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Notes on *Clathroterebra fortunei* (Deshayes, 1857) and *Clathroterebra multistriata* (Schepman, 1913)

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Abstract: *Clathroterebra fortunei* (Deshayes, 1857) and *Clathroterebra multistriata* (Schepman, 1913) are compared and discussed and *C. multistriata* is removed from synonymy with *C. fortunei*.

Abbreviations:

FN:	Private collection of Frank Nolf, Belgium
NHMUK:	Natural History Museum, United Kingdom
YT:	Private collection Yves Terryn, Belgium
ZMA:	Zoologisch Museum Amsterdam, at present Naturalis Biodiversity Center, The Netherlands

Introduction: *Terebra fortunei* was described by Deshayes in 1857, accompanied by a simple but clear drawing facilitating identification at the time. The taxon was seldom used thereafter, largely due to the rarity of the species. in 1913, Schepman described a similar-looking species, *Terebra multistriata*, in *Prosobranchia of the* Siboga *expedition*. The description there was also accompanied by a rudimentary small drawing. Both drawings appear very similar upon first glance (See Figs 1 & 12).

The family **Terebridae** underwent a first thorough revision by Bratcher & Cernohorsky (1987); the synonymy of *T. multistriata* Schepman, 1913 with *T. fortunei* Deshayes 1857 was validated and since then widely accepted. Admittedly, if one only has the descriptions with drawings at hand, perhaps aided with a brief study of the types or pictures thereof, and lacking further material, it is not a surprise to consider them conspecific.

A majority of subsequent authors accepted their opinion (incl. Terryn, 2007; pending further revision aided by the type material) and regarded *T. multistriata* synonymous with *T. fortunei*.

During the past decade, an 'abundance' of *T. fortunei,* mainly originating from the Philippines, has become available to conchologists together with a very small number of similar-looking specimens, which are here regarded as belonging to a separate species: *T. multistriata*. On top of that, a number of specimens have been incorrectly labelled as *T. fortunei* and will be discussed and/or described in a forthcoming article with molecular data.

Since the last major revision (Terryn, 2007), *T. fortunei* has been considered as belonging to the genus *Clathroterebra*, but recent molecular results (Gorson et al., in prep; Fedosov et al., in prep.) reveal it as a member of a subclade of *Myurella;* but results at present impede the further taxonomic division of the latter. Pending this publication, the species discussed herein are considered as *Clathroterebra* according to Terryn (2007), for continuity's sake.

SYSTEMATICS

Class **GASTROPODA** Cuvier, 1797
Order **NEOGASTROPODA** Wenz, 1938
Superfamily **CONOIDEA** Fleming, 1822
Family **TEREBRIDAE** Mörch, 1852
Genus ***Clathroterebra*** Oyama, 1961
Type species: *Terebra fortunei* Deshayes, 1857

Clathroterebra fortunei Deshayes, 1857

Type: Lectotype, NHMUK 19790061 (see Salvador & Pickering, 2017)

Type locality: 'les mers de Chine' – 'China Seas'.

Description: The original latin description (Reeve, 1860): translates into Shell elongately turreted, somewhat slenderly pyramidal, white, whorls slightly convex, divided at the upper part by a pricked groove, concentrically strongly ribbed, interstices latticed with spiral ridges, sutures deep; aperture small, columella somewhat produced and twistedly recurved.

Additional notes: The slender form is both highlighted by Deshayes (1857) and Reeve (1860) and virtually all subsequent authors. The holotype is white, probably a dead-collected specimen. However, live-caught specimens often have a coloured and patterned subsutural band consisting of irregular shaped blotches, more often visible in young specimens. Kira (1959: 38, fig. 5; 1965: pl. 71, fig 5) and Cernohorsky (1978: pl. 52, fig. 9) figure a different species with more rounded whorls and a different colour and pattern arrangement, a species currently under further study and description with molecular data.

Clathroterebra multistriata Schepman, 1913

Type: Lectotype, ZMA. MOLL. 136898, 34.6 mm; paralectotype, ZMA. MOLL. 136897, 25.7 mm (presently curated as syntypes, but the figured specimen and the data correspond to the aforementioned specimen ZMA. MOLL. 136898 and justifies designation as a lectotype).

Type locality: *Siboga* Stn 116. Indonesia. W of Kwandang Bay entrance. 72 m. Fine sand and mud.

Description: The original description by Schepman (1913) is very detailed: "Shell moderately large, elongate, very slender, white, with faint traces of an interrupted yellowish, subsutural zone and two still fainter ones on the last whorl. Whorls 25, of which about 3 form a smooth nucleus, with convex whorls, subsequent whorls strongly convex for the genus, separated by a deeply impressed, undulated suture; sculpture consisting of conspicuous, elegantly curved ribs, 14 on last whorl, the crest of ribs smooth, but their sides and interstices by unequal flat lirae; 18 striae on penultimate whorl, of which one, placed at some distance from the suture, has the appearance of a groove; the ribs nearly reach the base of the last whorl, where the number of striae is much more considerable; this last whorl is very long, subangularly rounded below, then strongly contracted. Aperture elongate, narrow, with a not very sharp angle above, ending in a rather long, curved canal below; peristome not intact, columellar margin consisting of an appressed layer of enamel, with a scarcely appreciable groove below, bordering a faint columellar fold. Interior of aperture smooth, white."

Additional notes: Schepman goes on by noting the main difference from *C. fortunei*: at an equal number of whorls, *C. multistriata* is much smaller and slenderer. Moreover, the number of spiral striae is 'double' the amount of the striae in *C. fortunei.*

Discussion: The present paper highlights the main differences between the two species, aided by an abundance of photographs, which will facilitate identification, and thus justifying *C. multistriata* no longer to be considered synonymous with *C. fortunei*, but a valid separate species.

Both have an identical conical protoconch of 3 whorls, white to light brown in colour. *C. multistriata* is characterised by generally attaining a smaller adult size than *C. fortunei*, more convex and constricted (above the suture) whorls (see detail 19b). *C. multistriata* is characterised by a much slenderer shell: the apical angle of *C. multistriata* averages 0.117 (n=7), while the apical angle of *C. fortunei* averages 0.130 (n=10). The number of spiral striae on the remainder of the whorl is roughly double in number in *C. multistriata* compared to *C. fortunei* (see comparative figures 3b and 19b).

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Plate

1-11: ***Clathroterebra fortunei*** Deshayes, 1857
- **1:** Type figure taken from Deshayes, 1857.
- **2:** YT, Philippines. Mindanao. Off Aliguay Island. Dredged at 50-150 m, 48.0 mm.
- **3a:** YT, Philippines. Mindanao. Off Aliguay Island. Dredged at 50-150 m, 55.9 mm
- **3b:** detail of whorls and sculpture at identical distance from protoconch as 19b.
- **4:** YT, Philippines. Balicasag Island. Tangle nets at 100-150 m, 57.8 mm.
- **5:** YT, Philippines. Mactan. Trawled at 200 m, 69.0 mm.
- **6:** YT, Japan. Tosa Bay. Trawled at 80 m, 73.3 mm.
- **7:** YT, Philippines. Mactan. Trawled at 200 m, 73.8 mm.
- **8:** YT, Philippines. Mindanao. Off Aliguay Island. Dredged at 50-150 m, 75.7 mm.
- **9:** YT, Philippines. Mactan. Trawled at 200 m, 75.0 mm.
- **10:** YT, Philippines. Mindanao. Off Aliguay Island. Dredged at 50-150 m, 59.9 mm.
- **11:** YT, Philippines. Balicasag Island. Tangle nets at 100-150 m, 32.3 mm.

12-20: ***Clathroterebra multistriata*** Schepman, 1913
- **12:** Type figure taken from Schepman, 1913.
- **13:** Lectotype, ZMA. MOLL. 136898, 34.6 mm.
- **14:** YT, Philippines. Mactan. Punta Engano. Amisa. Trawled at 70 m, 38.8 mm.
- **15:** FN, Philippines. N of Cebu. Liloan Island. Trawled at 100 m, 41.4 mm.
- **16:** YT, Philippines. N of Cebu. Liloan Island. Trawled at 100 m, 49.2 mm.
- **17:** YT, Papua New Guinea. Durangit. Trawled, 50.0 mm.
- **18:** YT, Philippines. Mactan. Punta Engano. Amisa. Trawled at 70 m, 50.7 mm.
- **19a:** YT, Philippines. Mindanao. Off Aliguay Island. Dredged at 150-240 m, 50.9 mm;
- **19b:** detail of whorls and sculpture at identical distance from protoconch as 3b.
- **20:** YT, Philippines. Mactan. Punta Engano. Trawled at 70 m, 57.1 mm.


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3a
3b
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19a
18
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19b