

# Some notes on the genus *Schileykiella* Manganelli, Sparacio & Fo. Giusti, 1989 (Gastropoda, Helicoidea: Canariellidae) from Tunisia and Libya

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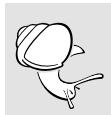
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LIBERTO, F., ABUSNEINA, A., GREGORINI, A. & COLOMBA, M., 2024. Some notes on the genus *Schileykiella* Manganelli, Sparacio & Fo. Giusti, 1989 (Gastropoda, Helicoidea: Canariellidae) from Tunisia and Libya. – *Basteria*, 88 (1): 25–28. Leiden.  
*Published 20 July 2024.*

Building on the recent re-allocation of *Helix sordulenta* to the genus *Schileykiella*, this paper provides further insights into the taxonomy, palaeontology, and distribution of *Schileykiella* in North Africa. Additionally, the taxon *Helix mendicaria* L. Pfeiffer, 1860, described from Tunisia, is here proposed as a junior synonym of *Schileykiella sordulenta* (Morelet, 1851), and the taxon *Xerophila chadiana darnensis* Hey, 1955, described from Derna (Cyrenaica, Libya), is identified as a possible congeneric fossil species.

**Key words:** Gastropoda, Pulmonata, distribution, pleistocene, land snail, North Africa, *Schileykiella sordulenta*, taxonomy.

## INTRODUCTION

Recently, Abbes et al. (2023) revised the North African species *Helix sordulenta* Morelet, 1851, type locality: Algeria, “aux alentours de Constantine dans les cimetières musulmans”. Based on the genital examination of some Tunisian specimens, they assigned this species to the genus *Schiley-*

*kiella* Manganelli, Sparacio & Fo. Giusti, 1989. In addition, they redefined its range, spanning from northeastern Algeria, through Tunisia to northwestern Libya (Gharian mountains, south of Tripoli) (Fig. 1). *Helix alsia* Bourguignat, 1863 and *Helix lasia* Bourguignat, 1863 have been tentatively identified as possible congeneric species by examination of the type specimens. Following that report, the present paper provides additional notes on the taxonomy, palaeontology, and distribution of *Schileykiella* in North Africa. Moreover, a new interpretation of the taxon *Helix mendicaria* L. Pfeiffer, 1860 is proposed. Pfeiffer (1860: 136) described *Helix mendicaria* based on a shell held in the Cuming collection and collected by Mr. Tristram in the “Interior of Tunis” (Tunisia). This taxon was subsequently listed by Bourguignat (1865: 323), Tryon (1887: 185), Pilsbry (1895: 274) and re-described, without additional notes, by Pfeiffer (1861: 233; 1868: 134) and Bourguignat (1868: 15–16). To date, MolluscaBase (2021) reports *H. mendicaria* as taxon inquirendum. Based on the examination of the holotype of *H. mendicaria*, a close relation between this taxon and *Schileykiella sordulenta* is discussed.

## MATERIAL AND METHODS

The taxonomic order and nomenclatural arrangement follow MolluscaBase (2023). The distribution map was produced by the first author (FL) using Photoshop CS5 (2022) software. Acronym: NHMUK = Natural History Museum, London.



**Fig. 1.** Distribution of the genus *Schileykiella* (purple areas). Black dot: type locality of *Helix mendicaria* L. Pfeiffer, 1860; black triangle: type locality of *Xerophila chadiana darnensis* Hey, 1955.

## RESULTS

The holotype of *Helix mendicaria* in the Cuming collection at the Natural History Museum, London was traced (Figs 2–3). Examination of the holotype reveals noticeable similarities with the morphological characters of *Schileykiella sordulenta*, leading to the proposal of *H. mendicaria* L. Pfeiffer, 1860 as junior synonym of *S. sordulenta*.

The holotype is accompanied by three labels. The label on the base of the box is in Pfeiffer's handwriting (with the registration number and the genus name *Hygromia* added by subsequent museum curators): "Helix mendicaria Pfr. / Int. of Tunis Mr. / Tristram". The other two labels were added later. The label starting 'N.B.' is in the handwriting of James Cosmo Melvill (1845–1929) (J. Ablett personal communication, January 8, 2023): "This sp. is desc. as / being "breviter lanu- / -ginosa"; the hairs must / have worn off if this / is the Type. Mil.". Melvill notes the lack of the hairs described by Pfeiffer and speculates that they may have fallen out. Indeed, the hairs of *S. sordulenta* are not firmly attached and easily lost (Abbes et al., 2023). The label on the upper side of the box (with the glass) was written by Mr. Atkinson, a curatorial assistant at the NHMUK (J.

Ablett personal communication, January 10, 2023): "mendicaria Pfr. / Tunis".

*Schileykiella sordulenta* (sub *Hygromia sordulenta*) was reported as a fossil in Pleistocene levels from Wadi Derna (Eastern Cyrenaica, Libya) by Gregory (1911: 579) and Newton (1911: 619, pl. 43, figs 1–2). Subsequently, Hey (1955: 292–293, pl. 15, fig. d) described the new taxon *Xerophila chadiana darnensis* from a bed of marl on the west bank of Wadi Gahham, Derna and he regarded the fossil reported by Newton as conspecific (Hey, 1955: 109, 292). The taxon *darnensis* Hey, 1955 is identified here as a possible congeneric of *S. sordulenta*. The fossil *S. darnensis* differs from the living *S. sordulenta* in its slightly larger size (diameter of the largest specimen 10 mm), aperture less nearly circular, striation coarse. The presence of living populations of *S. darnensis* in Cyrenaica was ruled out by Hey (1955), who did not even find this species in Holocene levels. Later, Hey (1967) announced the finding of *S. darnensis* in a "recent deposit" at Ain Mara, 25 km west of Derna. Nonetheless, no other malacologist who studied the living Cyrenaic malacofauna has ever reported this or any other similar species (Bisacchi, 1934; Brandt, 1959) so far.



Figs 2-3. *Helix mendicaria* holotype (NHMUK 20230534). 2. Shell. 3. Labels.

## DISCUSSION

The present paper resolves the taxonomic status of *Helix mendicaria*, contributing to the clarification of the historical taxonomy of the genus *Schileykiella* in North Africa. Notably, the fossil record of *Schileykiella* in Pleistocene levels from Cyrenaica, Libya (Gregory, 1911; Newton, 1911; Hey, 1955) extends the past distribution range of the genus to eastern Libya and underscores the paleontological significance of this genus in North Africa. When comparing the fossil *S. darnensis* and the extant *S. sordulenta*, the observed morphological features – including size, aperture

shape, and striation coarseness – provided new insights into an additional *Schileykiella* species and provided for the first time a fossil record for the genus.

## ACKNOWLEDGEMENTS

The authors express gratitude to Jonathan Ablett (curator of the NHMUK collection) for his assistance and for producing photographs of the *Helix mendicaria* holotype. We also thank Harriet Wood from the National Museum of Wales (Amgueddfa Cymru).

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