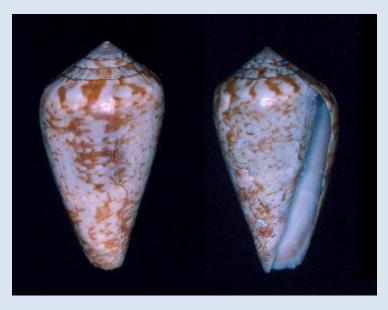
C. aemulus Reeve, 1844



Holotype NHMUK

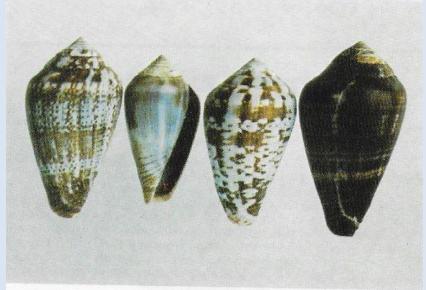
Original description: The Rival Cone. Shell turbinated, rather swollen at the upper part, smooth; olive-blue, variegated, filleted, and spotted with olive-brown; spire rather obtusely raised, sutures slightly rugged and uneven; interior of the aperture stained with dark olive-brown.

Reeve, Pro. Zool. Soc., 1843.

Habitat: ?

This is another very richly coloured shell allied in some measure to the Conus *guinaicus*, but presenting a very different style of painting.

Fernandes & Rockel, 1982



Size of pictured specimens: 41 mm. 33. 5 mm. 38 mm. 44 mm.

8. Conus aemulus Reeve, 1844

==Conus unifasciatus, Kiener, 1854

Essential characteristics: Conical, light shell of medium size. Sides of body whorl straight, slightly rounded near shoulder. Shoulder roundly angulated. spire moderately elevated with straight sides. Spire whorls smooth. Surface smooth and dull, few spiral cords near the base. Ground color bluish white with small interrupted light-dark spiral lines. Irregular dark brown dots scattered on the body whorl, mostly axially arranged. Inner lip white edged, then deep violet with small line at shoulder and centre.

Animal: Colour pinking grey to pinkish with black dots. In the light colour forms of shells the animal is more grey, in the dark forms the animal is more pinkish. Periostracum: grey/yellowish to yellow and transparent.

Habitat: At low tide buried in sand in seaweed areas. Found only in calm waters and sometimes near rocks or on rocks. Under rocks only when laying eggs.

Locality: Only Luanda area (Mussulo Bay, Samba Bay, Luanda Bay and Cacuaco Bay). Sympatric in rock areas with *C. tabidus*.

Similar species: C. hybridus is more slender, more glossy, with smaller brown dots on the surface. Spire whorls with 3 or 4 deeply incised grooves. *C. obtusus* has smaller and thicker shell, with more rounded shoulder and irregular pattern.

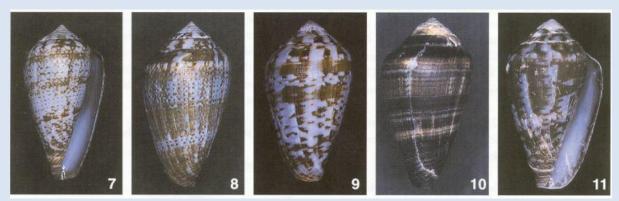
Rolan & Rockel, 2000

Conus aemulus Reeve, 1844 (Figs. 7 -11) Conus aemulus Reeve, 1844. Conch. Icon., 1, Conus, pl. 46, sp. 256.

Type material: Lectotype, designated by BANDEL & WILS, 1977, depicted by COOMANS, MOOLENBEEK & WILS (1979), in BMNH (34 x 19 mm).

Other material studied: Cacuaco; Mussulo Mussulo Bay; Samba, Luanda, Corimba, Luanda; Parol das Lagostas, Luanda;

Type locality: Mussulo Bay, Angola; designated by COOMANS ET AL. (1982).



Specimens from Mussulo Bay

Shell description: Small to medium sized, moderately light. Last whorl broadly and ventricosely conical; outline convex at ad apical half and usually straight below. Shoulder subangulate. Spire of moderate height. Larval shell of 1.75 whorls, maximum diameter 0.6-0.7 mm; nucleus 0.35 mm. Postnuclear whorls not tuberculate. Teleoconch sutural ramps flat to slightly concave, with fine axial growth lines. Last whorl smooth but dull, with a few spiral grooves basally.

Ground colour bluish white, with brown bands of different width at shoulder, above centre and at base and with numerous spiral rows of brown dots, often alternating with white dashes or dots. More or less uniformly brown specimens co-occur with typically patterned shells. Aperture white to light violet, translucent at collabral edge.

Larval shells white with dark base (Figs.14-116)

Shell morphometry

L 20-58 mm RD 0.63-0.73 RSH 0.13-0.22 PMD 0.75-0.80 RW(L 34-40) 0.135g/mu

Description of animal: Variable. Pinkish grey to pinkish with black dots (ROCKEL & FERNANDES, 1982a).

Radula: Radula sac with 45-60 teeth. Tooth {Fig. 121) of vermivorous type, relatively small. PA about half or little more than half tooth length. Only a single row of D in S, being small. F slightly prominent and far from waist, covering 70-80% of PA.

Radula morphometry:

D 18-25 ABS 40-45° LC/DR 51-67 DR/PA 1.83-2.00

Egg capsules: White, almost rectangular, with short base (Figs. 110-112). Escape window wide and translucent. Spawn with several capsules fixed one on the other and forming a group (Fig. 113).

Distribution: From Cacuaco up to Mussulo Bay, all in Luanda area, north of Angola (Fig. 145). Sympatrically living with *C. ermineus*, *C. genuanus*, *C. ambiguus*, *C. pulcher*; and with *C. xicoi* as another endemic species.

Habitat: At low tide buried in sand in seaweed areas. Found only in calm water and sometimes near rocks or on rocks (ROCKEL & FERNANDES, 1982a).

Discussion: *Conus aemulus* is an endemic species of Angola. Its closer relationship with the Conus ventricosus-group rather than to the other endemics is evident, in particular with *Conus guinaicus* Hwass from Senegal. COOMANS ET AL. (1979) explained the differences of the shell characters: "*Conus aemulus* has a smooth spire, the outlines of the last whorl are almost straight, the design shows a number of white spiral lines regularly covered with dark brown dots". Juvenile specimens of *C. aemulus* may resemble *C. variegatus* and are sometimes similar to *C. xicoi* in its colour pattern. For comparison with *C. variegatus* and *C. xicoi*, see the Discussion of the latter species.

Uniformly dark brown shells of *C. aemulus* with a light central band have been sometimes assigned to *C. franciscanus* Hwass, 1792. This taxon has been commented on by Rockel (1989), who considered it dubious though more similar in his opinion to *C. guinaicus*. Other authors like Kohn (1992) considered *C. franciscanus* a junior synonym of *C. ventricosus* Gmelin,1791.

Small shells (L 12-14 mm) showing similar characters as *C. aemulus* are found in Parol das Lagostas, Luanda area and in Sombreiro Bay, Benguela. Further studies may reveal their taxonomical status.

Other Sources

A variety of specimens of differing patterns are illustrated in the Iconography of West African Conidae



Paul Kersten illustrates a range of specimens in his checklist





Corimba 33mm GM

Corimba 31mm GM

Corimba 35mm

DNA specimens

Three specimens were analysed for the COI gene and all clustered together.



Specimens from Samba and Corimba, Luanda

However a specimen MNHN 31284 labelled *C. neoguttatus* is to be found in the DNA tree in very close proximity to the *C. aemulus* specimens. It is labelled as from Baia de Lucida which is probably a handwriting error and should read Baia de Luanda or Baia Lucira in the south. Typically, *C. neoguttatus* would be expected to have a white aperture. The specimen could be the white form of *C. aemulus* or a bluish form of *C. lineopunctatus* which is found at

Limagens and Elefantes. Shells with the bluish tone to their background have a corresponding purple patch in the aperture.



Page last updated 23 October 2019.