THE CONE COLLECTOR

#17 - May 2011

THE CONE COLLECTOR

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On the Cover
***Conus leopardus* from New Caledonia. Image courtesy of Thierry Vulliet.**

Note from the Editor

It is with great pleasure that I present to our readers the latest issue of *The Cone Collector*. After an extra heavy number, the current one is of course somewhat shorter, but not less interesting, I hope!

As always, I heartily thank all those who contributed with articles, photos, comments, suggestions, etc. The pages of our bulletin are always open to contributions and we always try to include a wide diversity of topics, so that we may capture the attention of advanced collectors and professional researchers as well as of beginners – anyone in fact who is fascinated with shells and shell collecting in general, and with the wonderful Cones in particular.

The Cone world continues to bustle with activity and exciting discoveries are made, often on a monthly basis. We try to keep our readers informed of what goes on, so please send me any news that may come your way – don't surmise that I've already heard of it from some other source, as it may not be so!

One of the most important projects at hand will of course be the organization of the 2nd International Cone Meeting. After the huge success of the meeting held last year in Stuttgart, the same Organizing Committee is already working on the next one: it will take place in La Rochelle, France, in September 2012. You will read a little more about it in this number.

So, without further ado, I give you TCC #17. Hopefully you will find inside its pages some enjoyable reading and useful information. Let me know what you think.

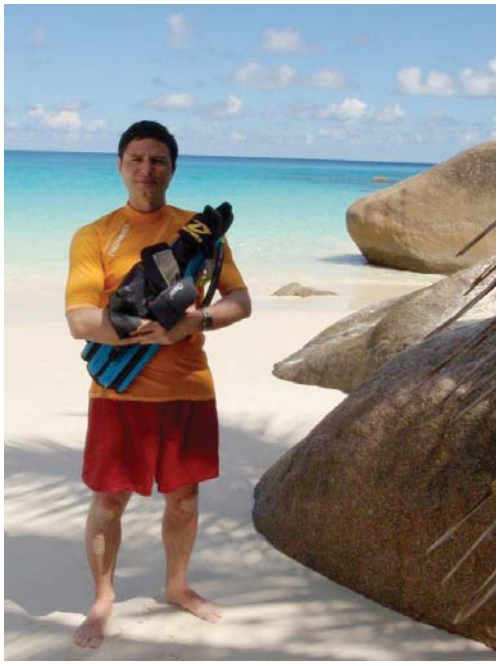
A.M.

Who's Who in Cones: David Touitou

I was born in 1975 in Toulon, in the South of France, close to the Mediterranean Sea. For seven years I studied at the Pharmacy Faculty at Marseille and got my PhD degree in 2000.

Like many of you, I am sure, I have been a collector since early childhood: first underground tickets, bottle corks, capsules; later on, stamps, coins and seashells.

However it was only in 1997 that I have been truly captured by the fabulous world of conchology, as I found a wonderful freshly dead cowry while snorkeling in the Seychelles: my first *Cypraea erosa*! I was used to finding beautiful, nicely preserved *Cypraea caputserpentis* along the granite coast, but that particular find was a revelation. *Cypraea erosa* has a very pretty shell indeed, if one takes the time to examine it. From then on I looked for information and I have began to meet other passionate collectors and thus my own passion started.



At a certain moment, I have befriended a much older collector, Mr. Roger Rault (he was 73 when I was 23), unfortunately since deceased, who quickly became my mentor, helping me to avoid many mistakes, in particular that of purchasing cheap specimens. That is, in fact, a piece of advice that must be passed along: it is preferable to buy a 100 euros shell than to buy one hundred 1 euro ones… because in due time one will even be given such common shells…

He had also foreseen that I would turn to Cones, even though at the time I was interested in cowries only… And he was right once again! From this friendship, the Seashell-Collector website was born in 1999. More than ten years old already, it was in fact one of the first websites dedicated to seashells!

Thus did I begin to collect worldwide cowries. In 2000 I visited the Paris Bourse, a formidable thing for a beginner. In 2001 I left for Martinique for 18 months to fulfill my national (civilian) service and it was there that I fell in love with Cones (how could I help it?). It was also after my stay in Martinique that my passion suffered some evolution and finally I chose to collect only self-collected specimens. Since then, I have stopped exchanging and buying shells. I have also began working to help genetics research on Cones, supplying pieces of tissue to Tom Dudda first and later to Chris Meyer.

Still in Martinique, I was fortunate to befriend two remarkable Antillean collectors.

Two trips to the Grenadines have allowed me to find other legendary species. Then, in 2002, I departed for the other side of the world: French Polynesia! From 2002 to 2006 I worked as a chemist at the island of Moorea. Obviously, I kept collecting mainly Cones, but also Cowries, Olives, Terebras, Mitres and Murexes. And in 2004 my first son Moana was born there!

In Polynesia I have also met other collectors, namely Michel Balleton, with whom I have travelled to the Hao group in the Tuamotu Islands and also dived at Tahiti Island. In the same period I first met Chris Meyer in person and with him we went hunting for Cones on both diurnal and nocturnal dives. My stay also allowed me to travel to New Caledonia twice to meet my friend Serge Rolland, with whom I was in

touch via email since my Martinique period. Serge and I have the same philosophy when it comes to our collections, which is to keep only self-collected specimens and above all, never over-collect! Nevertheless, I must confess that many times it is not easy, at depths of 50 metres, to leave behind specimens of *Conus moluccensis merleti*… But that's the price to pay if one wishes to preserve the object of our passion.

I came back to France in 2006, remaining close to the Mediterranean, where I dive regularly with my friend Laurent Kbaïer, a photographer. And in 2008 my second son, Teiva, was born. A word must be said for our wives who support us and our catches. They will never be thanked enough and I am lucky to have a wonderful wife that goes with me everywhere and even helps me in my searches!

Returning to the website Seashell-Collector, it has just been given a new interface that will allow us to develop new functionalities. Our goal is to become a platform where everything that will bring collectors together will be possible. I have a thousand projects inside my head, but of course the work done on the site is completed outside working hours and with Laurent Cayre – who has recently joined our team – we must also spend time with our families…

We are currently changing the server and the new and very stable version of the site will be up by mid April. From then on, we will add new functionalities, so that the site becomes more dynamic than ever before. Very soon members will be able to upload their articles (without passing through a specific software!), for the purpose of sharing information. We will also try to unite the forum with the site, in order to have a single password.

One project I cherish is to make collections visible to everyone, as it is often quite difficult to see collections otherwise. With that in mind, I have begun by placing my own Cone collection online. We will also work on an interface that will enable collectors to manage their collections online, so that they will become visible by collectors worldwide.

There are many other projects, but… for the moment they must remain secret! :)

C. superstes Hedley, 1911 – More Information

R.M. (Mike) Filmer

Jon Singleton's very interesting article on *C. superstes* stimulated me to look again at this enigmatic cone. Over very many years Jon and I have discussed this species and its status but we never reached a satisfactory conclusion.

I originally concluded that *C. superstes* was probably a juvenile of *C. clarus* Smith, 1881 because of its colouring and its type locality within the range of *C. clarus* and no other cone species.

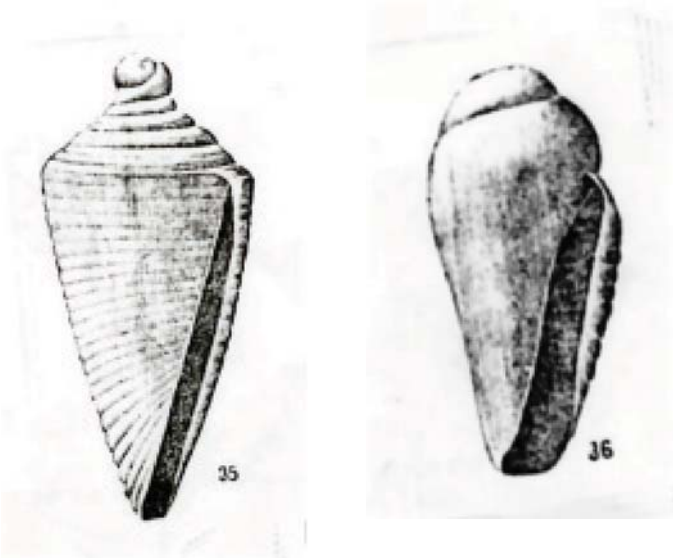
Now that Jon has found juveniles of *C. clarus* and discovered that these do not possess the very large protoconch of *C. superstes*. I agree with Jon that *C. superstes* cannot be a juvenile of *C. clarus*.

When I was living in Melbourne in the late 1970's I became good friends with Max and Lorna Marrow experienced and knowledgable shell collectors they very kindly gave me four specimens of *C. superstes* measuring 8.9; 6.5; 5.8 & 4.6 mm. These specimens were obtained in the 1960's from a local fisherman who had dredged them in grit in deep water in the Great Australian Bight.

In the late 1970's I visited the South Australian Museum and was able to study and photograph the Cone types in the Museum. Included was the largest syntype at 8.5 mm which I erroneously called the holotype in my book *A Catalogue of Nomenclature and Taxonomy in the Living Conidae*. This syntype is displayed on pl. 1, fig 1.

In my opinion it is highly unlikely that *C. superstes* is a juvenile of any known living cone species and that it is probably a fossil. All the syntypes and my specimens are dead shells and in his original description Hedley suggests it's nearest relation is *C. convexus* Harris, 1897 from the Victorian Eocene. Hedley's illustrations appear on pl.1, figs 2 & 3) I have no knowledge of fossil *Conidae* but Tucker & Tenorio place *C. convexus* in the genus *Endemeconus* Iredale, 1931. Röckel, Korn & Kohn figure (pl.70, fig.18) illustrate a syntype which they suggest is an unknown juvenile. It would be very interesting to hear from anyone who has studied fossil *Conidae*.

C. superstes – Syntype 8.5 mm in SAMS



C. superstes – Illustrations in Hedley

Conus or *Conoid*

Jon F. Singleton

Conus helgae Blöcher, 1992 was named and described from a few specimens collected off Tulear, Madagascar, from a depth of 80 metres. A further specimen was later collected off the N. E. Coast of Madagascar. The holotype size is 36.6 × 19 mm, possesses a red pattern on a light brown base colour. The most distinctive feature of *C. helgae* is the spiral sculpture, which has very prominent nodules around the shoulder and spiral whorls.

Shortly following the description, I was fortunate in obtaining a specimen of *C. helgae*, size 39.5 × 18.5 mm, and from off the type locality of Tulear. Although it is in good condition and still retained some inner lip gloss, I suspect it was dead collected. It has a faint pattern on a light brown colour, but lacks any of the red markings shown on the holotype.

There are two other *Conus* which show a remarkable resemblance to *C. helgae* in their shape and spiral sculpture, both possessing the prominent nodules. These are *Conus lenhilli* Cargile, 1998, from the Turks and Caicos Islands in the Caribbean, and *Conus vaubani* Röckel & Moolenbeek, 1995, a New Caledonian species. Sadly I have never sighted either of these, but both are very close to *C. helgae*.

It would be interesting to know if any scientific study has been carried out on the living animals of these three species, to determine their true status. Hopefully one of our readers may have some further information on this problem.

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Description of *Conus lenhilli*. *Siratus* No. 14.

C. helgae – Holotype *C. helgae*

A Doubtful Specimen

Christophe Roux

I recently have been proposed to buy a piece which gave me some real interrogation:

> The shell was announced as "*Conus kerstitchi* Walls, J.G., 1978" supposed to be collected in Tres Maris Islas. Nayarit Province. Mexico. The shell is 31.3 mm and bought during a passed show in California couple of years ago.

I had the shell in hand during couple of weeks and I have been able to do few researches on my available literature and photos from internet. My doubts raised as the shells described in the Walls has a provenance exactly same as the piece I had in my hands.

The data I assume to be fake.

In spite of a very similar shape my doubts were reinforced by the shell itself. As *Conus kersitchi* Walls, J.G., 1978: Shoulder is carinate, no nodules along the shoulder angle. A turnip-shaped shell; creamy yellowish covered with about 10 regular spiral rows of small squarish deep brown spots.

But my piece in hand was showing spiral cords and flamules near the shoulder as *Conus kerstitchi* do not present and the type seems to be smooth and glossy.

So what is this *Conus* obviously coming from the Panamic region? Observing some pieces on the Femorale website I noticed that some *Conus ernesti* Petuch, 1990 can also be quite similar.

All these doubts and the additional doubtful provenance led me to restitute this interesting piece to its owner.

Literature: *Cone shells* - JG Walls
Websites: *http://biology.burke.washington.edu*; *www.schnr-specimen-shells.com* and *www.gastropods.com*

The Rise and Fall of "*Conus recurvus* Broderip 1833"(*)

Bruce Neville

In an article in the September 2010 issue of *American Conchologist*, J.M. Inchaustegui identified two figured cone specimens from western Mexico as "*Conus recurvus* Broderip 1833." Taking a second look at the shells in Mr. Inchaustegui's illustrations, I tentatively identify them as *Conus regularis* (Sowerby I 1833). The two species, "*C. recurvus*" and *C. regularis*, are not as easily separated as one might think, at least on conchological characteristics.

Our long-suffering Editor's "innocent" note attached to Mr. Inchaustegui's article regarding the taxonomic status of "*C. recurvus*" has led to some interesting discussions. When I (Neville 2010) reviewed Tucker and Tenorio's *Systematic Classification of Recent and Fossil Conoidean Gastropods* (2009), I was puzzled that the shell that has long been called "*Conus recurvus* Broderip 1833" was not included, and finally found it under the name *Kohniconus emarginatus* (Reeve 1844), type species of the genus *Kohniconus* Tucker and Tenorio 2009. I was surprised that such a longstanding name for such a well-known shell as *Conus recurvus* could have been replaced, but they did not discuss the reason(s) for the change (that not being the function of their work), so I did some research into the matter. I did not have space in that review to go into the nomenclatural legalities, but, since it has come up again, I've decided to go into more detail on the story.

Here it goes.

G.B. Sowerby I described and figured *Conus regularis* in the *Conchological Illustrations*; that portion of the *Illustrations* was issued 17 May 1833. W.J. Broderip described *Conus recurvus* in *Proceedings of the Zoological Society of London* without illustration; that part of the *Proceedings* was issued 24 May 1833, or one week after Sowerby's name. [The article is attributed to "Broderip and Sowerby," but individual names are credited to one or the other with initials.] The primary types of *Conus regularis* Sowerby "II" [sic] 17 May 1833 and *Conus recurvus* "Broderip and Sowerby" [sic] 24 May 1833 are illustrated in the Type Gallery of *The Conus Biodiversity Website* (Kohn & Anderson, n.d.) and obviously belong to the same, highly variable species.

In his review of the Eastern Pacific *Conus*, Hanna (1963) figured a "hypotype" (a term without definition or standing in the International Code of Zoological Nomenclature) of *Conus recurvus* Broderip 1833. Unfortunately, this specimen was not conspecific with Broderip's type. Apparently Keen (1971), Abbott (1974), and many others took the specimen illustrated to represent "*Conus recurvus* Broderip 1833" and the name was widely applied to the species illustrated by Hanna. Walls ([1979]) was perhaps the first to recognize that the holotype of *Conus recurvus* Broderip 1833 did not represent the species to which the name was then applied, but chose not to open that particular can of worms.

In 1839, J.E. Gray illustrated a shell as "*Conus arcuatus* Broderip and Sowerby 1829." Reeve recognized that Gray's illustration was not the *C. arcuatus* of Broderip and Sowerby and so gave it the replacement name *Conus emarginatus* in his *Conchologia Iconica* in 1844. Coomans, Moolenbeek, and Wils (1981), in reviewing the status of the name *Conus arcuatus* Gray 1839, realized that the types of *C. recurvus* and *C. regularis* represented the same species and that the next available name for the "shell formerly known as *recurvus*" was thus *C. emarginatus* Reeve 1844, but this change was not picked up in the broader literature. Tucker and Tenorio, with their encyclopedic knowledge of cone taxonomy, were aware of the change and used it correctly in their recent systematic work. This is the "shell formerly known as *recurvus*" and is the first available name for that species.

There are two "take home" lessons from this story:

1. Always refer to (trusted) types wherever possible, when making identifications, and

2. None of this should detract from the interesting observation reported by Mr. Inchaustegui!

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See also *http://biology.burke.washington.edu/conus/gallery/index.php?pglimit=R&frms=1* for illustrations of type specimens.

(*) – Reprinted, with thanks, from *American Conchologist*

Note: Joaquin Inchaustegui points out that the original identification of the Cones was taken from the original labels of Theresa Stelzig, Leola Glass and R. A. Sparlin.

Record Sizes

Philippe Quiquandon

Our friend Philippe Quiquandon has sent in photos of several World size records, which I am sure our readers will enjoy seeing.

Conus terryni - 31,75 mm

Conus lenavati - 116,94 mm

Conus thalassiarchus f. depriesteri - 102.6 mm

Conus beatrix - 40.13 mm

Madagascar is More Than Just Lemurs

John K. Tucker & Luigi Bozzetti

The island of Madagascar is located in the southwestern Indian Ocean about 300 km from the eastern coast of Mozambique. It is bordered on the west by the Mozambique Channel and on the east by the Indian Ocean. This island is the world's fourth largest and is 1,570 km long and 570 km wide with a two-dimensional surface area of 587,000 km2. Local ocean currents in the waters surrounding Madagascar may contribute to the biodiversity observed on and around the island (see Korn et al., 2000, for details).

These physical properties shed no light on the biological uniqueness of the Island. Madagascar is most widely known for its more than 100 species of lemurs. These are small primates with many primitive features, but these are not the only stars. Madagascar also has a wealth of chameleons, which are a uniquely adapted lizard. There are about 160 species of chameleons on Madagascar or about two-thirds of the world's chameleon species. The flora of Madagascar is equally unique. For instance of the eight species of baobab trees (*Adansonia* spp.), seven are found in Madagascar and six of these seven are endemic to Madagascar (Baum, 1995; Cruywagen et al., 2010).

Lately Madagascar has become a hot spot for cone shell systematics. As it stands now 40 taxa have their type localities in Madagascar (Table 1). Kiener in 1845 named the first two taxa with Madagascar as a type locality. This should not be particularly surprising. However, 27 of these 40 taxa (68%) were described between 1980 and the present. Sixteen of those were made known to science by the second author and his co-authors. These and many of the others have only been found in this southwestern Indian Ocean region. Many other Indo-Pacific species also occur in Madagascar (Table 2; Röckel et al, 1995).

Recently we reported two 'lost' species from this wonderful place (Tucker & Bozzetti, 2010a & b). Specimens of *Endemoconus lozeti* (Richard, 1980) and *Asprella cavailloni* (Fenaux, 1942) were collected at Lavanono in southern Madagascar and Sandravinany in southeast Madagascar, respectively. Specimens of these species had not been reported since their descriptions. They are illustrated in Plate 1, Figs 1-4 (*A. cavailloni*) and Figs. 5-8 (*E. lozeti*).

Because many collectors may not be aware of some of the other taxa, we provide illustrations for many of the taxa (also see Table 1). Some of the names listed in Table 1 are form names and are not taxonomically available names and should be used carefully. They do, however, provide a way to recognize the infrasubspecific variability that exists in some of the Madagascar species. We use the supraspecific taxonomy from Tucker & Tenorio (2009). Abbreviations for collections can be found in Röckel et al. (1995) except for three of them. Here JKT means the specimen is in the first author's collection, whereas LB indicates that the specimen is in the second author's collection. We also use SBMNH for specimens donated to the Santa Barbara Museum of Natural History as vouchers.

Other interesting shells have also come from Madagascar. Specimens of *Pionoconus gubernator* (see Bozzetti, 2008b) resembling the type specimen of *P. boivini* (Plate 4, Fig. 9) have been discovered (Plate 4, Figs. 5 & 6). This flat-topped morph also occurs in *P. magus* (Tucker, 2008, Plate 4, Fig. 7 & 8). This brings up the unanswered question as to how much of the variation (i.e., forms and subspecies) is systematically relevant. The variation seen in *P. gubernator* is extreme (Verdasca & Monteiro, 2008). It is not the purpose of this paper to suggest synonymies. However, all of the forms and subspecies described to date lack the geographic component needed to identify them as actual geographic races (i.e., subspecies). Regardless, future studies and especially molecular ones may find that some of these are valid cryptic species.

Almost all collectors have one or more specimens from Madagascar that were collected by local fishermen. When the term fishermen is used, most of us have

little idea what that term actually means in a location such as Madagascar (Figs. 1 & 2). The first author has never had the pleasure of visiting Madagascar. However, the second author has been there working with local fishermen (Figs. 3 & 4). Readers may be amazed at the sorts of boats that these people do their work from (Figs. 5 & 6); the first author certainly was. Shell collecting is popular with all ages of Malagasy people (Figs. 7 & 8). Local children along with their elders are happy to sell their finds (Figs. 9 & 10). Local fishermen in the Philippines also take small boats to sea to fish. The first author was in the Philippines and watched the fishermen go out in their bonka boats (a boat with an outrigger).

Photo Credits

Plate 1

Figs.1-4 by John K. Tucker
Figs. 5,6, 9-11 by Luigi Bozzetti
Figs. 7 & 8 were made by C. Reynes and Virginie Héros of MNHN supplied the images

Plate 2

Figs. 1-6 by Luigi Bozzetti
Figs. 7-11 are from Alan Kohn's Conus Biodiversity Website

Plate 3

Figs. 1-12 are by Luigi Bozzetti

Plate 4

Figs.1, 2, 5, 6, 10-12 by Luigi Bozzetti
Figs. 3, 4 & 9 are from Alan Kohn's Conus Biodiversity Website
Figs. 7 & 8 by John K. Tucker
Figs. 5-10 are by Luigi Bozzetti

Figures

Plate 1

1, 2. *Aprella cavailloni* (Fenaux, 1942) collected in 60-100 m by lobster pots from Sandravinany, southeast Madagascar, 80.2 mm (SBMNH 99899).

3, 4. *Aprella cavailloni* (Fenaux, 1942) collected in 60-100 m by lobster pots from Sandravinany, southeast Madagascar, 79.6 mm (second author's collection).

5, 6. *Endemoconus lozeti* (Richard, 1980) collected in 20 m, near Lavanono, Madagascar, 61 mm (second author's collection)

7, 8. Holotype of *Endemoconus lozeti* (Richard, 1980), trawled in 100-120 m, Fort-Dauphin, 56 mm (MNHN 550/22/6/79)

9. *Endemoconus bonfigliolii* Bozzetti, 2010c, holotype (MNHN), trawled in30-50 m, Lavanono, Madagascar, 23.6 mm.

10. *Dendroconus medoci* (Lorenz, 2004), (LB), from Fort Dauphin, Madagascar, 62.6 mm

11. *Rolaniconus olgiatii* (Bozzetti, 2007), holotype (MNHN), collected in 5-10 m, Toliara, Madagascar, 31.0 mm.

Plate 1

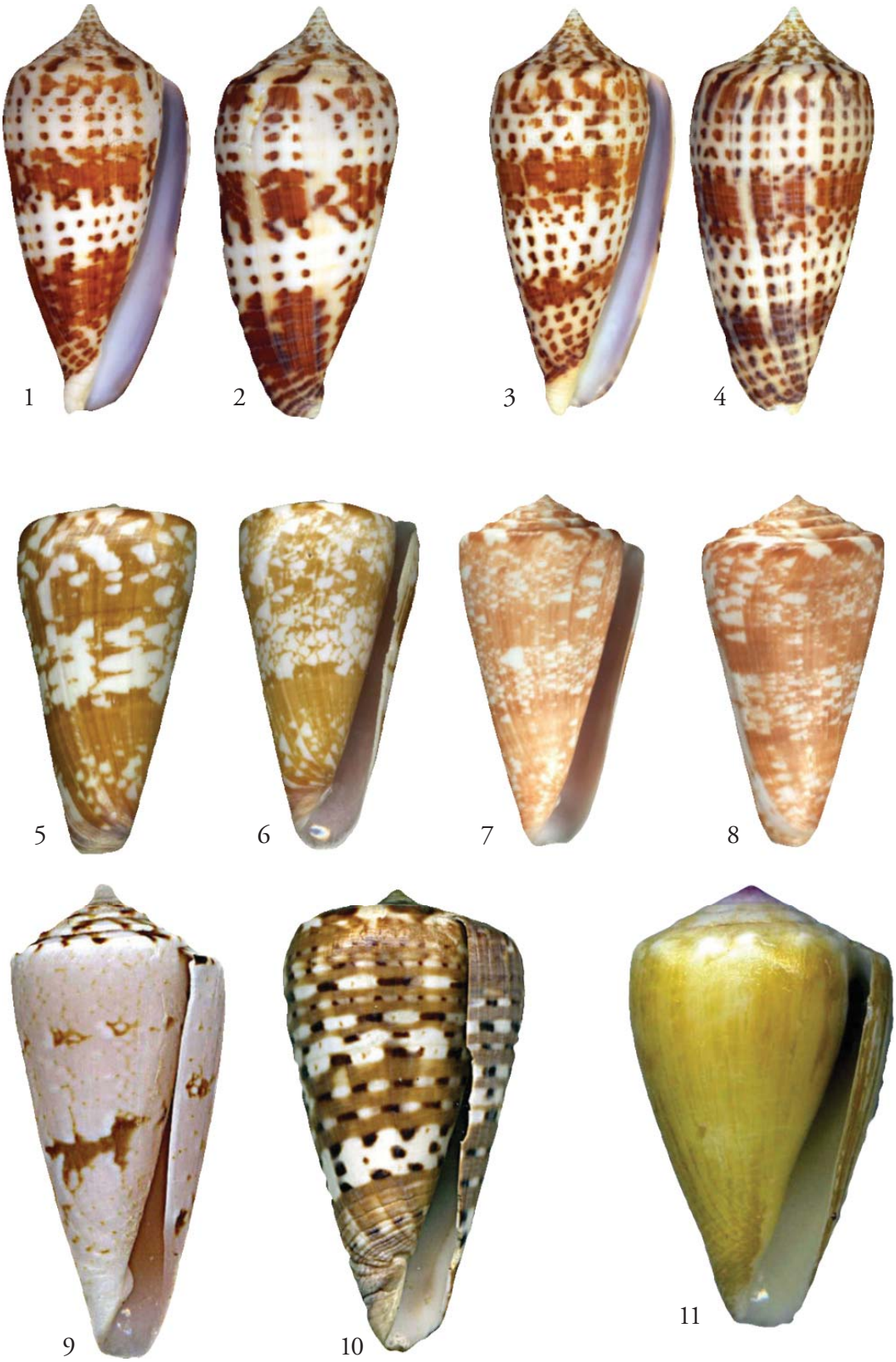

Plate 2

1. *Textilia chiapponorum* (Lorenz, 2004), holotype (MNHN), beaches between Fort Dauphin and Lavonono, southern Madagascar, 41.4 mm.

2. *Textilia lucasi* Bozzetti, 2010c, holotype (MNHN), collected in 30-50 m, Lavanono, southeastern Madagascar, 23.1 mm.

3. *Textilia solangeae* Bozzetti, 2004, paratype (MNHN), collected at Lavanono, Southern Madagascar, 25.7 mm.

4. *Dendroconus betulinus* subspecies *rufoluteus* Bozzetti and Ferrario, 2005, holotype (MNHN), from Toliara, Madagascar, 82.5 mm.

5. *Pionoconus simonis* (Bozzetti, 2010a), holotype (MNHN), from Tolagnaro, southeastern Madagascar, 22.6 mm.

6. *Rhizoconus anosyensis* (Bozzetti, 2008a), holotype (MNHN), collected in 60-100 m, Antsotso, Madagascar, 30.9 mm.

7. *Rhombiconus imperialis* subspecies *compactus* (Wils, 1970), lectotype (ZMA) collected at Nosy Be, Madagascar, 71 mm.

8. *Darioconus pennaceus* subspecies *behelokensis* (Lauer, 1989b), holotype (MNHN), collected on the Great Coral Reef, 50 km south of Tulear, Madagascar, 48.5 mm.

9. *Darioconus madagascariensis* (G. B. Sowerby II, 1858), syntype (BMNH), Madagascar, 44 mm.

10. *Darioconus gracianus* (da Motta and Blöcher in da Motta, 1982a), holotype (MHNG), Tulear, S. W. Madagascar, 44 mm.

11. *Darioconus corbieri* (Blöcher, 1994), holotype (SMNS ZI 9115), from Salary, southwestern Madagascar, 53.9 mm.

Plate 3

1-3. *Textilia solangae* forma *flammata* Bozzetti, 2010d, (LB), collected Lavanono, southeastern Madagascar, 21 mm, 23 mm, and 27 mm, respectively.

4. *Dendroconus betulinus* forma *continua* Bozzetti, 2010d, (LB), Tuléar, southwestern Madagascar, 97.6 mm.

5. *Cylinder textile* forma *aquata* Bozzetti, 2010e, (LB), from Toliara, Madagascar, 49 mm.

6. *Cylinder textile* forma *aquata* Bozzetti, 2010e, (LB), from Toliara, Madagascar, 55 mm.

7. *Cylinder textile* forma *aquata* Bozzetti, 2010e, (LB), from Toliara, Madagascar, 55.9 mm.

8. *Cylinder textile* forma *tricincta* Bozzetti, 2010e, (LB), from Toliara, Madagascar, 34.2 mm.

9. *Cylinder textile* forma *tricincta* Bozzetti, 2010e, (LB), from Toliara, Madagascar, 37.0 mm.

10. *Cylinder textile* forma *diluta* Bozzetti, 2009, (LB), from Toliara, Madagascar, 45 mm.

11. *Dendroconus medoci* (Lorenz, 2004), (LB), from near Lavanono, southern Madagascar, 49.1 mm

12. *Dendroconus medoci* forma *armeniaca* (Bozzetti, 2009), (LB), from Tolagnaro, Madagascar, 49.1 mm

Plate 2

Plate 3

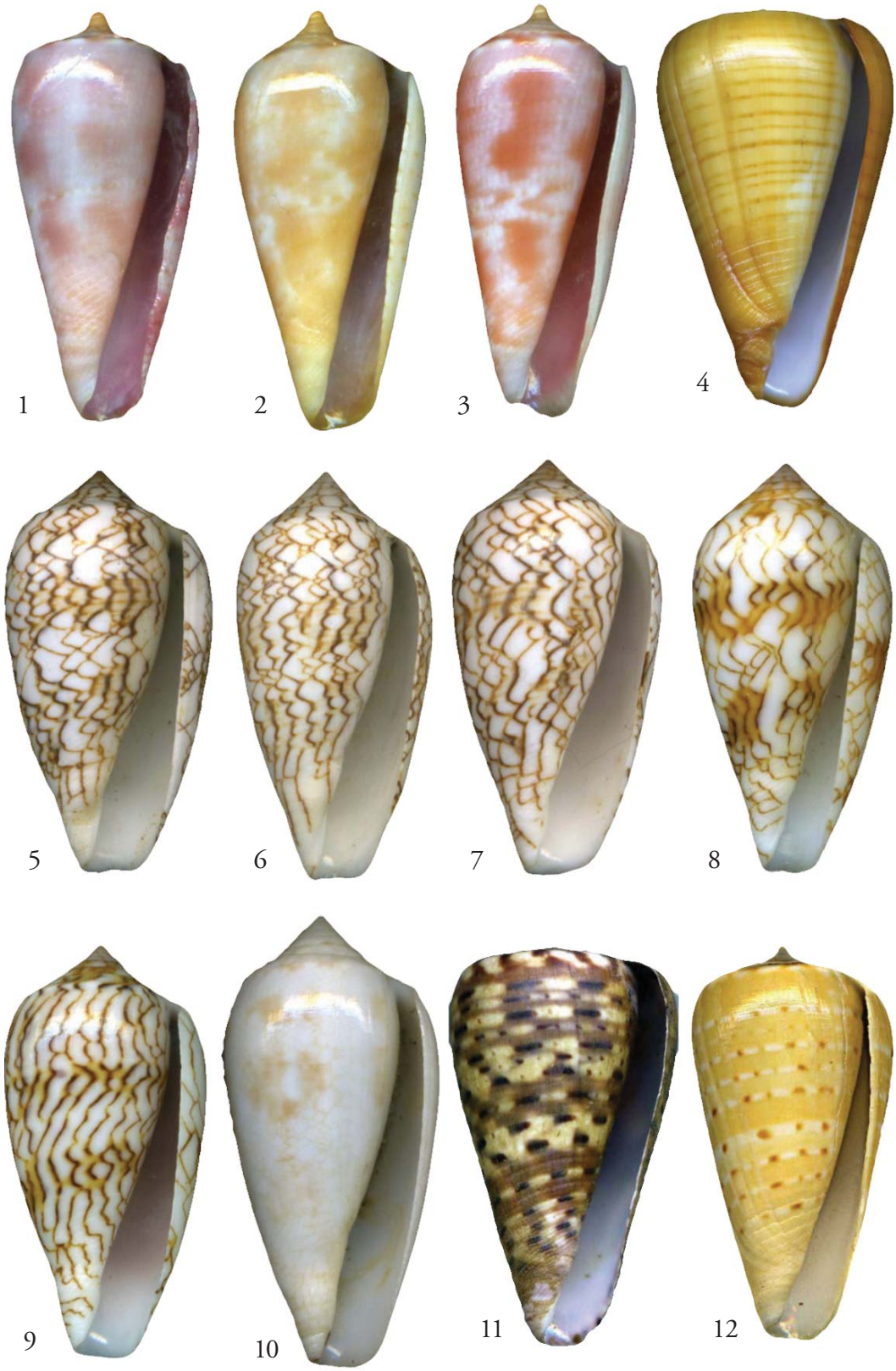

Plate 4

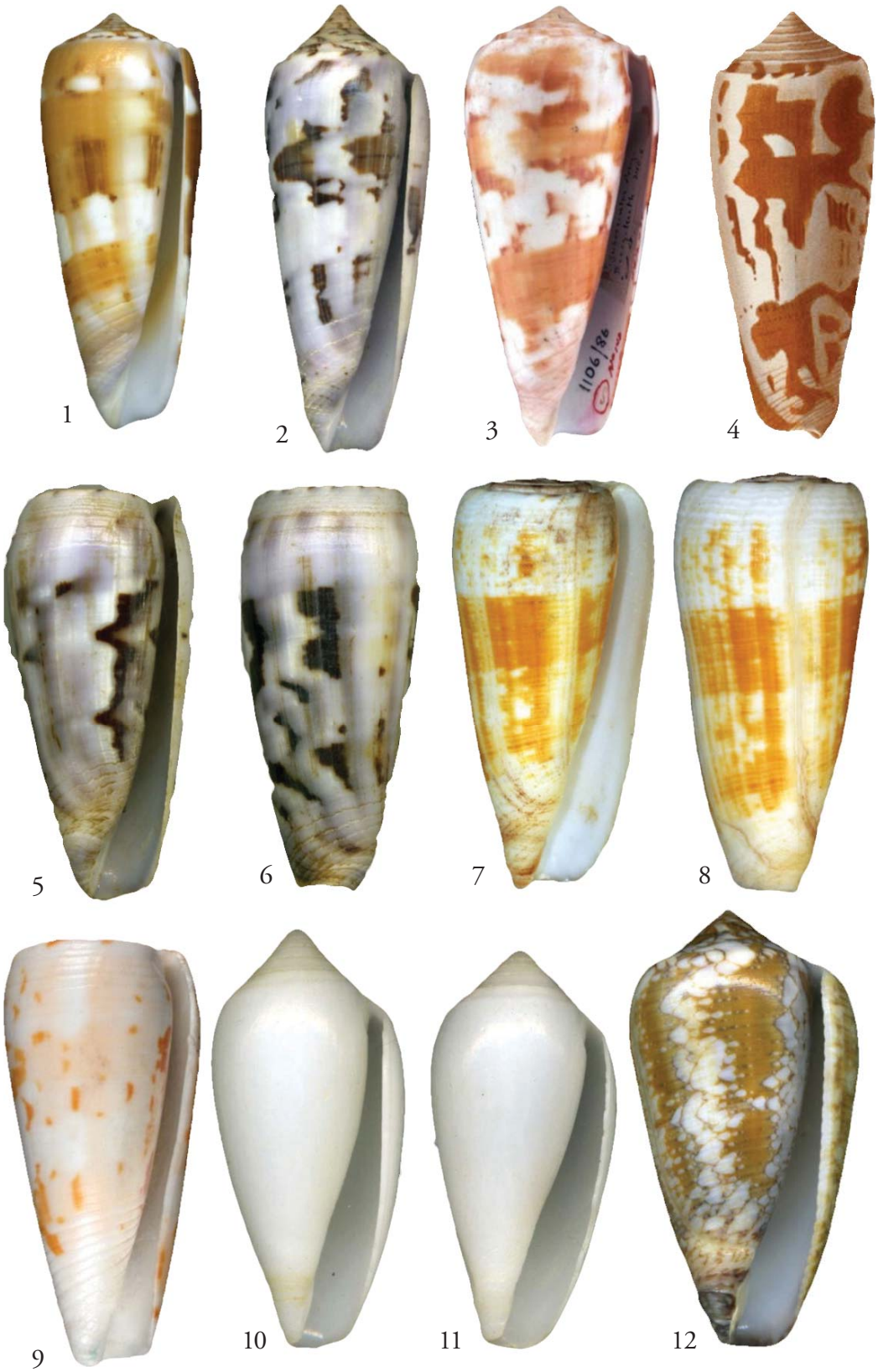

Plate 4

1. *Pionoconus gubernator* (Hwass in Bruguière, 1792), (LB), from Lavanono, Madagascar, 77 mm

2. *Pionoconus gubernator* (Hwass in Bruguière, 1792), (LB), from Mozambique Channel, southern Madagascar, 77 mm

3. *Pionoconus gubernator* (Hwass in Bruguière, 1792), lectotype (MHNG), from Asiatic Ocean, 77 mm.

4. *Pionoconus gubernator* (Hwass in Bruguière, 1792), figure of holotype of *Conus terminus* Lamarck from Kiener, 1845, Pl. 48, fig. 1d, from Asiatic Ocean, 82 mm.

5-6. *Pionoconus gubernator* (Hwass in Bruguière, 1792), (LB), the *boivini* form, from Tuléar, Madagascar, 63.1 mm.

7-8. *Pionoconus magus* (Linné, 1758), (JKT), the *boivini* form, from the Philippines, 54.8 mm.

9. *Pionoconus gubernator* (Hwass in Bruguière, 1792), holotype (MNHN) of *Conus boivini* Kiener, 1845, 61.0 mm.

10. *Cylinder biancae* (Bozzetti, 2010b), paratype (EB), from Sandravinany, southeastern Madagascar, 42.9 mm.

11. *Cylinder biancae* (Bozzetti, 2010b), holotype (MNHN), from Sandravinany, southeastern Madagascar, 40.0 mm.

12. *Darioconus pennaceus* forma *confusa* Bozzetti, 2010f, (LB), from Toliara, Madagascar, 50.5 mm.

Habitat Figures

1. "Lakana" and fishermen at Saint Luce

2. Fishermen coming back at Manantenina

3 & 4. Luigi Bozzetti looking for shells at Lavanono

5. "Lakana" (Pirogues) at Saint Luce

6. Fishermen cleaning nets at Manantenina

7. Solange Rahantooa looking for shells in a small fishermen village

8. Solange Rahantooa looking for shells at Lavanono.

9. Antandrou children offering shells at Soamanitra, near Lavanono.


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Table 1: Taxa Described with Madagascar as Their Type Locality

anosyensis Bozzetti, 2008a. *Conus*. *Malacologia Mostra Mondiale* 58:15, text-figs. 60-100 m, Antsotso, Madagascar. (Plate 2, fig. 6)

aquata Bozzetti, 2010e. *Cylinder textile* (Linné, 1758) forma. *Malacologia Mostra Mondiale* 69:8, fig. Toliara, Madagascar. An unavailable form name. (Plate 3, figs. 5-7)

armeniaca Bozzetti, 2009. *Conus medoci* Lorenz, 2004, forma. *Malacologia Mostra Mondiale* 64:12, fig. Tolagnaro, Madagascar. An unavailable form name. (Plate 3, fig. 12)

behelokensis Lauer, 1989b. *Conus pennaceus* Born, 1778, subspecies. *Rossiniana* 43:13, figs. 63a-c. Great Coral Reef, 50 km south of Tulear, Madagascar. (Plate 2, fig. 8)

biancae Bozzetti, 2010b. *Conus*. *Malacologia Mostra Mondiale* 66:15, figs. Sandravinany, southeastern Madagascar. (Plate 4, figs. 10, 11)

bonfigliolii Bozzetti, 2010c. *Endemoconus*. *Malacologia Mostra Mondiale* 68:3, figs. 30-50 m, Lavanono, southeastern Madagascar. (Plate 1, fig. 9)

chiapponorum Lorenz, 2004. *Conus*. *Visaya* 2:20, unnumbered fig. and pl. 2. Between Fort Dauphin and Lavonono, southern Madagascar. (Plate 2, fig. 1)

compactus Wils, 1970. *Conus imperialis* Linné, 1758, subspecies. *Conidae* 8:12, pl. 2, fig. 7. Nosy Be, Madagascar. (Plate 2, fig. 7)

confusa Bozzetti, 2010f. *Darioconus pennaceus* (Born, 1778) forma. *Malacologia Mostra Mondiale* 69:10, fig. Toliara, Madagascar. An unavailable form name. (Plate 4, fig. 12)

continua Bozzetti, 2010d. *Dendroconus betulinus rufoleuteus* (Bozzetti and Ferrario, 2005), forma. *Malacologia Mostra Mondiale* 68:12, fig. Tuléar, Madagascar. An unavailable form name. (Plate 3, fig. 4)

corbieri Blöcher, 1994. *Conus pennaceus* Born, 1778, subspecies. *World Shells* 10:50, figs 5-7. Salary, southwestern Madagascar. (Plate 2, fig. 11)

dautzenbergi Fenaux, 1942. *Conus*. *Bull. Inst. Océanogr*. (Monaco) 814:2, fig. 2. Madagascar.

deprehendens Prelle, 2009. *Conus*. *Malacologia Mostra Mondiale* 62 (Supplement):I, figs. Tuléar, Madagascar.

diluta Bozzetti, 2009. *Conus textile* Linné, 1758, forma. *Malacologia Mostra Mondiale* 64:12, fig. Toliara, Madagascar. An unavailable form name. (Plate 3, fig. 10)

douvillei Fenaux, 1942. *Conus*. Bull. Inst. Océanogr. (Monaco) 814:2, fig. 5. Madagascar.

flammata Bozzetti, 2010d. *Textilia solangeae* (Bozzetti, 2004), forma. *Malacologia Mostra Mondiale* 68:12, fig. Tuléar, Madagascar. An unavailable form name. (Plate 3, figs. 1-3)

frauenfeldi Crosse, 1865b. *Conus. J. Conchyliol*. 13:307, pl. 10, figs. 1, 1a. Madagascar.

gracianus da Motta and Blöcher in da Motta, 1982a. *Conus. Publ. Ocas. Soc. Port. Malac*. 1:16, figs. 15a, b. Tulear, S. W. Madagascar. (Plate 2, fig. 10)

helgae Blöcher, 1992. *Conus. Arch. Conch*. 3(3):35, pl. 3, figs. 23-27. Off Grand Récif, Tulear, southwest Madagascar.

immaculata Dautzenberg, 1906. *Conus betulinus* Linné. 1758, variety. *J. Conchyliol*. 54:27. Amboifoutra, east coast of Ste. Marie Island, Madagascar.

jeanduvali Bozzetti, 2010d. *Pionoconus barthelemyi* (Bernardi, 1861b) forma. *Malacologia Mostra Mondiale* 68:13, fig. 60-80 m, Maldives. An unavailable form name.

lozeti Richard, 1980. *Conus* (*Leptoconus*). *Cahiers Indo-Pacifique* 2(1):9, figs. 1-4. 100-120 m, Fort-Dauphin, southeast of Madagascar. (Plate 1, figs. 5-8)

lucasi Bozzetti, 2010c. *Textilia*. *Malacologia Mostra Mondiale* 68:4, figs. 30-50 m, Lavanono, southeastern Madagascar. (Plate 2, fig. 2)

madagascariensis G. B. Sowerby II, 1858. *Conus. Thes. Conch*. 3(*Conus*), pt. 18:43, pl. 24, fig. 582. Madagascar. (Plate 2, fig. 10)

medoci Lorenz, 2004. *Conus*. *Visaya* 2:19, unnumbered fig. and pl. 1. Vicinity of Lavonono, extreme southern Madagascar. (Plate 1, fig. 10; Plate 3, fig. 11)

nisus Kiener, 1845. *Conus*. *Iconogr. Coq. Viv*. 2:217, pl. 59, fig. 4. Madagascar.

olgiatii Bozzetti, 2007. *Conus*. *Malacologia Mostra Mondiale* 54(1):16, figs. 5-10 m, Toliara, Madagascar. (Plate 1, fig. 11)

ponderosa Dautzenberg, 1932. *Conus textile* Linné, 1758, variety. *J. Conchyliol*. 76:16. St. Marie Island, Madagascar.

richardi Fenaux, 1942. *Conus*. Bull. Inst. Océanogr. (Monaco) 814:4, fig. 11. Madagascar.

rufoluteus Bozzetti and Ferrario, 2005. *Conus betulinus* Linné, 1758, subspecies. *Visaya* 4:54, pl. 3. Tuléar, southwestern Madagascar. (Plate 2, fig. 4)

sartii Korn, Niederhöfer and Blöcher, 2001. *Conus*. *La Conchiglia* 33(301):35, figs. 1a, b, 2a, b, 3. Off Tulear, Madagascar.

simonis Bozzetti, 2010a. *Conus*. *Malacologia Mostra Mondiale* 66:11, figs. Tolagnaro, southeastern Madagascar. (Plate 2, fig. 5)

sirventi Fenaux, 1943. *Conus*. *Bull. Inst. Océanogr.* (Monaco) 834:4, fig. 10. Madagascar.

solangeae Bozzetti, 2004. *Conus*. *Malacologia Mostra Mondiale* 43:13, 7 text-figs. Lavanono, Southern Madagascar. (Plate 2, fig. 3)

subacutus Fenaux, 1942. *Conus*. *Bull. Inst. Océanogr*. (Monaco) 814:4, fig. 10. Madagascar.

superscriptus G. B. Sowerby III, 1877. *Conus*. *Proc. Zool. Soc. Lond*. 1876:753, pl. 75, fig. 4. Madagascar.

tigrinus G. B. Sowerby II, 1858. *Conus*. *Thes. Conch*. 3(*Conus*), pt. 18:41, pl. 23, fig. 569. Madagascar.

tricincta Bozzetti, 2010e. *Cylinder textile* (Linné, 1758) forma. *Malacologia Mostra Mondiale* 69:8, fig. Toliara, Madagascar. An unavailable form name. (Plate 3, figs. 8 & 9)

tsara Korn, Niederhöfer and Blöcher, 2000. *Conus pennaceus* Born, 1778, subspecies. *Stuttgart. Beitr. Naturk*., ser. A (Biol.) 610:4, pl. 1, figs. 1-9. Fort Dauphin, Taolañaro, SE Madagascar.

vezoi Korn, Niederhöfer and Blöcher, 2000. *Conus pennaceus* Born, 1778, subspecies. *Stuttgart. Beitr. Naturk*., ser. A (Biol.) 610:20, figs. 3-7, pl. 2, figs. 1-9. 25 km south of Pointe Beheloka south of Toliara, SW Madagascar.

Three other species that might have been described from Madagascar.

boivini Kiener, 1845. *Conus. Iconogr. Coq. Viv*. 2:282, pl. 64, fig. 2. Not stated. (Plate 4, figs. 5-9)

gubernator Hwass in Bruguière, 1792. *Conus*. *Enc. Mèth*. 1:772, pl. 340, figs. 4-6. (Plate 4, fig. 3)

terminus Lamarck, 1810. *Conus*. *Ann. Mus. Natl. Hist. Nat*. 15:426. Indian Ocean. (Plate 4, fig. 4)

Table 2: Cone shells that occur in Madagascar listed in Röckel et al. (1995) or more recently reported from Madagascar elsewhere.

For references and supraspecific classification consult Tucker & Tenorio (2009).

achatinus Gmelin, 1791
acutangulus Lamarck, 1810
angioiorum Röckel and Moolenbeek, 1992
anosyensis Bozzetti, 2008a
araneosus araneosus [Lightfoot], 1786
arenatus Hwass in Bruguière, 1792
articulatus G. B. Sowerby II, 1873
artoptus G. B. Sowerby II, 1833
augur [Lightfoot], 1786
aulicus Linné, 1758
aureus paulucciae G. B. Sowerby III, 1877
auricomus Hwass in Bruguière, 1792
balteatus G. B. Sowerby II, 1833
bandanus Hwass in Bruguière, 1792
bayani Jousseaume, 1872
betulinus betulinus Linné, 1758
betulinus rufoluteus Bozzetti and Ferrario, 2005
biliosus meyeri Walls, 1979
bonfigliolii Bozzetti, 2010c
bullatus Linné, 1758
canonicus Hwass in Bruguière, 1792
capitaneus Linné, 1758
catus Hwass in Bruguière, 1792
cavailloni Fenaux, 1942
chaldaeus Röding, 1798
chiapponorum Lorenz, 2004
circumactus Iredale, 1929a
collisus Reeve, 1849
consors G. B. Sowerby II, 1833
coronatus Gmelin, 1791
crocatus Lamarck, 1810
cylindraceus Broderip and G. B. Sowerby I, 1830
distans Hwass in Bruguière, 1792
ebraeus Linné, 1758
eburneus Hwass in Bruguière, 1792
elokismenos Kilburn, 1975b
episcopatus da Motta, 1982a
eugrammatus Bartsch and Rehder, 1943 w/query
figulinus Linné, 1758
flavidus Lamarck, 1810
floridulus A. Adams and Reeve, 1848
geographus Linné, 1758
glans Linné, 1758
gracianus da Motta and Blöcher in da Motta, 1982a
gubernator gubernator Hwass in Bruguière, 1792
possible subspecies
gubernator terminus Lamarck, 1810
helgae Blöcher, 1992
imperialis Linné, 1758
iodostoma Reeve, 1843
janus Hwass in Bruguière, 1792
kinoshitai Kuroda, 1956
legatus Lamarck, 1810
leopardus Röding, 1798
litoglyphus Hwass in Bruguière, 1792
litteratus Linné, 1758
lividus Hwass in Bruguière, 1792
locumtenens Blumenbach, 1791
lozeti Richard, 1980
lucasi Bozzetti, 2010c
magus Linné, 1758 w/query
maldivus Hwass in Bruguière, 1792
martensi E. A. Smith, 1884
medoci Lorenz, 2004
miles Linné, 1758
miliaris Hwass in Bruguière, 1792
milneedwardsi Jousseaume, 1894
moreleti Crosse, 1858a
muriculatus G. B. Sowerby II, 1833
mustelinus Hwass in Bruguière, 1792
namocanus Hwass in Bruguière, 1792
nanus G. B. Sowerby II, 1833
nimbosus Hwass in Bruguière, 1792
nucleus Reeve, 1848

nussatella Linné, 1758
obscurus G. B. Sowerby II, 1833
olgiatii Bozzetti, 2007
omaria Hwass in Bruguière, 1792
parvatus Walls, 1979
pennaceus Born, 1778
subspecies or color forms
pennaceus behelokensis Lauer, 1989b
pennaceus corbieri Blöcher, 1994
pennaceus praelatus Hwass in Bruguière, 1792
pennaceus tsara Korn, Niederhöfer and Blöcher, 2000
pennaceus vezoi Korn, Niederhöfer and Blöcher, 2000
pertusus Hwass in Bruguière, 1792
praecellens A. Adams, 1855a
quercinus [Lightfoot], 1786
rattus Hwass in Bruguière, 1792
retifer Menke, 1829
sanguinolentus Quoy and Gaimard, 1834
sazanka Shikama, 1970a
simonis Bozzetti, 2010a
solangeae Bozzetti, 2004
sponsalis Hwass in Bruguière, 1792
striatellus Link, 1807
striatus Linné, 1758
sukhadwalai Röckel and da Motta, 1983a
suratensis Hwass in Bruguière, 1792 w/query
tenuistriatus G. B. Sowerby II, 1858
teramachii Kuroda, 1956
terebra Born, 1778
tessulatus Born, 1778
textile Linné, 1758
color forms
textile archiepiscopus [Lightfoot], 1786
textile concatenatus Kiener, 1845
textile corbula G. B. Sowerby II, 1858
textile loman Dautzenberg, 1937
textile pyramidalis Lamarck, 1810
textile scriptus G. B. Sowerby II, 1858
textile sirventi Fenaux, 1943
tulipa Linné, 1758
varius Linné, 1758
vexillum vexillum Gmelin, 1791
violaceus Gmelin, 1791
virgo Linné, 1758
zeylanicus Gmelin, 1791

This list does not include form names. For those consult the text and Table 1.

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Bozzetti, L. 2007. *Conus olgiatii* (*Gastropoda: Prosobranchia: Conidae*) nuova specie dal Madagascar Sud-Occidentale. *Malacologia Mostra Mondiale* 54(1):16-17

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Bozzetti, L. 2010a. *Conus simonis* (*Gastropoda: Prosobranchia: Conidae*) a new species from southeastern Madagascar. *Malacologia Mostra Mondiale* 66:11-12.

Bozzetti, L. 2010b. *Conus biancae* (*Gastropoda: Prosobranchia: Conidae*) a new species from southeastern Madagascar. *Malacologia Mostra Mondiale* 66:15-16.

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The Forgotten *Jaspidiconus*

John K. Tucker

Some time ago I reviewed most of the species of West Atlantic cone shells in TCC 14A. After that was published, I realized that I had forgotten to include *Jaspidiconus henckesi* (Coltro, 2004). This was simply a lapsus. I actually had the plate prepared. I think it is appropriate to quickly review this species.

Jaspidiconus henckesi (Coltro, 2004) occurs off Brazil and when first described met with some doubt. Most of the specimens available to collectors are dead when collected. Likely the color patterns will be brighter in live-collected specimens. The specimens that I figure (Figs. 1-3) were collected dead.

This species seems always to have spiral rows of pustules that are perched on top of 10 or so spiral ridges. The shoulder is undulating or nodulose. The species seems to be a valid species of *Jaspidiconus* with a limited distribution off Brazil.

There has been some confusion with other pustulose specimens of the various species of *Jaspidiconus*. Although *J. henckesi* always are pustulose, most other species of *Jaspidiconus* have smooth and pustulose variants in populations. I think this variation represents a case of polymorphism or individual variation and is not biologically recognizable either a distinct species or subspecies. This does not mean that they are not collectable.

The northern subspecies of *Jaspidiconus jaspideus* (Gmelin, 1791), or *Jaspidiconus jaspideus pealii* (Green, 1830), has two common variants both of which are sometimes accorded nomenclatural status. One is the form *branhamae* Clench, 1953. These specimens represent a growth stage (see Tucker 2010) and consist of fairly large specimens whose shells take on an unusual appearance due to a flattening of the body between the shoulder and anterior end to just anterior to the midbody region (Fig. 4 & 5). The shell shape comes to resemble that of *J. henckesi* (Figs. 1-3). Another morph that is common in populations of *J. jaspideus pealii* is the *verrucosus* (Hwass in Bruguière, 1792) form (Figs. 7 & 8). Again this is another morph that has spiral rows of pustules on the teleoconch whorl and undulations or nodules along the shoulder angle. Similar morphs also occur in *J. j. jaspideus* (Gmelin, 1791) (Fig. 6) and in *J. m. mindanus* (Hwass in Bruguière, 1792) (Fig. 9).

I hope this short note helps readers who are wondering what happened to *J. henckesi*. It was a simple failure to communicate.

Figures

1. JKT 3477 *Jaspidiconus henckesi* (Coltro, 2004), 20.3 mm, Brazil, Bahia Province, diver on reef

2. JKT 3477 *Jaspidiconus henckesi* (Coltro, 2004), 17.0 mm, Brazil, Bahia Province, diver on reef

3. JKT 3477 *Jaspidiconus henckesi* (Coltro, 2004), 17.0 mm, Brazil, Bahia Province, diver on reef

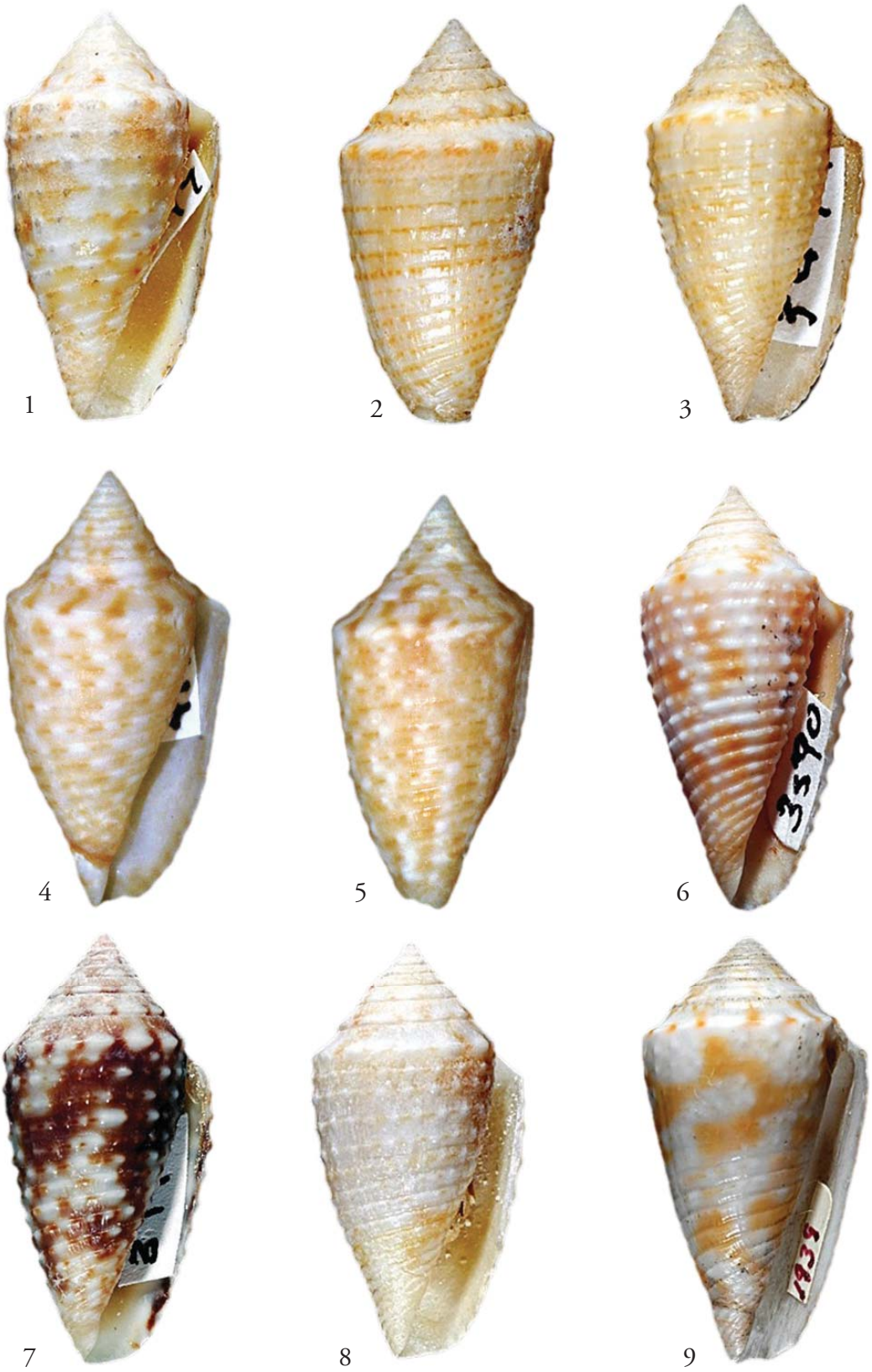
4-5. JKT 4190 *Jaspidiconus jaspideus pealii* (Green, 1830), 19.5 mm, sand in 3-5 feet, snorkel, 1988, Marathon, Florida Keys, ventral and dorsal views. Form *branhamae* Clench, 1953

6. JKT 3590 *Jaspidiconus jaspideus jaspideus* (Gmelin, 1791), 16.9 mm, Honduras, night scuba 18 m, rubble, Isla de Roatan, Islas de la Bahia

7. JKT 3197 *Jaspidiconus jaspideus pealii* (Green, 1830), 18.2 mm, Bahamas, Abaco Cays, snorkeling at 6-10 feet, in sand, summer 2002. Form *verrucosus* Hwass in Bruguière, 1792

8. JKT 3200 *Jaspidiconus jaspideus pealii* (Green, 1830), 17.8 mm, Bahamas, Abaco Cays, in 6-10 feet in sand, Summer, 2002. Form *verrucosus* Hwass in Bruguière, 1792.

9. JKT 1938 *Jaspidiconus mindanus mindanus* (Hwass in Bruguière, 1792), 29.0 mm, St. Croix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New Publications

Edward J. Petuch & Mardie Drolshagen, *Compendium of Florida Fossil Shells, Volume 1* (Middle Miocene to Late Pleistocene Marine Gastropods, families *Strombidae*, *Cypraeidade*, *Ovulidae*, *Eocypraeidae*, *Triviidae*, *Conidae* and *Conilithidae*). MdM Publishing, Florida, U.S.A., 2011

The South of Florida is well known to be particularly rich in fossils, many of them excellently preserved, sometimes even showing original pattern. As a matter of fact, the diversity of forms in the local Miocene to Pleistocene period can be said to be not inferior to the modern day fauna of the South Pacific. Most of the species found in the area – and even some of its genera – are unique.

Considering macro-mollusks only (shells over 5 mm in length), more than 1500 different species have been described, including over 100 species of *Cypraeidae*, 160 of *Muricidae* and 100 of *Conidae*!

The *Compendium of Florida Fossil Shells* is planned as a six-volume set, of which the first has just been published by Bob Janowsky's well known MdM Publishing firm. It is already available in DVD format and a paper edition is expected any day now. This first volume includes descriptions of 119 new species and subspecies, as well as of 16 new genera and subgenera, and it is estimated that subsequent volumes will present at least 300 new species.

The first author, Dr. Edward Petuch, is well known as expert and author of papers on Cones and also on Florida fossils, while the second author is an accomplished photographer who has developed a special technique that greatly enhances the specimens shown.

When it comes to Cones, here is the list of taxa described as new in the present volume:

New Species & Subspecies

Conidae

Contraconus arlinei Petuch & Mardie Drolshagen, 2011 (named for Jonathan Arline)
Contraconus tryoni brantleyi Petuch & Mardie Drolshagen, 2011 (named for the late D. L. Brantley)
Osceolaconus buckinghamensis Petuch & Mardie Drolshagen, 2011 (named for the Buckingham Member of the Tamiami Formation)
Osceolaconus matchetti Petuch & Mardie Drolshagen, 2011 (named for Eddie Matchett
Lindaconus ductor Petuch & Mardie Drolshagen, 2011 ("Ductor", "Leader" in Latin, in reference to the new species being the oldest-known of its genus)
Lindaconus swearingeni Petuch & Mardie Drolshagen, 2011 (named for Clifford Swearingen)
Lindaconus tuckeri Petuch & Mardie Drolshagen, 2011 (named for John Tucker)
Fenestraconus yaquensis myakka Petuch & Mardie Drolshagen, 2011 (named for the Myakka Indians and for the Myakka River, which flows through the Sarasota area)

Calusaconus weisbordi Petuch & Mardie Drolshagen, 2011 (named for Dr. Norman Weisbord)
Calusaconus manueli Petuch & Mardie Drolshagen, 2011 (named for Dr. Manuel Tenorio (Spain))
Calusaconus basingerensis Petuch & Mardie Drolshagen, 2011 (named for Fort Basinger, Highlands County, Florida, the type locality)
Calusaconus spuroides charnyi Petuch & Mardie Drolshagen, 2011 (named for Gary Charny)
Seminoleconus schnireli Petuch & Mardie Drolshagen, 2011 (named for Brian Schnirel)
Seminoleconus lybrandi Petuch & Mardie Drolshagen, 2011 (named for M. Todd Lybrand)
Seminoleconus waldroni Petuch & Mardie Drolshagen, 2011 (named for Herbert Waldron)
Seminoleconus okeelantensis Petuch & Mardie Drolshagen, 2011 (named for Okeelanta and the Okeelanta Sugar Corporation, Palm Beach County, the type locality)
Purpuriconus briani Petuch & Mardie Drolshagen, 2011 (named for Brian N. Petuch)
Purpuriconus erici Petuch & Mardie Drolshagen, 2011 (named for Eric A. Petuch)
Purpuriconus jenniferae Petuch & Mardie Drolshagen, 2011 (named for Jennifer A. Petuch)
Kohniconus cannoni Petuch & Mardie Drolshagen, 2011 (named for Hugh Cannon)
Kohniconus stowelli Petuch & Mardie Drolshagen, 2011 (named for Dr. Christopher Huntington Stowell III)
Kohniconus delessertii bermontianus Petuch & Mardie Drolshagen, 2011 (named for the Bermont Formation)
Gradiconus fortdrumensis Petuch & Mardie Drolshagen, 2011 (named for the town of Fort Drum, Okeechobee County, Florida, the type locality of the new species)
Gradiconus hunterae Petuch & Mardie Drolshagen, 2011 (named for Muriel Hunter)
Gradiconus immokaleensis Petuch & Mardie Drolshagen, 2011 (named for the Immokalee Reef Tract of the Pliocene Everglades Pseudoatoll, the habitat of the new species)
Gradiconus roachi Petuch & Mardie Drolshagen, 2011 (named for Robert Roach)
Gradiconus bartoni Petuch & Mardie Drolshagen, 2011 (named for the late Matthew Barton)
Gradiconus desotoensis Petuch & Mardie Drolshagen, 2011 (named for DeSoto County, Florida)
Gradiconus anabathrum bellegladeensis Petuch & Mardie Drolshagen, 2011 (named for the Belle Glade Member of the Bermont Formation, and the city of Belle Glade, Palm Beach County, Florida)
Gradiconus anabathrum holeylandicum Petuch & Mardie Drolshagen, 2011 (named for the Holey Land Wildlife Management Area of extreme southwestern Palm Beach County, Florida)
Dauciconus collierensis Petuch & Mardie Drolshagen, 2011 (named for Collier County, Florida)
Eugeniconus janowskyi Petuch & Mardie Drolshagen, 2011 (named for Robert Janowsky)
Virgiconus antonioi Petuch & Mardie Drolshagen, 2011 (named for António Monteiro (Portugal), editor of *The Cone Collector* online magazine and expert on the *Conidae* of the Cape Verde Islands)
Virgiconus arcadiensis Petuch & Mardie Drolshagen, 2011 (named for the city of Arcadia, DeSoto County, Florida)

Conilithidae

Jaspidiconus fruitvillensis Petuch & Mardie Drolshagen, 2011 (named for the town of Fruitville, Sarasota County, site of the type locality of the new species)
Perplexiconus williamsonae Petuch & Mardie Drolshagen, 2011 (named for Jennifer Williamson)
Perplexiconus alligator Petuch & Mardie Drolshagen, 2011 ("Alligator", named in reference to the new rough-textured species' resemblance to alligator skin)

New Genera

Osceolaconus new genus (*Conidae*) (Type Species: *O. osceolai*)
Fenestraconus new genus (*Conidae*) (Type Species: *F. yaquensis*)

The new genus *Tenorioconus* is also proposed for the members of the "*Conus*" *cedonulli* Linnaeus, 1767 species complex of the Recent southern Caribbean region. This was necessary since these have been incorrectly placed in the extinct genus *Seminoleconus* in recent publications (see the section on *Seminoleconus* in Chapter 5).

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Pereira, C. M., Rosado, J., Seabra, S. G., Pina-Martins, F., Paulo, O. S. and Fonseca, P. J. (2010) "*Conus pennaceus*: a phylogenetic analysis of the Mozambican molluscan complex", *African Journal of Marine Science*, 32: 3, 591 — 599. *http://www.nisc.co.za*

More and more the study of DNA is used in trying to understand the affinities or otherwise of populations of Cones. This recent article supplies new information on the "*pennaceus*" complex. First author Carla Pereira send in the following summary:

Conus pennaceus Born, 1778: a case of a wide morphological diversity.

My first introduction to the genus *Conus* Linnaeus, 1758 was with the species *Conus pennaceus*. I knew nothing about this genus (or species) but soon became part of the group of admirers. Who does not recollect finding every sort of shell on the beach throughout childhood and feeling astonished by its amazing shapes and colors?!

Just as any other species of this genus, *Conus pennaceus* presents a great morphological variety that seems to dazzle both scholars and lay people. In spite of its wide geographic distribution (mainly every country bathed by the Pacific and Indian oceans), the greatest morphological diversity seems to occur only in Mozambique and Hawaii.

In Mozambique, local malacologists allege that it is possible to establish a link between each morph and the geographical location where it was captured. Moreover, they also distinguish two morphs (or forms) in the North of Mozambique, the Pemba form and the Nacala form, which contradicts the old belief of a sole form in the entire region. Further entropy arises when taking into consideration the high number of species described as distinct by some authors but acknowledged as synonymous species of *Conus pennaceus* by other authors. *Conus praelatus*, *Conus elisae* and *Conus lohri* are examples of such species and the latter is believed to be the same form as the *C. pennaceus bazarutensis*. It is no wonder that this species is generally acknowledged as the *pennaceus* complex.

To understand this complexity, a phylogenetic study was conducted with a small number of specimens captured along the Mozambican coast: Pemba form, Nacala form, *C. p. bazarutensis*, *C. lohri* and *C. praelatus*. The results of this study were surprising, not only for the weak distinction between the assessed synonymous species and the forms of this complex but also for the clusters obtained, of which some are more geographic-related (Pereira et al, 2010). These results suggested that not every morphological description used to distinguish the species is genetically supported, therefore revealing the importance of conciliating as much information as possible when classifying the species.

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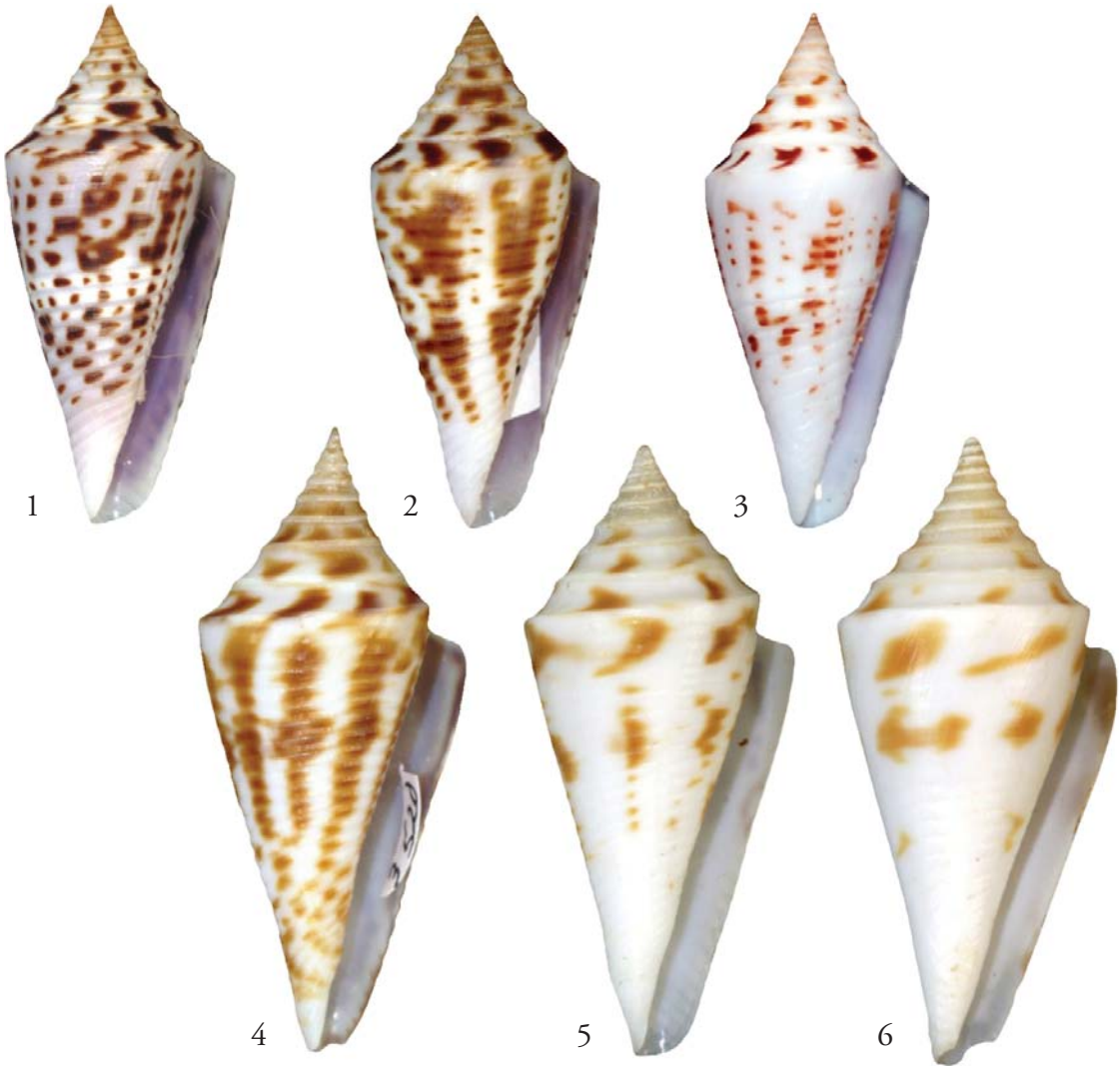
John K. Tucker & Manuel J. Tenorio, New Species of *Gradiconus* and *Kohniconus* from the Western Atlantic (*Gastropoda: Conoidea: Conidae, Conilithidae*), *Miscellanea Malacologica* 5(1): 1-16, 14.IV.2011

In this recent article, the authors describe *Gradiconus ostrinus* sp. nov. (from East Panama) and *Kohniconus janowskyae* sp. nov. (Colombia and Yucatan, Mexico). The former is compared with *G. portobeloensis* (Petuch, 1990), *G. ernesti* (Petuch, 1990), *G. gibsonsmithorum* (Petuch, 1986), *G. tristensis* (Petuch, 1987), *G. regularis* (Sowerby II, 1933), *G. recurvus* (Broderip, 1833) and *G. dispar* (Sowerby II, 1933), whereas the latter is compared with *K. arcuatus* (Sowerby, 1829), *Conasprelloides villepinii* (Fischer & Bernardi, 1857), *K. ambonos* (Hoerle, 1976)(Miocene fossil), *K. drezi* (Hoerle, 1976) (Miocene fossil), and *K. dodona* (Gardner,1938)(Miocene fossil), *K. patstreami* (Petuch, 1994))(Miocene fossil), *K. centurio* (Born, 1778), *K. delessertii* (Recluz, 1843), *Conus borneensis* A. Adams & Reeve, 1848, *Yeddoconus boholensis* (Petuch, 1979).

Figures

1-3 *Gradiconus ostrinus* Tucker & Tenorio, 2011
1. holotype, 29.6 mm; 2. paratype 1, 24.4 mm; 3. paratype 2, 27.7 mm

4-6 *Kohniconus janowskyae* Tucker & Tenorio, 2011
4. holotype, 36.1 mm; 5. paratype 1, 37.0 mm ; 6. paratype 2, 38.6 mm



Conus zonatus

Jon F. Singleton

Conus zonatus is a very distinctive species, and easily recognizable with its striking black and white pattern. There are also some fine reddish horizontal lines, and sometimes with inter-spaces which can form a brixk wall pattern. The species is represented by a lectotype size 57 × 32 mm, and has a type locality of Asiatic Ocean. Today we know the range to be across the northern Indian Ocean, from Sri Lanka to N. W. Australia.

Surprisingly, *C. zonatus* was amongst the first group of Indian Ocean cones I ever collected. It was my first voyage into the Indian Ocean, and my ship anchored in Trincomalee Harbour on the eastern coast of Sri Lanka, for a few days. I went a few kilometres north and found a good reef for some shelling. The common Indian Ocean shells were quickly found, and I came across some large rather grotty looking cones. I must have sighted some 30 plus specimens. Despite being alive, they were in poor condition, most likely due to their reef-top habitat. Most had lost their periostracum, and were scarred and pitted. The black and white pattern was always visible and I was surprised to see the living animal had a pinkish foot with some fine black line markings, and the siphon a pale red. After another check over the area, I finally chose six specimens to take home.

A few days later I was able to identify my black and white cones from the old *Handbook for Shellers*, which was my one and only shell book at the time. I thought after seeing so many, it was a reasonably common cone, but it was to be another 20 years before I ever found another in the southern Maldives.

Although all my finds were in shallow water, *C. zonatus* is found in much deeper waters. I have one specimen from a very reliable source who trawled it at a depth of 70 metres in the Malacca Straits.

The illustrated specimens range in length from 46 to 70 mm.

Reference

1948. W. F. Webb, *Handbook for Shell Collectors* (revised edition).

Live Cones from New Caledonia (2)

A new series of photos of live Cones from New Caledonia, sent by our friend Thierry Vulliet.

Conus arenatus

Conus glans

Conus imperialis

Conus ferrugineus

Conus frigidus

Conus ferrugineus

Conus geographus

Conus geographus

Conus arenatus

Conus leopardus

Comments About: TCC #16

From Mike Filmer

Dear Rich,

I read with great interest your excellent article on *C. auratinus* & *C. aulicus*.

I agree with all your comments on the differences between the two species. I believe there is another observable difference that is that *C. auratinus* never has the larger tents often but not always found on *C. aulicus* except in the form *gracianus*. As a matter of interest you do not mention *gracianus* at all – is this because it is confined to the Southern Indian Ocean ?

Richard Goldberg Replies

Hi Mike,

Thank you very much for writing. I very much appreciate your comments and supplemental information on *C. auratinus*.

I knowingly avoided discussion of *Conus gracianus*, as you say, since it is limited to the Indian Ocean. I felt my primary emphasis needed to be differentiating between the two species that are most often confused (*auratinus* & *aulicus*) and also that co-exist in the Pacific, while confirming localities. I have seen the name *C. auratinus* applied to *Conus aulicus* specimens so often that writing the article was as much of a catharsis for me as it was to put some definition on just what is *Conus auratinus*!

I also avoided discussion about the differences of the tented pattern since I was having trouble nailing down a good explanation. Much like the extension (or lack of) the siphonal fasciole, it seems to be consistent in *auratinus* yet not 100% in *aulicus*. *C. auratinus* seems to come in a wide variety of patterns based on the specimens in Emilio's collection, which was somewhat surprising to me. In hindsight I should have tackled the tenting characteristic to have a more complete discussion.

I appreciate having the data for your specimens of *C. auratinus*. I met Bob da Motta back in the early 1980's when he was passing through New York City where I used to live. We had corresponded for many years and he was one of the greatest influences on my interest in Cones. Interestingly, I have a rather lengthy professionally produced television interview with Bob that I conducted back around 1983. I need to convert it from video tape and upload it to my Web site. It is quite interesting and really gives a solid perspective on Bob's *Conidae* philosophy.

Thanks again Mike for weighing in on the article. I truly appreciate your interest and support.

From Mike Filmer

I have done some more research into *C. superstes* and note that Hedley mentions a likeness to a fossil *C. convexus* Harris, 1897 described as Eocene from Meribee Plains, Victoria. I have not seen this species nor have I seen its description.

I have called the 8.5 mm specimen in the South Australian Museum the holotype because of the way Hedley described "The Shell" which suggests he was studying only one specimen. However there are more specimens in the type material, Hedley mentions several specimens under Habitat, Röckel, Korn & Kohn (appendix 1 no.6) also refer to the syntypes and therefore it is probably better to describe them all as syntypes.

I note that Tucker & Tenorio place both *C. superstes* and *C. convexus* in Genus *Endemeconus*. Although mentioned in both the index and the text under *Endemeconus*, *C. superstes* is not listed under either Congeners or Fossil species, presumably because they were unable to identify it.

From John Tucker

This was a really good issue.

About the little cones in Remy Devorsine's piece, I think numbers 1, 2, 3, & 4 are probably all *Pionoconus magus*. I think # 5 is a juvenile *Rhizoconus rattus*.

I noted there were no captions for figs. 11 & 12. I would place 11 as a *Puncticulis pulicarius* or even P. arenatus and 12 is *Conus* but could be *C. marmoreus* or *C. bandanus*. [Please see Errata in the present number. Ed.]

I liked your article on *iodostoma*. It is another variable one like *janus*, *neptunus*, etc.

Finally I also liked Richard Goldberg's article on *aulicus* and *auratinus*. This is the first article that I have read that made sense of these two and did not read like stereo instructions.

Errata to: TCC #16

A number of errors crept into the pages of our previous number. Here are the corrections, with thanks to the authors and other readers who pointed them out:

Page 21

Captions of the Figures:

Instead of
"1 & 2 - Habitat of *C. legatus*"

it should read
"1 & 2 - Habitat of *C. legatus* at the Seychelles"

Instead of
"8-23 - *C. legatus* (cleaned specimens)"

it should read
"8-14 - *C. legatus* (cleaned specimens) from French Polynesia"
"15-23 - *C. legatus* (cleaned specimens) from the Seychelles"

Sizes of the specimens shown:

Number & Size (mm)

8	22.6	16	31.7
9	25.0	17	43.3
10	25.6	18	52.4
11	17.6	19	57.2
12	29.0	20	57.4
13	33.4	21	57.6
14	36.9	22	29.9
15	28.9	23	31.7

Page 40

The caption "*augur*" in the first specimen in the top row is wrong and the others are missing. Captions should be as follows:

Top row (left to right): *floridulus*, *ebraeus*, *lenavati*, *mustelinus*

Middle row (left to right): *parvatus*, *sponsalis*

Bottom row (left to right): *marmoreus*, *quercinus*, *sulcatus*, *bandanus*

Pages 62-69

The identifications of the species illustrated are missing.

Page 62 (top to bottom): *C. artoptus* Sowerby, 1833; *C. coccineus* Gmelin, 1791

Page 63 (top to bottom): *C. capitaneus* Linnaeus, 1758; *C. coccineus* Gmelin, 1791

Page 64 (top to bottom): *C. coronatus* Gmelin, 1791; *C. ebraeus* Linnaeus, 1758

Page 65: *C. eburneus* Hwass, 1792

Page 66: *C. emaciatus* Reeve, 1849

Page 67 (top to bottom): *C. emaciatus* Reeve, 1849; *C. episcopatus* da Motta, 1982

Page 68 (top to bottom): *C. lividus* Hwass, 1792; *C. marmoreus* Linnaeus, 1758

Page 69 (top to bottom): *C. marmoreus* Linnaeus, 1758, form *suffusus* Sowerby, 1870; *C. episcopatus* da Motta, 1982

Page 70

Right column, line 11, instead of "*R. quecketti*" it should read "R. queketti"

Correction to TCC #14A

Our friend Arnold Zandbergen hás sent in a correction to John Tucker's article published in TCC #14A. John, by the way, fully agrees.

On Figure 2 (*daucus* types), the captions are mixed up.

Instead of

A – *worki*
B – *boui*
C – *norai*
D – *riosi*

they should read

A – *worki*
B – *norai*
C – *riosi*
D – *boui*

A New Meeting on the Horizon

Last October, the 1st International Cone Meeting held in Stuttgart, Germany, was a big success and we can – without undue immodesty – quote Dieter Röckel's qualification of the event as an "historical meeting". As a matter of fact, many scientific reunions are held worldwide quite regularly and many shell shows and similar gatherings take place every year, often commanding large attendances. But I feel that it is safe to say that this was the first time that both collectors and professional researchers got together to share information about a specific molluscan family. Our aim was twofold: to spend a pleasant weekend discussing and examining Cones and to learn something about our favourite group of shelled mollusks. I think we were successful on both accounts.

Already in Stuttgart members of the Organizing Committee were approached by participants asking about date and location for a second similar meeting, which was most rewarding. A few suggestions were discussed there and then, but of course we felt that it was a bit too soon to make any decisions.

More recently, however, I was in touch with Prof. Georges Richard and Michaël Rabiller, from the Muséum d'Histoire Naturelle of La Rochelle, France and they kindly prepared a detailed dossier explaining the many and quite enticing possibilities of La Rochelle for hosting our 2nd Meeting. Their arguments were quite sound and, after consulting the other members of the Organizing Committee, I had no difficulty in accepting their offer.

So, I am now pleased and honoured to officially inform all our readers that the 2nd International Cone Meeting will take place at La Rochelle, France, in September 2012.

Located on the Atlantic coast of France – a mere three hours travel from Paris on high speed train – La Rochelle has much to offer visitors. Local attractions include an important Aquarium, the reconstructed ship Hermione, docked at Rochefort, the "Corderie Royale", close by islets such as Fort-Boyard and Île de Ré, etc. Since September will usually boast fine weather, these touristic attractions will make for a remarkable event for attendees.

Then, of course, there is the Natural History museum itself. Recently renovated, it houses a very important collection of Cones, including Georges Richard's own research materials. In all, the collection includes some 10,000 specimens, representing about 9% of all known species, subspecies and forms; the samples from the West Indies and French Polynesia are particularly important. One point of interest is also a collection of about 1500 subadult and juvenile Cones, from about 300 species and subspecies, and we all know how important it is to be able to identify juveniles! The museum also houses many other collections, including Richard's fossil Cones and others from the estates of local 18th and 19th centuries collectors.

Even this far ahead, we are already busy with several aspects of organization and a number of speakers have already been approached to help us build a program that will match the one of our Stuttgart Meeting – which in itself is not an easy task, since we had such brilliant talks to begin with. But we will endeavour to live up to everybody's expectations.

We will of course have more to say – and to show – about La Rochelle, the local Museum and our Meeting in future editions of TCC. We hope to meet as many of you as possible there next year. Keep tuned for further information, which I will surely forward as it becomes available.

A.M.

We hope to see your contribution in the next TCC!