

Clarification of the identity of the type series of *Helix castra* W.H. Benson, 1852 (Helicarionidae, Durgellinae), with designation of a lectotype

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Abstract. Syntypes of *Helix castra* W.H. Benson, 1852 in the William Benson collection at the University Museum of Zoology, Cambridge, are a mixture of two species. A lectotype is designated to fix the name and stabilise the nomenclature of this species, now the type species of *Sivella* W.T. Blanford, 1863 (Helicarionidae, Durgellinae). The lectotype and paralectotype, the only specimens in the type series to match Benson's description, are illustrated.

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In 1852, William Benson named a new species of land snail collected by Robert Trotter from Darjeeling, India, as *Helix castra* with the following description in Latin:

Testa mediocriter umbilicata, depressissimo-conica, tenui, exiliter oblique acuto-striatula, cornea; spira ad apicem obtusa, suturis marginatis. Anfractibus 5 planulatis, ultimo ad peripheriam acutissime carinato, subtus planiusculo; apertura oblique subquadrata, margine acuto. (Benson 1852: 349)

[Shell with moderately wide umbilicus, very depressed, conical, thin, with fine oblique striations, horny; spire broad at apex, with shallow sutures. Five flattened whorls, the last whorl acutely keeled at the periphery, slightly flatter below; aperture obliquely subquadrate, with a sharp edge.]

As part of a major review of Benson's taxa, the type series of *Helix castra* W.H. Benson, 1852, the type species of *Sivella* W.T. Blanford, 1863 (Helicarionidae, Durgellinae), was evaluated by Preece *et al.* (2022). Two lots of specimens were identified amongst the Benson collection in the University Museum of Zoology, Cambridge (UMZC), both of which were labelled "*Videna Castra* Bens, Bens. col.", although these labels were added by Robert McAndrew after the Benson collection had passed into his ownership (see Preece *et al.* 2022 for full details). Only one lot (UMZC

I.103920) carries locality data "Darjeeling"; the other (UMZC I.103925) has no locality data.

Although his original description was typically brief, Benson unambiguously described a sharp lip, with no mention of any thickening or reflection of the aperture. This is the case for both specimens in lot UMZC I.103920, but not the single specimen in lot UMZC I.103925, which was illustrated as a syntype by Preece *et al.* (2022, fig. 75C). This is unfortunate, since we have now noticed that this specimen has a thickened, downturned lip and clearly does not conform with Benson's description. Moreover, as this specimen also lacks locality data its status as a syntype and member of the type series is less reliable and supports the need for a lectotype designation from lot UMZC I.103920 to stabilise the nomenclature.

The two specimens that form lot UMZC I.103920 match the original description (Fig. 1). One of these is better preserved in general, although has lost most of its periostracum, whereas the other has a damaged aperture. Given that the aperture represents a critical morphological character, we hereby designate the former (UMZC I.103920.A) as the lectotype (Fig. 1A).

It is worth noting that Reeve (1853: pl. 172 fig. 1160) illustrated a correctly identified specimen from the Benson collection, labelled as coming from "Darjeeling, Sikkim Himalaya; Trotter". Subsequently, a specimen from "Dar-

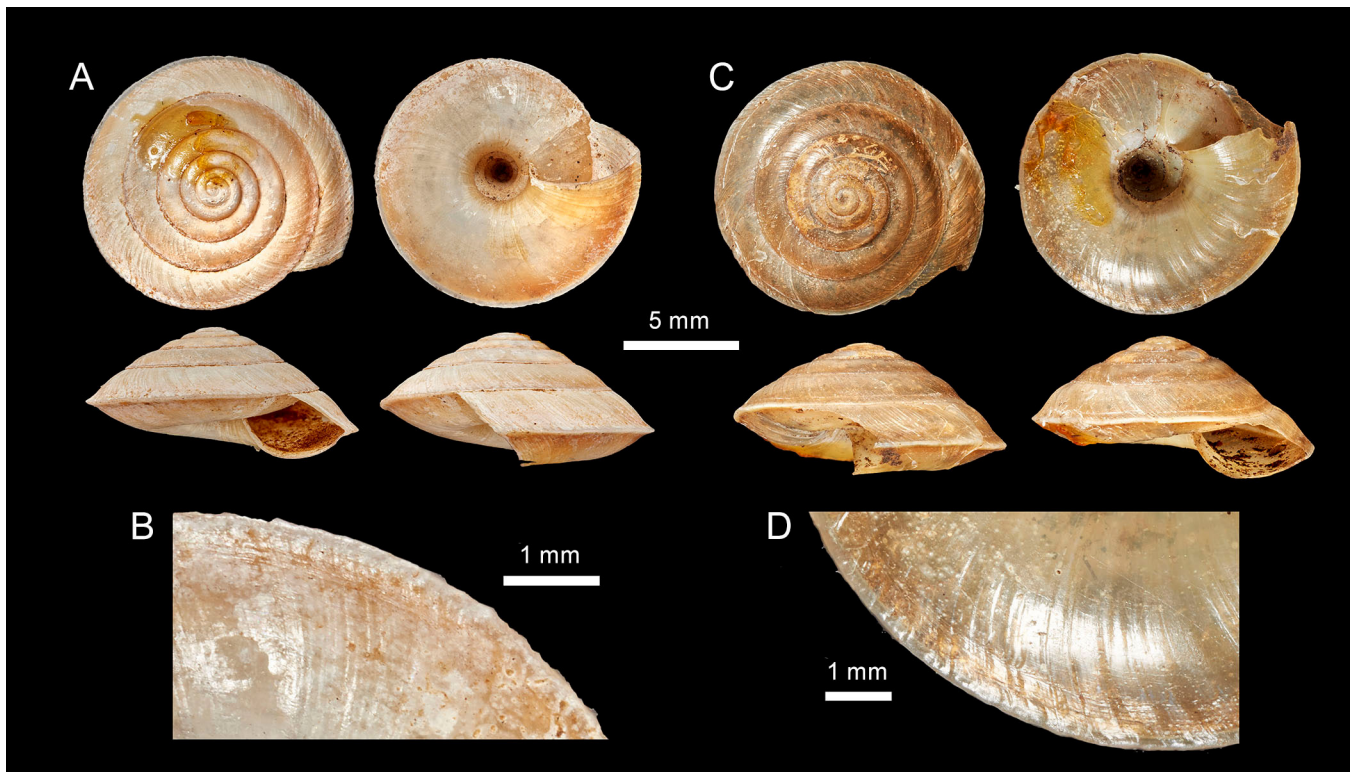


Figure 1. *Helix castra* W.H. Benson, 1852 in the Benson collection in the University Museum of Zoology, Cambridge (UMZC) from “Darjeeling”. **A, B.** lectotype (UMZC I.103920.A); **C, D.** paralectotype (UMZC I.103920.B).

jiling, Sikkim Himalayah” was figured in *Conchologia Indica* (Hanley & Theobald 1872: pl. 83 figs 1–3; see White (in press) for corrected publication dates) that exhibited “minute spiral striae on the lower disk, near the keel [that] cannot be represented by lithography”. This additional character can be clearly seen in both the lectotype (UMZC I.103920.A) and paralectotype (UMZC I.103920.B) (Figs 1B and 1D, respectively).

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REFERENCES

- BENSON WH. 1852. Notice of an Australian *Diplommatina*; and characters of new East Indian Helicidae from Darjiling and Singapore. *Annals and Magazine of Natural History (Series 2)* **10**: 348–351. doi: 10.1080/03745485609495711
- HANLEY SCT, THEOBALD W. 1872 [in 1870–1876]. *Conchologia Indica: Illustrations of the Land and Freshwater Shells of British India*. L. Reeve & Co., London. Part V, pp. 35–40, pls 81–100 [1 November 1872; date of publication follows White 2026]. doi: 10.5962/bhl.title.120669
- PREECE RC, WHITE TS, RAHEEM DC, KETCHUM H, ABLETT JD, TAYLOR H, WEBB K, NAGGS F. 2022. William Benson and the golden age of malacology in British India. Biography, illustrated catalogue and evaluation of his molluscan types. *Tropical Natural History Supplement* **6**: 1–434. doi: 10.58837/tnh.22.6.257073
- REEVE LA. 1851–1854. *Conchologia Iconica: Or, Illustrations of the Shells of Molluscos Animals. Vol. VII. Containing a Monograph of the Genus Helix*. Lovell Reeve, London, 210 pls. doi: 10.5962/bhl.title.8129
- WHITE TS. In press. The dates of publication of Hanley and Theobald’s *Conchologia Indica* and an evaluation of its new molluscan taxa. *Systematics and Biodiversity*.

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