# Conus (Lautoconus) annegretae n. sp.



Holotype of Conus (Lautoconus) annegretae n. sp.:

#### Type material

More than 100 specimens were found of which 30 specimens were studied in more detail and are considered type specimens. All specimens from the type locality. Holotype:  $37 \times 21.8$  mm, MNCN.

#### **Type locality**

Baia Equimina, Benguela, Angola; dived at 3 m depth.

#### **Distribution and Habitat**

This new species was found only in the Equimina Bay, in the south of Benguela Province, Angola. In this bay, the species is living sympatrically with other endemic cones such as *C. chytreus*, *C. trovaoi*, *C. zebroides*, *C. variegatus*, *C. carnalis*, *C. fuscolineatus* and *C. micropunctatus*. *C. annegretae n. sp.* was not found in other bays along this coast.

### **Etymology**

This species is named after Annegret Schönherr, the author's wife.

### **Description**

Shell medium in adult size (30-40 mm) and quite solid. The shell is ventricosely conical. The outline is convex in the adapical third, almost straight below. The left side is concave near the base. The aperture is wider at the base than near the shoulder. Shoulder is rounded, the spire moderately high; teleoconch whorl tops rounded and stepped with many microscopic spiral threads. Suture area is recessed, without undulations. Many weak spiral threads on spire whorls. Protoconch eroded.

The ground colour is white, typically with broad spiral bands of yellow/orange sometimes with a weak grayish tint covering most of the whorl while leaving a spiral white band at the middle. The spire is a similar colour to the whorl. The interior of the aperture is white, sometimes with a patch in the upper half with tones matching the colour of the whorl pattern.

The periostracum is opaque gray-brown. The operculum is small and elongated. The animal is a mix of colours of grey and yellow-orange with a black foot.

Radula: LC 40 mm, DR: 0.41 mm PA: 0.20 mm LC/DR: 96; DR/PA: 2.05 F: not estimable; D: 30.



Radula tooth of Conus (Lautoconus) annegretae n. sp.

The radula tooth is typical with the PA (anterior part) very narrow; the F (file) is not appreciable, the number of D (denticles) is about 30. It has some similarity with the tooth of *Conus cepasi* TROVÃO, 1975, *C. bocagei* TROVÃO, 1978 (but having a larger tooth) and also *C. trovaoi* ROLÁN & RÖCKEL, 2000 but this has less denticles D.

#### Discussion

Variations: In some specimens, the pattern of broad orange yellow spiral bands is greatly reduced creating, in the extreme, all white shells or shells with weak orange bands on the upper or lower half. Maximum size of type specimens was 42.5 mm.



Row 1: Holotype of *C. carnalis*, holotype of *C annegretae* n. sp., holotype of *C trovoai*. Row 2: Spire of *C. carnalis*, spire of *C. annegretae* n. sp.

C. annegretae n. sp. has some similarity to C. cepasi but is closest to C. trovaoi and C. carnalis, displaying features of both these species.

*C. cepasi* is a white/cream shell with numerous orange-brown axial hairlines. It has a transparent yellow periostracum and its animal is pink with irregular black marks.

*C. trovaoi* is a broader shell in shape. Its ground colour is typically a greyish green colour with a white spiral band centrally and a purple aperture. Its periostracum is transparent with grey green colour. Its animal is pink with dark spots.

C. carnalis is a much larger species in adult size, the spire tops comprise obliquely raised overlapping whorls with a distinctive depression near the suture. Its suture is wavy giving the

impression of being nodulose. In *C. annegretae* n. sp., the whorl tops lack the depression and are convex in outline. The animal of *C. carnalis* is salmon red [FERNANDES & RÖCKEL, 1983] whereas in *C. annegretae* n. sp. the animal has a black foot with grey and yellow-orange areas.

### Notes

A number of variations among the paratypes from the type locality are shown below:



C. annegretae 35mm GM



C. annegretae 33mm GM



C. annegretae 32mm GM



 $\overline{33}$ mm



30mm

Juvenile specimens tend to be white, developing the orange banding as they mature.

# **DNA** Analysis.

No tests have yet been recorded.

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