Conus anabelae Rolán & Röckel, 2001

Type material: Holotype (Figs. 7-8) in MNCN (15.05/44375) 23.3 x 15.1 mm.
Other material studied: Angola: Praia Amelia, 3-6 m, Ponta de Noronha, Baia de Moçamedes, Ponta de Noronha (SMNS); Praia das Conchas.
Type locality: Praia Amelia, in the Baia de Moçamedes.
Etymology: Named in honour of Anabela, daughter of Francisco Fernandes. Both, Anabela and Francisco, collected the material here described.

Shell description: Small to moderately small, moderately light to moderately solid. Last whorl ventricosely conical. Outline convex at adapical third, slightly concave below. Aperture wider at base than near shoulder. Shoulder subangulate to rounded. Spire low, outline straight or slightly convex. teleconch sutural ramps convex, with numerous spiral striae. Last whorl smooth and dull, with some broad and weak spiral grooves at base. Ground colour light brown, changing to darker and lighter zones, spiral bands or spiral lines. Usually darker brown near base and often with a lighter brown broad spiral-band at centre or above centre. Lighter zones with very close-set axial brown lines. Aperture white.
Periostracum: Brown, transparent.

Shell morphometrv:
L 18-29 mm
RD 0.66-0.73 (specimens of Praia das Conchas: 0.75-0.78)
RSH 0.07-0.14
PMD 0.76-0.80
RW 0.09-0.21
Description of the animal: Animal not available for study although the radula was obtained from dry soft parts.

Radula: In radula sac 70-100 teeth. Tooth of vermivorous type, relatively primitive (Fig. 22). PA shorter than half of DR; S narrow, with about 15 D in a single row, being present on its upper part; F covering near 80% of PA.
Radula morphometry: (n = 9)
D 13-20
ABS 45°
LC/DR 52-60
DR/PA 2.09-2.25
%PA 70-76
Habitat: Shallow water, under rocks, buried in sand. *C. anabelae* is sympatric with *C.filmeri* and *C.fuscolineatus.*

Distribution: Found in several localities around Baia de Moçamedes (Praia Amelia, Ponta de Noronha, Praia das Conchas).

Discussion: Specimens from Praia das Conchas differ from the typical specimens conspicuously by their larger relative diameter (0.75-0.78 vs. 0.66- 0.73). As all other characters are identical, we consider the population of Praia das Conchas to be a geographical variant of *C. anabelae.*

C. anabelae is most similar to *C. babaensis* in shell characters, but can be distinguished by its brown instead of white ground colour. While the pattern of *C. anabelae* merges from lighter to darker brown, in *C. babaensis* brown and white bands and flecks are clearly separated. The tooth of *C. anabelae* is rather different from the tooth of *C. babaensis* (see Figs. 22 and 23-25), firstly in the ratio DR/PA (2.09-2.25 vs. 1.71-2.09) which conspecificy excludes. In addition, *C. anabelae* has about 50% more teeth in the radula (70-100 vs. 48-62) and more D in S (29 vs. 15) (see Figure 28). Most similar - although not identical - in radula shape is the sympatrically living *C. filmeri,* but the latter can easily be distinguished by its different shell characters (shell shape and white colour pattern). Both species appear very similar when the periostracum is not removed.

The radula tooth is also different from other species of superficial similarity: C. *flavusalbus,* C. *africanus* and C. *naranjus* (see Figures 29, 30). On the other hand, *C. bulbus* has obvious different shell characters, while the radular characters are similar, except the number of teeth in radula sac *(C. anabelae* 70-100 vs. 58-63).

Notes

A number of specimens are illustrated which are generally similar to the type specimens are illustrated in the Iconography of West African Conidae.

Other specimens in Encyclopedia ()

S. Namibe

S. Namibe.

Conchas .
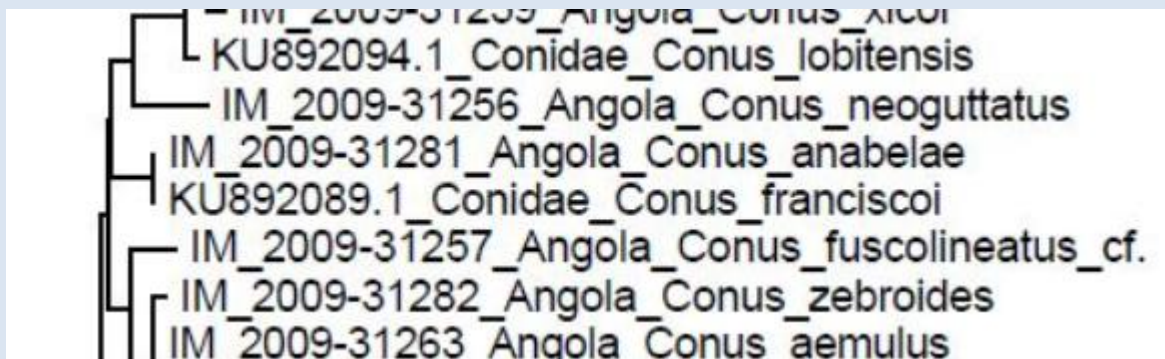

Praia Amelia GM coll2060

Praia Amelia GM coll2652

DNA analysis

One specimen has been tested by MNHN 31281

Baia Babas MNHN 31281

Given the very different radulae of *C. franciscoi* and *C. anabelae*, the DNA results are surprising. This may change when a wider set of genes is tested.

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