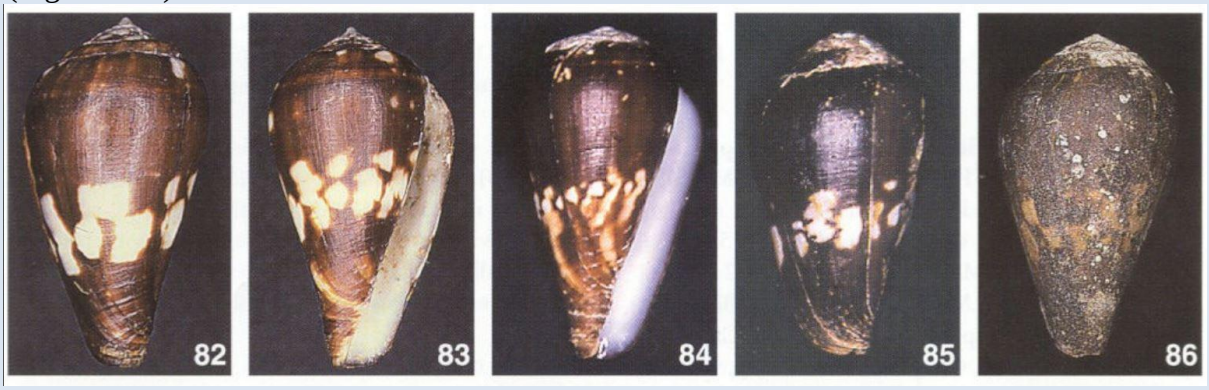
Conus franciscoi Rolán & Röckel, 2000

Holotype

Conus franciscoi n. Sp.
(Figs. 82-86)



Conus sp. Rockel, 1988. Club Conchylia, 20: pI. 2, figs.3 & 8
Conus variegatus "Kiener", Walls, 1979: Cone shells:693, fig. below, right.

Type material: Holotype (Figs. 82-83) in MNCN (15.05/39751) of 28.4 x 15.6 mm.

Other material examined:Sao Nicolau; Chapeu Armado .

Type locality: Chapeu Armado, Angola.

Shell description: Moderately small to medium sized, moderately solid. Last whorl ventricosely conical, outline convex at adapical third, almost straight below. Aperture wider at base than near shoulder. Shoulder rounded. Spire of low to moderate height, outline

slightly convex to sigmoid. Teleoconch sutural ramps convex, with fine spiral striae. Last whorl smooth, with some weak spiral grooves at base.

Shell dark brown, leaving a broad central spiral band consisting of broad white axial streaks and bars.

Periostracum translucent and of orange colour.

Shell morphometry:

L 30-38 mm
RD 0.65-0.70
RSH 0.10-0.16
PMD 0.75-0.81
RW 0.20-0.25 g/mm

Description of animal: Colour of animal unknown.

Radula: In radula sac 40-61 teeth. Tooth (Fig. 141), relatively small, with an unusually elongate PA for Angolan species; D in S, usually arranged into two rows adapically and into a single row below; ABS about 45°.

Radula morphometry:
(n = 5)
D 30-43
ABS 45°
LC/DR 43-57
DR/PA 1.7-1.8

Distribution: Only known from Sao Nicolau and Chapeu Armado (Fig. 147) .There it is sympatric with *C. chytreus, C. fuscolineatus, C. nobrei, C. albuquerquei, C. neoguttatus, C. naranjus, C. africanus,* and *C. variegatus.*

Habitat: Buried in sand between stones; juveniles in the high tidal level.

Etymology: Named in honour of the late Francisco Fernandes, who began the present work and collected most of the material.

Discussion: *C. franciscoi* n. sp. was named (but never published) by dealers and collectors as "C. armatus" (e.g. Clover, 1978: 14) or "C. armadensis". Similar species are the sympatrically living *C. zebroides* and *C. gabrielae*. *C. zebroides* from Sao Nicolau has an almost identical shell morphometry, but differs in its axial lines, usually covering the shell from shoulder to the base. Specimens of *C. zebroides* from the S. Nicolau population may have a reduced pattern, and can be distinguished only by their narrower white axial streaks. Much more significantly different are the radula teeth: LC/DR is 70-85 (S. Nicolau-population of *C. zebroides*) vs. 43-57 (*C. franciscoi*); the PA is larger in *C,franciscoi* (DR/PA = 1.66 vs. 2.1-2.4); also the number of D is very different: 16-25 in *C. zebroides* vs. 30-43 in *C. franciscoi*, there are in two rows in the base of *C. franciscoi* and one only in *C. zebroides*. *C. gabrielae* has a very similar morphometry and pattern, but it has a smaller (20-25 mm vs. 30-38 mm)

and slightly broader shell and its axial streaks are narrower. More different are the radula teeth: *C. gabrielae* has less D in S (16-20 vs, 30-43 in *C. franciscoi*), and PA is smaller in *C. gabrielae* (2.1-2.4 vs. 1,7-1,8 in *C. franciscoi).*

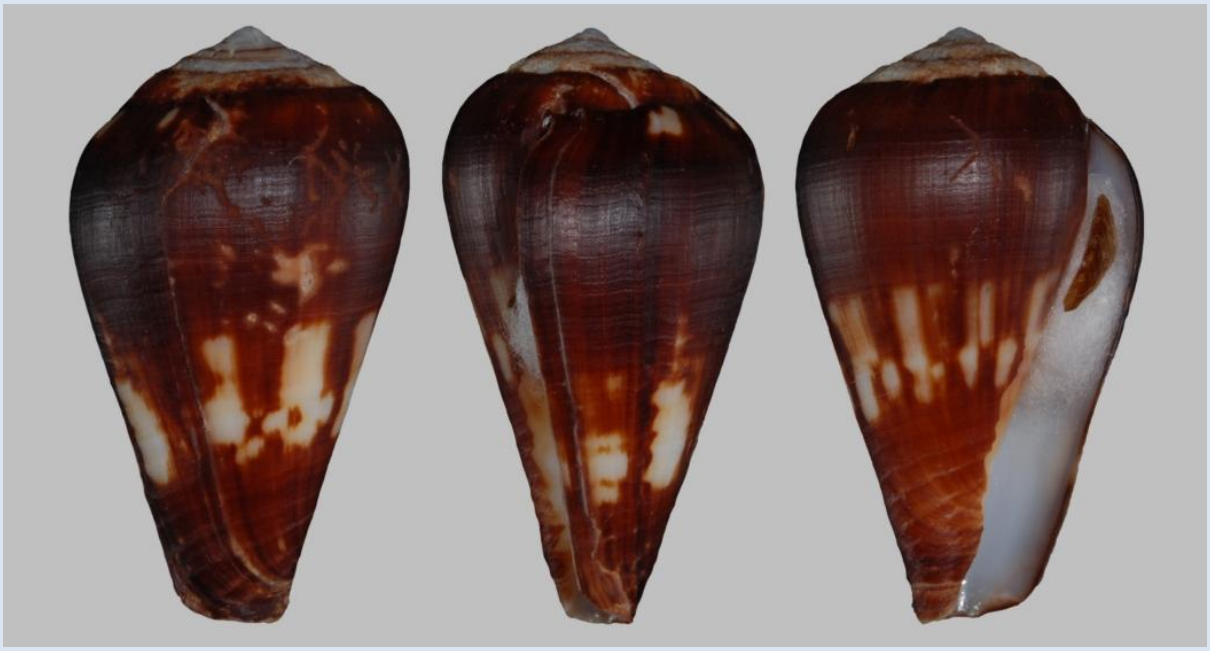
Iconography of West African Conidae

The text summarises the original description and comparison.

The illustrations of specimens from Baia das Pipas which display base colours of variable shades of brown but all have the wide band of white flammules just below the middle of the whorl. The locality extends the distribution range.

Other populations exist around Bentiaba

Bentiaba 27mm C. Afonso

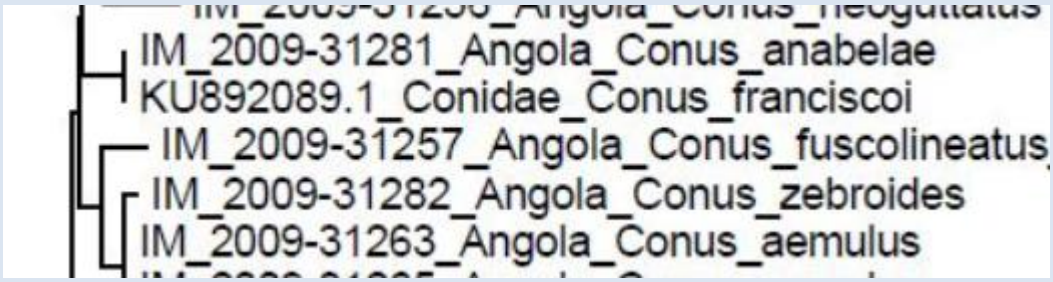


Bentiaba 32mm C Afonso

DNA Analysis

One specimen is recorded in Gen Bank

KU892089 Sao Nicolau



It is surprising that a COI gene test places *C. franciscoi* as genetically similar to *C. anabelae;* These species have dissimilar radulae; the radula of *C. anabelae* being short and that of *C. franciscoi* being one of the longest.

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Page last updated 31 May 2019.