

## Revision of the *Simililyria aikenii* Complex, with the Description of a New Subspecies

Roy Aiken<sup>1</sup> and José Rosado<sup>2</sup>

<sup>1</sup> 11 Nestadt St., Rynfield, Benoni, 1501 South Africa

[shells@molluscafrica.co.za](mailto:shells@molluscafrica.co.za)

<sup>2</sup> Av. Friedrich Engels N.373, 1º Maputo, Moçambique

[joserosadoi@hotmail.com](mailto:joserosadoi@hotmail.com)

**ABSTRACT** A new subspecies in the *Simililyria aikenii* complex from Mozambique is described, and a re-assessment of the distribution data for the group is provided.

**KEY WORDS** *Simililyria*, *Simililyria aikenii*, *Simililyria aikenii bazarutensis*, Mozambique.

### INTRODUCTION

In Strandloper 276 (2004-2005), Aiken and Marais started initial work on the “*Simililyria queketti*” group in their article “The tribe Lyriini from the East Coast of Africa.” Then, in the Volute section of the Identification Guide to Seashells of South Africa (Marais and Seccombe, 2010), *Lyria queketti* was presented as five forms, labeled therein as A to E. In Malacologia 75, Vellies Veldsman (2012) separated this group taxonomically from the distant Southern Natal group of *Simililyria queketti*. More material and data has now become available which has allowed the authors to study and describe herein a distinct new subspecies from an area further north of the known distribution area. Additionally, with more specimens being made available, it is now possible to present two other specific, localized variants of the group that were never properly illustrated. Images of specimens representing these variants are presented in an accurate sequence from South to North Mozambique. Veldsman, in Malacologia 75, alluded to the fact that information from trawlers is not very accurate at all, and their original paper utilized all data that was available at that time. However,

a new and more accurate distribution map of the complex can now be presented (see Figure 1) .

### Detailed distribution of the *Simililyria aikenii* complex (from bottom of chart, upwards):

- *S. aikenii kosibayensis* - from Kosi Bay to Bilene area, in 90 to 180 metres, including pale variant with very light background. Also crabbed in lobster traps and nets, at 200 to 270 metres. Size 45 to 70 mm. (Blue and Green)
- *S. aikenii aikenii* - from Boa Paz to Quissico in 115 to 130 metres. Live taken by Russian trawlers during the 1990’s. Unfortunately, still no record of animal colour/pattern. Size 50 to 70 mm. (Red)
- *S. aikenii inhacaensis* - from Zavora to Massinga, crabbed in traps at 120 to 140 metres. Also from lobster trawlers at 200 to 270 metres. Size 40 to 70 mm.(Brown)
- *S. aikenii inhacaensis* - striped variant, from Massinga to Cabo Sao Sebastiao, crabbed in traps at 120 to 140 metres. From lobster trawlers, crabbed at 200 to 270 metres. Size 40 to 60 mm. (Orange)
- *S. aikenii bazarutensis* ssp.nov - From North Bazaruto Island to South Sofala Bank, trawled crabbed 220 to 275 metres. Size 30 to 45 mm. (Pink)

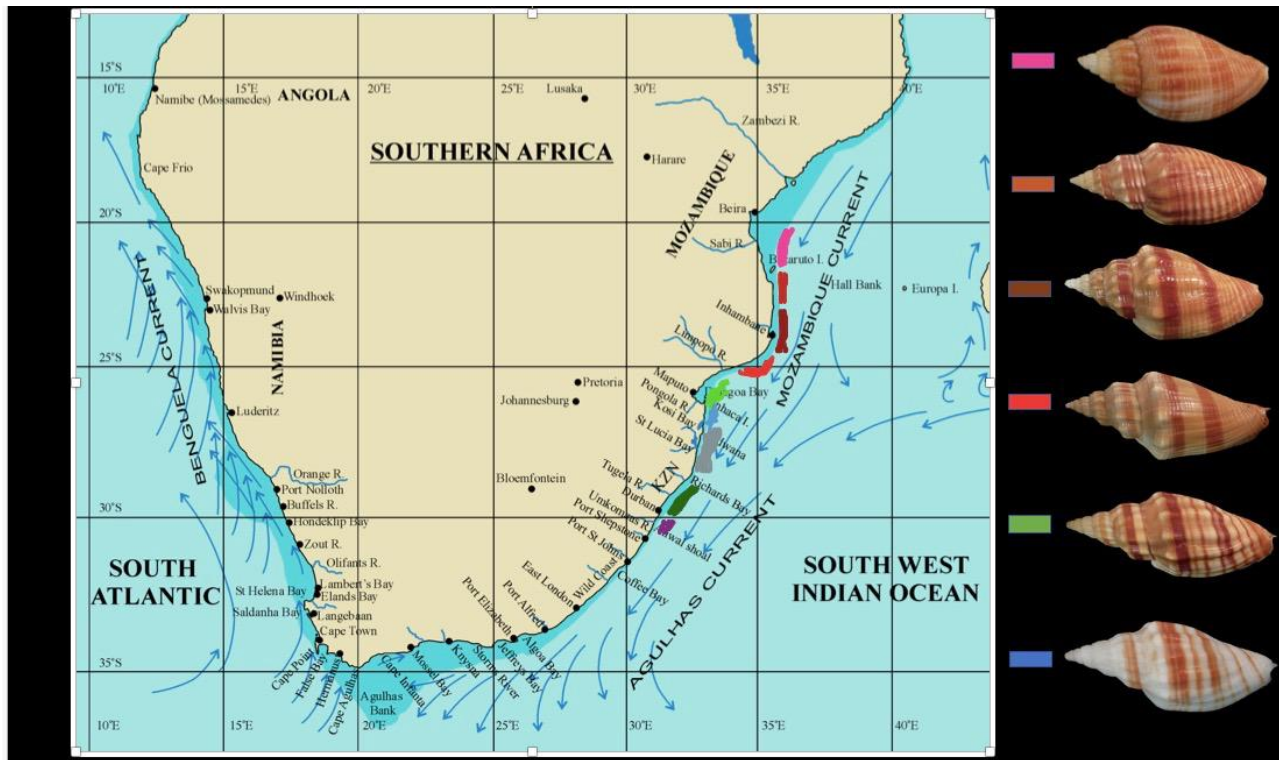


Figure 1. Distribution map of the *Simililyria aikeni* group. Map adapted from Pbsouthwood, 2007, Wikipedia Creative Commons.

**General habitat of the group:** In fine muddy sand, on or around flat rocks in the region of sponges and gorgonian reefs.

## SYSTEMATICS

Class Gastropoda  
 Infraorder Neogastropoda  
 Superfamily Muricoidea  
 Family Volutidae  
 Genus *Simililyria* Bail & Poppe, 2001

*Simililyria aikeni bazarutensis* ssp. nov.  
 Aiken and Rosado, 2018

**Description.** Average size is the smallest in the *Simililyria aikeni* group, at 38 mm. Shell ovate fusiform with solid, distinctly squat appearance. Surface noticeably dull, with matt appearance. Protoconch and teleoconch whorls very pale uniform grey. Spire low, early whorls with distinct sutural channel. Strong multiple radial grooves/striae cover the entire whorl. Blunt, low

and strong axial ribbing covering the entire whorl from suture to base, with a smooth shoulder. These fairly broad ribs create a coronate effect at the suture throughout the shell. The absence of any shoulder knobs renders this subspecies morphologically distinctive from its southern relatives. Aperture narrow, white, with flared white posterior callus, interior white. Columella with six to eight plaits, regularly spaced, strongest anteriorly. Two separate, small but distinct plaits exist towards the posterior end of the columella, creating a notch in some specimens. Base colour pale grey, with continuous radial red to orange-red lines covering the whorl, and two vague deeper red bands, in an upper and lower zone of the whorl (see Figure 2).

**Distribution.** Taken from 120 to 270 metres depth off Bazaruto Island from trawling activity in earlier years. Also taken off Bartolomeu Dias and Northern Bazaruto Island, by trawlers at

220 to 275 metres. Holotype obtained as an attachment to a specimen of *Xenophora pallidula*.

### Types.

Holotype - Height 33.6 mm x Width 16.0 mm, Aperture 22.6 mm. Catalogue and Type number, M 0213/ T 4278. Housed in the Natal Museum, Pietermaritzburg, Natal, South Africa.

Paratype 1: Height 43.6 mm x Width 21.8 mm. In collection J. Rosado.

Paratype 2: Height 43.1 mm x Width 20.5 mm. In collection R. Aiken.

Paratype 3: Height 31.7 mm x Width 16.6 mm. In collection J. Rosado.

Paratype 4: Height 33.9 mm x Width 16.2 mm. In collection J. Rosado.

**Etymology.** The name *bazarutensis* derives from the Island marker, off which this deep water subspecies has been obtained.

### DISCUSSION

Albeit that this discovery is noticeably different, the authors are of the opinion that it still falls within the parameters of the same ‘*aikeni*’ group, particularly based on proximate locality, as this ‘tribe’ spread and localized over millennia.

We re-iterate, that this ‘pattern’ of a locally spread but differentiated group, is also to be found off Eastern Australia (the *Pulchra* complex), and Southern Japan (*Fulgoraria*, per Bail, 2000).

This very rare subspecies has been known for some time, but from extremely few specimens and can be distinguished from all other members of the group by its ovate morphology, deep radial grooves on the whorl, lack of

shoulder knobs and very far northern distribution (see Figure 3). At least two of the types show distinct signs of drilling into earlier whorls by an unknown predator, possibly a muricid. These drill holes are a regular feature of many *kosibayensis*, and *queketti parkrynieensis* specimens.

Two consistently different variants in the group have also been brought to light, namely:

- A very attractive variant of *kosibayensis* from Techobanine area, with distinctive **very pale** background. Fresh specimens even exhibit this noticeably light background.
- An *inhacaensis* variant with uniform red radial lines only, showing no banding on the whorl.

### ACKNOWLEDGEMENTS

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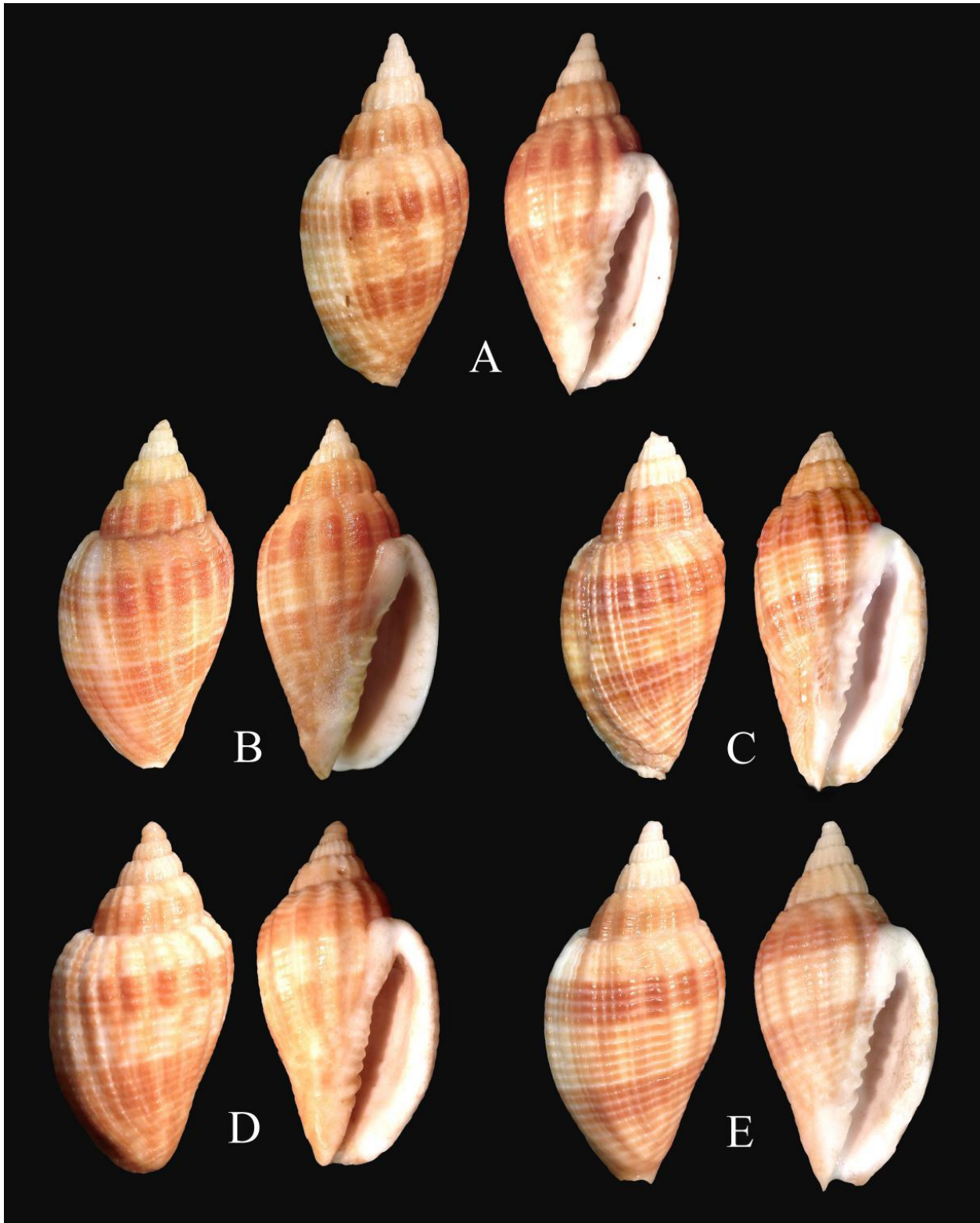
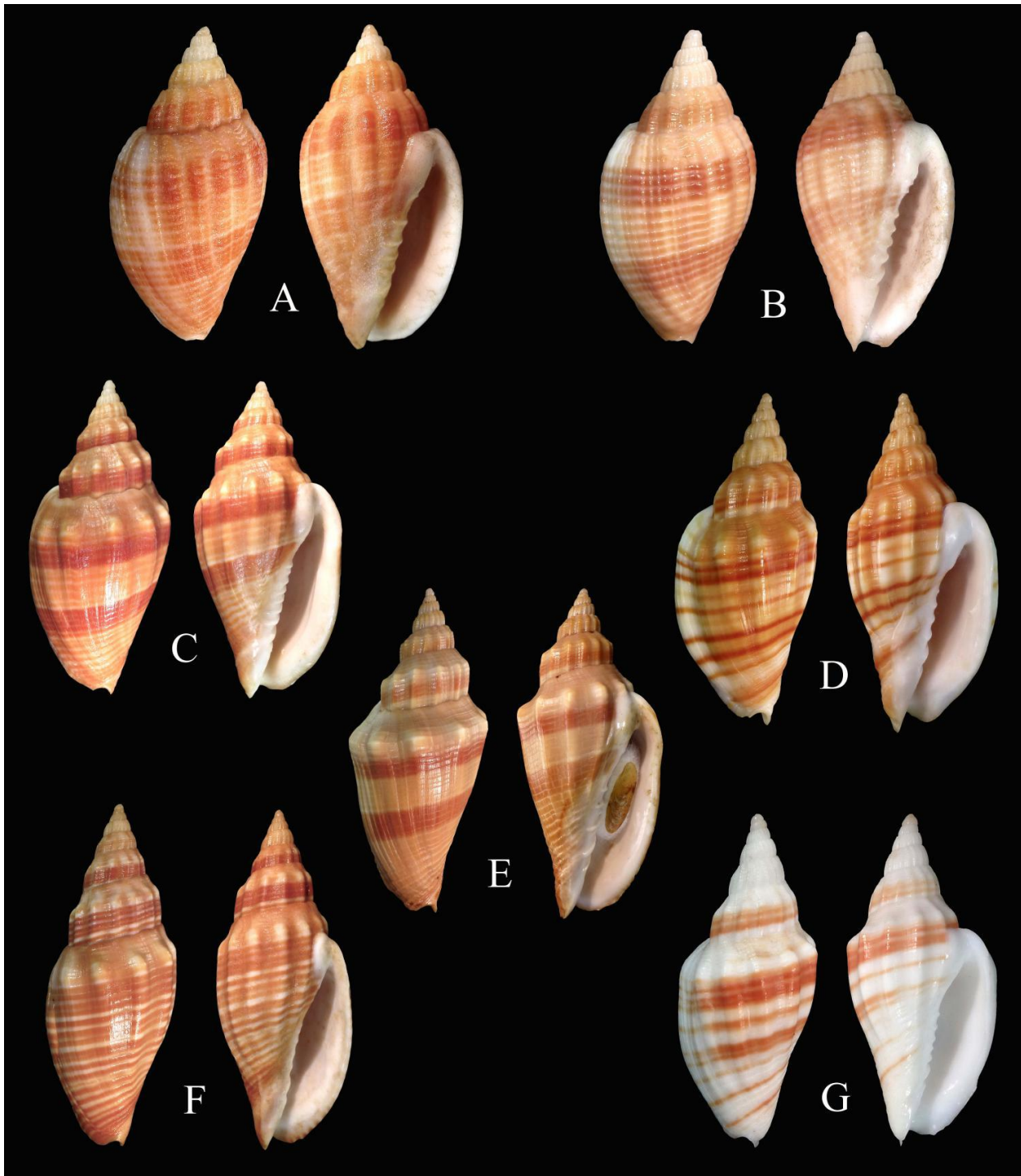


Figure 2. *Simililyria aikenii bazarutensis* ssp. nov. A = Holotype - 33.6 mm; B = Paratype 1 - 43.6 mm; C = Paratype 2 - 43.1 mm; D = Paratype 3 - 1.7 mm; E = Paratype 4 - 33.9 mm.



**Figure 3. Comparison of the *Simililyria aikenii* complex.**

**A** = Paratype 1 *Simililyria aikenii bazarutensis* ssp. nov., from off Sofala Bank; **B** = Paratype 4 *Simililyria aikenii bazarutensis* ssp. nov., from North Bazaruto; **C** = Typical form of *Simililyria aikenii inhacaensis*, from off Zavora; **D** = Typical form of *Simililyria aikenii kosibayensis*, from deep water off Techobanine area, south of Inhaca; **E** = Classic form of *Simililyria aikenii aikenii*, from Quissico Bank; **F** = *Simililyria aikenii inhacaensis*, uniform striped variant, from Massinga; **G** = *Simililyria aikenii kosibayensis*, rare smaller very pale variant, from off Kosi Bay.