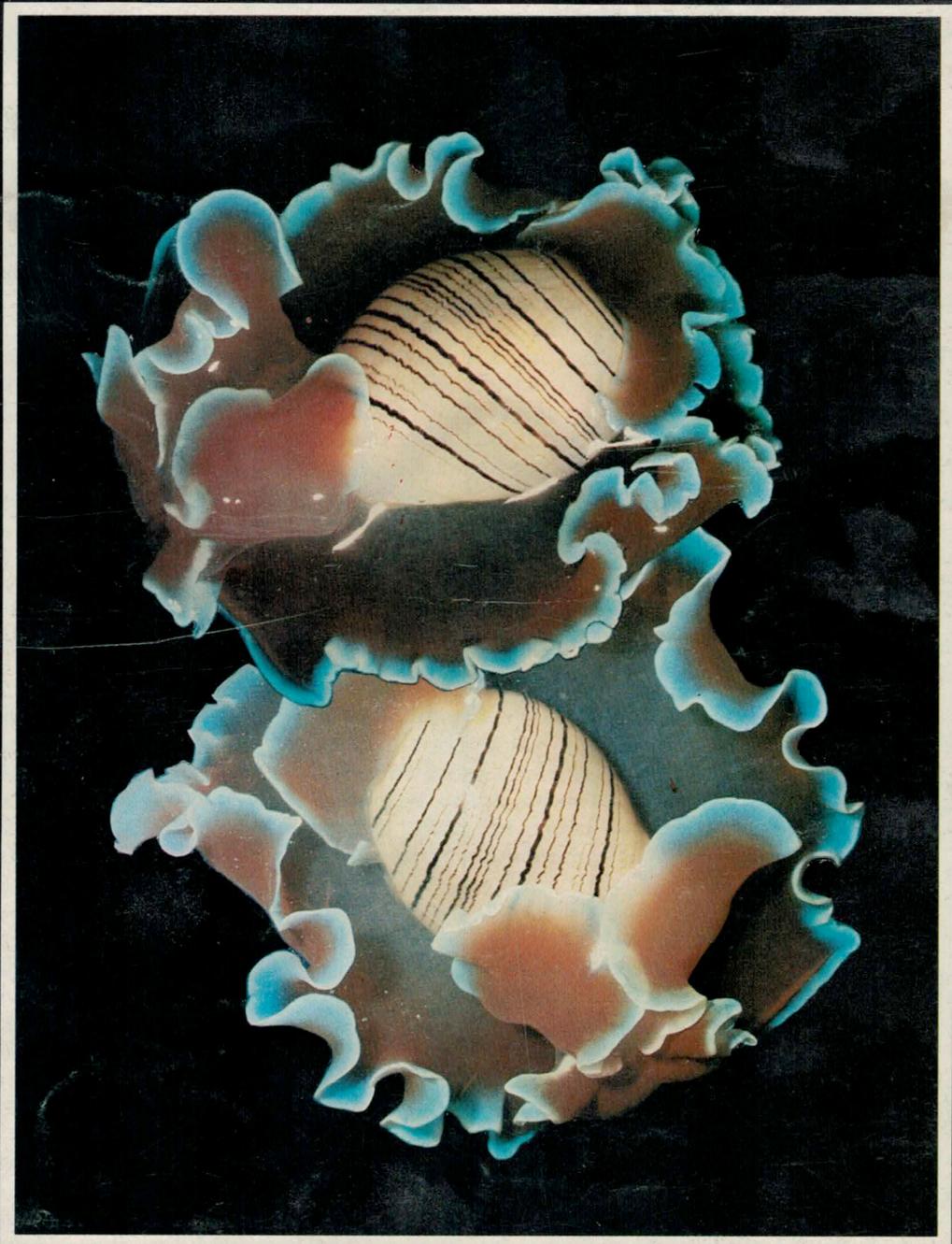


La Conchiglia

The Shell

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haddnightae is *fallax*...

During my recent visit to the Museum of Natural History in London, thanks to the support of Dr. Katharina Way of the Molluscan Section, I had the great opportunity of taking a comprehensive look at the original material of the Authors of the past and study in particular the type collection of *Cypraea*.

What especially struck me was the holotype of *Cypraea fallax* Smith, 1881, a large elongated shell, which I thought I had seen before, but under a different name. I asked for Dr. Way's assistance and, comparing the holotype of *fallax* with a typical *Cypraea haddnightae* Trenberth, 1973, illustrated in Walls & Taylor's «Cowries», we found that they clearly belonged to the same species.

You will come to the same conclusion if you compare the specimen of *haddnightae* in your collection with the photos of the *fallax* holotype shown hereby. The indistinct lacunae on the dorsum, the fossula, and the unique formation of the anterior columellar teeth are unmistakable features.

The newer name, *haddnightae*, must therefore yield to the older one, *fallax*, which Smith established 92 years before Trenberth thought, in error, that he had come upon an unknown shell within the *Cribraria* (actually *Cribrarula*) genus, and decided to call it after both Miss. F. Haddrill and Miss. M. Knight, the two nursing sisters who had first brought such a shell to his notice.

It is obvious that Trenberth ignored the holotype of *fallax*. But he was perhaps led to confusion also by the fact that Smith's name had often been (and still is) misused to indicate the larger, inflated West Australian deep water form of *Cypraea cribraria* Linné, 1758. Even normal shallow water shells of this species are sometimes labeled *fallax* in collections.

In my opinion, the correct name for the deep water West Australian *cribraria* is *exmouthensis* Melville, 1888. Schilder 1938 confirms this

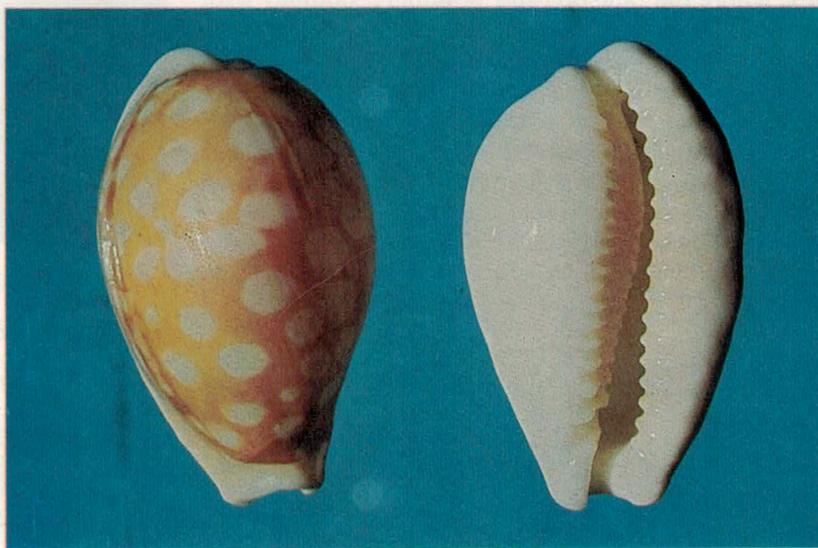


A taxonomical revision of West Australian *Cribrarulae*

Felix Lorenz jr. e Guglielmo Biraghi



The holotype of *Cypraea fallax* Smith, 1881: dorsal and ventral views.



A typical *Cypraea haddnightae* Trenberth, 1973: dorsal and ventral views.

impression by treating *exmouthensis* as a synonym of *fallax*.

As for the smaller shallow water form from the same area (extending, in fact, as far as Queensland), it is now left nameless by *fallax* becoming the valid name of a different species.

But I do not think it really needs to be named at all, since it does not show any significant morpho-

logical features distinguishing it from *cribraria*.

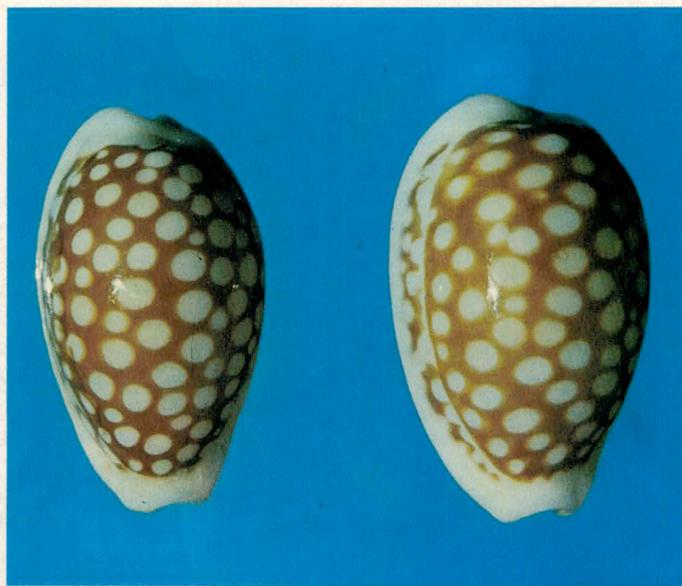
I am greatly indebted to the help and patience of Dr. Katharina Way for letting me study the type collection.

Special thanks to Mrs. Anne Thomson for the excellent colour photographs of the *fallax* holotype.

F. L.



Cypraea cribraria Linné, 1758. Left: the «quasi niger» form from New Caledonia. Right: a colour variation from the Dampierian Region.



Two specimens of typical **Cypraea cribraria** Linné, 1758, from the Exmouth Gulf.

... but what is *exmouthensis*?

Before accepting the conclusions of Felix Lorenz jr. and renaming *haddnighetae fallax* according to the laws of priority, two steps had to be taken: 1) comparing the shell illustrated in Walls & Taylor's «Cowries» (a book not always fully reliable) with the original illustration of *haddnighetae* provided by Trenberth in Publication No. 17 of the Malacological Society of South Australia; 2) comparing the description in Trenberth's paper with the description of Smith's *fallax* in the Annals and Magazine of Natural History of Great Britain.

Both steps have proved positive. The photocopy of the *haddnighetae* holotype, although not clear enough to be reproduced here, leaves no doubt about the conspecificity of that shell with the shell reproduced by Walls & Taylor.

And both specimens do correspond to the *fallax* holotype in the photographs sent to us by our friend Lorenz: the only difference being in the size (not in the quality) of the white dorsal lacunae, which are smaller (but no better defined) in Edgar A. Smith's old shell.

As for the two descriptions, that of 1881 and that of 1973, it would be too long to report them here in full. But some phrases make it ob-

vious that they both refer to conspecific specimens. Smith: «It is larger than any specimen of *cribraria* which has come under my observation, and of pear-like shape... It has more than the average number (about nineteen) of teeth on the labrum... Labium internum denticibus 23 paulo minoribus parum prominentibus instructum...». Trenberth: «The shell is readily separated from all others of the Genus by its pyriform, inflated shape, finer and numerous teeth... Sulcus and inner denticles very prominent...».

Smith occupies himself mostly with colour details: «The white spots are not so clearly defined... The fawn colour is paler than in most specimens of *cribraria*... The white spots appear to blend into the fawn-colour and no indication of minute dotting is traceable...». While Trenberth, in a more modern fashion, favours details of shape: «The extremely sloping columellar teeth area of the shell is one of its most outstanding characteristics... Right margin expanded, left side rounded, except for anterior extremity, which is also expanded...». But either order of remarks finds adequate correspondence in all the photographs at our disposal: Lorenz is right, *haddnighetae* is *fallax*, and *fallax* is a good

species, not just a form of *cribraria*.

We do not agree, though, with our friend's conclusions as far as the other taxon, *exmouthensis*, is concerned. Nor can we see how *exmouthensis* could be used, as is sometimes done, for that remarkable West Australian form of *cribraria* in which the very neatly designed dorsal lacunae, instead of being as white as the margins, show a warm yellow/ orange tinge. In fact, even though this often comes from the Exmouth Gulf itself, it does not correspond to the original description by Cosmo Melvill in Memoirs and Proceedings of the Manchester Literary and Philosophical Society.

«Another form» says Melvill «I noticed recently in the Natural History Museum, S. Kensington. In this the dorsal markings are very rich blackish brown, the white spots more sparse; long in size about 1 inch. Habitat, Exmouth Gulf, W. Australia, collected by T. H. Haynes. Mr. J. Michael Williams has another specimen approaching this. The dorsal covering matter seems to have been twice deposited, causing a very rich effect, with partial eclipse of the round white spots. This possibly may be *C. comma* (Perry, Conch., pl. XXI, f. 5), but plate and description are both bad, and identification difficult in consequence».

That's all. Even leaving prudently aside *comma* Perry, 1811, an East African taxon, the impression we derive from Melvill's words is extremely vague and confusing. The closest thing to such a description seems to be what is usually offered to us as a «quasi-niger» form of *cribraria* originating from New Caledonia! In fact, of the two shells mentioned by Melvill, could not at least Mr. Williams' have come from that Pacific island? We are almost tempted to believe it.

But, then, specimens with irregularly impressed dorsal lacunae can be found just anywhere.

Why did the Schilders put *exmouthensis* in the synonymy of *fallax* when they certainly knew Melvill's text? This is easily explained by their habit of naming every geographical race considered in their

famous Prodrôme with whatever local name came chronologically first, even if it had been created for an abnormal shell. The same rule was observed all the way down their synonymical lists, where names of all sorts follow one another according to the laws of taxonomy but independently from the original intentions of their authors. Once *fallax* was accepted as the racial taxon for *cribraria* in the Dampierian Region, *exmouthensis* therefore automatically became its junior synonym. That a different species of *Cribrarula* kept hiding in those waters, the Schilders did not yet know. Nor did anybody else, until Trenberth came across another shell like Smith's, and named — or rather renamed — it.

Later, the Schilders had to give up their beautiful and long sought-

after dream of a perfect racial splitting. It then became necessary to disentangle many of the old taxa from the web of the exploded Schilderian scheme and bring each of them back to its own original acceptance and meaning. Some students and most collectors (not to mention all the dealers) still seem to find this operation quite difficult. Yet, since the original meaning of *exmouthensis* is impossible to determine, why not stop trying to give it new, unauthorized acceptations, and simply declare it a *nomen dubium*?

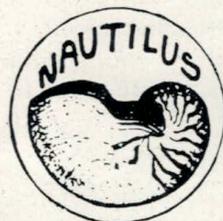
Our thanks also go to Dr. Way and Mrs. Thomson of the London Museum of Natural History, and to Mr. Olaf Christensen of Australia, for providing us the original descriptions of *fallax* and *haddnigh-tae*.
G. B.

NOTES & TIDINGS

An important and exhaustive study of the *Conus cedonulli* complex has been published in the Revue Suisse de Zoologie» Tome 92, fasc. 3, Oct. 1985 by our collaborator Danker E. Vink and the well known German malacologist Rudo von Cosel. Seventy eight pages, with 12 black and white plates and 10 figures in the text. After a historical review of previous investigations of this complex from Linné onwards, the authors recognise 8 closely related species. Of these, one is a fossil (*C. consobrinus* Sowerby I, 1850), one is new (*C. pseudaurantius*): the others are *C. cedonulli* Linné, 1767, *C. aaurantius* Hwass in Bruguière, 1792, *C. mappa* Lightfoot, 1786, *C. curassaviensis* Hwass in Brug., 1792, *C. archon* Broderip, 1833 and *C. scopulorum* van Mol, Tursch & Kempf, 1971. *C. cedonulli* from oceanic islands in the Eastern Caribbean (Lesser Antilles) and *C. mappa* from the continental shelf of northern South America have developed various populations in different geographic areas. These populations have constant differences in colour and pattern and they are here treated as subspecies, i.e. *C. cedonulli cedonulli*, *C. cedonulli insularis* Gmelin, 1791, *C. cedonulli dominicanus* Hwass in Bruguière, 1792 and *C. mappa granarius* Kiener, 1848. Furthermore there exist colour varieties, to which various names have been given, such as «*C. caledonicus*» Hwass in Bruguière, 1792 and «*C. holemani*» Usticke, 1968.

For each taxon synonymy, differential characters and information on distribution and habitat are provided. A statistical analysis of the morphometric parameters. shell length (SL), maximum diameter (MD) and aperture height (AH) is presented as well as a dichotomic key to the recent members of the complex. The cones of the *Conus cedonulli* complex inhabit soft

floors except mud in the vicinity of hard substrate between 1.5 and 160 m. They mostly feed on polychaetes of the family Amphinomidæ., Metamorphosis takes place within the egg capsule, the young have a paucispiral embryonic shell and hatch at least in the late pediveliger stage; there is no planctonic phase. To conclude, the *Conus cedonulli* group is a species» and subspecies complex with mostly allopatric members at various stages of speciation, presumably originating from a common ancestor and now separated by biological barriers.



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