

***Conus (Lautoconus) equiminaensis* Schönherr, 2018.**



**Text-Fig. 4:** Holotype

**Type Material**

More than 80 specimens were found of which 30 specimens were studied in more detail and are considered type specimens.

All specimens from Equimina Bay.

Holotype: 31.5 × 17.8mm, MNCN.

**Type Locality**

Equimina Bay, Benguela Province, Angola; coordinates 13° 20'S, 12°, 80'E. where specimens were dived at 2-4 m on south side of the bay.

**Distribution and Habitat**

This new species is found in Equimina Bay, and in neighbouring bays in the south of Benguela province within the desert of southern Angola. It is found often in rough water at 2-4 m depth between and under rocks or buried in fissures of the rocks. The species is sympatric with other endemic cones including *C. chytreus*, *C. zebroides*, *C. variegatus*, *C. carnalis*, *C. fuscolineatus* and *C. micropunctatus*.

**Etymology**

This species is named after its type locality, Equimina Bay, 150 km to the South from the town Benguela, capital of this province. The name of this locality comes from the name of the river Equimina, which runs only during the rainy season in the mountains.

**Shell description**

Shell of medium size, usually 25-35 mm. The shell is conical to ventricosely conical. The outline is convex at the shoulder, with straight sides; the left side is concave near the base. The aperture is wider at the base than near the shoulder. The shoulder is rounded, the whorls tops smooth, rounded and slightly stepped; the spire is low. No cords are visible in the basal area.

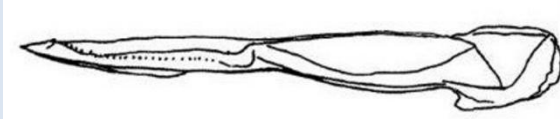
The ground colour is light greenish grey often with weak orange tones. The ground colour is not uniform, broken by two lighter spiral bands below center and near the shoulder. Closely

spaced brown dots form 25-30 variably spaced spiral bands. The spire is a lighter shade of the ground colour with axial brown flammules which run over the shoulder. The aperture is dark purple with two white bands. The edge of the lip matches the ground colour.

The operculum is small and elongated. The periostracum is smooth and translucent. The animal is very dark grey at the foot, separated from the yellow-grey of the remainder by a stripe in a stronger yellow colour.

The rough wave environment and predators often cause grazes and other damage on the shell.

Radula: LC 28 mm, DR 0.73 mm, PA 0.38mm, LC/DR 38, DR/PA 1.97, F 60 %, D 24.



**Text-Fig. 5:** Radula tooth of *Conus (Lautoconus) eqiminaensis* n. sp.

This radula tooth has a clearly observable F at the middle of its PA and has a larger size (LC/DR = 38 in front). Some populations of *C. zebroides* have a similar tooth but the F is not visible. The radular tooth of *C. cepasi* and *C. trovai* both lack a visible F and their tooth has a smaller size.

## Discussion

Variations are found in the tones of orange, green and in the number of rows and size of dots.

*C. eqiminaensis* n. sp. is similar to *C. micropunctatus*, *C. chytreus* and *C. variegatus*.

*C. micropunctatus* has a similar dotted pattern but is a white shell with brown spots and a white aperture. Its shoulder pattern comprises axial brown hairlines. It has 5-8 spiral grooves in its basal area. Its animal is pinkish with dark dots and spots [RÖCKEL & FERNANDES, 1982].

*C. chytreus* has a pattern of strong spiral lines sometimes broken into long dashes. Its aperture is white even in its most strongly coloured specimens. Its animal is pinkish cream with black dots [RÖCKEL & FERNANDES, 1982c].

*C. variegatus* is difficult to interpret as its very name suggests. The description refers to a light tan specimen with darker spiral dashes. It is a juvenile specimen 15-20 mm (See Text-Fig. 6.)



**Text-Fig. 6:** From left to right: Lectotype figure of *C. variegatus*; RÖCKEL & FERNANDES 2000 specimen from Limagens; MONTEIRO et al. 2014 “typical form specimen of *C. variegatus*” from Calonga; holotype of *C. equiminaensis* n. sp.

RÖCKEL & FERNANDES, (1982) designated from KIENER (1845: pl.106, fig. 1a), a specimen which was originally described as a “variety”, to be the lectotype figure. They illustrated greenish tan specimens with a strong pattern of spiral brown dashes from Limagens, of a similar size and juvenile shape to the specimen in Kiener.

RÖCKEL & ROLÁN, (2000) designated Santa Maria as the type locality. It has been reported from Bissonga to Limagens but not as far north as Equimina. They illustrated four specimens which are closer to the type of *C. obtusus* considered a junior synonym of *C. variegatus*. The animal is described as having “dark siphon and rostrum, base of foot grey.”

MONTEIRO et al. (2014) published a review of *C. variegatus* in which they selected specimens in size of 18-26 mm from Calonga judged to be closest to the type figure. They cite “bluish grey background” with light dots and up to three tan spiral bands. The living animal is described as “cream with salmon or pink shades and tinged with dark grey to black mainly along the foot margins and especially around the siphon”.

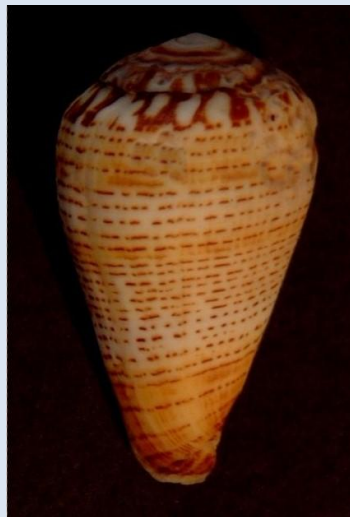
*C. equiminaensis* n. sp. differs from any of the interpretations of *C. variegatus* in having a pattern of many spiral rows of small distinct brown dots and a greenish/grey background with orange tones. It has a much larger size 25-35mm in adults and broader shape. Its animal colour pattern differs from any published description of the animal of *C. variegatus*.

**Comment:** There have been no reviews of the species

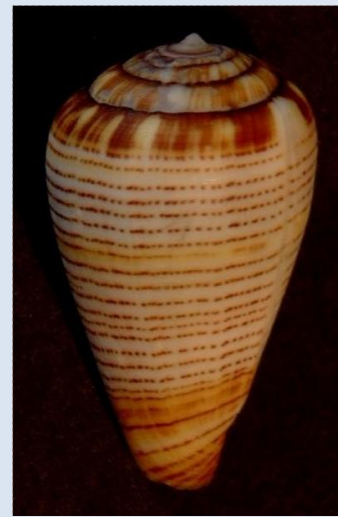
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Equimina 24mm GM



Equimina 29mm GM



Equimina 25mm GM

**DNA analysis:** Specimens have been deposited at MNCN for testing.

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