

**Five New Gastropoda (*Casmaria*, *Sassia*, *Kilburnia*, *Quasimitra* and *Calliostoma*) from the Eastern Seaboard of Southern Africa and a Revision of *Mitra boswellae***

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**ABSTRACT** Five new gastropods are described from the Eastern Seaboard of Southern Africa. These Molluscs include *Casmaria natalensis* new species (from Kwazulu-Natal, South Africa), *Sassia mozambicana* new species (from Mozambique), *Kilburnia emmae* new species (from Eastern Cape Province, South Africa), *Quasimitra rubrolaterculus* new species (from Kwazulu-Natal, South Africa), and *Calliostoma margaretae* new species (from Kwazulu-Natal, South Africa). The status of *Mitra boswellae* is reviewed.

**KEYWORDS** *Casmaria*, *Sassia*, *Kilburnia*, *Quasimitra*, *Mitra*, *Scabricola*, *Fascioliidae*, South Africa, Eastern Cape Province, Kwazulu-Natal, Mozambique

## INTRODUCTION

Dredging in new areas at 75 to 100 metres off Southern Natal has brought to light new gastropod species, including an interesting smaller member of the *Cassidae*. Alan Seccombe has considerable experience regarding world *Cassidae*, and this, combined with very useful fresh information and images presented in the recently published “*Cassidae*, An Amazing Family of Seashells”, has consolidated thinking regarding the newly described species, *Casmaria natalensis*.

Specimens of a *Sassia* species marked ‘*cf. nassariformis*’ have been taken from off Bazaruto, Mozambique at depths of 320 to 360 metres over a period of time. (Pers. com. J. Rosado). Although initially bearing a resemblance to *S. nassariformis*, there is a consistent difference in size, colour and morphology of these shells that allows for separation from the more southern *nassariformis*, resulting in *Sassia mozambicana* n.sp. being described.

Recently, A. Seccombe has acquired a number of specimens of a member of the *Fascioliidae* that is currently undescribed. He has known about this species for a number of years having first obtained specimens more than 15 years ago. All shells were dredged in approximately 65 metres depth off Cape St. Francis, in the Southeast Cape area of South Africa. Despite being known about, this species was not depicted in Marais & Kilburn (2010), who discussed and figured the known *Fascioliidae* occurring in the waters of South Africa, nor was it depicted in Recent *Fascioliidae*.

This species, *Kilburnia emmae* n.sp., can only be confused with *Africofusus adamsii* (Küster & Kobelt, 1876), small specimens of which are often caught at the same depth and in the same habitat, and juvenile *Kilburnia scholvienei* (Strebel, 1911). The most similar known species in South African waters in the genus *Kilburnia* is *K. heyneimanni* (Dunker, 1870), however, it occurs many hundreds of kilometres to the North, off the Coast of the northern Eastern Cape Province in the region of Coffee Bay.

Snyder, M.A., Vermeij, G.J. & Lyons, W.G., 2012 separated the Fascioliidae into a number of different genera. The genus into which this species most closely fits is *Kilburnia*, all species of which occur in the same geographical area.

A decade has passed since the comprehensive work on the living South African *Mitridae* by Markus Lussi in *Malacologia* 62 of 2009. No local activity in this family is noted since then. Over this period, less than a handful of specimens of an attractive, large *Mitra* have been dredged in deep water (100 metres) off Southern Natal. Sufficient specimens were finally obtained to warrant the description of *Quasimitra rubrolaterculus* n.sp.

Further to this, the acquisition of some fine specimens of *Scabricola guttata* taken by SCUBA off Southern Natal, resulted in this species being re-visited in South Africa and the review of *Mitra boswellae*.

A new species of *Calliostoma* from South-eastern Africa is described, together with a comparison of the *Calliostoma* species found in deep water (90 to 120 metres depth) off Kwazulu-Natal South Coast, South Africa.

#### ABBREVIATIONS

NMSA	KwaZulu-Natal Museum, Pietermaritzburg, South Africa
n. sp.	New species
pers. comm.	Personal communication

#### SYSTEMATICS

Class: Gastropoda  
Subclass: Caenogastropoda  
Order: Littorinimorpha  
Superfamily: Tonnoidea Suter 1913  
Family: Cassidae Latreille, 1825  
Subfamily: Phaliinae Beu, 1981

Genus *Casmaria* H & A. Adams, 1853

*Casmaria natalensis* R. Aiken and  
A. Seccombe, new species.  
(Figure 1, Plate 1 A-G)

**Description.** Shells ovate, light-weight, tending towards globose. Size small, 27 to 30 mm, spire pointed, non-varicose. Whorls smooth and glossy, aperture obliquely pyriform, accounting for almost two thirds of the shell length. Parietal shield absent, columellar fold with six sharp lirae. Anterior canal short, outer lip fairly thin, recurved, bearing three to five short, sharp prickles on the lower half thereof. Background colour pale brown, with four spaced radial rows of almost square deep brown blotches. Pale off white subsutural band, interspersed with evenly spaced dark brown almost square blotches. Labial edge marked with dark dashes.

**Type and distribution.** Type locality of the holotype and paratypes of *C. natalensis* is off southern KwaZulu-Natal, South Africa, dredged in new areas at depths of 75 to 100 metres.



**Figure 1.** *Casmaria natalensis* R. Aiken and A. Seccombe new species, holotype.

**Type specimens.**

- Holotype: 29.2 x 16.8 mm. (Plate 1.1); in Natal Museum (NMSA), ID No: P1161/T4316.
- Paratype 1: 30.0 x 18.0 mm. R. Aiken Collection.
- Paratype 2: 29.2 x 17.1 mm. R. Aiken Collection.
- Paratype 3: 30.0 x 17.6 mm. R. Aiken Collection.
- Paratype 4: 23.6 x 14.0 mm. A. Seccombe Collection.
- Paratype 5: 26.8 x 17.0 mm. R. Aiken Collection.
- Paratype 6: 34.2 x 18.9 mm. A. Seccombe Collection.
- Paratype 7: 30.2 x 18.0 mm. R. Aiken Collection.
- Paratype 8: 21.0 x 12.6 mm. A. Seccombe Collection.
- Paratype 9: 26.8 x 16.6 mm. R. Aiken Collection.

**Etymology.** Named for Natal, South Africa, where the species was discovered.

**Discussion.** This species is found in a similar area to *Semicassis decipiens* (Kilburn, 1980), but differs from the latter by way of smaller size on average, more bulbous shape, and different pattern on the whorl. *Cf.* Plate 1 I-J.

There is an interesting and noteworthy similarity across the oceans, between *Casmaria atlantica* Clench, 1944 (Western Atlantic) [Plate 1 K-L, *Casmaria perryi* (Iredale, 1912) (New Zealand and Easter Island), and *Casmaria cernica* (G. B. Sowerby III, 1888) (China Sea and Philippines) [Plate 1 M-N], of which *C. ponderosa nipponensis* is accepted as a synonym. *Casmaria natalensis* bears a similar resemblance to the above three species, at the low end of their size range. *C. natalensis* potentially fills an ancient ocean gap between the Caribbean and New Zealand.

Class: Gastropoda

Subclass: Caenogastropoda

Order: Littorinimorpha

Superfamily: Tonniodea

Family: Cymatiidae

Genus *Sassia* L.M.D. Bellardi, 1873.

*Sassia mozambicana* R. Aiken and  
A. Seccombe, new species  
(Figure 2, Plate 2 A-J, Plate 3 A-D)

**Description.** Shells averaging 49.2 mm, ranging from 45.0 mm to 55.1 mm, shape broadly fusiform, fairly high-spired. Spiral sculpture of eight cords, crossed by axial costae that produce prominent nodules at their intersection. Varices regular, aperture oval, parietal glaze strong, covering a large part of the columellar area. Single, strong posterior notch. Inner labrum has seven denticles, strongest posteriorly. Columella with two strong pleats anteriorly, giving way to more faint plications towards the posterior. Siphonal canal medium sized and recurved. Shell base colour almost white (even in live specimens), with faint sporadic brown markings on the whorl and varices.

**Type and distribution.** Type locality of the holotype and paratypes of *S. mozambicana* is off Bazaruto, Mozambique, trawled at depths of 320 to 360 metres.

Holotype: 45.2 mm x 23.0 mm (Plate x.1), with operculum. Off Bazaruto, Mozambique. Coll. Natal Museum South Africa (NMSA), ID No: M0261/T4317. Donated by A. Seccombe.

Paratype 1: 48.5 mm x 23.2 mm. Off Bazaruto, Mozambique. R. Aiken Collection.

Paratype 2: 45.0 mm x 21.0 mm. Off Bazaruto, Mozambique. R. Aiken Collection.

- Paratype 3: 55.1 mm x 25.1 mm. Off Bazaruto, Mozambique. R. Aiken Collection.
- Paratype 4: On *X. pallidula*. broken attachment. Off Bazaruto, Mozambique. R. Aiken Collection.
- Paratype 5: 53.0 mm x 23.8 mm. Off Bazaruto, Mozambique. A. Secombe Collection.
- Paratype 6: 48.0 mm x 22.9 mm. Off Bazaruto, Mozambique. A. Secombe Collection.
- Paratype 7: 50.2 mm x 22.8 mm. Off Bazaruto, Mozambique. A. Secombe Collection.



**Figure 2.** *Sassia mozambicana* R. Aiken and A. Secombe new species, holotype.

**Etymology.** Named for Mozambique, where it appears to be endemic.

**Discussion.** Specimens of a *Sassia* species marked ‘*cf. nassariformis*’ have been taken from deep water off Bazaruto, Mozambique at depths of 320 to 360 metres over time. (Pers. com. J. Rosado). Although, initially bearing a resemblance to *S. nassariformis*, there is a consistent difference in size, colour and morphology of these shells that allows for separation from the more southern *S. nassariformis*.

*Sassia mozambicana* new species, can be distinguished from its closest congener, *S. nassariformis* (Plate 3 E-L), by its constant pale white colour, broader morphology, more northern locale, larger shells on average, and deep habitat. Specimens attached to *Xenophora pallidula* verify this.

Class: Gastropoda  
 Subclass: Caenogastropoda  
 Order: Neogastropoda  
 Superfamily: Buccinoidea  
 Family: Fascioliariidae  
 Subfamily: Fascioliariinae  
 Genus *Kilburnia* Snyder, Vermeij & Lyons, 2012

*Kilburnia emmae* A. Secombe &  
 R. Aiken, new species  
 (Figure 3, Plate 4 A-L, Plate 5 A-B)

**Description.** Shell fusiform, with high spire and long siphonal canal; small for the genus, the size of adult shells ranging from 55 to 64 mm; protoconch papilliform. Teleoconch whorls 6, shouldered; shoulder slope broad, concave, summit adpressed to preceding whorl; sutures shallow. Axial sculpture of very low, rounded folds. Spiral sculpture of rather strong, rounded ridges bearing prominent nodules, 2 rows on spire whorls, last whorl with 10 to 11. Nodules strongest on shoulder ridge, becoming smaller anteriorly, *ca.* 11 on last whorl. Spiral

interspaces and shoulder slope with smooth microscopic spiral treads, middle one often stronger than the rest. Aperture oval; outer lip thick, pinched in anteriorly, with sharp crenulated edge. Labral teeth, often arranged in pairs, formed by thin lirae reaching deep into interior of shell. Siphonal canal narrow, open, entrance fold prominent, keel-like. Columella evenly concave, with 1 columellar fold; parietal ridge prominent.



**Figure 3.** *Kilburnia emmae* A. Seccombe and R. Aiken, new species, paratype 2.

Dimensions: H 56.29 mm W 24.16 mm (holotype); H 64.80 mm x W 26.90 mm (largest paratype).

Shell colour dull, dirty white; nodules dark brown with white interspaces; shoulder slope with faint, intermittent spiral streaks of brown; protoconch, columella and aperture white. Periostracum brown, smooth and thin, shell pattern visible underneath.

Operculum oval-elongate, tapered bluntly anteriorly, dark brown and lighter around the edges, outer surface smooth with numerous growth increments arranged in concentric arcs.

Animal carmine red in colour.

**Type and distribution.** Type locality of the Holotype and paratypes of *K. emmae* is off Cape St. Francis, in the Southeast Cape area, South Africa, *ca.* 65 metres.

Holotype: 56.29 mm. Off Cape St. Francis, in the Southeast Cape area of South Africa, *ca.* 65 metres. NMSA P1163/T4318.

Paratype 1: 55.46 mm. Collection A. Seccombe.

Paratype 2: 64.80 mm. Collection A. Seccombe.

Paratype 3: 60.07 mm. Collection A. Seccombe.

Paratype 4: 58.78 mm. Collection A. Seccombe.

Paratype 5: 57.44 mm. Collection R. Aiken.

Paratype 6: 52.30 mm. Collection of Alwyn & Johan Marais.

Paratype 7: 51.76 mm. Collection A. Seccombe.

Paratype 8: 50.20 mm. Collection A. Seccombe.

Paratype 9: 45.33 mm. Collection A. Seccombe.

Paratype 10: 47.90 mm. Collection A. Seccombe.

Paratype 11: 48.93 mm. Collection A. Seccombe.

Paratype 12: 45.90 mm. Aiken Collection.

**Distribution.** Known only from type locality.

**Etymology.** The species is named after Emma Grobler, step daughter of Alan Seccombe.

**Discussion.** *Kilburnia emmae* here described is known from 20 specimens. The specimens were dredged between 2011 and 2014; 16 were live-collected and still retain operculae. Depths of collection, recorded for all specimens, indicate a range of 60 to 65 metres. The specimens were compared with *K. heynemanni* (Dunker, 1876), a shallow water species found in 15 to 30 metres off the northern coast of the Eastern Cape (Coffee Bay is the best known locality for this species), 2 specimens of juvenile *K. scholvieni* (Strebel, 1911) and with 5 specimens of *Africofusus adamsii* (Kobelt, 1880) from the same area and depth.

*Kilburnia emmae* is similar in general shape to *K. heynemanni* (Plate 5 G-H), but considerably smaller (45 mm to 65 mm compared to greater than 80 mm) less strongly shouldered, the spiral ridges on the last whorl are relatively much stronger than those on *K. heynemanni* and the nodules are not only restricted to the shoulder ridge of each whorl, but occur on all ridges. Furthermore, the labral teeth of *K. emmae* are relatively stronger, the protoconch much larger and the nodules are dark brown instead of pale brown to cream in *K. heynemanni*.

*Africofusus adamsii* (Plate 5 C-D) is superficially remarkably similar to *K. emmae*, but on closer inspection can readily be separated from the latter. The spire tapers to a fine point with a relatively small protoconch. The shell is

much wider, the siphonal canal slender but longer, usually 33 to 40 percent of the shell length. It has no parietal ridge nor columellar folds, however, a false umbilicus is present. The operculum is thin and yellow/orange-brown. Although the specimens studied were in the same size range as *K. emmae*, generally speaking *Africofusus adamsii* is a much larger shell and occurs at much greater depths.

Juvenile *K. scholvieni* (Plate 5 E-F) also appear similar primarily due to the dark shoulder knobs and protoconch. However, the *K. emmae* can be distinguished by the more strongly ribbed and patterned body whorl, and shorter, straight siphonal canal, which is white ventrally. Like *A. adamsii*, *K. scholvieni* in its adult form is a substantially larger shell and occurs at much greater depths.

Class: Gastropoda

Subclass: Caenogastropoda

Order: Neogastropoda

Superfamily: Mitroidea

Family: Mitridae

Subfamily: Mitrinae

Genus *Quasimitra* Fedosov, Herrmann, Kantor & Bouchet, 2018

*Quasimitra rubrolaterculus* R. Aiken & A. Seccombe, new species.  
(Figure 4, Plate 6 A-H, Plate 7 A-E)

**Description.** Shells relatively large, narrow, pointed, and of medium build. Average size 67 mm, ranging from 63.4 mm to 72.9 mm. Whorls weakly convex to straight-sided, suture with narrow ramp. Columellar plications oblique, numbering four, strongest posteriorly. Sculpture of intermittently pitted spiral grooves. Outer lip cream and crenulate.



**Figure 4.** *Quasimitra rubrolaterculus* R. Aiken and A. Seccombe new species, holotype.

Colour brick-red and white, shown as fairly equal radial dashes. Subsutural pattern of a fairly broad band of indented axial white dashes, each separated by a thin red axial dash. Columellar callous strong, particularly anteriorly.

**Type and distribution.** Type locality of the holotype and paratypes of *Q. rubrolaterculus* is off Southern Kwazulu-Natal, South Africa. Dredged at 100 metres depth.

Holotype: 63.4 x 18.0 mm. Collection NMSA P1164/T4319. Donated to the Natal Museum by A. Seccombe.

Paratype 1: 72.9 x 18.8 mm. Collection A. Seccombe.

Paratype 2: 69.1 x 18.0 mm. Collection R. Aiken.

Paratype 3: 64.0 x 17.9 mm. Collection R. Aiken.

**Etymology.** Rubro: red, and laterculus: brickwork. Latin combination for the whorl pattern of this species.

**Discussion.** This species has affinities with two congeners, *Quasimitra rinaldii* (H. Turner, 1993) and *Quasimitra sanguinolenta* (Lamarck, 1811). All three are found off the East coast of Africa. *Q. rinaldii* is not quite as large, slightly broader, and has much smoother whorls, and a somewhat different pattern of red and white “bricks”. *Quasimitra sanguinolenta* is a much smaller species, often half the size, stocky, with broad, more squat, somewhat oval profile, stepped sides, stronger sutural channel, and is from a shallower habitat. The sub-sutural band is much thinner, consisting of a row of cream coloured beads set on a red background. The 51.3 mm shell illustrated by Robin & Martin in their Mitridae, is *Q. rubrolaterculus*, noting the axially broad subsutural band. See Plate 7 F-J for comparison.

Class: Gastropoda  
Subclass: Caenogastropoda  
Order: Neogastropoda  
Superfamily: Mitroidea  
Family: Mitridae  
Subfamily: Imbricariinae  
Genus *Scabricola* Swainson, 1840

*Mitra boswellae* (Cate, 1964)  
stat. rev.  
(Figures 5-6, Plate 8 E-K)

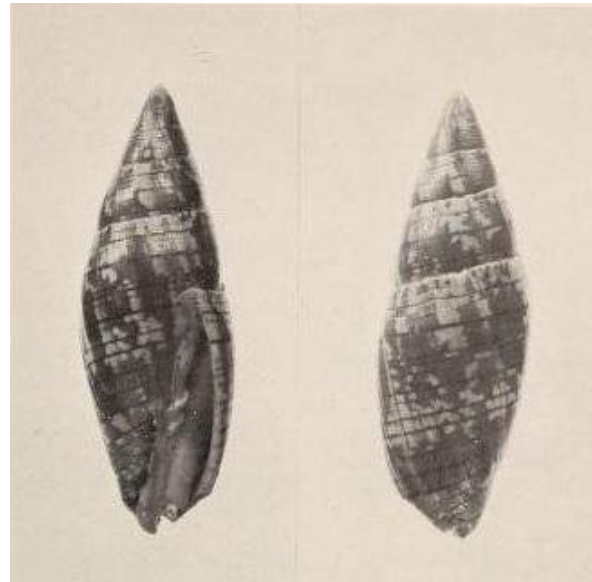
**Discussion.** Since the description of *Mitra guttata* by Swainson as far back as 1824, there has been a paucity of information and

discoveries of this species over the last 195 years. It is an elusive, little known Mitre, from diverse localities including Madagascar, Reunion, Arabian Gulf, Sri Lanka, Andaman, Oman, Somalia, Mozambique and South Africa. Such was the lack of information on *guttata*, that when J. Cate described *Mitra boswellae* in 1964 after much cogitation, the only species he used for comparison were *M. nubila*, *M. nebulosa* and *M. bretteinghami*.

It is of interest that the comprehensive 1980 work of Pechar, Prior and Parkinson, *Mitre Shells from the Pacific and Indian Oceans*, covers some 270 species, but they make no mention of *M. guttata*. The description of *M. boswellae* based on a single specimen was bold indeed, notwithstanding the fact that said specimen had been obtained by Helen Boswell from “the boats in Durban”, now recognized as very inaccurate locality data. Boswell, for all her considerable conchological knowledge, had no idea of the existence of the close congener to her specimen, *M. guttata*. (See Plate 8 A-I)

In more recent times, *M. boswellae* was synonymized with *M. guttata* based on relative perceived similarities between them, but this was based on a notable lack of material, clouding the synonymy. Four South African collectors now have sufficient combined material of ‘*guttata*’ from Kwazulu-Natal, to enable the authors a closer look at the status of *M. boswellae*. Cate’s image in *The Veliger* of the very large sized holotype is clear enough for one to see salient features of *M. boswellae* that afford the realization that this rare *Mitra* is in fact different from *M. guttata* (see Figure 5 below) and is supported by two very pertinent comments made by Cate in his description of *M. boswellae*: “Shell large (70.5 mm), smooth” ...and... “spiral punctations obsolete on last three whorls except immediately below the suture”...enough material is now available

to compare *M. boswellae* with *M. guttata*. *Mitra boswellae* is definitely a larger species on average, often with a much broader profile. The whorls of *M. boswellae* are conspicuously smooth, unlike most *Scabricola*.



**Figure 5. Holotype *Mitra boswellae* Cate, 1964 (70.5 x 24.1 mm). A New Species of *Mitra* from the Western Indian Ocean. 1964. *The Veliger* 6(4):219-220: Plate 28.**

It is notable that the pattern of narrow brown radial lines on the whorl is not pitted, unlike the strong radial pitted grooves of *M. guttata*, raising the question as to whether this species even falls into the Genus *Scabricola*. These surface brown lines on the whorl of *M. boswellae* are spaced noticeably further apart than the pitted grooves of *M. guttata* in all shells of *M. boswellae* examined. Therefore, *M. boswellae* is reinstated as a full species based on these new observations. This species was collected in the Richards Bay harbour dredgings (around ten specimens), and the assumption was then made that the shells were worn smooth. Figure 6 showing live taken specimens, is proof of the fact that the whorl is not worn at all. The doubts expressed by some researchers regarding



whether the holotype was *ex pisce* are possibly valid.



**Figure 6.** Photographs of the living *Mitra boswellae* Cate, 1964, photographed by Valda Fraser during March 2007.

Class: Gastropoda  
 Subclass: Caenogastropoda  
 Order: Neogastropoda  
 Superfamily: Mitroidea  
 Family: Mitridae  
 Subfamily: Mitrinae  
 Genus *Quasimitra* Fedosov, Herrmann, Kantor & Bouchet, 2018

*Calliostoma margaretae* A. Seccombe &  
 R. Aiken, new species  
 (Figure 7, Plate 9 A-I, Plate 10 A)

**Description.** Shell reaching 22.4 mm in height. Conical shape with high tapering spire.

White/cream in colour with purple apex, cream protoconch and irregular red/brown markings on body and earlier whorls (absent in paratype 4). Height to width ratio 1.11:1.23. Base convex with a very small umbilicus the size of a pin hole. Subsutural band absent, shallow spiral ribs on body whorl and spire, faintly pustulose bands. Spire with raised bumps above the suture, and forming a peripheral keel on the body whorl.



**Figure 7.** *Calliostoma margaretae* A. Seccombe & R. Aiken new species, holotype.

**Type and distribution.** Type locality is South Africa, Natal South Coast, off Hibberdene in 94 to 102 metres depth on low profile reef. One specimen collected *ex pisces* (Red Fish) off Richards Bay, Natal North Coast, South Africa (Collection: A. Seccombe)

Holotype: 16.3 mm × 14.8 mm. In collection Natal Museum South Africa, P1165/T4320.  
 Paratype 1: 20.2 mm x 16.5 mm. A. Seccombe Collection.  
 Paratype 2: 20.8 mm x 16.8 mm. A. Seccombe Collection.

- Paratype 3: 22.4 mm x 19.6 mm. A.  
Seccombe Collection.
- Paratype 4: 21.0 mm x 17.7 mm. A.  
Seccombe Collection.

**Etymology.** This species is named in honour of Mrs. Margaret Seccombe, mother of A. Seccombe, who encouraged and developed his interest in natural history from a very early age.

**Discussion.** *Calliostoma margaretae* resembles *Calliostoma layardi* G.B. Sowerby III, 1897 (Plate 10 D), and can only be confused with this species. *C. margaretae* has a greater height to width ratio (exceeds 1.1:1 and adult shells are closer to 1.2:1, whereas *C. layardi* is usually below 1.1:1. *Calliostoma layardi* is darker brown (although white shells occur) and has prominent sharp knobs on each whorl just above the suture and forming a peripheral keel on the body whorl, as opposed to smother bumps in *C. margaretae* which create an undulating effect. *C. layardi* has deeper spiral ribs and noticeable subsutural band (not present in *C. margaretae*) on the body whorl and spire. The umbilicus in *C. layardi* is wholly or partially occluded.

*Calliostoma iridescens* G.B. Sowerby III, 1903 has no knobs or bumps on the body whorl or spire, a wider umbilicus and no purple colour on the tip of the spire. *Tristichotrochus crossleyae* (E. A. Smith, 1910) is smaller (max. height around 14 mm) has no umbilicus. Knobs and bumps are absent in both *Calliostoma aiken* Lussi, 2014 and *Calliostoma africanum* Bartsch, 1915. (see Plate 10, images B-E for comparison)

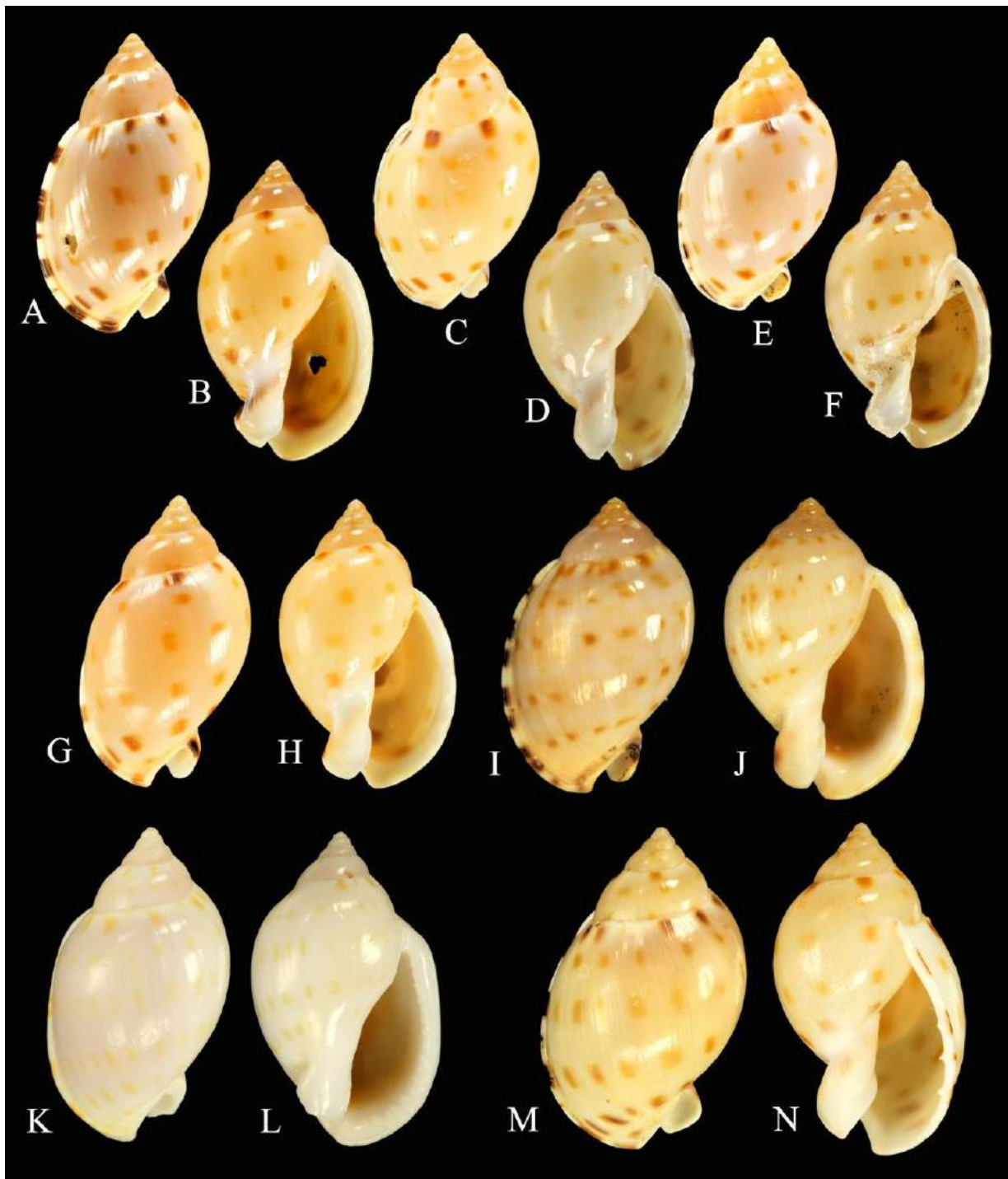
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Jose Rosado, for bringing our attention to the *S. nassariformis* species; Linda Davis, Collections

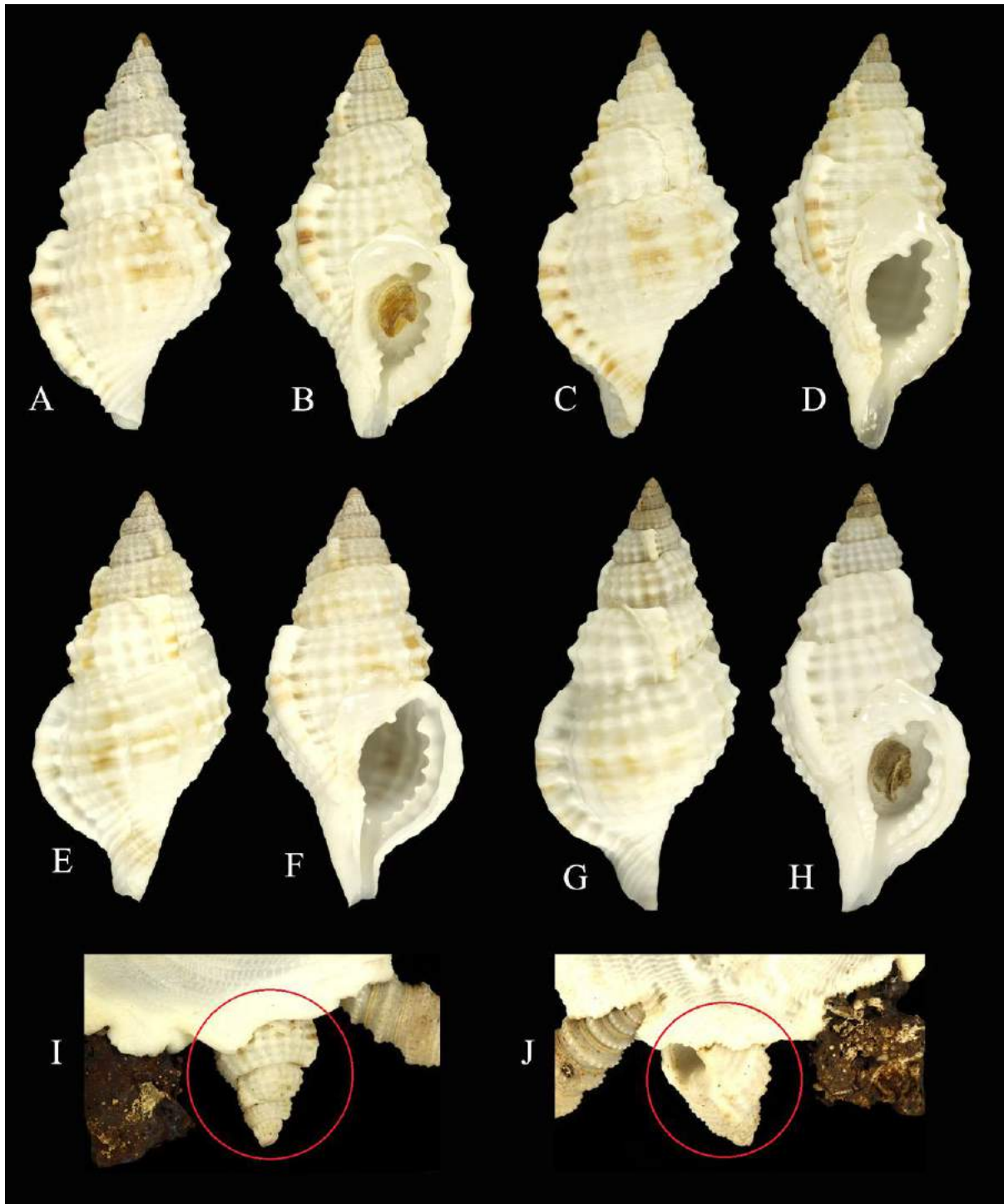
Manager, Mollusca at the Natal Museum, Pietermaritzburg for supplying accession numbers and Mark Page for photography and document preparation. Philip Jooste provided most specimens of *Kilburnia emmae* and *Fusinus ocelliferus adamsii* that were examined for this study, with Roy Aiken providing the enthusiasm and encouragement to put pen to paper and Alwyn and Johan Marais read an early and later drafts of the manuscript. All are thanked for their assistance. Valda Fraser for the provision of photographs of a live *M. boswellae*.

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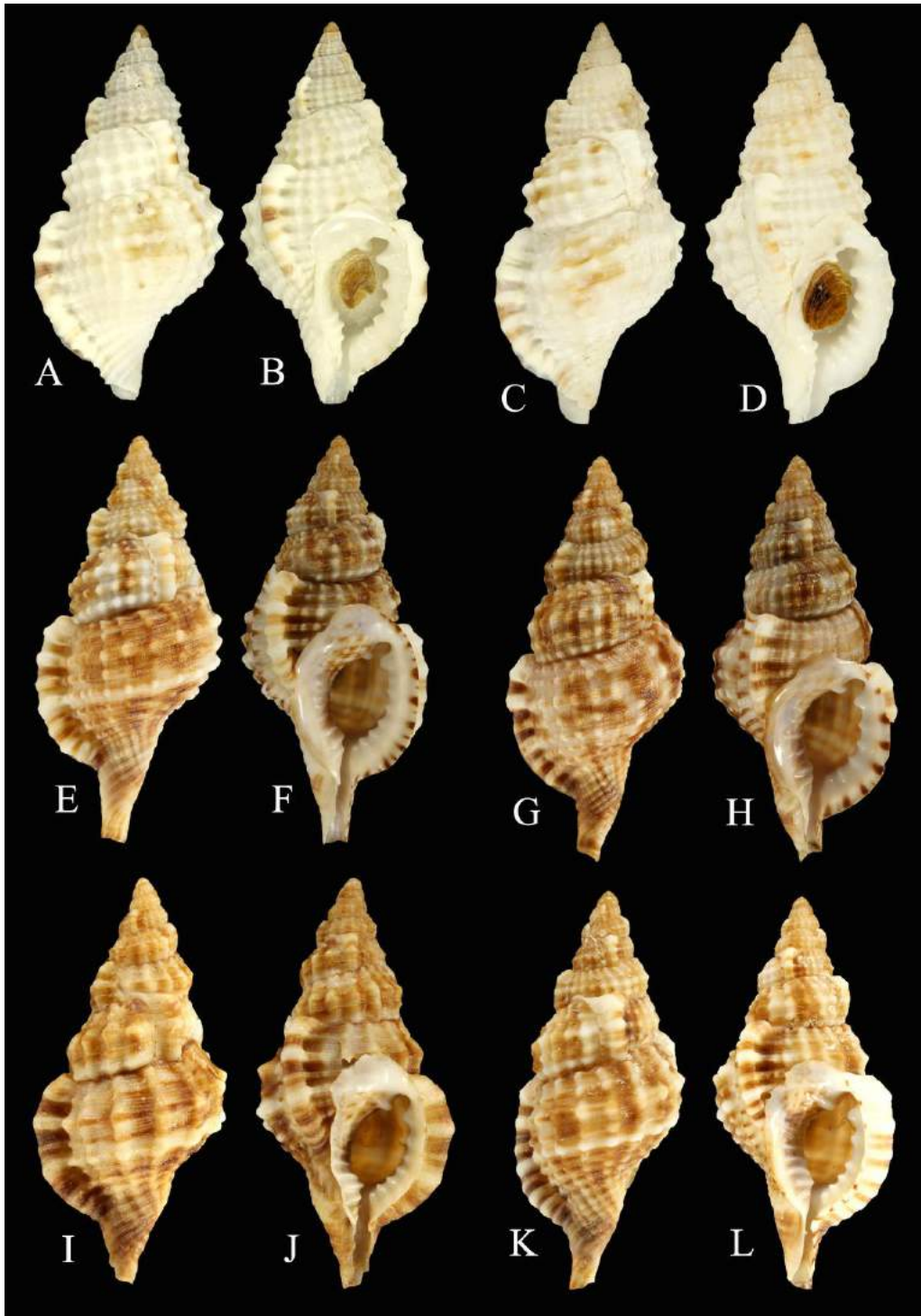
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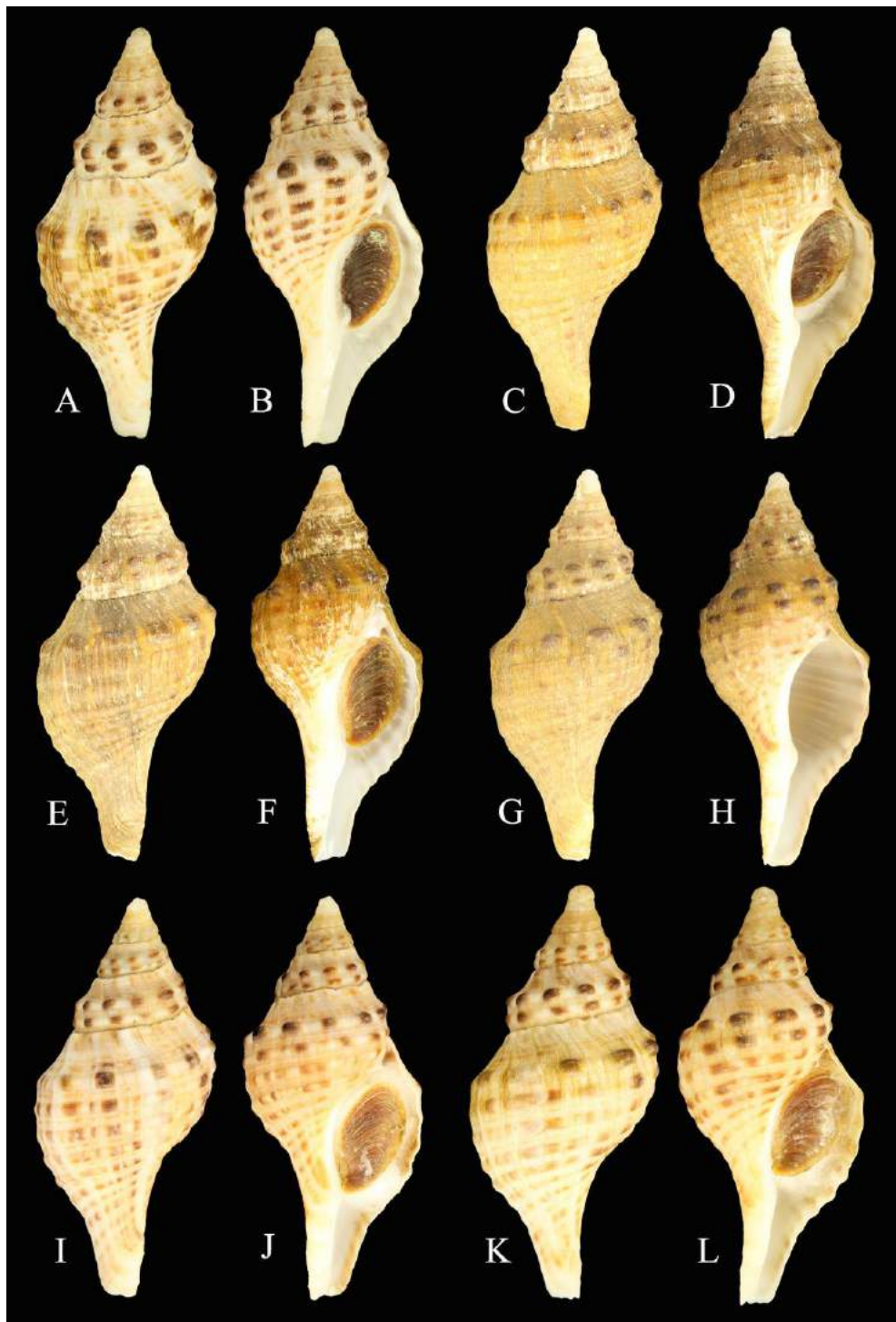
**Plate 1.** Figures: **A-B** = *Casmaria natalensis* new species (29.2 x 16.8 mm) – Holotype; NMSA Collection, ID No: P1161/T4316, off Southern KwaZulu-Natal, dredged 75 to 100 m. **C-D** = *Casmaria natalensis* new species (30.0 x 18.0 mm) – Paratype 1; off Southern KwaZulu-Natal, dredged 75 to 100 m; Aiken Collection. **E-F** = *Casmaria natalensis* new species (29.2 x 17.1 mm) – Paratype 2; off Southern KwaZulu-Natal, dredged 75 to 100 m; Aiken Collection. **G-H** = *Casmaria natalensis* new species (23.6 x 14.0 mm) – Paratype 4; off Southern KwaZulu-Natal, dredged 75 to 100 m; Seecombe Collection. **I-J** = *Semicassis decipiens* (Kilburn, 1980) (22.2 mm); Off Pumula, Kwazulu-Natal, South Africa; Seecombe collection. **K-L** = *Casmaria atlantica* Clench, 1944 (28.9 mm), Western Atlantic; Seecombe collection. **M-N** = *Casmaria cernica* (G. B. Sowerby III, 1888) (30.1 mm), China Sea; Seecombe collection.



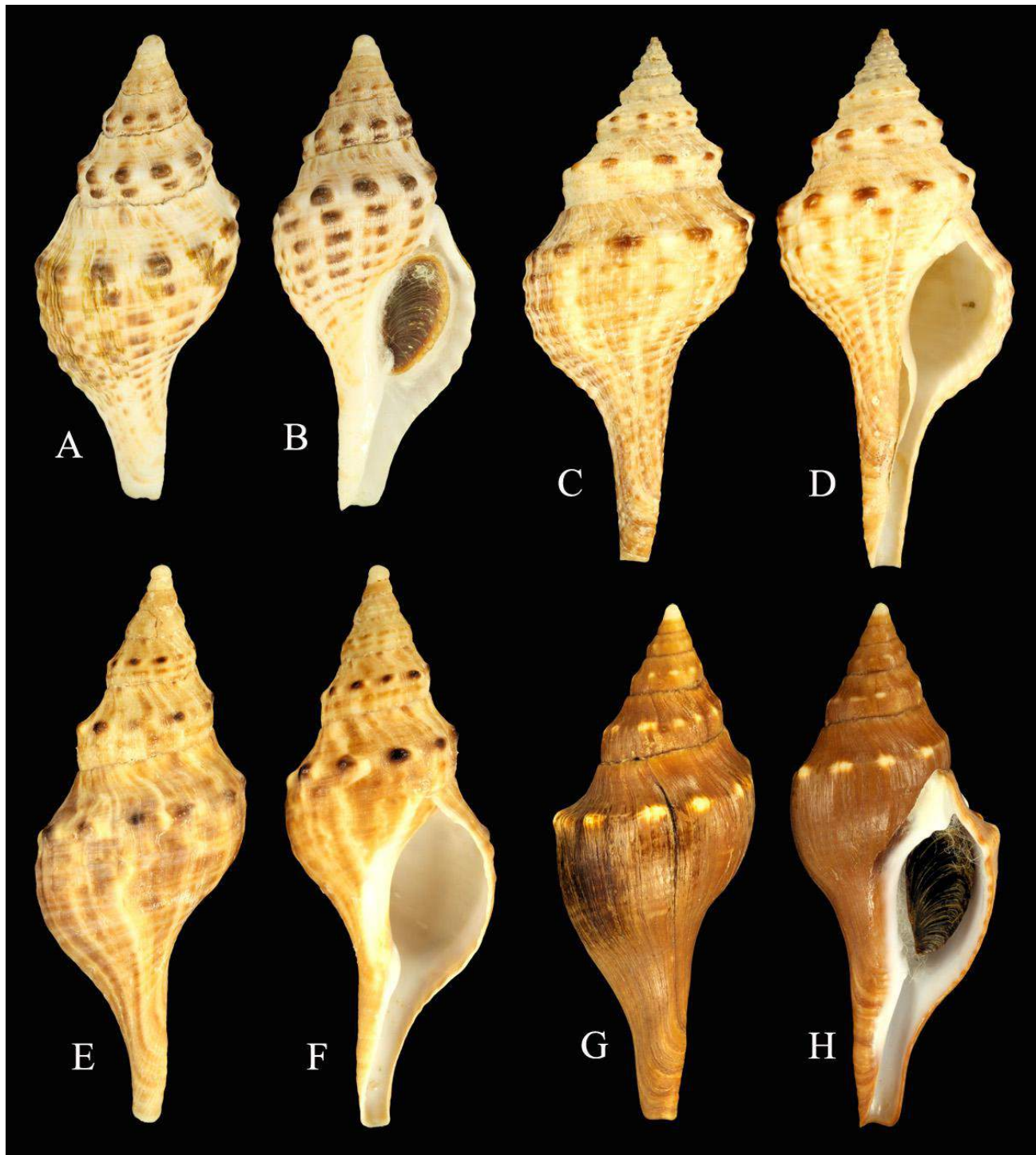
**Plate 2.** Figures: **A-B** = *Sassia mozambicana* new species (45.2 x 23.0 mm) – Holotype; NMSA Collection, ID No: M0261/T4317, Off Bazaruto, Mozambique, dredged 320 to 360 m. **C-D** = *Sassia mozambicana* new species (48.5 x 23.2 mm) – Paratype 1; Off Bazaruto, Mozambique, dredged 320 to 360 m; Aiken Collection. **E-F** = *Sassia mozambicana* new species (45.0 x 21.0 mm) – Paratype 2; Off Bazaruto, Mozambique, dredged 320 to 360 m; Aiken Collection. **G-H** = *Sassia mozambicana* new species (53.0 x 23.8 mm) – Paratype 5; Off Bazaruto, Mozambique, dredged 320 to 360 m; Seccombe Collection. **I-J** = *Sassia mozambicana* new species – Paratype 4; On *Xenophora pallidula*, Off Bazaruto, Mozambique, dredged 320 to 360 m; Aiken Collection.



**Plate 3.** Figures: **A-B** = *Nassia mozambicana* new species (45.2 x 23.0 mm) – Holotype; NMSA Collection, ID No: M0261/T4317, Off Bazaruto, Mozambique, dredged 320 to 360 m. **C-D** = *Nassia mozambicana* new species (50.2 x 22.8 mm) – Paratype 7; Off Bazaruto, Mozambique, dredged 320 to 360 m; Seecombe Collection. **E-F** = *Nassia nassariformis* (G. B. Sowerby III, 1902) (47.3 x 21.2 mm), Off Southern Kwazulu-Natal; Aiken Collection. **G-H** = *Nassia nassariformis* (G. B. Sowerby III, 1902) 48.1 x 21.4 mm), Off Southern Kwazulu-Natal; Aiken Collection. **I-J** = *Nassia nassariformis* (G. B. Sowerby III, 1902) (43.4 x 20.3 mm), Off Southern Kwazulu-Natal; Aiken Collection. **K-L** = *Nassia nassariformis* (G. B. Sowerby III, 1902) (38.1 x 17.6 mm), Off Southern Kwazulu-Natal; Aiken Collection.



**Plate 4.** Figures: **A-B** = *Kilburnia emmae* new species (56.29 x 24.16 mm) – Holotype; NMSA Collection, ID No: P1163/T4318, Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres. **C-D** = *Kilburnia emmae* new species (48.5 x 23.2 mm) – Paratype 1; Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres.; Seccombe Collection. **E-F** = *Kilburnia emmae* new species (64.8 mm) – Paratype 2; Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres.; Seccombe Collection. **G-H** = *Kilburnia emmae* new species (52.3 mm) – Paratype 6; Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres.; Aiken Collection. **I-J** = *Kilburnia emmae* new species (50.2 mm) – Paratype 8; Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres.; Seccombe Collection. **K-L** = *Kilburnia emmae* new species (47.9 mm) – Paratype 10; Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres.; Seccombe Collection.



**Plate 5.** Figures: **A-B** = *Kilburnia emmae* new species (56.29 x 24.16 mm) – Holotype; NMSA Collection, ID No: P1163/T4318, Off Cape St. Francis, in the Southeast Cape area of South Africa, ca. 65 metres. **C-D** = *Africofusus adamsii* (Kobelt, 1880) (68.43 mm) – dredged off Cape St Francis in 65 m; Seccombe Collection. **E-F** = *Kilburnia scholvi* (Strebel, 1911) (87.8 mm), dredged off Cape St Francis in 65 m; Seccombe Collection. **G-H** = *Kilburnia heyne* (Dunker, 1876) (80.32 mm), dived off Coffee Bay, Eastern Cape, on sand in 25 m; Seccombe Collection.

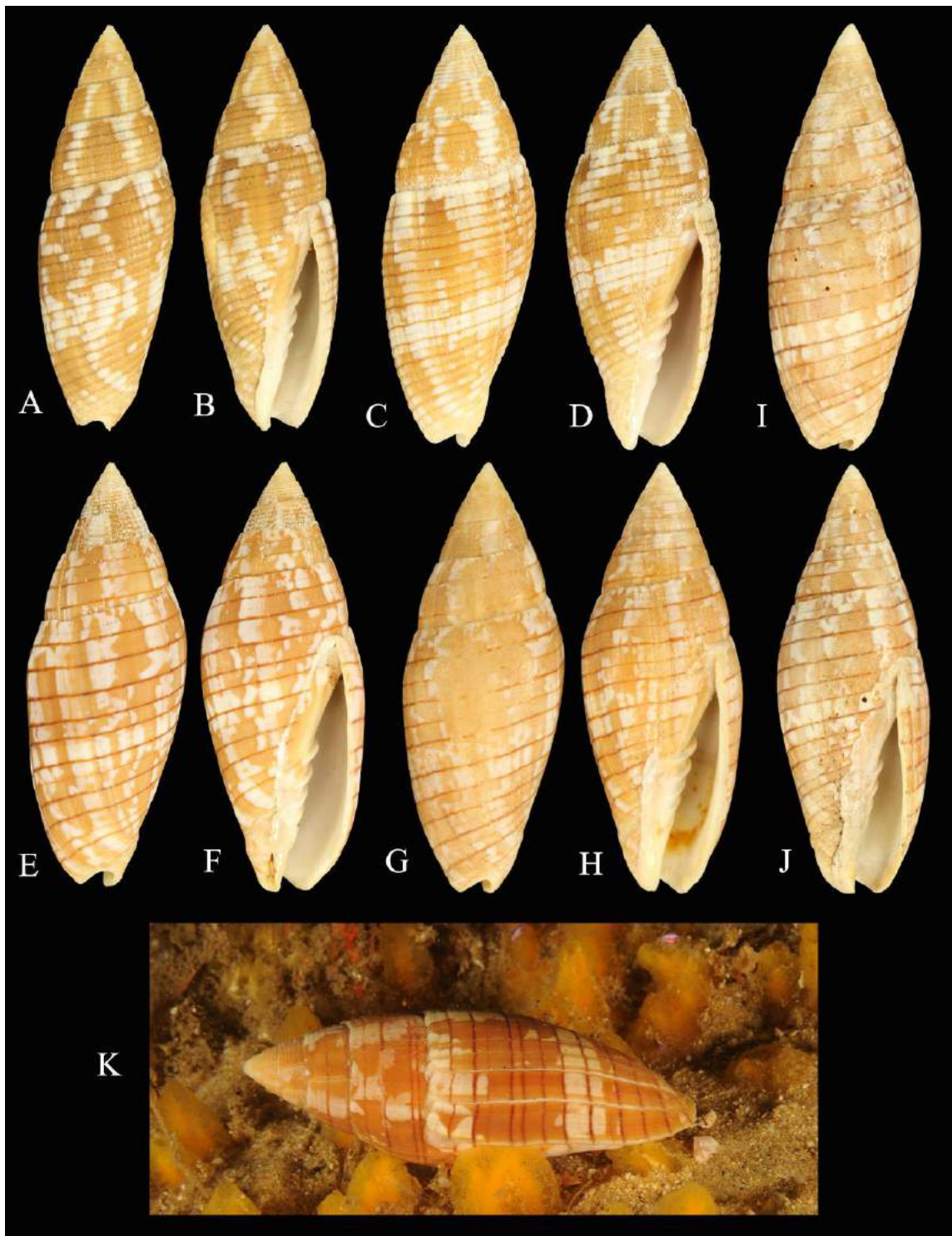


**Plate 6.** Figures: **A-B** = *Quasimitra rubrolaterculus* new species (63.4 x 18.0 mm) – Holotype; NMSA Collection, ID No: P1164/T4319, off Southern Kwazulu-Natal, South Africa. Dredged at 100 metres. **C-D** = *Quasimitra rubrolaterculus* new species (72.9 x 18.8 mm) – Paratype 1, off Southern Kwazulu-Natal, South Africa. Dredged at 100 metres; Seccombe collection. **E-F** = *Quasimitra rubrolaterculus* new species (69.1 x 18.0 mm) – Paratype 2, off Southern Kwazulu-Natal, South Africa. Dredged at 100 metres; Aiken collection. **G-H** = *Quasimitra rubrolaterculus* new species (64.0 x 17.9 mm) – Paratype 3, off Southern Kwazulu-Natal, South Africa. Dredged at 100 metres; Aiken collection.

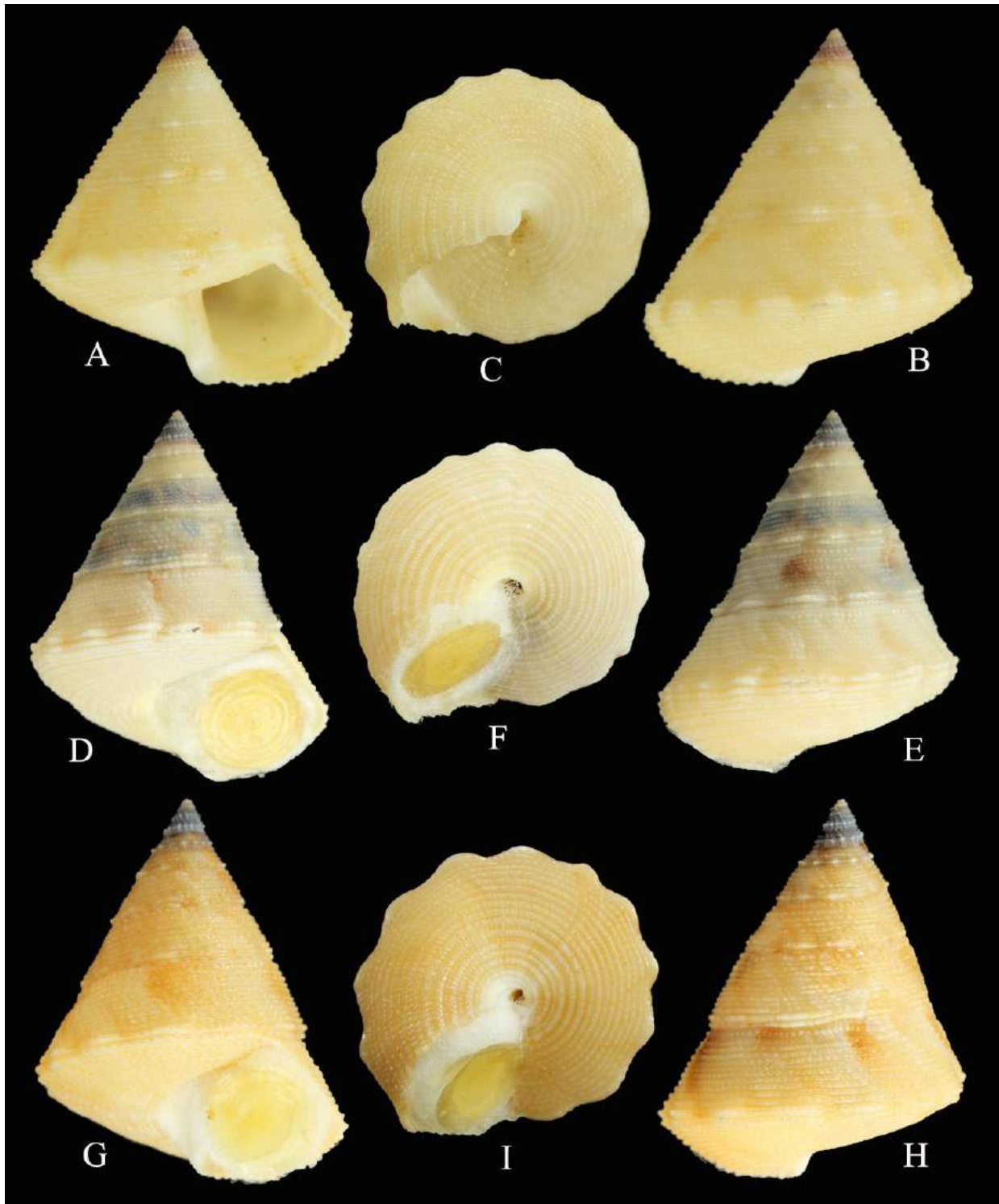




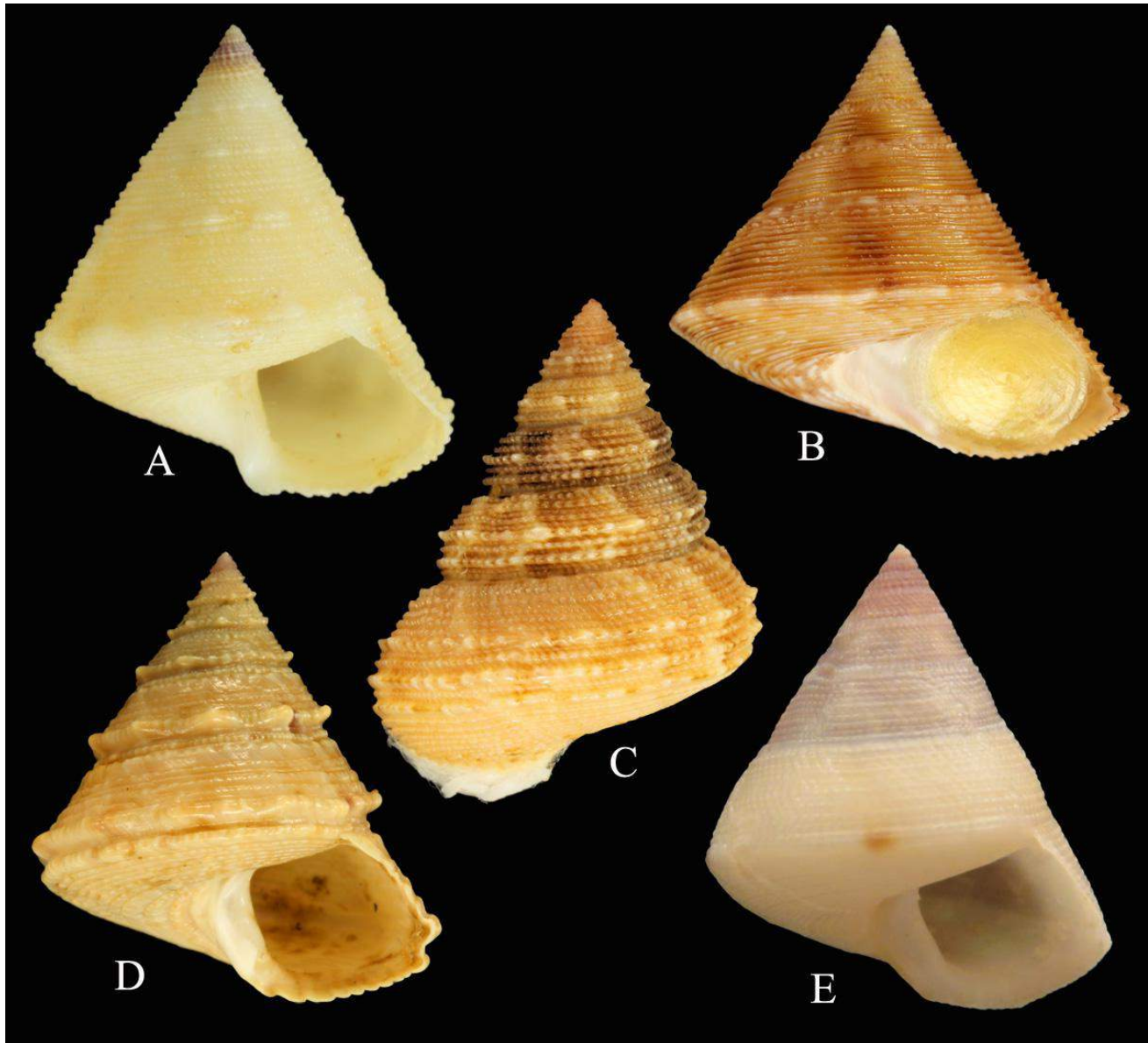
**Plate 7.** Figures: **A-B** = *Quasimitra rubrolaterculus* new species (63.4 x 18.0 mm) – Holotype; NMSA Collection, ID No: P1164/T4319, off Southern Kwazulu-Natal, South Africa. Dredged at 100 metres. **D-E** = *Quasimitra rubrolaterculus* new species (72.9 x 18.8 mm) – Paratype 1, off Southern Kwazulu-Natal, South Africa. **C** = *Quasimitra rubrolaterculus* new species suture **F** = *Quasimitra sanguinolenta* (Lamarck, 1811) suture. **G-H** = *Quasimitra sanguinolenta* (Lamarck, 1811) (37.0 mm), Live dived off Kwazulu-Natal south coast, 38 m; Aiken Collection. **I-J** = *Quasimitra sanguinolenta* (Lamarck, 1811) (34.6 mm), Live dived off Kwazulu-Natal south coast, 38 m; Aiken Collection.



**Plate 8.** Figures: **A-B**= *Scabricola guttata* (Swainson, 1824) (54.9 x 19.5 mm), Off Kwazulu-Natal south coast, South Africa; Aiken collection. **C-D** = *Scabricola guttata* (Swainson, 1824) (52.7 x 19.1 mm), Off Kwazulu-Natal south coast, South Africa; Aiken collection. **E-F** = *Mitra boswellae* (Cate, 1964) (57.6 mm), Off Richards Bay, Kwazulu-Natal, South Africa; Seccombe collection. **G-H** = *Mitra boswellae* (Cate, 1964) (55.1 mm), Kwazulu-Natal, South Africa; Aiken collection. **I-J** = *Mitra boswellae* (Cate, 1964) (63.68 mm), Kwazulu-Natal, South Africa; Aiken collection. **K** = *Mitra boswellae* (Cate, 1964) Live specimen, Kwazulu-Natal, South Africa; Photographed by Valda Fraser.



**Plate 9.** Figures: **A-C** = *Calliostoma margaretae* new species (16.3 x 14.8 mm) – Holotype; NMSA Collection, ID No: P1165/T4320, South Africa, Kwazulu-Natal South Coast, off Hibberdene in 94 to 102 metres. **D-F** = *Calliostoma margaretae* new species (20.2 x 16.5 mm) – Paratype 1; South Africa, Kwazulu-Natal South Coast, off Hibberdene in 94 to 102 metres; Collection A. Seccombe. **G-I** = *Calliostoma margaretae* new species (20.8 x 16.8 mm) – Paratype 2; South Africa, Kwazulu-Natal South Coast, off Hibberdene in 94 to 102 metres; Collection A. Seccombe.



**Plate 10.** Figures: **A** = *Calliostoma margaretae* new species (16.3 x 14.8 mm) – Holotype; NMSA Collection, ID No: P1165/T4320, South Africa, Kwazulu-Natal South Coast, off Hibberdene in 94 to 102 metres. **B** = *Calliostoma iridescens* G.B. Sowerby III, 1903 (18.34 mm); Seccombe Collection. **C** = *Tristichotrochus crossleyae* (E. A. Smith, 1910) (14.65 mm); Seccombe Collection. **D** = *Calliostoma layardi* G.B. Sowerby III, 1897 (19.5 mm); Aiken Collection. **E** = *Calliostoma aikeni* Lussi, 2014 (13.03 mm); Seccombe Collection.