

## A new species of *Coptocheilus* Gould, 1862 (formerly *Schistoloma* Kobelt, 1902) from Vietnam (Caenogastropoda: Cyclophoroidea: Pupinidae)

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**Abstract.** *Coptocheilus maunautim*, new species, is described from Vietnam's Thua Thien-Hue Province. The closest relative of the new species is probably *Coptocheilus maydelinae* (Páll-Gergely, P.K. Nguyen & Y. Chen, 2019), which also has a “double suture”, but differs in its much stronger shell sculpture. *Coptocheilus* Gould, 1862, is reinstated for this genus group. The widely used *Schistoloma* Kobelt, 1902, is an unnecessary replacement name and cannot be conserved. An updated checklist of the members of this genus is appended.

**Key words.** taxonomy, systematics, *Coptocheilus*, *Schistoloma*, new species

### INTRODUCTION

*Schistoloma* Kobelt, 1902, is a genus of the Pupinidae, ranging from the southern Himalaya region to the Philippines (Benson, 1838, 1852; Bartsch, 1916; Egorov, 2013). A newly collected species from Thua Thien-Hue Province does not correspond to any of the four *Schistoloma* species known from Vietnam in the recent review of the genus by Páll-Gergely et al. (2019). It is therefore described as new to science. In addition, we restore the genus *Coptocheilus* Gould, 1862, and relegate the unnecessary replacement name *Schistoloma* to its synonymy (see Remarks under genus).

### MATERIAL AND METHODS

The counting of the shell whorls (to the closest 0.25 whorl) follows Kerney & Cameron (1979: 13).

#### Abbreviations.

AH: aperture height

AW: aperture width

H: shell height

HA: Collection András Hunyadi (Budapest, Hungary)

HNHM: Hungarian Natural History Museum (Budapest, Hungary)

LZ–HUE: Laboratory of Zoology, Hue University of Education (Hue city, Vietnam)

MNHN: Muséum National d'Histoire Naturelle (Paris, France)

SMF: Senckenberg Forschungsinstitut und Naturmuseum (Frankfurt am Main, Germany)

VNMN\_IZ: National Museum of Nature (Hanoi, Vietnam)

W: shell width

ZRC: Zoological Reference Collection, Lee Kong Chian Natural History Museum (NUS, Singapore)

### TAXONOMY AND SYSTEMATICS

#### Family Pupinidae L. Pfeiffer, 1853

#### *Coptocheilus* Gould, 1862

*Coptocheilus* Gould, 1862: 282.

*Schistoloma* Kobelt, 1902: 298 (nom. nov. pro *Coptocheilus* Gould, 1862).

*Pinteria* Varga, 1972: 134 (type species: *Pinteria croesus* Varga, 1972, by original designation).

**Type species.** *Cyclostoma altum* G.B. Sowerby I, 1842, by original designation.

**Remarks.** Kobelt (1902) established *Schistoloma* as a nom. nov. for *Coptocheilus* Gould, 1862, claiming that it is a junior homonym of *Coptochilus* Amyot & Serville, 1843 (Insecta: Hemiptera). However, *Coptocheilus* Gould, 1862, is not a junior homonym of *Coptochilus* Amyot & Serville, 1843, based on the one letter difference (see Article 56.2 of the International Code of the Zoological Nomenclature, hereafter the Code [ICZN, 1999]), thus Kobelt's replacement name is unnecessary. *Coptochilus* F. Sandberger, 1871, is also considered to be an unjustified emendation of *Coptocheilus* Gould, 1862. A reversal of precedence (Article 23.9 of the Code) cannot be used to conserve the widely used *Schistoloma* because *Coptocheilus* has been used as valid after 1899 (e.g., Fulton, 1903; Bartsch, 1909).

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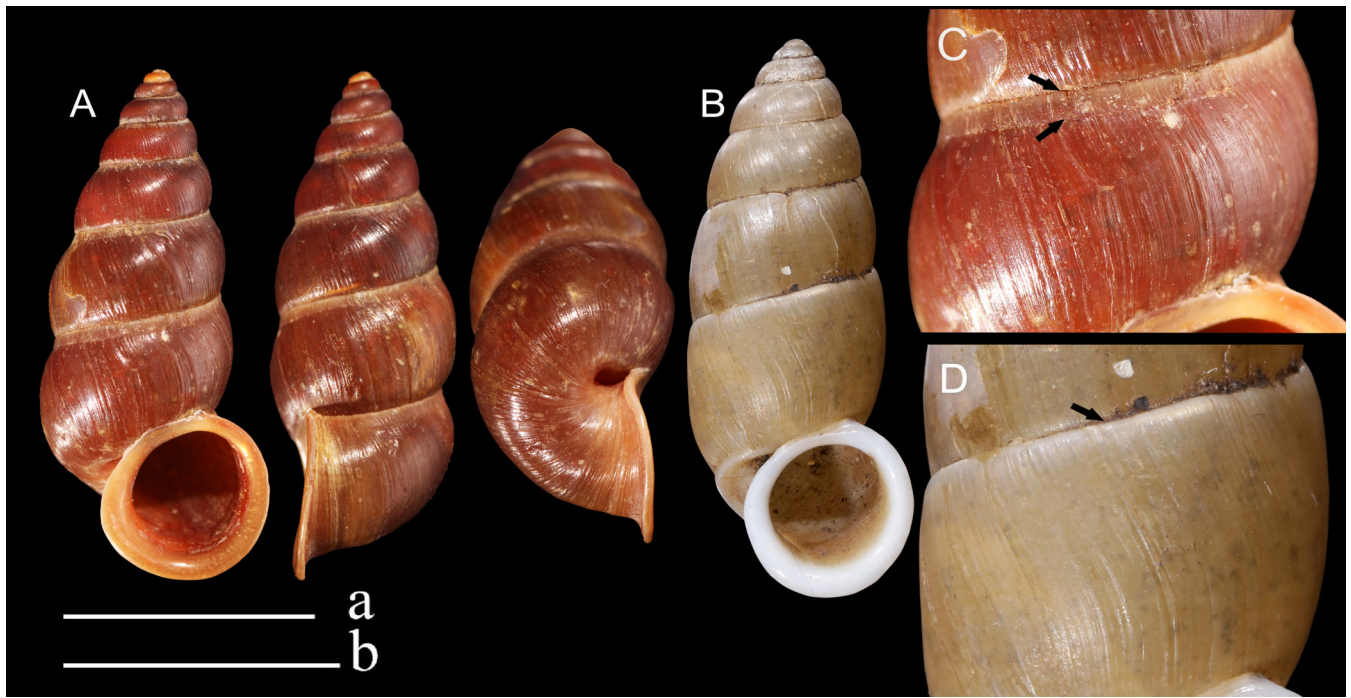


Fig. 1. A, C, holotype of *Coptocheilus maunautim*, new species (MNHN-IM-2000-35697), with “double suture” indicated by arrows; B, D, *Coptocheilus messengeri* (SMF 192263) with simple suture indicated with an arrow. Scale a represents 10 mm and refers to fig. A and B, scale b represents 5 mm and refers to fig. C and D.

***Coptocheilus maunautim*, new species**  
(Fig. 1A, C)

**Material examined.** Holotype (H: 21.7 mm, W: 9.2 mm) (MNHN-IM-2000-35697), Vietnam, Thua Thien-Hue Province, Nam Dong District, limestone mountain (16°06'56"N, 107°38'32"E, 220 m), coll. T.C. Bui, 10 June 2018. Paratypes: 1 ex. (HNHM 104870), 1 ex. (coll. HA), 1 ex. (VNMN\_IZ 000.000.178), 17 exx. (LZ-HUE 5601), all same data as holotype, coll. T.C. Bui, N.T.N. Dang and N.T. Duong, 01 October 2017 and 10 June 2018; 2 exx. (ZRC.MOL.16453), same data as holotype, coll. T.C. Bui, 10 June 2018; 7 exx. (LZ-HUE 5602), Vietnam, Thua Thien-Hue Province, Nam Dong District, limestone mountain (16°08'16"N, 107°36'51"E, 270 m), coll. T.C. Bui and H.C. Nguyen, 07 July 2018.

**Diagnosis.** A middle-sized *Coptocheilus* species with a brownish purple shell colour, rather glossy, almost smooth shell surface, and a “double suture”.

**Description.** Shell high conical, widest around base, brownish purple (dead collected shells lighter); protoconch 2.75 whorls, smooth, glossy, orange to purple; teleoconch glossy, nearly smooth, with very fine growth lines; suture “double” (a “pseudosuture” visible as slight groove just below the suture), with a conspicuous pale subsutural band; outer lip slightly opisthocline; peristome continuous, expanded, very slightly reflected, especially at basal part; peristome slender, sharp in lateral view, boundary between inner and outer peristomes hardly visible; umbilicus open, slit-like, without periumbilical keel. Operculum unknown.

**Measurements** (mm). H: 19.2–23.3, W: 8.5–9.2, AH: 6.6–7.3, AW: 6.4–7.1 (n = 25).

**Differential diagnosis.** *Coptocheilus maunautim*, new species, differs from all congeners by its “double suture” (see comparison with *C. messengeri*, Fig. 1B, D), except for *Coptocheilus maydelineae* (Páll-Gergely, P.K. Nguyen & Y. Chen, 2019), which clearly differs by having a strongly ribbed shell. *Coptocheilus sectilabris* (A. Gould, 1844), which was also reported from Vietnam (Thach, 2016), is larger, with a more corpulent shell and wider body whorl.

**Etymology.** The specific epithet ‘maunautim’ (to be used as a noun in apposition) derives from “màu nâu tím”, meaning “a mixture of brown and purple” in Vietnamese, referring to the colour of the shell.

**Distribution.** This new species is only known from the type locality so far (Fig. 2).

**Checklist of *Coptocheilus* species**

The most recent review by Páll-Gergely et al. (2019) erroneously used the generic name *Schistoloma* (grammatical gender: neutral). Here we provide an updated checklist of the species, now included in *Coptocheilus* (grammatical gender: masculine), to reflect changes in parentheses around authors’ names in changed combinations and agreement in gender of species names.

*Coptocheilus altus* (Sowerby I, 1842)  
*Coptocheilus anostomus* (Benson, 1852)  
*Coptocheilus cochinchinensis* (Rochebrune, 1882)  
*Coptocheilus doriae* (Issel, 1874)  
*Coptocheilus funiculalus* (Benson, 1838)



Fig. 2. Distribution of *Coptocheilus* species in Vietnam. 1, *C. messageri* (Bavay & Dautzenberg, 1909); 2, *C. inermis* (Bavay & Dautzenberg, 1909) (type locality of *Pinteria croesus* Varga, 1972); 3, *C. maunautim*, new species; 4, *C. sectilabrum* (A. Gould, 1844); 5, *C. maydelineae* (Páll-Gergely, P.K. Nguyen & Y. Chen, 2019); 6, *C. cochinchinense* (Rochebrune, 1882) (based on Thach, 2016 and Páll-Gergely et al., 2019).



*Coptocheilus inermis* Bavay & Dautzenberg, 1909  
*Coptocheilus leferi* (Morelet, 1861)  
*Coptocheilus longyanensis* (Zhou, Zhang & Chen, 2009)  
*Coptocheilus maydelineae* (Páll-Gergely, P.K. Nguyen & Y. Chen, 2019)  
*Coptocheilus mcgregori* (Bartsch, 1916)  
*Coptocheilus messengeri* Bavay & Dautzenberg, 1909  
*Coptocheilus pauperculus* (Sowerby I, 1850)  
*Coptocheilus quadrasi* (Hidalgo, 1889)  
*Coptocheilus sectilabris* (A. Gould, 1844)  
*Coptocheilus sumatranus* Dohrn, 1881  
*Coptocheilus tanychilus* (Godwin-Austen, 1876)

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