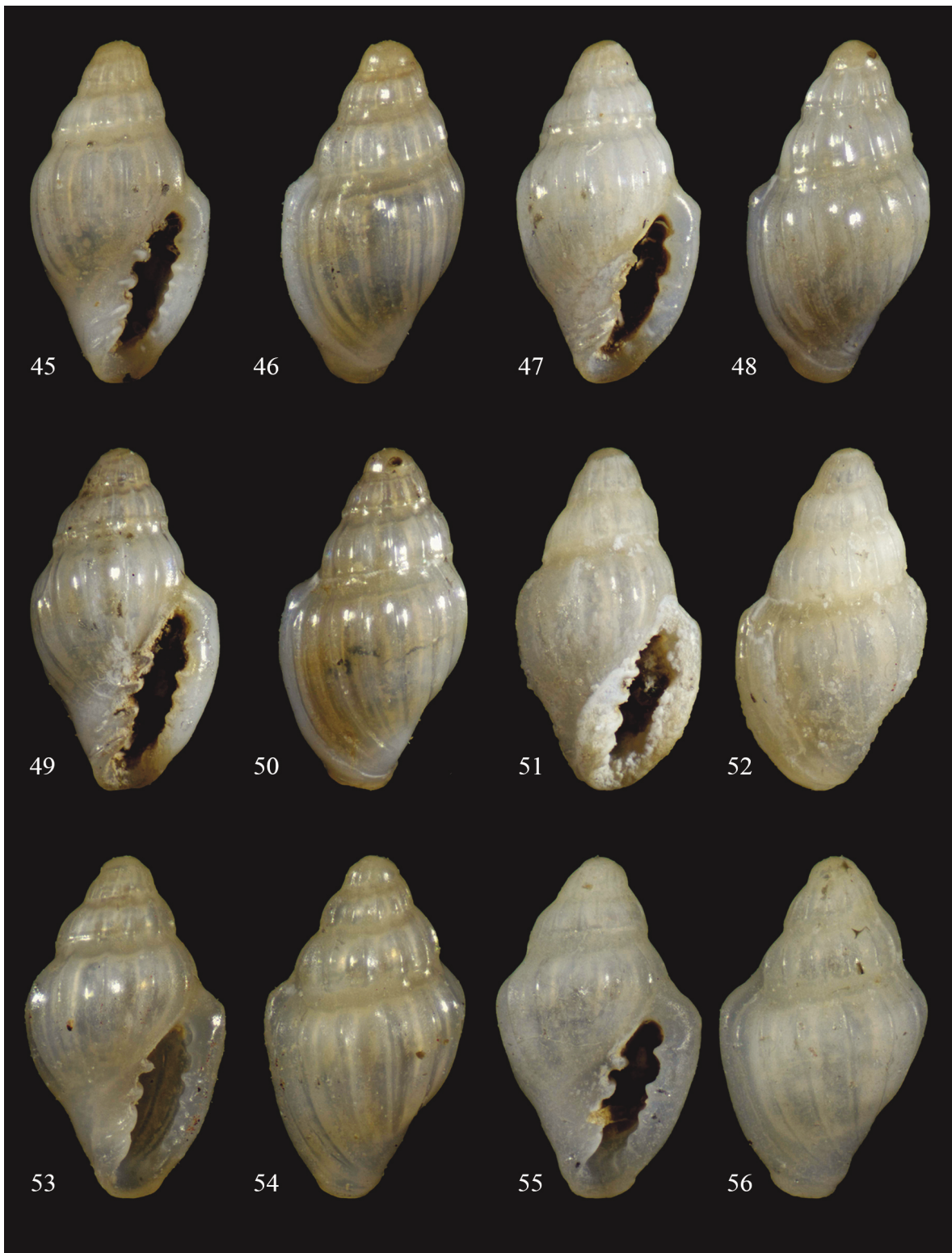
REMARKS. In many respects, *E. inflata* n. sp. (Figs. 53–54) looks very close to *E. strangulata* n. sp. It differs only by its noticeably more inflated outline, its thinner and more spaced axial ribs, its less forked columellar plaits, and possibly by the lack of golden shades on the siphonal canal and on the apex. Due to the diversified documentation at hand, it seems that this kind of morphological variation does not occur in *E. strangulata* n. sp., at the stage of its local populations as well as at the stage of its geographical range, so *E. inflata* n. sp. looks to constitute an autonomous form in the same area of geographical distribution.

***Eratoidea angulosa* n. sp.** Figs. 55–56  
<https://www.zoobank.org/4350CBAB-5228-4E47-B190-8C6DDE3DEC4B>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.8 mm (Figs. 55, 56); Holotype MHNG-MOLL-0151915.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 55, 56). Shell outline sharply biconical, moderately thickened, body whorl slightly subpyriform, shoulder sharply angled, axial ribs thin, sharp and spaced, spire strong, blunt top, convex sides, upper side of the whorls carved, making a strangled figure, protoconch big and bulbous. Labrum low inserted, angular shoulder, faintly convex middle part, five labial teeth regularly decreasing in size towards the



Figures 45, 46. *Eratoidea strangulata* n. sp., holotype MHNG, L = 3.1 mm, Cayenne, shrimpers. Figures 47, 48. Idem, paratype 1 FBC, L = 3.1 mm, Cayenne, shrimpers. Figures 49–52. Idem, paratypes 2, 3 MZUSP, L = 3.1 mm and 3.2 mm, Cayenne, shrimpers. Figures 53, 54. *Eratoidea inflata* n. sp., holotype MHNG, L = 2.9 mm, Cayenne, shrimpers. Figures 55, 56. *Eratoidea angulosa* n. sp., holotype MHNG, L = 2.8 mm, Cayenne, shrimpers.

base, outer margin thick and heavily stepped; aperture quite short and quite narrow at both tips. Four columellar plaits, thick and spaced, poorly forked at their distal end, siphonal canal quite pinched. One diffuse light golden wide spiral band on a whitish ground on the anterior part of the dorsum.

**DISTRIBUTION.** At least from French Guyana and Suriname.

**ETYMOLOGY.** The epithet refers to the angular outline of the shell, from the Latin “*angulosus*”.

**REMARKS.** *Eratoidea angulosa* n. sp. (Figs. 55, 56) looks very similar to *E. inflata* n. sp. It differs mainly by its angular outline (versus inflated-rounded outline in *E. inflata* n. sp.), especially at the level of the shoulder of the body whorl. On the ground of the documentation at hand, the morphology of *E. angulosa* n. sp. does not seem to match the natural variability of *E. strangulata* n. sp. or that of *E. inflata*.

One specimen from Suriname (collected at 52 m) clearly belonging to *E. angulosa* n. sp. was pictured from O.C.P.S. collection (L = 3.15 mm), and a specimen belonging to the same lot was recorded. Another lot with 31 shells, apparently conspecific, was also recorded.

Species group *Eratoidea levisa*, sensu McCleery, 2011

***Eratoidea serratula* n. sp.** Figs. 57–60

<https://www.zoobank.org/9863AAB7-178F-416E-9152-9766AAF38586>

**TYPE MATERIAL.** FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 4.8 mm (Figs. 57–60); Holotype MHNG-MOLL- 0151916.

**TYPE LOCALITY.** French Guyana, 30–60 m depth.

**DESCRIPTION OF THE HOLOTYPE** (Figs. 57–60). Shell outline roughly biconical, thick, body whorl slightly subpyriform, spire high and massive, protoconch of 1.75 whorls, big and bulging. Labrum low inserted, moderately shouldered, regularly arched, ten small subequal and packed labial teeth, upper labial cove moderately opened, with bevelled inner wall, outer margin thick, wide and heavily stepped; aperture moderate, slightly oblique, quite narrow at both tips, short and quite narrow at both tips. Four columellar plaits, thick and spaced, first one thin, long, straight and oblique, upper plaits

thicker and much protruding in the aperture, long bumpy varix running along the second plait; siphonal canal quite deep, base narrow, quite truncated and oblique. Ground colour dirty white, false-suture much distant from the suture and well-visible by transparency on the whorls.

**DISTRIBUTION.** At least from French Guyana.

**ETYMOLOGY.** The epithet refers to the labial denticulation of the species, which suggests the shape of a little saw, in Latin “*serratula*”.

**REMARKS.** *Eratoidea serratula* n. sp. (Figs. 57–60) is tentatively proposed in the *E. levisa* species group, but it differs noticeably from *E. levisa* McCleery, 2011, a tiny species from Cubagua, Venezuela (6 m). The shell of *E. serratula* n. sp. is much larger (4.8 mm instead of 2.88 mm in *E. levisa*), its surface is deprived of any axial sculpture, its outline is less oval, more biconical, the anterior part is slightly pinched, its labial teeth are smaller, more numerous and packed (10 instead of 6) and subequal (versus isolated big upper tooth in *E. levisa*). Moreover, the shell of *E. levisa* presents a rich shell decoration of reddish, orange and white marks on a tan ground, organized following both axial and spiral series, whereas the shell of *E. serratula* n. sp. is fully whitish. Possibly *E. serratula* n. sp. is closer to the species group *E. acutulla* McCleery, 2011 (cf. below), but this point will be not clarified without deeper investigations about the *Eratoidea* radiation in Caribbean.

***Eratoidea flavida* n. sp.** Figs. 61–64

<https://www.zoobank.org/6BF40D0E-3A44-423E-8FB7-0DCA7C45A0F3>

**TYPE MATERIAL.** FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 3.1 mm (Figs. 61–64); Holotype MHNG-MOLL- 0151917.

**TYPE LOCALITY.** French Guyana, 30–60 m depth.

**DESCRIPTION OF THE HOLOTYPE** (Figs. 61–64). Shell outline roughly oval-biconical, spire high, massive, protoconch of about 1.25 whorls, bulging, big, massive, sides of the spire quite convex. Labrum low inserted, quite slanted shoulder, regularly arched, upper labial cove widely opened, big rounded upper labial tooth, followed by four smaller and subequal spaced ones, inner labrum thin at the level of the upper cove, much thicker at the level of the teeth,

outer margin thick, wide and strongly stepped; aperture moderate, slightly oblique, about equal width along its range. First columellar plait long, thin and sinuous, three upper plaits much thicker and spaced, second plait slightly forked at its distal end, extended by a long bumpy varix running along the left side of the first plait, siphonal canal wide, base quite truncated and oblique. Ground colour creamy-whitish vitreous, three light lemon-yellowish spiral bands suggested on the dorsum, upper one more colourful and running just under the suture, median one and basal one being rather evidenced on the inner and outer labrum, yellowish shades on the spire and on the area of the columellar plaits.

**DISTRIBUTION.** At least from French Guyana and Suriname.

**ETYMOLOGY.** The epithet refers to the yellowish shades colouring the shell, from the Latin “*flavidus*”.

**REMARKS.** *Eratoidea flavida* n. sp. (Figs. 61–64) presents some resemblances with *E. infera* McCleery, 2011, a tiny species from Aruba (6–26 m). It differs mainly from it by its higher and more massive spire with convex sides (instead of shorter stepped spire with concave sides in *E. infera*), its stronger protoconch, its total lack of axial sculptures, its wider but less notched labial cove, its less numerous and lower rounded labial teeth, and its colourful yellowish decoration (instead of general whitish ground with light golden spire in *E. infera*). However, *E. flavida* and *E. infera* have the same organisation and shape of the columellar plaits, and the same basal columellar varix, so despite their differences they belong clearly to the same species group, even if both species are not closely disbranched.

*Eratoidea flavida* presents also some affinities with *E. serratula* for its general outline, for the morphology of its spire and for the organization and shape of its columellar plaits. But it differs noticeably from *E. serratula* by its wider aperture, its few and spaced big labial teeth (instead of numerous tiny packed ones in *E. serratula*) and its low stepped outer margin (instead of heavily stepped in *E. serratula*). The colour shades observed in the type specimen of *E. flavida* n. sp. do not seem to occur in *E. serratula*.

One specimen from Suriname (collected at 45 m) clearly belonging to *E. flavida* n. sp. was pictured from O.C.P.S. collection (L = 3.3 mm), and one further specimen belonging to another lot (collected at 25 m) was recorded. The morphology of the pictured

shell matches perfectly that of *E. flavida* n. sp., and it differs only by its colour shades, with red-brown marks on a shining deep white ground, instead of lemon-yellowish marks on a creamy-whitish vitreous ground. The position of the colour marks is exactly the same in the pictured specimen from Suriname and in the type of *E. flavida* n. sp. Such colour variation cannot be accepted by itself as sufficient clue of a specific splitting, and we consider provisionally that the form from Suriname is conspecific with that from French Guyana. A specimen from French Guyana also pictured as “*Eratoidea* n. sp.” (ref. 2012–43216) in the Faber-Massemin’s file presents a quite more slender and subcylindrical outline than the type of *E. flavida* n. sp., but in all other respects it matches perfectly the definition of this species. The colour decoration is made of light-brown marks on a creamy-beige ground.

Species group *Eratoidea acutulla*, sensu McCleery, 2011

***Eratoidea acutulla*** McCleery, 2011 Figs. 65–68

**TYPE MATERIAL.** REPUBLIC OF TRINIDAD AND TOBAGO • 1 spm; Tobago; 65–198 m depth; L = 4.51 mm; Holotype MNHN-IM-2000-23753 • 1 spm; Tobago; 65–198 m depth; L = 5.08 mm; Paratype 1 MNHN-IM-2000-23754 • 1 spm; Tobago; 65–198 m depth; L = 5.13 mm; Paratypes 2 TMC • 1 spm; Tobago; 65–198 m depth; L = 5.40 mm; Paratypes 3 TMC • 1 spm; Tobago; 65–198 m depth; L = 4.15 mm; Paratypes 4 AWC • 1 spm; Tobago; 65–198 m depth; L = 4.96 mm; Paratypes 5 AWC.

**TYPE LOCALITY.** French Guyana, 30–60 m depth.

**OTHER MATERIAL EXAMINED.** FRENCH GUYANA • 1 ad spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 4.3 mm (Figs. 65–68); FBC.

**DESCRIPTION.** See original description in McCleery (2011: 72–74).

**DISTRIBUTION.** At least from Tobago to French Guyana.

**REMARKS.** Our specimen from French Guyana (Figs. 65–68) is closely matching the type of *E. acutulla*, differing only by the absence of visible axial ribs (except 2 or 3 varicose axial ribs on the distal end of the body whorl, just before the outer labial margin),

by the presence of a well-marked false-suture and by the quite pinched base of its shell. These features look to be simple intraspecific morphological variation, either at the geographic, bathymetric or individual stages, and they cannot be interpreted by themselves as clues of a distinct status at the specific level.

One shell from French Guyana is pictured as “*Eratoidea* aff. *acutulla*” (ref. 2012–43156) in the Faber-Massemin’s file. In fact, this strictly biconical light shell differs noticeably from the type of *E. acutulla* n. sp., by its outline by several details, and it must be considered as an undescribed new species belonging to the *E. acutulla* species group. On the contrary, one of the two shells from French Guyana pictured as “*Eratoidea* aff. *aciesa*” in the same file (ref. 2012–43218) is deeply matching *E. acutulla* n. sp., despite the absence of dorsal view which prevents from verifying the occurrence of possible axial ribs, and despite the damages to the lower labrum which prevent from verifying the possible occurrence of a pinched base; the other of these two shells is quite resembling to *E. aciesa* McCleery, 2011, described from Isla Margarita, Venezuela (80–100 m).

Familia CYSTISCIDAE W. Stimpson, 1865  
Genus *Gibberula* Swainson, 1840

TYPE SPECIES. *Gibberula zonata* Swainson, 1840 (= *Volvaria oryza* Lamarck, 1822), by monotypy.

***Gibberula contracta*** n. sp. Figs. 69–76  
<https://www.zoobank.org/1AF5C0E1-D192-4142-AE5B-493A1E971F94>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.2 mm (Figs. 69–72); Holotype MHNG-MOLL-10151919 • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.0 mm (Figs. 73–76); Paratype FBC.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 69–72). Shell outline oval-turbiniform, moderately thick, spire very low, small lenticular protoconch. Labrum straight and quite oblique in its medium part, moderately thickened, 11 packed and subequal tiny labial teeth along the two lower third of the inner

labrum, outer margin poorly thickened, non-stepped; aperture long and constant, very narrow, siphonal canal poorly notched. Four columellar plaits regularly spaced, moderately oblique, the first one being thinner and much longer.

DISTRIBUTION. At least from French Guyana.

ETYMOLOGY. The epithet refers to the narrow aperture of the shell, from the Latin “*contractus*”.

REMARKS. The paratype of *Gibberula contracta* n. sp. (Figs. 73–76) is matching the holotype in all respects, except for its antepenultimate whorl which is bulging and more convex. *Gibberula contracta* n. sp. presents most affinities with the shell morphology of *G. velox* McCleery, 2008, described from Aruba (20 m). *Gibberula velox* differs from *G. contracta* n. sp. by its smaller size (1.73 mm versus 2.0–2.2 mm), a bit more slender-cylindrical outline, the aperture slightly widening towards its lower part, and the more pointing base of its labrum.

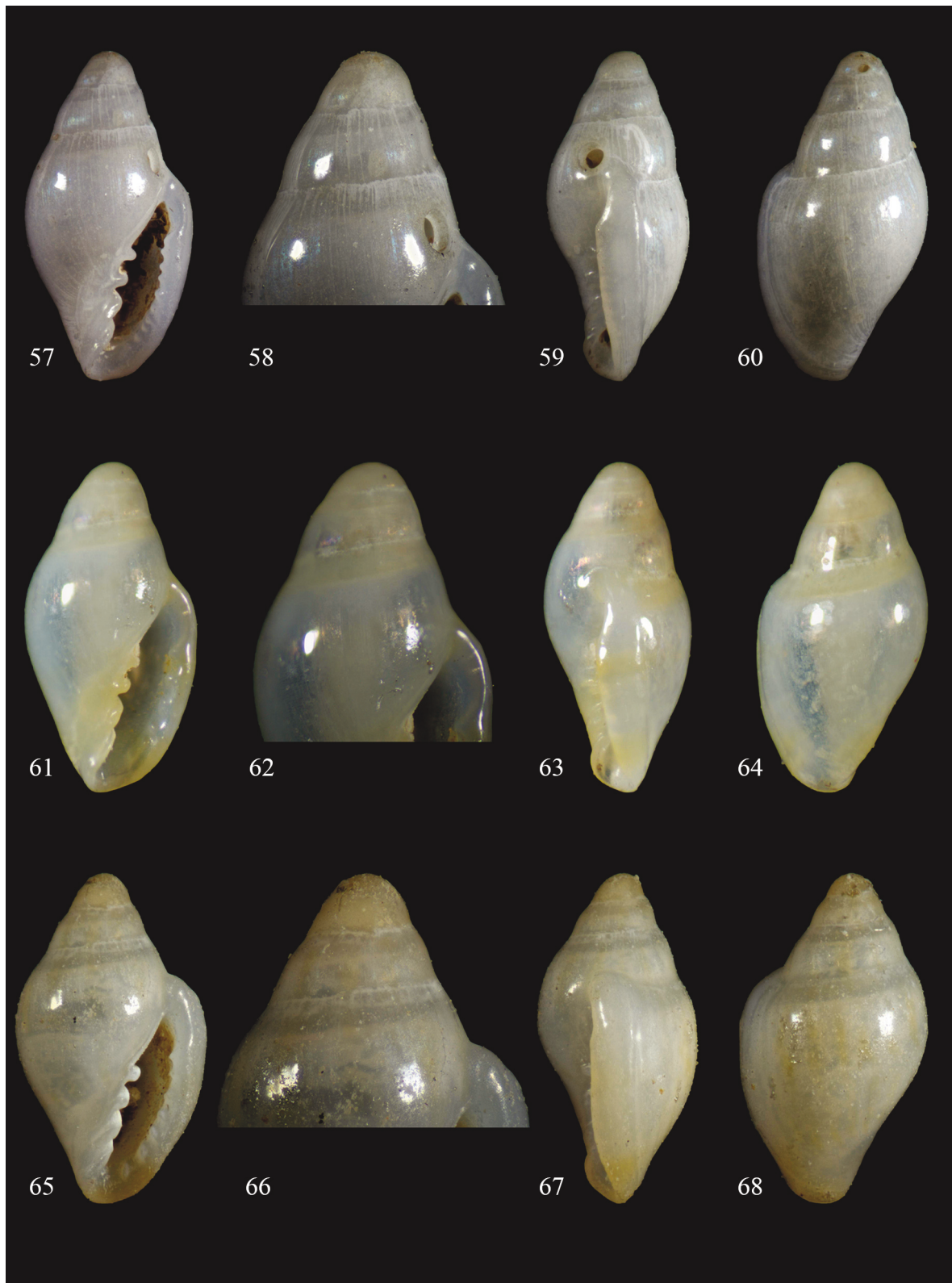
Familia GRANULINIDAE Covert & Covert, 1995  
Genus *Granulina* Joussemae, 1888

TYPE SPECIES. *Marginella pygmaea* Issel, 1869 (= *M. isseli* G. Nevill & H. Nevill, 1875), by monotypy.

***Granulina ampla*** n. sp. Figs. 77–80  
<https://www.zoobank.org/4964DE42-B2F6-4106-B4BB-1B8CA1EC3C19>

TYPE MATERIAL. FRENCH GUYANA • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.9 mm (Figs. 77–80); Holotype MHNG-MOLL-0151920 • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.45 mm; Paratype 1 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.7 mm; Paratype 2 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.9 mm; Paratype 3 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.95 mm; Paratype 4 FBC • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.4 mm; Paratype 5 MZUSP • 1 spm; French Guyana; 30–60 m depth; 1980s, 1990s; shrimpers fishing, L = 2.7 mm; Paratype 6 MZUSP.





Figures 57–60. *Eratoidea serratula* n. sp., holotype MHNG, L = 4.8 mm, Cayenne, shrimpers. Figures 61–64. *Eratoidea flavida* n. sp., holotype MHNG, L = 3.1 mm, Cayenne, shrimpers. Figures 65–68. *Eratoidea acutulla* McCleery, 2011, L = 4.3 mm, Cayenne, shrimpers.

TYPE LOCALITY. French Guyana, 30–60 m depth.

DESCRIPTION OF THE HOLOTYPE (Figs. 77–80). Shell outline much rounded, slightly contracted on the left side of the base, ventral side smooth, dorsal side bearing low axial ribs, no apparent spire. Labrum thick, highly arched, inserting on the top of the shell, twenty equal and quite packed labial teeth; aperture regularly widened, wide upper anal canal, turning upwards, base rounded. Columellar plaits small, thin and poorly protruding in the aperture, first one being long, unnotched, deeply arched and protruding outwards, three upper plaits regularly spaced, decreasing in length, increasing in thickness and in notching deepness.

DISTRIBUTION. At least from French Guyana and Suriname.

ETYMOLOGY. The epithet refers to the large and loose proportions of the shell, from the Latin “*amplus*”.

REMARKS. Beyond the important unity displayed by the shell morphology of *G. ampla* n. sp. (Figs. 77–80), the shell outline is slightly varying from well-rounded to slightly oval or to slightly subpyriform. The width of the aperture is also quite variable, from moderate to wide. The length size is varying from 2.4 mm to 3.1 mm. Due to the quite bad state of the shells, the macro-sculpture is not always visible, and the micro-sculptures cannot be recognized.

One specimen from Suriname (collected at 81 m) clearly belonging to *G. ampla* n. sp. was pictured from O.C.P.S. collection (L = 2.8 mm) and another specimen belonging to the same lot was recorded.

Quite large for the genus, *G. ampla* n. sp. has no real morphological homolog in the Atlantic waters, the most resembling *Granulina* species seeming to be *G. oodes* (Melvill, 1898), described from Bushire, the present Iranian town of Bouchehr, down the Persian Gulf (Manchester Museum).

## DISCUSSION

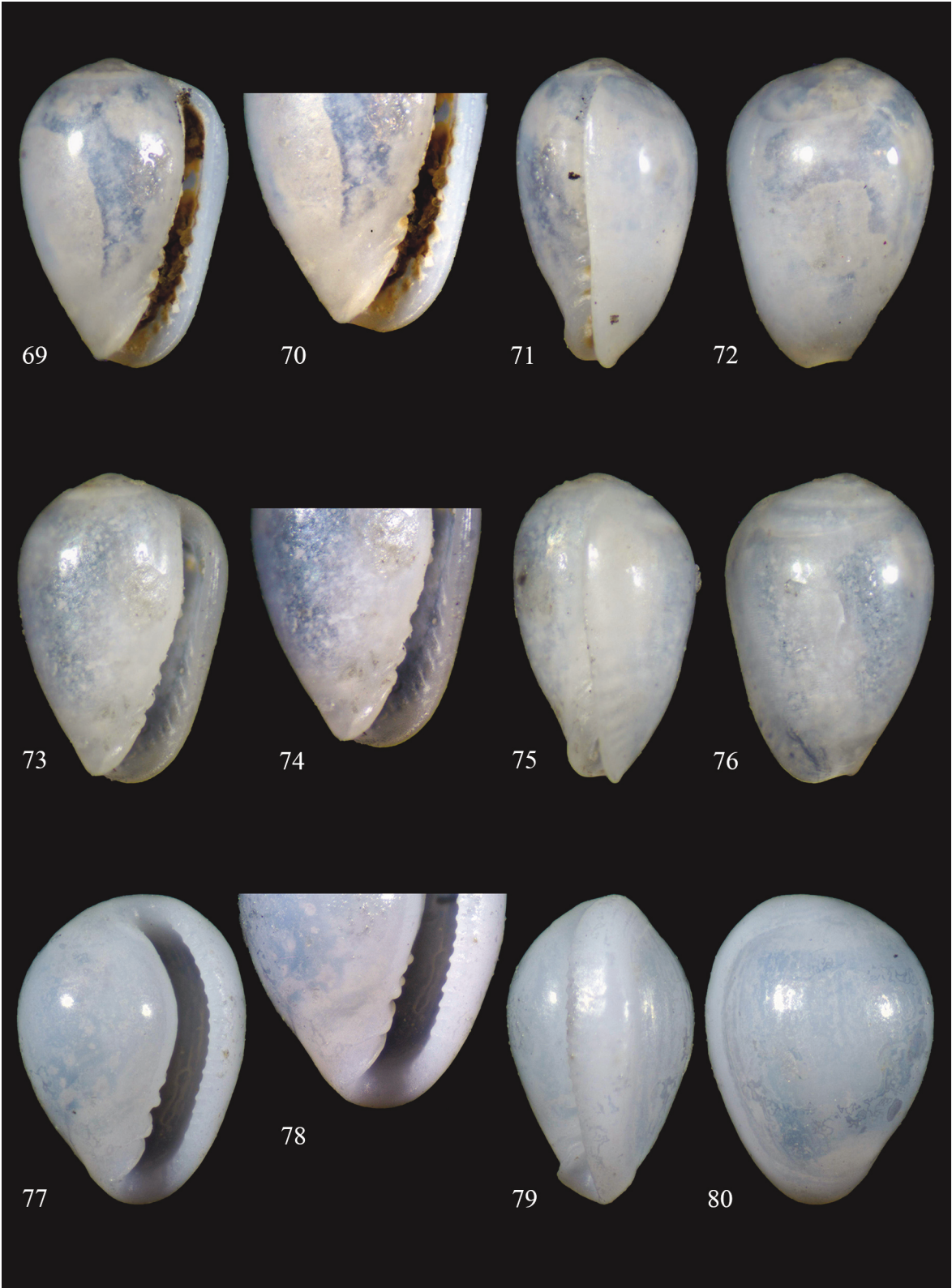
Despite the limited documentation at hand, two major facts are evidenced. First, most of the fauna of tiny marginellas from French Guyana is also found in Suriname, and apparently some of these species are ranging also off northern Brazil, or even as far as Trinidad or southern Caribbean. This point

suggests a quite important unity of the millimetric marginellas along the Guianese Plateau. Secondly, the assemblage of millimetric marginellas studied in this article looks to be a very partial sample of the fauna really occurring off French Guyana. The best proof of this documentary gap is found in the limited observations, notes and sketches made by the author about the O.C.P.S. collection of Leiden Museum: out of the species found also off French Guyana, several other species were documented, which could potentially belong also to the marginellas fauna of French Guyana.

For instance, as far as the genus *Eratoidea* is concerned, five shells from a bathyal level (collected at 570 m) clearly belonging to the species *E. aciesa* were recorded, and two undescribed species were documented: a tiny species with biconical-oval shell (L = 2.4 mm) collected at 32 m, with three strong labial teeth, a red-brown base and a red-brown mark on the labial shoulder, and a larger biconical species (L = 5.95 mm) collected at 77 m, with a subpyriform body whorl, a slender spire with concave sides, a quite wide aperture, height labial teeth with bigger upper one, and four unforked, non-oblique and protruding lamella-shaped plaits. The smaller species is closely matching a species of 1.9 mm from Bahia, Brazil, pictured by Souza (1997: 35, fig. 5) as “*Eratoidea* sp. 2” and differing mainly by a decoration of three wide red-brown spiral bands. The larger species is looking like a morphological intergrade between *E. margarita* and our new species *E. serratula* n. sp., and we cannot decide in the present side to what species group to link it.

In the genus *Granulina*, outside our new species *G. ampla* n. sp., at least two other species (size below 2 mm) look to occur in the Suriname waters: one species (collected at 120 m) with an oval shape, a strong produced and wide rostrum and a very thick labrum with straight vertical inner lip bearing many microscopic teeth; another oval species (collected at 92 m), with a high but narrower rostrum and a very attenuated base, and a thinner labrum, with more arched lip inside and no visible teeth.

From these elements, we infer that the specific diversity on the Guianese Plateau is much more important than expected until recent times, and that its methodical study is of major interest in several respects, including for the knowledge of the faunistic exchanges between Caribbean and Brazilian Provinces, and for the understanding of the diversity



Figures 69–72. *Gibberula contracta* n. sp., holotype MHNG, L = 2.2 mm, Cayenne, shrimpers. Figures 73–76. Idem, paratype 1 FBC, L = 2.0 mm, Cayenne, shrimpers. Figures 77–80. *Granulina ampla* n. sp., holotype MHNG, L = 2.9 mm, Cayenne, shrimpers.

formation in subequatorial Atlantic. Methodical revisions of the Guianese material occurring in O.C.P.S. collection (Leiden and Rotterdam), in MNHN collection (2014 samplings) and in MZUSP collection would provide an essential working base in this regard.

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## REFERENCES

- Altena Van Regteren C.O., 1975. The Marine Mollusca of Suriname (Dutch Guiana). Holocene and Recent. Part III. Gastropoda and Cephalopoda. Zoologische Verhandelingen, 139: 3–104, pl. 1–11.
- Boyer F., 2015. Révision des marginelles de Linné (Mollusques prosobranches: Marginellidae et Cystiscidae). *Xenophora Taxonomy*, 8: 33–55.
- Caballer M., Espinosa J., Ortea J. & Narciso S., 2013. Nuevas especies de la familia Marginellidae (Mollusca: Neogastropoda: Muricoidea) de Venezuela. *Revista de Biología Marina y Oceanografía*, 48: 115–129. <https://doi.org/10-4067/S0718-19572013000100010>
- Clench W.J. & Turner R.D., 1950. The Western Atlantic marine mollusks described by C.B. Adams. *Occasional Papers on Mollusks*, 1: 233–403.
- Coan E. & Roth B., 1976. Status of the genus *Hyalina* Schumacher, 1817. *Journal of Molluscan Studies*, 42: 217–222.
- Cossignani T., 2006. Una nuova *Volvarina* dal Brasile (Gastropoda: Prosobranchia, Marginellidae). *Malacologia Mostra Mondiale*, 51: 10.
- De Jong K.M. & Coomans H.E., 1988. Marine gastropods from Curaçao, Aruba and Bonaire. *Studies on the fauna of Curaçao and other Caribbean Islands*, 214: 1–261.
- Espinosa J. & Ortea J., 2017. Tras la huellas de Alcide D'Orbigny: el género *Eratoidea* Weinkauff, 1879 (Mollusca: Neogastropoda: Marginellidae) en la isla de Martinica, Antillas Menores, con la descripción de dos nuevas especies. *Revista de la Academia Canaria de Ciencias*, 29: 207–220.
- Faber M.J., 2006. The genera *Pachy bathron* and *Persicula* with description of a new species of *Persicula* from French Guyana (Gastropoda: Cystiscidae). *Miscellanea Malacologica*, 2: 25–39.
- Faber M.J. & Sliker F.J.A., 2014. A new species of *Mirarissoina* (Gastropoda: Rissoidae) from deep water of Suriname with notes on western Atlantic - eastern Pacific cognates and extinction processes. *Miscellanea Malacologia*, 6: 69–74.
- McCleery T., 2008. Descriptions of sixteen new species of the genus *Gibberula* Swainson, 1840 (Gastropoda: Cystiscidae) from the Caribbean. *Novapex*, 9: 101–118.
- McCleery T., 2011. A revision of the genus *Eratoidea* Weinkauff, 1879 (Gastropoda: Marginellidae). *Novapex*, 12 (HS 8): 1–111.
- Massemin D., Lamy D., Pointier J.-P. & Gargominy O., 2009. Coquillages et escargots de Guyane. *Muséum national d'Histoire naturelle, Paris; Biotope, Mèze*, 456 pp.
- Minior D., 2020. Description of *Hyalina cunhai*, a new species of Marginellidae (Mollusca: Gastropoda) from the eastern seaboard of Brazil. *The Festivus*, 52: 218–223.
- Ortea J., 2022. Salvar los muebles, una expresión popular aplicada a la finalización de trabajos malacológicos inacabados (Mollusca, Gastropoda). *Avicennia*, 30: 13–18.
- Rios E. de C. & Matthews H.R., 1972. Uma nova espécie de *Marginella* Lamarck, 1799 do Brasil (Mollusca: Gastropoda). *Arquivos de Ciências Marinhas*, 12: 31–33.
- Souza P.J.S. de, 1997. A Tribo Marginellini Fleming, 1828 na Costa Brasileira (Mollusca, Gastropoda, Marginellidae). Tese de Mestrado em Ciências Biológicas-Zoologia. Universidade Federal do Rio de Janeiro. I–XII, 1–75.
- Vanin S., 2017. As famílias Marginellidae e Cystiscidae no Brasil. Pp. 1–91. PDF digital document, privately published.
- Wakefield A., Boyer F. & McCleery T., 2002. Review of the genus *Pachy bathron* Gaskoin, 1853 (Gastropoda: Cystiscidae). *Novapex*, 3: 65–81.