

# Morelet's contributions to malacology: further additions and corrections

ABRAHAM S.H. BREURE

Royal Belgian Institute of Natural Sciences, Vautierstraat 29, Brussels, Belgium;  
Natural History Museum, Cromwell Road, London SW7 5BD, U.K.;  
Naturalis Biodiversity Center, P.O. Box 9517, 2300RA Leiden, the Netherlands;  
ashbreure@protonmail.com [corresponding author]

JONATHAN D. ABLETT

Natural History Museum, Cromwell Road, London SW7 5BD, U.K.;  
j.ablett@nhm.ac.uk



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## Abbreviations

NHMUK Natural History Museum, London, U.K.  
SMF Senckenberg Natur-Museum, Frankfurt am Main, Germany

## Abstract

Further additions and corrections are presented to update the book on Pierre Marie Arthur Morelet, which was published in 2018. The most important addition is a missing letter that was recently found. The main corrections are related to the new molluscan taxa introduced by him, with consequences for the indices. Recent literature that provoked these corrections is listed.

**Key words.** Bivalvia, Gastropoda, current systematic position, indices, recent literature, update.

## Introduction

In 2018 we published a monograph on the contributions of Arthur Morelet (1809–1892) to malacology (Breure *et al.*, 2018). As was to be expected, soon after publication, some necessary corrections were noticed and some additional data was uncovered that could be included (Breure & Ablett, 2021). Since then a missing letter and additional material was found, and in recent literature some new systematic positions were included for several of Morelet's taxa. We take the opportunity of these recent additions to include these new systematic positions as corrections and follow the same structure as in our book, referring to the pages where the additions and corrections may be placed, and use the same reference system for Morelet's publications. Literature quoted is listed in the references, unless it formed part of the corrections itself. The Morelet project is now concluded with this second update.

## Additions

[Page 102] Morelet to Crosse (Letter 18761130): see Appendix.

[Page 204] *Clausilia angrandi*: additional syntypes: MHNG-MOLL-1153 (32).

[page 308] † *hupeanus*, *Bulimus* [Strophocheilidae] Morelet, 1863: 170.

REMARKS Morelet wrote “Le nom de [*Bulimus*] *Castelnaudi* [Hupé, 1857] et celui de [*Bulimus*] *Castelnaui* donné par M. Pfeiffer, en 1856, ... constituent un double emploi” [The name *Castelnaudi* and that of *Castelnaui* given by M. Pfeiffer in 1856 constitutes a double use (homonym)] Morelet's *hupeanus* is an unnecessary replacement name as Pfeiffer (1857: 332) introduced his species as *castelneai* and used neither *castelnaudi* or *castelnaui*. Morelet mentioned material from “la vallée tempérée de Vilcabamba”, but we have not located any specimen in his collection. Currently *B. hupeanus* is a synonym of *Megalobulimus leucostoma* (G.B. Sowerby I, 1835).

[Page 360] *Unio mucidus*: One additional syntype is SMF 3692 (1), labeled “Rio Paiva” ex Ihering ex Morelet.

[Page 401] *Helicina purpureoflava*: Three additional syntypes have been found in the NHMUK, registered as 1893.2.4.1997–1999. They are labelled as coming from “Peten” and labelled “type”. They are from the Morelet collection purchased from Fulton.

[Page 431] *Cyclostoma simulacrum*: Two additional syntypes have been found in the NHMUK, registered as 1893.2.4.684–685, and labelled “types? / Test. Noviss. No. 54”. They are from the Morelet collection purchased from Fulton.

[Page 436] *Physa spiculata*: Three additional syntypes have been found in the NHMUK, registered as 1893.2.4.660–662, and labelled “Campeche. dans les cisternis”. They are from the Morelet collection purchased from Fulton.

### Corrections

[Page 201] *Otopoma anaglyptum* Morelet, 1890: this junior homonym of the species described by Morelet in 1886 has been renamed *Otopoma (Ligatella) moreleti* Kobelt in Kobelt & Möllendorff (1899: 178). According to MolluscaBase (2022) its current systematic position is *Tropidophora anaglypta* (Morelet, 1890).

[Page 204] *Clausilia angrandi*: Nordsieck (2010: 58) restricted the type locality to “gorges de la vallée de Vilcabamba ou du Vilcamaya (Quebrada Honda, Gorges de l’Urubamba)”.

[Page 321] *Anodonta lemeslei*: Type material: Syntype MNHN-MP-3150 (2). Labels: “Grand lac de Pnom-Penh etc. Envoi Pavie”, “Marecages de Battambang, Cambodge”. Current systematic position changed to *Namkongnaia lemeslei* (Morelet, 1875) by Jeratthitikul *et al.* 2021: 132, fig. 5.

[Page 341] *Unio massini*: current systematic position removed from synonymy and considered as a valid species, *Physunio massini* (Morelet, 1864); see Pfeiffer *et al.* (2021: 424).

[Page 342] Change legend of Fig. 647 to: *Physunio massini* (Morelet, 1864), syntype NHMUK 1893.2.4.1590. Scale line 5 cm.

[Page 348] Change legend of Fig. 674 to: *Lens micropterus* (Morelet, 1866), lectotype NHMUK 1893.2.4.1596. Scale line 5 cm.

[Page 348] *Unio micropterus*: current systematic position to be updated to *Lens micropterus* (Morelet, 1866); see Pfeiffer *et al.* (2021: 418).

[Page 352] *Unio misellus*: current systematic position to be updated to *Lens misellus* (Morelet, 1865); see Pfeiffer *et al.* (2021: 419).

[Page 428] *Dreissena siamensis*: current status removed from synonymy and considered as a valid species, *Limnoperna siamensis* (Morelet, 1866); see Sokolova *et al.* (2021: 1181).

[Page 428] Change legend of Fig. 1034 to: *Limnoperna siamensis* (Morelet, 1866), syntype NHMUK 1893.2.4.1750. Scale line 1 cm.

[Page 507] *Dreissena siamensis* Morelet, 1866 in bold type.

[Page 512] *Unio massini* Morelet, 1864 in bold type.

[Page 513] *Anodonta lemeslei* Morelet, 1875 [= *Namkongnaia lemeslei* (Morelet, 1875)]

[Page 513] *Unio massini* Morelet, 1864 [= *Physunio massini* (Morelet, 1864)]

[Page 513] *Unio micropterus* Morelet, 1866 [= *Lens micropterus* (Morelet, 1866)]

[Page 513] *Unio misellus* Morelet, 1865 [= *Lens misellus* (Morelet, 1865)]

[Page 514] *Dreissena siamensis* Morelet, 1866 [= *Limnoperna siamensis* (Morelet, 1866)]

[Page 515] *Otopoma anaglyptum* Morelet, 1890 [= *Tropidophora anaglypta* (Morelet, 1890)]

[Page 532] Remove *fortunei* (Dunker, 1857), *Limnoperna* 428

[Page 534] Change *lesmeslei* (Morelet, 1875), *Pilsbryconcha* in *lesmeslei* (Morelet, 1875), *Namkongnaia*

[Page 534] Insert after *lemeslei* (Morelet, 1875), *Pilsbryconcha* 321 the following two:

*Lens micropterus* (Morelet, 1866) 348

*Lens minutialis* (Morelet, 1865) 352

[Page 534] Change *Limnoperna fortunei* (Dunker, 1857) 428 in *Limnoperna siamensis* (Morelet, 1866) 428

[Page 535] Insert after *massauensis* Ehrenberg in L. Pfeiffer, 1858, *Melampus* 279: *massini* (Morelet, 1864), *Physunio* 341

[Page 535] Correct *micropterus* (Morelet, 1866), *Physunio* to *Lens* 348

[Page 535] Insert after *minutialis*: *misellus* (Morelet, 1865), *Lens* 352

[Page 535] Insert after *naevula*: *Namkongnaia lemeslei* (Morelet, 1875) 321

[Page 537] Insert after *Physastra nasuta* (Morelet, 1857) 304: *Physunio massini* (Morelet, 1864) 341

[Page 537] Delete *Pilsbryconcha lemeslei* (Morelet, 1875) 321

[Page 537] Delete *Physunio micropterus* (Morelet, 1866) 348

[Page 547] Delete “341” after *Physunio superbus* (I. Lea, 1843)

[Page 538] Insert after *siamensis* (Morelet, 1875), *Laemodonta* 429: *siamensis* (Morelet, 1866), *Limnoperna* 428

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- Vag. du Café (Babosa de cochinos, à Cuba).
- Animal entièrement brun, avec deux bandes latérales interrompues et plus foncées, arrondi à l'extrémité postérieure qui est plus large & plus épaisse que l'antérieure. Tentacules d'un noir bleuâtre, gros, ligaments renflés, les inférieurs courts et échancrés. Le dernier est chagriné, dans l'état de contraction, et parsemé, en outre, de petits tubercules éclaircis à leurs sommets qui s'effacent dans l'extension ; le mollusque, alors, paraît lisse. Le plan locomoteur est étroit et couvert de rides excessivement fines. L'ouverture anale est très visible. Cette Vaginule, recueillie à Bahia honda, ronge l'écorce des jeunes plants de café, ~~en sorte~~ tellement que les cultivateurs sont quelquefois obligés de les envelopper avec des feuilles de bananier pour les préserver de leurs atteintes.
- Vag. du tabac
- Ce mollusque offre trois variétés qui se distinguent par la couleur, noirâtre, grisâtre et jaunâtre. La variété jaunâtre est finement ombrée de brun et quelquefois marquée de taches noires, allongées, irrégulières ; quant à la grise, elle emprunte sa couleur au mélange des deux autres. On reconnaît, en effet, en l'examinant de près, qu'elle est ~~finement~~ pointillée de brun et de jaune, quoique la teinte, au premier aspect, paraisse à peu près uniforme. Une ligne fine et jaunâtre regne sur le milieu du dos. Le derme n'est pas sillonné, mais couverts de petits tubercules généralement plus clairs que le fonds. La tête ne s'allonge jamais au-delà du manteau. Les tentacules, rougeâtres ou brunâtres, sont à la fois contractiles et rétractiles ; les supérieurs, oculés au sommet, les inférieurs, échancrés ou bifurqués. Le plan locomoteur est nettement séparé du corps par un sillon. Ce mollusque (comme l'espèce du Yucatan) s'aplatit considérablement dans l'état de repos et, au lieu de se contracter à l'attouchement, il se tord & se roule à la manière de certains crustacés. L'espèce, commune aux environs de la Havane, est un fléau pour les plantations de tabac.
- J'avais l'intention de comprendre ces deux limaces dans ma note sur les mollusques peu connus de Cuba ; mais je vous en fais l'abandon de grand cœur et vous prie d'en user comme il vous conviendra.

## Appendix

A missing letter was found misplaced in the Crosse archive, which is here transcribed and translated.

### Morelet to Crosse (Letter 18761130)

Velars 30 9<sup>bre</sup> 1876

Cher Monsieur,

La plus grande des deux Vaginules de Cuba est notée Vag. du Café parcequ'elle se plaît particulièrement dans ces sortes de plantations ; l'autre, Vag. du Tabac, parcequ'elle passe pour infester les champs où l'on cultive cette solanée précieuse.

A propos d'une conversation que nous eûmes à Velars, j'ai écrit à M. Bouvier pour le dissuader d'entreprendre le voyage trois fois absurde du Gallapagos, et pour l'engager à dépenser son ardeur scientifique sur la route de San Thomé, lui promettant des lettres de Lisbonne qui lui ménageraient un bon accueil, et, en outre, une souscription sérieuse à son entreprise[.] Je me croyais autorisé, jusqu'à un certain point, à lui faire cette ouverture, après les rapports, tout à fait obligeants de ma part, que nous avions eus au temps de son voyage en Amérique. Ce Monsieur ne m'a pas répondu, ce qui montre d'abord que le code de la civilité ne lui est pas tombé sous la main pendant ses pérégrinations lointaines. Mais, comme San Thomé me trotte par la tête, je saisirai l'Académie de Dijon de la question et j'ouvrirai une souscription pour y envoyer un jeune appariteur du lieu, quelque peu botaniste, et qui ne craint pas les voyages.

En fait de voyages, Cher Monsieur, j'espère que vous n'oublierez pas l'engagement que vous avez pris de recommencer celui de Velars (et non Vélars) l'année prochaine, dans l'intérêt des Mélania. Nous tâcherons d'avoir M. Brot, le célèbre mélanophile, et de mieux vous recevoir dans une saison qui y prêtera d'avantage.

Mandez-moi donc, lorsque vous m'écrirez, si les naïades de l'Indo-Chine ont été pulvérisées ou non pas les obus prussiens au Muséum ; mon voyage à Paris en dépend.

Je ne connais, en Afrique, d'autres *Vaginula* que celles qui sont mentionnées dans votre lettre. En part de mollusques nus, mais qui diffèrent des *Vaginules*, je citerai les *Veronica* et *Dendrolimax* de l'île du Prince (Dohrn), *Parmarion flavescens* de Mozambique (Keferst.) et *Oopelta nigropunctata* de Guinée, Morch.

Je termine en vous assurant de mes meilleurs sentiments,

A. Morelet

Si vous avez déjà un *Limax Guatemalensis* vous pouvez appeler l'autre *Cobanensis*, car je vois dans mes notes qu'il provient des jardins de Coban (Vera Paz) ; si j'ai indiqué Guatemala, c'est une erreur.

Vous ne dites mot des coquilles de Madagascar ; aurais-je commis une indiscretion ? J'en serais désolé.

#### Translation

Velars 30 November 1876

Dear Sir,

The larger of the two Cuban *Vaginulas* is noted as Coffee Vag. because it is particularly fond of these kinds of plantations; the other, Tobacco Vag. because it is said to infest the fields where this precious solanaceous plant is grown.

Vag. of Coffee (*Babosa de cochinos*, in Cuba).

An entirely brown animal, with two interrupted and darker lateral bands, rounded at the posterior end, which is wider & thicker than the anterior. Tentacles bluish-black, large, with swollen ligaments, the lower ones short and indented. The last one is chagrined, in the state of contraction, and strewn, moreover, with small tubercles lighter at their summits which fade away in the extension; the mollusc, then, appears smooth. The locomotor plane is narrow and covered with excessively fine wrinkles. The anal opening is very visible. This *Vaginula*, collected in Bahia Honda, gnaws the bark of young coffee plants, so much so that the cultivators are sometimes obliged to wrap them with banana leaves to preserve them from their attacks.

Tobacco Vag.

This mollusc has three varieties which differ in colour, blackish, greyish and yellowish. The yellowish variety is finely shaded with brown and sometimes marked with black, elongated, irregular spots; as for the grey one, it borrows its colour from the mixture of the other two. Indeed, on close examination, it is finely stippled with brown and yellow, although the shade, at first sight, appears more or

less uniform. A fine yellowish line runs down the middle of the back. The back is not furrowed, but covered with small tubercles generally lighter than the base. The head never extends beyond the mantle. The tentacles, reddish or brownish, are both contractile and retractile; the upper ones, oculate at the top, the lower ones, indented or bifurcated. The locomotor plane is clearly separated from the body by a groove. This mollusc (like the Yucatan species) flattens considerably in the state of rest and, instead of contracting on touching, it twists and rolls in the manner of certain crustaceans. The species, common in the vicinity of Havana, is a scourge to the tobacco plantations.

I had intended to include these two slugs in my note on the little-known molluscs of Cuba; but I give them up to you with all my heart and ask you to use them as you see fit.

In connection with a conversation we had at Velars, I wrote to M. Bouvier to dissuade him from undertaking the thrice absurd voyage to the Galápagos, and to urge him to spend his scientific ardour on the San Thomé route, promising him letters from Lisbon which would give him a good reception, and, moreover, a serious subscription to his enterprise[.] I thought I was authorised, to a certain extent, to make this suggestion to him, after the reports, quite obliging on my part, which we had had at the time of his trip to America. This gentleman did not answer me, which shows at first that the code of civility did not come to his hand during his distant wanderings. But, as San Thomé is on my mind, I will bring the matter to the attention of the Dijon Academy and open a subscription to send a young local servant, who is somewhat of a botanist, and who is not afraid of travelling.

As far as journeys are concerned, dear Sir, I hope that you will not forget the commitment you made to repeat the Velars (and not Vélars) trip next year, in the interests of the *Melania*. We will try to invite Mr Brot, the famous melanophile, and to receive you better in a season that will lend itself to it.

Ask me, when you write to me, whether the naiads of Indo-China have been pulverised or not by Prussian bombs in the Museum; my trip to Paris depends on it.

I know of no other *Vaginula* in Africa than those mentioned in your letter. Aside from naked molluscs, but which are different from *Vaginulas*, I would mention *Veronica* and *Dendrolimax* from Prince's Island (Dohrn), *Parmarion flavescens* from Mozambique (Keferst.) and *Oopelta nigropunctata* from Guinée, Morch.

I conclude by assuring you of my best wishes,

A. Morelet

If you already have a *Limax Guatemalensis* you can call the other one *Cobanensis*, as I see in my notes that it comes from the Coban gardens (Vera Paz); if I have indicated Guatemala, it is a mistake.

You say nothing about the shells of Madagascar; have I committed an indiscretion? I would be sorry.