Some notes on the genus Colubraria Schumacher, 1817, with description of Colubraria brinkae, spec. nov.

(Mollusca, Gastropoda, Buccinidae)

By Manfred Parth

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Some species of *Colubraria* are discussed and a new species, *Colubraria brinkae*, is described. *Tritonium tenerum* Gray, 1839, is the valid name for the species usually known as *Colubraria castanea* Kuroda & Habe, 1952. For *T. tenerum* Gray a neotype is designated.

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This paper should represent a brief attempt to classify all recent species of the genus *Colubraria* that are known on a worldwide scale. A list of all, in my opinion, valid species is provided here at bottom.

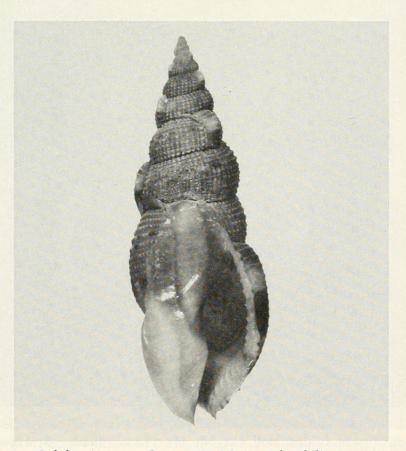


Fig. 1. Colubraria tenera Gray, 1839. Mactan Isl., Philippines. 60.4 mm.

The name of one of the most striking species of the genus, Colubraria castanea Kuroda & Habe, 1952, must be changed. Gray (1839) described (p. 111) Tritonium tenerum, but without providing any illustration of the new species. Unfortunately, no type material is preserved in the BMNH. However, the following description is so accurate that it can only be referred, in my opinion, to the species Colubraria castanea (replacement name for Triton comptus Sowerby III, 1875, preoccupied): "Shell ovate, turreted, thin, pale, fulvous, pellucid, cancellated, with equal fine longitunal and spiral ridges; spire attenuated, longer than the mouth; whorls rounded, varices rounded, cancellated, with two brown spots. Mouth ovate, oblong, outer lip crenulated, throat smooth, inner lip thickened, smooth, elevated, canal short, perforated in front. Axis 3½ inches. Inh. Allied to T. maculosum, but thinner and cancellated."

The size mentioned by Gray (3½ inches) reduces the number of the species to which the description could refer to only three species that can reach such dimensions, i. e. *C. muricata*, *C. soverbii*, *C. tenera*.

After elimination of Colubraria muricata Lightfoot, 1786 (= Tritonium maculosum), because it clearly differs from C. tenera in the ground colour which is whitish, whereas Gray describes its C. tenera as fulvous or reddish-chestnut, it is only C. soverbii, to which Gray's description could refer to. Considering that the description is very accurate, I am almost sure that Gray would have mentioned the dark spiral lines, which are so peculiar for this Indo-Pacific species, should he have had the true C. soverbii before himself. Due to the absence of this specific detail in Gray's description, I am sure that also C. soverbii can be eliminated.

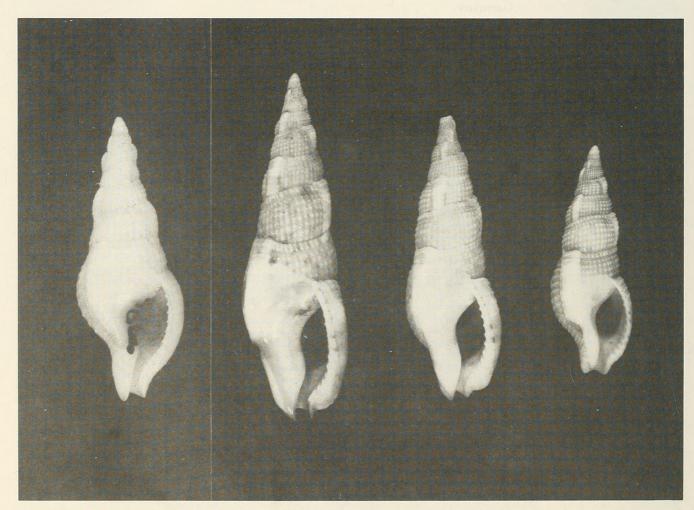


Fig. 2. Holotype of *Drupa (Maculitriton) buitendijki* Bayer, 1933. Irian Jaya (New Guinea), Mnoekwari. Coll. W. C. van Heurn, 1920, Museum Leiden, Moll. Cat. No. 48a. 14.5 mm (left). – Syntypes of *Triton ceylonensis* Sowerby, 1833. Ceylon. BMNH Reg. No. 1991014. 41.8 mm, 34.2 mm. 27.5 mm (from middle left).

To conclude, there is no detail in the description of *C. tenera* that could refer to another species than what is now known as *Colubraria castanea*.

Consequently, the designation of a neotype is necessary. I have selected as neotype of *Triton tenerum* Gray, 1839 the syntype of *Triton (Epidromus) comptus* Sowerby, 1875 in the BMNH (Reg. Nr. 1979250). The provenience of this specimen is unknown, but is most probably the Philippines or Hongkong. Dimensions: 61.0×25.2 mm.

It should be further mentioned that the figured syntype of *Triton comptus* (from the Prevost collection) is from Hongkong (National Museum of Wales, Cardiff).

The identity of *Drupa (Maculotriton) buitendijki* Bayer, 1933, was also questionable. After examination of the holotype of this species it was confirmed that it is a member of the genus *Colubraria*. The holotype is a juvenile, though it can be clearly identified and distinguished from any other known species of the genus. The species has never been figured (with the exception of Bayer's figure of the type) in any paper, however, during the last years, more and more specimens of this deepwater species came up from several localities in the Indo-Westpacific (Somalia-Maledives-Philippines-New Caledonia).

The species is easily confused with *Colubraria ceylonensis* Sowerby, 1833, but can be immediately distinguied by the narrower, conical protoconch of *Colubraria buitendijki* (0.8–1.0 mm against 1.4–1.5 mm in *C. ceylonensis*). Further important differences of the two species are:

- 1) Larger size of C. ceylonensis (ca. 40-45 mm average against ca. 25-30 mm in C. buitendijki).
- 2) More rounded whorls in C. buitendijki.
- 3) Slightly shorter siphonal canal in C. ceylonensis.

C. ochsneri Hertlein & Allison, 1968, from the Eastern Pacific is a further species with which C. buitendijki can be superficially confused. However, the position of the varices is quite sufficient for differentiation of both species.

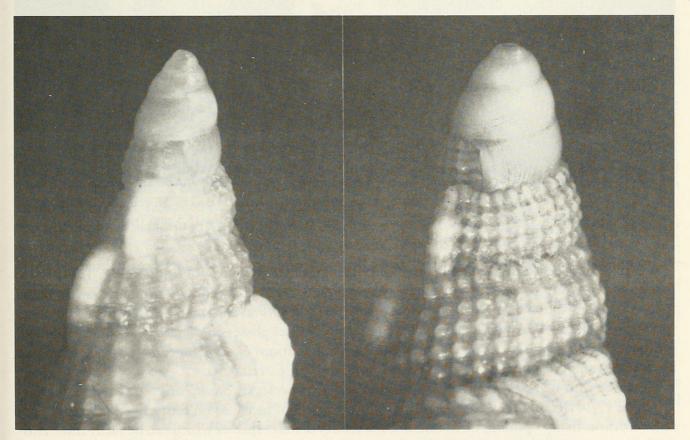


Fig. 3. Size comparison 1:1 of protoconches. Left: Colubraria buitendijki Bayer, 1933. Right: Colubraria ceylonensis Sowerby, 1833.

Beu & Maxwell (1987, p. 60) subdivided *Colubraria* into three different groups, according to their protoconchs, and I wish to maintain this division in my species list. However, a further division of genus *Colubraria* into two groups, according to the position of their varices, might be convenient:

- a) The final varix situated directly under the varix of the penultimate whorl, i. e. distant 360° from the final varix (C. nitidula, C. testacea etc.).
- b) The penultimate varix situated about 270° (e. g. C. muricata, C. ceylonensis) to 350° from the final varix (e. g. C. tenera, C. springsteeni).

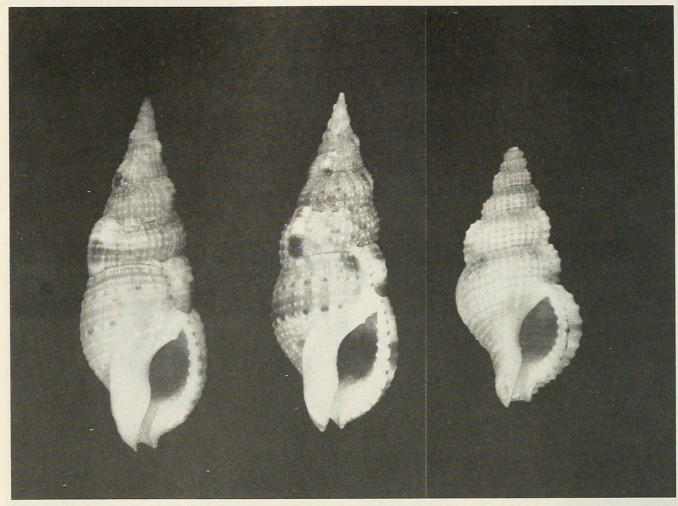


Fig. 4. Colubraria obscura Reeve, 1844. Mocambique. 46.0 mm (left). C. testacea Mörch, 1877. Palm Beach Co., Florida. 44.0 mm (middle). Fusus intertextus Helbling, 1779. Sicily, Italia. 13.5 mm (right).

A brief consideration may be also useful to the species *Colubraria obscura* Reeve, 1844. Both, Beu & Maxwell (1987, p. 60, 61) and Emerson (1966, p. 175) apparently confound Reeve's taxon (which is clearly based on Indo-Pacific specimens!) with *Colubraria testacea* Mörch, 1877, a distinct species from the West-Atlantic (Caribbean to Brazil). Besides possessing a narrowly conical, pointed protoconch (whereas *C. testacea* has a bulbous small initiation) *C. obscura* can always be separated by the very smooth columella which is very granulose in *C. testacea*).

I disagree with Beu & Maxwell also with regard to the species *C. canariensis* Nordsieck & Garcia-Talavera, 1979. Beu & Maxwell suggest that this taxon might be based on Eastern Atlantic specimen of *C. obscura*. In my opinion, *C. canariensis* is a clearly distinct species which can be easily differentiated either from *Fusus intertextus* Helbling, 1779 (the species better known as "*Colubraria*" reticulata Blainville, 1829), or *C. testacea* (= *C. obscura* of Beu & Maxwell).

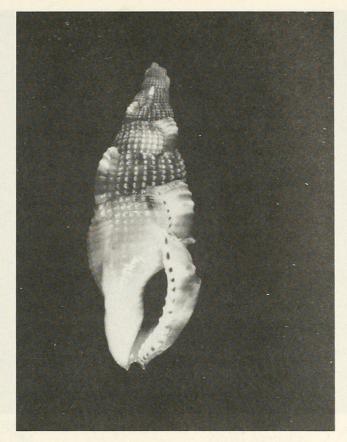


Fig. 5. Colubraria canariensis Nordsieck & Garcia-Talavera, 1979. Canary Isl. 34.9 mm.

Among the collection of Dawn Brink of Westville, South Africa, I recently identified two specimens of a *Colubraria* spec. from deep Taiwan waters. I first thought they were conspecific with *C. tenera* Gray, 1839, yet careful examination revealed specific differences between them which allow to describe it as a new species.

Colubraria brinkae, spec. nov.

Description. Shell small to medium sized for the genus, lightly built elongated turreted, eleven varices (including the final) present on the teleoconch. Protoconch small, subcylindrical, with a bulbous initiation, followed by two whorls (diameter of base of protoconch: 1.0 mm). Teleoconch whorls rounded, sculptured axially by about 40 ribs on the last whorl, forming small fine granules at the cross-points with the spiral cords. Colour of shell light brown. Columella smooth, enamelled, outer lip denticulated. Canal short, turned upwards. Last varix situated directly under the penultimate varix, i. e. 360°, with three brown blotches.

Types. Holotype: 30,4 mm; trawled off Taiwan (no other exact data available), in deep water; in Zoologische Staatssammlung München Inv.-Nr. 1870. – Paratype: 30,5 mm; off Taiwan; in collection Dawn Brink.

Differentiating characters.

Colubraria brinkae, spec. nov. may be distinguished from the similar species Colubraria tenera by different arrangement of the last two varices, different protoconch (having one additional whorl in C. brinkae!) smaller size than C. tenera, and other minor differences.

The new species is named in honour of Mrs. Dawn Brink, avid collector of this group of elongate ranellid-like shells.

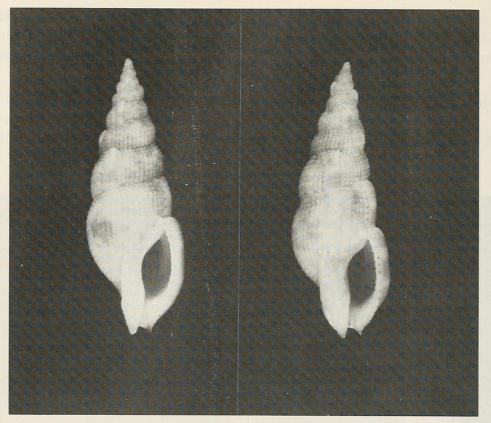


Fig. 6. Colubraria brinkae, spec. nov. Ventral view. Left: Paratype, 30.5 mm. Right: Holotype, 30.4 mm, both off Taiwan.

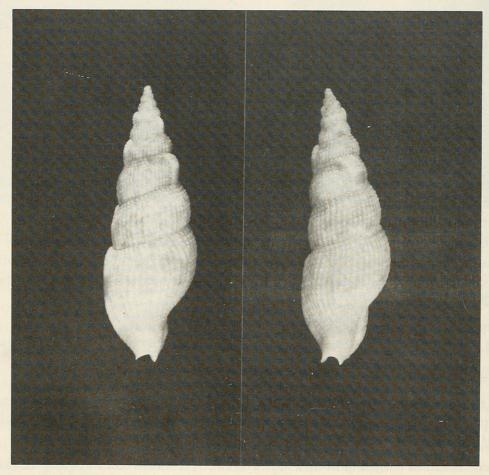


Fig. 7. Colubraria brinkae, spec. nov. Dorsal view. Left: Paratype. Right: Holotype.

List of recent species of the genus Colubraria

Arrangement, as mentioned above, of the varices in group A and B, and protoconchs in subgroups 1, 2 and 3 (see Beu & Maxwell, 1987, p. 60) as per following explanation: 1) tall, narrowly conical protoconch with pointed apex; 2) small, narrow, sibcylindrical protoconch with bulbous but relatively small initation; 3) large, subcylindrical, relatively wide protoconch with large, bulbous, very blunt apex

1)	C. brazieri Angas, 1869	Australia	A-3
2)	C. brinkae Parth, 1992	Taiwan	A-2
3)	C. buitendijki Bayer, 1933	Indo-Westpacific	B-1
4)	C. canariensis Nordsieck & Garcia-Talavera, 1979	Canary Island - Senegal	A-? Apex not seen
5)	C. ceylonensis Sowerby, 1833	Indian Ocean	B-1
6)	C. cumingi Dohrn, 1861	Indo-Pacific	A-2
7)	C. eugenei Bozzetti & Lussi 1991	South Africa	В-3
8)	C. janlochi Parth, 1991	Australia	A
	(Apex: see Beu & Maxwell, 1987, p. 10, fig. 2B)		
	Holotype desposited in Australian		
	Museum, Sydney, Reg. No. C 167054		
9)	C. jordani Strong, 1938	Eastern Pacific	A-? Apex not seen
	probably a synonym of C. lucasensis		
10)	C. lucasensis Strong & Hertlein, 1937	Eastern Pacific	A-1
11)	C. mulveyana Iredale, 1925	NSW, Australia	?-3
	(Varices position not clear)		
12)	C. muricata Lightfoot, 1786	Indo-Pacific	B-1
13)	C. myuna Garrard, 1961	NSW, Australia	B-3
14)	C. nitidula Sowerby, 1833	Indo-Pacific	A-1
15)	C. obscura Reeve, 1844	Indo-Pacific	A-1
16)	C. ochsneri Hertlein & Allison, 1968	Eastern Pacific	A-1
17)	C. procera Sowerby, 1832	Eastern Pacific	B-2
18)	C. soverbii Reeve, 1844	Indo-Westpacific	B-1
19)_	C. springsteeni Parth, 1991	Philippines	B-2
	(the holotype of C. springsteeni is deposited in		
	Australian Museum, Sydney, Reg. No. C 167055)		
20)		Indo-Westpacific	B-2
21)	C. testacea Mörch, 1877	Caribbian-Brazil	A-2
22)	C. tortuosa Reeve, 1884	Indo-Westpacific	A-3

It should be mentioned that the species *Fusus intertextus* Hebling, 1779, and *Ratifusus alfredensis* Bartsch, 1915, could be included very probably in the genus *Colubraria* because of teleoconch features. However, more extensive studies on the family Buccinidae are necessary to achieve better generic classification. However, this is of secondary importance, whereas the specific status of the species is at present of primary importance.

Note

Through inadvertency of the printer the name of a new *Colubraria* described by myself in honour of Mr. Ian Loch (La Conchiglia XXII, No. 261, p. 50) has been spelled *janlochi* instead of *ianlochi*. According to the rules of the ICZN this misspelled name is unfortunately valid.

Acknowledgements

I would like to thank the following persons: Dr. Richard Kilburn, who was the first to discover again the name *Drupa (Maculotriton) buitendijki* Bayer, 1933, and to state that this name refers to a juvenile *Colubraria*. Mrs. Kathie Way, who made available to me the type material of *Colubraria* in the BMNH. Dr. Gittenberger

(Leiden Museum), who sent me the holotype of *Drupa (Maculotriton) buitendijki* Bayer, 1933. Dr. Alison Trew, National Museum of Wales, Cardiff, for the loan of the figured syntype of *Colubraria comptus* Sowerby and for pointing out that the date of publication of *Triton comptus* should be 1875, not 1874, due to the dates of issue differing from the date printed on the volumes of Proceedings of the Zoological Society of London. A special thank also to my friend Heinrich Mühlhäusser of Freiburg, for reading the manuscript and for his comments on it. Thanks also to Mrs. Müller, Zoologische Staatssammlung München, who made all photos of this as well as my earlier papers in SPIXIANA.

Literature

Bayer, C. 1933. A new Maculotriton. - Zool. Meded. Rijks Museum, Nat. Hist. Leiden 16: 77

-- C. 1933. Catalogue of the Cymatiidae in Rijks Museum. - Zool. Meded. Rijks Mus. Nat. Hist. Leiden **16** (1-2): 33-59

Beu, A. & Maxwell 1987. A revision of the Fossil and Living Gastropods related to *Plesiotriton* Fischer, 1884.

– New Zealand Geol. Serv. Paleont. Bull. 54

Gray, J. E. 1839. The Zoology of Catain Beechey's Voyage.

Hertlein & Allison 1968. Description of New Species of Gastropods from Clipperton Island. – Occ. Pap. Calif. Acad. sci. 66: 1–13

Kaicher, S. D. 1990. Pack 57, Buccinidae. - Card Catalogue of World-Wide Shells

Mörch, O. A. L. 1877. Genus Triton Lam. - Malakozool. Bl. 1877: 25, Cassel, T. Fischer

Reeve, L. A. 1844. Conchologia Iconica 2, Triton, text and 20 plts

Sowerby, G. B. 1875. Description of five new species of shells. - Proc. Zool. Soc. London



Parth, M. 1992. "Some notes on the genus Colubraria Schumacher, 1817, with description of Colubraria brinkae, spec. nov. (Mollusca, Gastropoda, Buccinidae)." *Spixiana* 15, 213–220.

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