

## A NEW *CONUS* (GASTROPODA: CONIDAE) SPECIES FOUND IN MARTINIQUE

A. J. da Motta\*

LOZET and PETRON in «Coquilles des Antilles» (1977) first published several intriguing and very colorful Caribbean conid species never shown elsewhere before. Two of these (page 107) they identified as *Conus centurio*; fig. 188a as var. *cruzensis* and fig. 188b as var. *caribaensis*, both named by NOWELL-USTICKE (1968). VINK (1984) considered there was no doubt that fig. 188a is *C. daucus*. He explained that the two specimens (997 and 998) pictured by NOWELL-USTICKE have a slightly different pattern, but the «very low blunt spire» and the shape of the body whorl with convex sides just below the shoulder also point to identification with *C. daucus*. However, PATRICE BOU made available specimens closely resembling fig. 188a, together with data compiled from personal field observations, which enable me to here propose a new taxon in recognition of what can be established as a separate population distinct from either *C. centurio* or *C. daucus*, found in Martinique.

### *Conus (Dauciconus) boui* n. sp.

Shell of medium size, glossy, obconic with a low spire consisting of 10 whorls and an exerted apex with a tan protoconch; 2 postnuclear whorls being obsoletely beaded, the surface of the next 5 whorls being flat, followed by the penultimate whorl being deeply concave, with its edge forming a somewhat raised rim on a sharply carinate shoulder. The sides are slightly convex above, then becoming flat and taper gently to the base. The spire-whorls are lightly incised with numerous spiral threads; body-whorl smooth throughout its length but wrinkled with several ridges at the anterior end. The ground color of the shell is golden-brown with the spire being decorated with a series of white-and-brown arcuate tessellations. Then, originating from the penultimate whorl, undulating streamers of axially-aligned strands of dark brown overflow the shoulder into nearly two-thirds of the body whorl even to over-running into a white band at its mid-section. Some sparsely marked brown spots continue disjointedly into the remaining lower portion of the body whorl. The aperture has parallel sides, the interior being a nacreous white, with a narrow golden rim on the edge of its thin outer lip.

\* Suite 812, Harbour Crystal Centre, 100 Granville Road, Tsim Sha Tsui East, Kowloon, Hong Kong.

**Habitat:** Usually found in sandy bottom with rocks and algae but no other vegetation.

**Type Locality:** Pte de la Baleine, west coast of Martinique.

**Distribution:** Within a stretch from Pte du Diamant northward to Anse Dufour and again north of St. Pierre in the west coast of Martinique, in depths of 18 to 37 meters. Specimens have also been collected on sand between coral heads in 20 meters off Vauxhall, St. James, Barbados. *C. mindanus*, *C. attenuatus* and *C. vanhyningi* are sympatric, but are found more abundantly in shallower water.

**Holotype:** 30.2 x 17.3 mm, deposited in the Museum Historie Naturelle, Geneva. MHNG 988105

**Paratypes:** No. 1-29.2 x 16.8 mm, deposited in the Muséum National d'Histoire Naturelle, Paris, No.

No. 2-29 x 16.7 mm, deposited in the American Muséum of Natural History, New York, No. AMNH 236975

No. 3-28.9 x 17.6 mm

No. 4-33.5 x 19.1 mm

No. 5-28.2 x 16.4 mm

Remaining paratypes, retained in the author's custody for distribution to other museums.

**External morphology:** Pinkish gray, overall animal body color. *C. boui* has a syphon marked with a profusion of black horizontal darts and streaks on a background of orange; eyes and proboscis, reddish-orange; the foot, of a light burgandy-red with the edges ringed with a deeper shade of burgandy with smearings of black, somewhat similar to the animal of *C. regius*. *C. daucus*, by comparison, is almost a solid orange color throughout. Another species, which has a similar profile to *C. boui* and painted a cloudy purple, has a deep yellow syphon and a yellow foot rimmed with a ring of regular black smearings.

**Discussion:** The species closest in structural profile to *C. boui* is *C. daucus* Hwass in Bruguiere, 1792. It is a species widespread in the Caribbean from southern Florida and the Bahamas, south through the Antilles and the Central American coast, to the southeastern coast of Brazil. The many facets of its morphology were described so succinctly by Nowell-Usticke (1968) that it merits reproduction here: «The 'carrot cone' is a medium-sized orange colored cone widely distributed throughout the Caribbean Islands and in consequence shows considerable variation. The spire varies from very depressed, with concave sides, to somewhat elevated with straight

sides. The apex is often pink, and there are alternative patches of orange and white on the spire whorls, which are channelled, the earlier whorls having 3 to 4 incised spiral lines, later whorls show only the growth lines. The whorl shoulders are broad, usually slightly rounded, and at times almost sharp. The body appears smooth, but has fine growth lines, sometimes crossed with very fine irregular spirals. The sides become almost straight after bulging out to the widest point just below the shoulder. There are about 6 - 8 rough spirals at the base. While the shape is very constant, the color is quite variable; the main colors are: dark orange, orange yellow, and intermediate shades; pale dull yellow and rarely light brown, light yellow, light olive yellow, white (rarely with a pale yellow base). Frequently there are faint traces of tiny brown dots arranged spirally. The plain shells usually have a colorless subcentral band, though this is sometimes obscured or lacking, and there is sometimes a second pale band just below the shoulder. Rarely there are colorless flames above the subcentral band».

No study is known which attempted to segregate specific color, size or shape with specific localities, but such a ubiquitous species is bound to have penetrated some areas within such a vast distributional range where quite different ecologic conditions prevail. *C. boui* may well be an off-shoot of a common parentage, but the consistent evidence of its unique coloration; its allopatric habitat; its own limited distributional range provide ample justification to conclude that it has evolved into a distinct species. This is further borne out by its propagation into homogeneous colonies of its own by a range extension to Barbados. Several other colorful forms similar in profile are also found in Martinique, which will require further studies before determination of their status can be accurately assessed. However, they are not sympatric with *C. boui*.

There are two taxa in the synonymy of *C. daucus*, with apparent morphologic differences, which should therefore also be mentioned: *C. castus* Reeve, 1844, a slightly inflated yellow shell, encircled with a few faint very finely black-dotted lines at irregular distances; spire smooth and apex rose-tinted (locality unknown), and *C. croceus* Sowerby, 1833, described briefly as «yellow, banded and punctate» shown in Conch. Ill., pl. 29, fig. 27, but which was later revised in the Index as a variety of *daucus* (locality unknown). Neither has any resemblance to *C. boui*.

*C. centurio* Born, 1780 is an exceedingly rare species by comparison, although it occurs within an extended range from the northern coast of South America, along central America, and the Antilles to Florida. It resembles closest to *C. deserti* Recluz, 1843, but which is narrower with a higher spire. It has a low biconical spire with nearly flat sides. Body whorl is white, covered with rather wide zigzag flammules of tan to chestnut, widely spaced, flammules tending to condense into three spiral bands of large blotches: below shoulder, mid-body, and above the base. Its length is up to 65 mm. No apparent similarity is visible when compared to *C. boui*.

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A



B



C

A-B — *Conus (Dauciconus) Boui* n. sp.

C — Spire

Photographs courtesy of Mr. G. Dajoz of Museum d'Histoire Naturelle, Geneva.