

ON *ELLOBIUM AURISMALCHI* (MÜLLER, 1774) (MOLLUSCA: ELLOBIIDAE)

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INTRODUCTION

The second edition of the Singapore Red Data Book (Davison et al., 2008) listed threatened plants and animals of Singapore and was a landmark effort by local workers to inventorise Singapore's biodiversity that face immediate threat or extinction. The primary purpose of this paper is to highlight the inaccurate use of the name "*Ellobium aurismalchi* Linnaeus, 1758" in the Red Data Book (Chou & Tan, 2008: 59). The same name was also used in the first edition of the Red Data Book (Chou et al., 1994: 83) but without attribution to Linnaeus.

NOMENCLATURE AND BIOLOGY

This species was first described as *Helix aurismalchi* by Müller (1774: 112–113), and the correct citation of the species should therefore be *Ellobium aurismalchi* (Müller, 1774). Müller's species was also called Malchus's ear. This appears to follow in Linnaeus' habit of naming certain gastropods as resembling the ears of certain individuals. Examples include the closely related Midas' ear, *Ellobium aurismidae* [as *Bulla auris-midae* (1758: 728)] and Judas' ear, *Ellobium aurisjudae* [as *Bulla aurisjudae* (1758: 728)].

However, *Ellobium aurismalchi* (Müller, 1774) has been suppressed and should not be used. Case 2641 was brought before the International Commission on Zoological Nomenclature, ICZN, by P. Bouchet on 5 Feb. 1988 to conserve the specific names of *Limax fibratus* Martyn, 1784, and *Nerita hebraea* Martyn, 1786. An affirmative vote of this action would have led indirectly to the specific name "*aurismalchi*" coming into use once again. To recapitulate, the late Dr. R. Tucker Abbott had suggested that *Helix aurismalchi* Müller, 1774, may be the earliest name for *Limax fibratus* Martyn, 1784. In response, Bouchet expressed objection to the use of this name, unused since 1848, arguing that Müller could not have described in Europe in 1774 a shell from New Caledonia when this island was discovered by Cook in the same year (ICZN, 1992: 75). Commissioners of the ICZN were invited to vote on the matter and "the specific name *aurismalchi* Müller, 1774, as published in the binomen *Helix aurismalchi*, [was] suppressed for the purposes of the Principle of Priority but not for those of the Principle of Homonymy" (ICZN, 1992: 75).

Raven & Vermeulen (2007) provided one of the most recent treatments of this group from the region and correctly placed "*Helix auris-malchi*" in the synonymy of *Ellobium scheepmakeri* (Petit de la Saussaye, 1850), the next oldest name that was available upon suppression of *aurismalchi*. However, the date they provide for the ICZN ruling—2001—is erroneous. We agree with the opinion of Ng (1994: 509) that the inclusion of the author's or authors' name(s) when citing a species is in "aiding the search for literature and information" and to be able to "track down the original reference which described the species". This is another reason why we felt this short communication was necessary, and this species should now be rightly known as *Ellobium scheepmakeri* (Petit de la Saussaye, 1850) (Fig. 1).

Brandt (1974) suggested that *Ellobium scheepmakeri* (Petit de la Saussaye, 1850) might be a synonym of *Ellobium aurisjudae* (Linnaeus, 1758), but the validity of *Ellobium scheepmakeri* is without doubt. The holotype of "*Auriculus scheepmakeri*" Petit de la Saussaye, 1850 is preserved in the *Zoölogisch Museum* (Amsterdam), and is figured in Raven & Vermeulen (2007). The holotype, other than being slightly more slender-looking with a taller spire, agrees well with the local specimens. As pointed out by Raven & Vermeulen (2007), the taller spire is within typical variations that occur among individual species. We have also observed this phenomenon in other ellobiids that occur locally (e.g., *Ellobium aurismidae*, *Ellobium aurisjudae*), but the present samples of *Ellobium scheepmakeri*, consisting mainly of juveniles, do not show marked variations.

Ellobium scheepmakeri (Petit de la Saussaye, 1850) is regarded as critically endangered in Chou & Tan (2008), and presumably only a single remnant population is known from Mandai. An empty shell has been found amongst debris along the high-tide line at Changi (SKT, pers. obs.), but it is not possible to ascertain whether the shell originated from the Singapore side of the East Johore Strait, or Malaysia. Hence we concur objectively with Chou & Tan (2008) that this species is absent from other locations.



Fig. 1. *Ellobium scheepmakeri* (Petit de la Saussaye, 1850), Sungei Mandai, Singapore. Shell height: 20.7–67.5 mm.

Despite being relatively large, *Ellobium scheepmakeri* is rarely mentioned in the literature as compared to the similarly sized *Ellobium aurismidae*, or the smaller *Ellobium aurisjudae*, and it can be deduced that this species is relatively uncommon. It was reported from Singapore by Martens (1897: 153), and this was reiterated by Brandt (1974: 227–228) who adds that there have been no recent finds of *Ellobium* species from Singapore other than *Ellobium aurismidae* and *Ellobium aurisjudae*. Brandt (1974) also appeared uncertain about the taxon which suggests that he had never seen specimens of *Ellobium scheepmakeri*, further demonstrating the scarcity of this species.

Thus far, the species has only been reported from Indonesia (Sumatra, Java and West Kalimantan), East Malaysia (Sarawak), Peninsular Malaysia (Johore), and Singapore (Martens, 1897; Dharma, 2005; Raven & Vermeulen, 2007; Chou & Tan, 2008). However, the century-old material held in the collections of the *Nationaal Natuurhistorisch Museum* (Leiden), and that of the *Zoölogisch Museum* (Amsterdam) examined by Raven & Vermeulen (2007) extended the distribution range of *Ellobium scheepmakeri* to South Kalimantan, Sulawesi and Bangka-Beliton (Indonesia) and Selangor (Malaysia). It is thus possible that the species is more widespread in the region than is presently known.

As we do not have conclusive data, it would seem inappropriate to comment on the conservation status of *Ellobium scheepmakeri*. Perhaps the least we can do to ensure the survival of any species is the continued preservation of their habitats. We do not know if future surveys will reveal the existence of more populations of this species elsewhere in Singapore, but we hope to have put the nomenclatural status of this elusive species right.

CONCLUSION

The species hitherto referred in the literature on Singapore molluscs as *Ellobium aurismalchi* Linnaeus, 1758 is more appropriately called *Ellobium scheepmakeri* (Petit de la Saussaye, 1850).

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