

A NEW CONE FOUND OFF DURBAN, SOUTH AFRICA (PROSOBRANCHIA: CONIDAE)

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The entire coastal stretch of South Africa forms a zoogeographical zone without a very large conid presence, but still having a fair number of species which occur only in this area. MILLARD & FREEMAN (1979) compiled a list of 74 species of *Conus*, out of which 42 have a recorded occurrence; 19 were considered as doubtful, with the remaining 13 treated as endemic to South Africa. These are: *altispiratus*, *bairstowi*, *eucoronatus*, *eumitus*, *infrenatus*, *lohri*, *mozambicus*, *natalis*, *pictus*, *scitulus*, *tinianus*, *typhon* and *visagenus*. A new candidate can now be added to this last category as a result of having recently received from Dr. Connell a batch of cone shells, amongst which were some lemon-colored specimens I had never seen before. These, later, proved to be a distinctly new species, which I take pleasure in dedicating to Dr. Allan Connell of Brighton Beach, Natal in recognition of this discovery made by him.

Conus alconnelli n. sp.

(Fig. 2, A, B)

Description:

Shell subcylindrical, solid, smooth, with a low gloss and having a depressed conic spire consisting of 10 spiral whorls, with a pointed apex; surface of whorls imperceptably convex, furrowed with strongly incised revolving grooves, the edges folded outward into canaliculated sutures. Shoulder is angular and keeled. The elongate body whorl has sides which are flat, tapering down its attenuated length but slightly sigmoid at its midsection. Prominent striations are axially etched on a third to sometimes half of the dorsum surface of adult specimens; from the shoulder, curving horizontally at the lower end, to merge and wrinkle the base adjoining the columella. The entire shell is a solid lemon-yellow color with a narrow zone at just below the shoulder forming an indistinct collar of a lighter whitish shade. There is no maculation of any kind in any part of the shell. Aperture is off-white, porcelaneous and laterally narrow. It appears to be a monotypic species.

Type Locality:

All the shells were dredged by Dr. Allan Connell in person from recorded areas of individual specimens, within a radius from Richard Bay, which is about 200 kms north of Durban, to Park Rynie, 60 kms south thereof, off the eastern coast of South Africa.

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Holotype:

Fig. 1 & 2 dorsal and ventral aspects of *Conusalconnelli* measuring 61.5×29.5 mm deposited in Museum d'Histoire Naturelle, Geneva under MHNG No. 986.543. Dredged from about 55 fathoms depth in the Richard Bay area.

Paratype:

No. 1 46.1×24.5 mm deposited in American Museum of Natural History, New York, AMNH No. 222018. Dredged from about 78 fathoms depth in the Park Rynie area.

No. 2 62×29.6 mm from 67 fathoms, Richard Bay area.

No. 3 29.6×10 mm from 73 fathoms, Park Rynie area.

Radular tooth:

The radular tooth is typical of a vermivore. It presents at the top a barb and on the opposite side a well defined blade extending for about $3/4$ of the anterior zone. A clear constriction separates the anterior from a posterior zone of the same length.

The serration extends along the anterior zone and is formed by strong denticles which are double towards the middle portion of the tooth. This serration ends in a strong cuspid.

The base of the radular tooth presents a spur.

Discussions:

Conus lohri KILBURN, 1972 is found in the vicinity and is probably sympatric. Both are tinted yellow but conspicuously different in color-tone and easily separated. *C. lohri* is distinctly oblong-ovate in outline with a depressed convex spire and a obtuse apex; shoulders sloping and rounded, with a slight bulge; ground color being brownish-yellow fading to a drab orange-buff; body whorl often with two broad zones of darker transverse hairlines, one zone occupying the base, the other lying around the middle, with a series of predominantly arrowhead-shaped chestnut marks in the shoulder slope; aperture light violaceous fading to flesh color.

Conus turschi DA MOTTA, 1985 has a subcylindrical shape-resemblance with a fulvous ground color, but can be quickly recognised by its raised conic spire and the body whorl being ornamented with a median yellow band separating two broader transverse zones of a tawny shade. There is evidence that the range of *C. turschi* has now been extended to central Pacific, but is still not seen off the coast of East Africa, where it might be confused with *Conus consors* SOWERBY, 1833, found off the coast of Mozambique.

Conus kashiwajimensis SHIKAMA, 1981, is a medium-sized shell with a low, pink-tipped spire and roundly angled shoulder. Its body whorl is pale rosy-pink covered with about four broader spiral bands of deeper pink and orange; aperture pink to pinkish-violet, with no dark staining anteriorly on the shell. The records should be set straight that this species appears to be endemic to waters off south-east India. Its habitat was originally reported as southern Japan and Taiwan based on specimens acquired only from dealer sources. Walls mentioned that Taiwanese coral boats have taken the species in fair numbers from off Sri Lanka, which has since been borne out by In-

dian trawlers working the same area. On the other hand, no fresh specimens have been gathered from the China Sea, an origin still needing to be verified.

Conus kintoki COOMANS & MOOLENBEEK, 1982 is an obconical, very flat-spined shell, with narrow shoulders and an attenuated body whorl. Its ground color varies from a deep pink to orange or violet. It is only found in the Philippines and Taiwan and has been erroneously confused with *Conus berdulinus* VEILLARD, 1972. The latter is a different species altogether, so far found only in the west coast of Reunion Island. *C. berdulinus* has a low conic spire, with contrasting broad bulging shoulders, and sides tapering flatly down its length. The color is of a pastel shade of pinkish-mauve with a band of a lighter shade encircling its midsection. *C. kintoki* is however much more slender by comparison.

I must conclude that no evidence of recognizable similarity can be found when comparing the main characteristics of the new species with those of a selective number of look-alikes. I therefore consider *Conus alconnelli* as a distinct species and feel fully justified in proposing the name as a new taxon.

Acknowledgements:

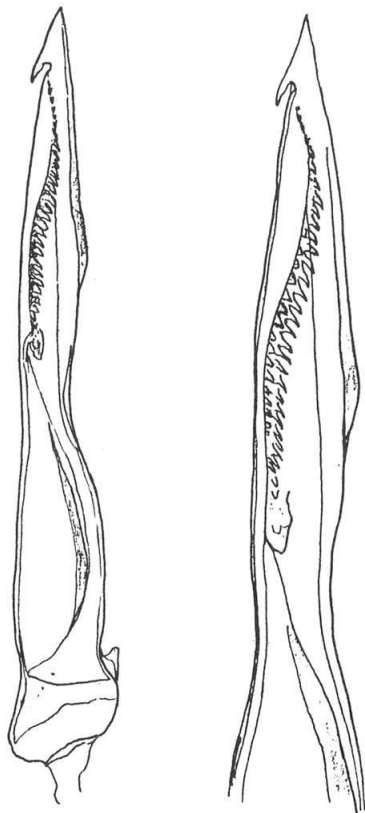
I express my gratitude to John Orr for the excellent photos of scanning views of the radular tooth and also to Herculano Trovão for studying those photos and preparing a detailed description of the tooth.

RESUMO

O autor descreve uma nova espécie do género *Conus* pertencente à fauna Sul Africana.

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Radular tooth from
Conus alconnelli n. sp.

Holotype *Conus alconnelli* n. sp.
Dorsal aspect



Holotype *Conus alconnelli* n. sp.
Ventral aspect

