

Description of two new cone species from Eastern Cape, South Africa, in the subgenus *Sciteconus*, Da Motta, 1981

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ABSTRACT The conid subgenus *Sciteconus* is re-visited and two new species, *Floraconus (Sciteconus) mosterti* and *F. (S.) markpagei* are described herein.

KEYWORDS Eastern Cape, *Floraconus*, *Sciteconus*, *mosterti*, *markpagei*, *bairstowi*, *nahoonensis*, *mpenjatiensis*

INTRODUCTION

The subgenus *Sciteconus* seems to have been introduced by Da Motta to focus on certain endemic South African cone species. Stephan Veldsman in 2016, using material and the guidance of the sharp eye of the late Arie Jooste, with addition of material by this author, worked on shells from the Eastern Cape that formed part of a so-called “*brianhayesi*” group. This group consists of small cones with distinctive nipple-like protoconch and convex spire whorls, found mainly at 90 -110 metres by dredging, of which he introduced four new species.

In terms of systematics, the author feels more comfortable with the logic of Puillandre *et al.* in 2014, in the *Journal of Molluscan Studies*, to maintain *Sciteconus* as a subgenus of *Floraconus*, removed from the eclectic group of species gathered recently under the umbrella of *Floraconus* by Monnier *et al.* 2018.

Including the two new species in this paper, a ‘string’ of related *Sciteconus* species, from southern Kwazulu-Natal to Port Alfred in the Eastern Cape (Capean Subprovince) is acknowledged. Nothing is yet known of their feeding habits and living specimens are virtually

unheard of, leaving DNA and radula type as a current mystery to entice future researchers.

ABBREVIATIONS

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

SYSTEMATICS

Superfamily Conoidea J. Fleming, 1822

Family Conidae J. Fleming, 1822

Genus *Floraconus* Iredale, 1930

Subgenus *Sciteconus* da Motta, 1991

Floraconus (Sciteconus) mosterti R. Aiken,
n. sp. (Figure 1, Plate 1)

Description. Shells fairly small, averaging 21.8 mm in size. Shape broadly conical, spire moderately depressed, suture indented, spire whorls convex with spaced axial dashes of colour. Protoconch nipple-like. Labrum curved, aperture narrow. Background colour white, overlaid with a pattern of relatively large nearly square brown blotches and thinner dashes,

forming an almost checker board pattern in some specimens. Base of shells purple-brown.



Figure 1. *Floraconus (Sciteconus) mosterti* R. Aiken, new species

Types.

- Holotype: 22.2 x 12.6 mm. (Plate 1.1). NMSA P1450/T4410.
- Paratype 1: 21.8 x 12.2 mm. R. Aiken Collection.
- Paratype 2: 22.9 x 12.9 mm. R. Aiken Collection.
- Paratype 3: 22.0 x 11.8 mm. R. Aiken Collection.
- Paratype 4: 19.0 x 10.7 mm.
A. Seccombe Collection.
- Paratype 5: 19.4 x 11.0 mm. R. Aiken Collection.

Paratype 6: 23.2 x 12.2 mm. R. Aiken Collection.

Paratype 7: 24.0 x 13.0 mm. M. Page Collection.

Distribution. Dredged off Port Alfred, Eastern Cape Province, South Africa at 90 to 115 metres.

Etymology. This species is named for its discoverer, Stephan 'Mossie' Mostert.

Discussion. Falling definitely morphologically and size wise into the '*brianhayesi*' group, this species, with its pale background and "checkered" pattern, bears no likeness to any of the seven *Sciteconus* species illustrated by Veldsman in *Malacologia* 92, pages 34 and 35.

Floraconus (Sciteconus) markpagei R. Aiken, n. sp. (Figure 2, Plate 2)

Description. Shells small, averaging 21.4 mm in size, conical, spire low, suture mildly indented. Nipple-like protoconch, spire whorls faintly convex, shoulder rounded, spire marked with angled brown flecks, sometimes triangular. Background colour pale cream, overlaid with a series of brown markings of varying length, in 8 to 9 regularly broken radial bands. Base of shells tinged with plum colour.

Types.

- Holotype: 20.8 x 11.3 mm. NMSA P1451/T4411.
- Paratype 1: 24.2 x 13.7 mm. R. Aiken Collection.
- Paratype 2: 22.0 x 12.1 mm. R. Aiken Collection.
- Paratype 3: 19.0 x 11.3 mm. R. Aiken Collection.

Paratype 4: 19.1 x 10.8 mm. A. Secombe Collection.

Paratype 5: 23.5 x 12.9 mm. M. Page Collection.



Figure 2. *Floraconus (Sciteconus) markpagei* R. Aiken, new species.

Distribution. Dredged at 100 metres between Port Alfred and Kenton-on-Sea, Eastern Cape Province, South Africa.

Etymology. This species is named for Mark Page, in gratitude for his research, suggestions, editing as well as photography of recent papers by the author.

DISCUSSION

To avoid confusion with other specific members of the subgenus *Sciteconus*, it is felt that a detailed account and presentation of comparable

species would be prudent at this juncture, due to their resemblance to the newly described species, as follows:

1) *Floraconus (Sciteconus) bairstowi* G. B. Sowerby III, 1889: Described from an Algoa Bay specimen in the Bairstow collection by Sowerby III in 1889, the type is way above average size at 51 mm. It was tracked and illustrated by Mike Filmer, and can be viewed on Gastropods.com (Hardy, 2020). Until the last decade, decent or live specimens were rare indeed. Ranging from 29 to 51 mm, the shells are robust, with different spire and broad aspect, and can be beach collected, alluding to a shallow water habitat. They exhibit most often a lovely pattern of dark brown somewhat large square shaped markings, that are set apart in a radial pattern on the whorl, usually in seven rows. Interestingly, there occurs a noticeable ‘form’ of this species, which has no ‘loose block ‘pattern at all, and is replaced by light axial flames, sometimes even blending into a pale brown coloured mass on the whorl. A superb, fresh looking example of this variant can be seen as shell number 8, on page 488 of the recent *Taxonomic Iconography of Living Cones*. (Monnier *et al.* 2018) Further investigation into this variety is warranted. See Plate 3, Figure 1, for comparison. *F. (Sciteconus) markpagei* is a much smaller species, with different spire, morphology and whorl pattern. It is a deep-water species.

2) *Floraconus (Sciteconus) nagoonensis* (S. G. Veldsman, 2016): This species has remained enigmatic, having been described from a somewhat diverse group of specimens. A fortunate acquisition of an old collection rich in Eastern Cape material has provided some specimens that give a clearer picture of this species. These assumed beach shells are in fair condition and exhibit consistently, “species traits”, such as medium size (23.2 to 26.3 mm),

relatively sparse, spaced, smaller dorsal patterning, and morphologically not as “cone shaped” as the broader *bairstowi*. This species is however, larger than *markpagei*, has a more relatively small, spread pattern, and is morphologically more elongate.

3) *Floraconus (Sciteconus) mpenjatiensis* (Veldsman, 2016): This species also has dashes of brown in a radial pattern on the whorl, but can be separated from *markpagei* as follows: It is on average larger, and also broader, with more rounded, less conical profile. The broken radial pattern is thinner, (Plate 3 Figures 4 and 6c), in more close-set bands, sometimes with a different or non-existent zone below the centre of the whorl. The two species are separated by about 700 km of water.

4) Although rare, *Floraconus (Sciteconus) markpagei* has been displayed on the internet as an image in Wikipedia (as *bairstowi*), and the same image is repeated in Gastropods.com. This 19.6 mm specimen by ‘medvedev’ (Alexander Medvedev, of Moscow, Russia) is a fine example of *markpagei* with its small size, nipple-like protoconch and convex spire. It is highly dubious that the very large operculum came from that specimen though. See Plate 3 Figures 1-2 for a comparison between *F. (S.) bairstowi* and *F. (S.) markpagei*.

5) Of interest is the Alphabetical Revision of the species in recent Conidae, by Coomans, Moolenbeek & Wils in Basteria 46, 1982. Their three figures are: 194; *bairstowi* “flamed” form, 195; Sowerby’s drawing of the type, and 196: actually *F. (S.) nahoonensis*.

6) In The Strandloper 225 of June 1989, Liltved and Millard produce a comprehensive article on the then-known *Conus* species of South Africa and on page 9 figure 18, illustrate a series of

“*bairstowi*”. In fact, their specimen on the lower left is another fine example of *markpagei*.

7) For the sake of comparison in this subgenus, see also in A Conchological Iconography of the Family Conidae in South Africa, on page 21, two superb examples of *F. (Sciteconus) velliesi*, with Holotype of *brianhayesi*, and on Plate 200, shells 1, 2, 5 & 6 are *F. (Sciteconus) "ariejoostei"* (Tenorio & Monteiro 2008).

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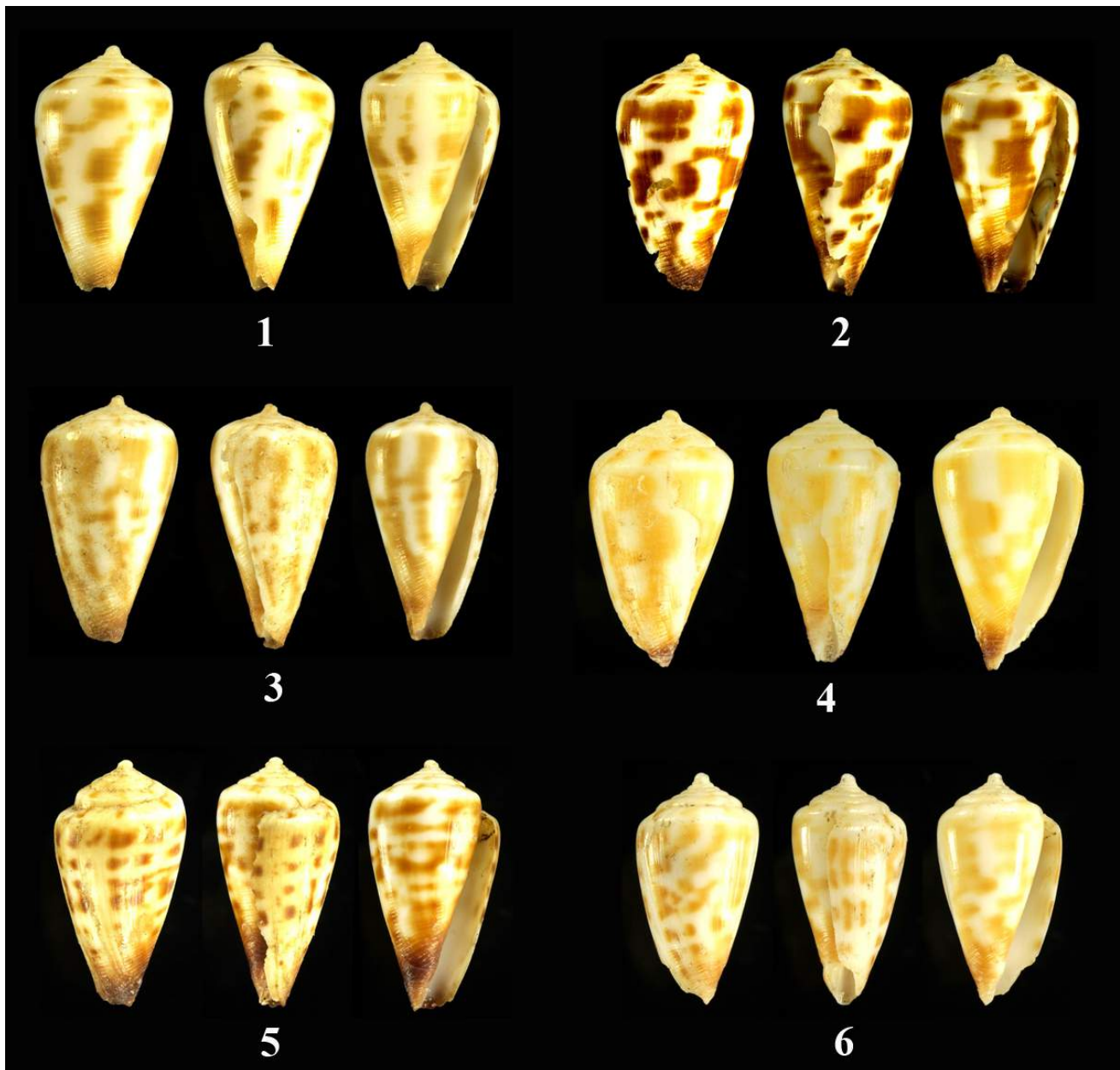


Plate 1. Figures: **1.** *Floraconus (Sciteconus) mosterti* n. sp. (22.2 x 12.6 mm) – Holotype; Port Alfred, Eastern Cape Province, South Africa; NMSA P1450/T4410. **2.** *Floraconus (Sciteconus) mosterti* n. sp. (21.8 x 12.2 mm) – Paratype 1; Port Alfred, Eastern Cape Province, South Africa; Aiken Collection. **3.** *Floraconus (Sciteconus) mosterti* n. sp. (22.9 x 12.9 mm) – Paratype 2; Port Alfred, Eastern Cape Province, South Africa; Aiken Collection. **4.** *Floraconus (Sciteconus) mosterti* n. sp. (19.0 x 10.7 mm.) – Paratype 4; Port Alfred, Eastern Cape Province, South Africa; Seccombe Collection. **5.** *Floraconus (Sciteconus) mosterti* n. sp. (23.2 x 12.2 mm) – Paratype 6; Port Alfred, Eastern Cape Province, South Africa; Aiken Collection. **6.** *Floraconus (Sciteconus) mosterti* n. sp. (22.0 x 11.8 mm) – Paratype 3; Port Alfred, Eastern Cape Province, South Africa; Aiken collection.

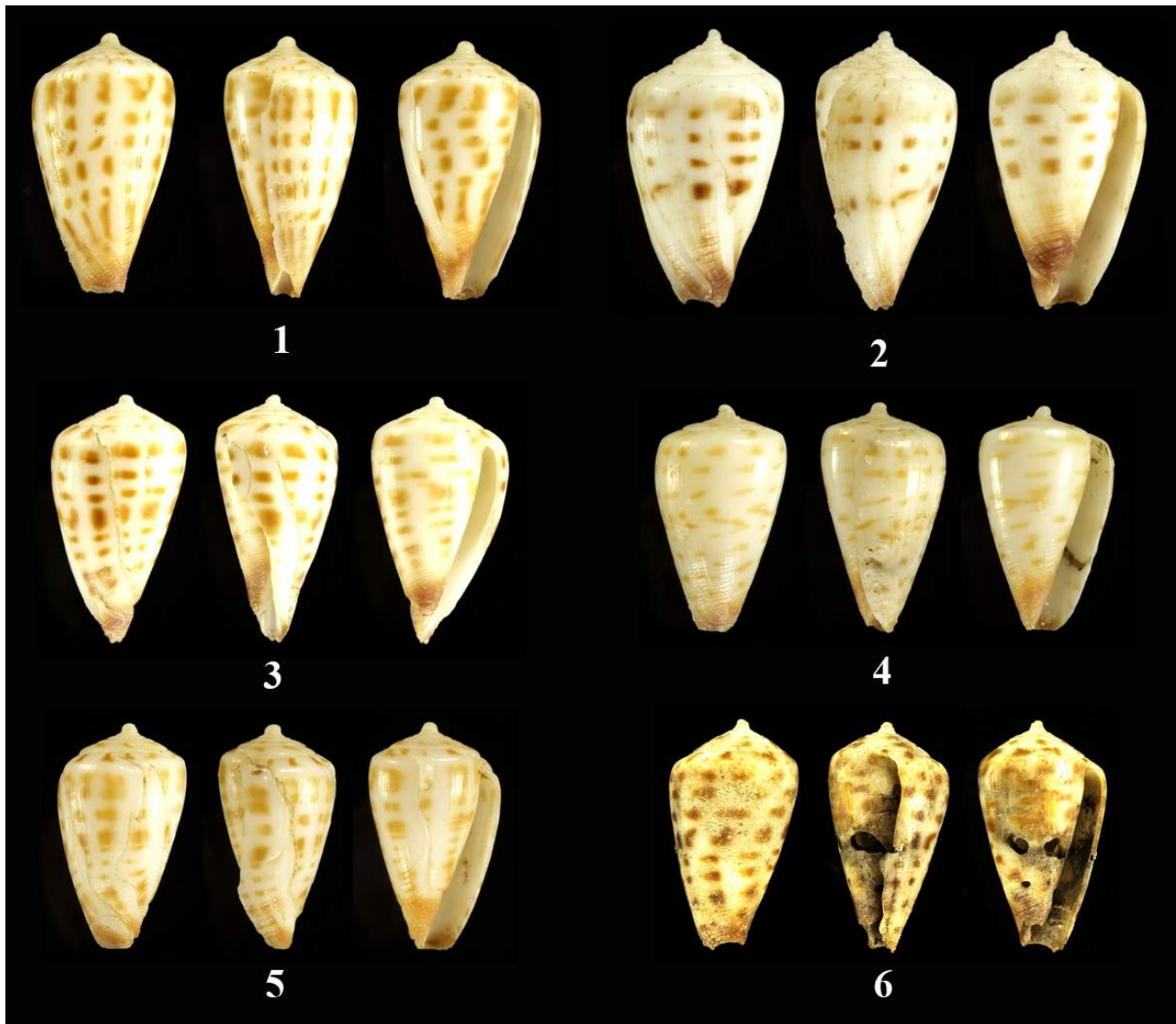


Plate 2. Figures: **1.** *Floraconus (Sciteconus) markpagei* n. sp. (20.8 x 11.3 mm) – Holotype; Eastern Cape Province, South Africa; NMSA P1451/T4411. **2.** *Floraconus (Sciteconus) markpagei* n. sp. (24.2 x 13.7 mm) – Paratype 1; Eastern Cape Province, South Africa; R. Aiken Collection. **3.** *Floraconus (Sciteconus) markpagei* n. sp. (22.0 x 12.1 mm) – Paratype 2; Eastern Cape Province, South Africa; Aiken Collection. **4.** *Floraconus (Sciteconus) markpagei* n. sp. (19.0 x 11.3 mm) – Paratype 3; Eastern Cape Province, South Africa; Seccombe Collection. **5.** *Floraconus (Sciteconus) markpagei* n. sp. (19.1 x 10.8 mm) – Paratype 4; Eastern Cape Province, South Africa; Seccombe Collection. **6.** *Floraconus (Sciteconus) markpagei* n. sp. (23.5 x 12.9 mm) – Paratype 5; Eastern Cape Province, South Africa; Page Collection.

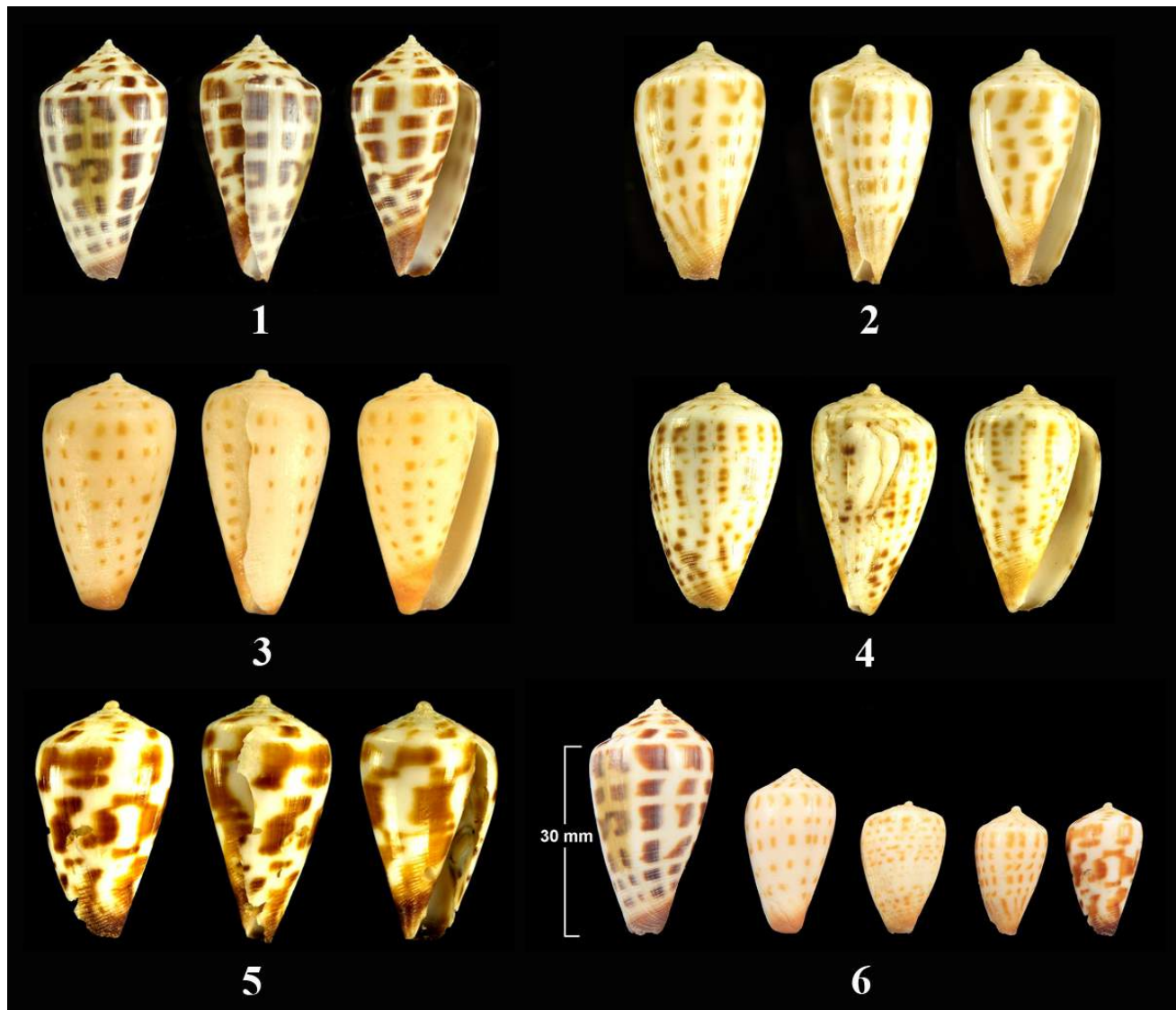


Plate 3. Figures: **1.** *Floraconus (Sciteconus) bairstowi* G.B. Sowerby III, 1889 (37.9 x 20.0 mm); Eastern Cape Province, South Africa; Aiken Collection. **2.** *Floraconus (Sciteconus) markpagei* n. sp. (20.8 x 11.3 mm) – Holotype; Eastern Cape Province, South Africa; NMSA P1451/T4411. **3.** *Floraconus (Sciteconus) nahoonensis* (S. G. Veldsman, 2016) (24.6 x 13.9 mm); Southern Kwazulu-Natal, South Africa; Aiken Collection. **4.** *Floraconus (Sciteconus) mpenjatiensis* (S. G. Veldsman, 2016) (21.5 x 13.8 mm) - Paratype 2; Southern Kwazulu-Natal, South Africa; Aiken Collection. **5.** *Floraconus (Sciteconus) mosterti* n. sp. (21.8 x 12.2 mm) – Paratype 1; Port Alfred, Eastern Cape Province, South Africa; Aiken Collection. **6.** From left to right: *Floraconus (Sciteconus) bairstowi* G.B. Sowerby III, 1889, *Floraconus (Sciteconus) nahoonensis* (S. G. Veldsman, 2016), *Floraconus (Sciteconus) mpenjatiensis* (S. G. Veldsman, 2016), *Floraconus (Sciteconus) markpagei* n. sp., and *Floraconus (Sciteconus) mosterti* n. sp.