

Towards a Systematic Revision of the Eastern Australian Land Snail *Austrochloritis* Pilsbry, 1891 (Eupulmonata, Camaenidae): Re-description of its Type Species, *A. porteri* (Cox, 1866)

MICHAEL SHEA  AND FRANK KÖHLER 

Australian Museum Research Institute,
Australian Museum, 1 William Street, Sydney NSW 2010, Australia

ABSTRACT. *Helix porteri* Cox, 1866 is the type species of *Austrochloritis* Pilsbry, 1891, a speciose genus of camaenid land snail with a known range in eastern Australia stretching from Wilson's Promontory in Victoria to southeastern Queensland. This species was first described based on material from two locations in New South Wales, "Upper Clarence River at Guy Faux Station" and "Upper Richmond River, at Cowlong". These two locations are about 230 km apart from each other while all type material is considered to be lost. Comparative morpho-anatomy of specimens collected in the proximity of both type localities shows that the original concept of *Helix porteri* is based on two distinct species. Here we designate a neotype for this species from the Upper Richmond River area and provide a detailed redescription in order to remove any ambiguity about the identity of *Austrochloritis porteri*. Material from the vicinity of the second site mentioned in the original description of *H. porteri*, Guy Fawkes Station, is identified as *Austrochloritis specularis* Shea & Griffiths, 2010. We describe key diagnostic features distinguishing both species.

Introduction

Austrochloritis Pilsbry, 1891 is probably the most speciose land snail genus in eastern Australia comprising 34 currently accepted species (Stanisic *et al.*, 2010). These species are overall similar externally, having rather small, depressed and hairy shells of dull brown colour. Given their rather inconspicuous appearance, *Austrochloritis* species have historically not received the same attention of taxonomists that other land snail groups with more distinct looking shells may have enjoyed. Yet, the systematic concept of *Austrochloritis* has changed significantly since its original description. Still, the currently preferred classification introduced by Stanisic *et al.* (2010) is not without difficulties, which arise from the subjectivity and inconsistencies of 150

years of changing taxonomic treatments and the prevailing lack of critical anatomical and molecular phylogenetic data, which is essential to achieve a more objective systematic classification. *Austrochloritis* was described as a subgenus in *Chloritis* Beck, 1837, for the type species *Helix porteri* Cox, 1866, and has subsequently become a catch-all for uniform brownish bristle snails from eastern Australia and even New Guinea (e.g., Pilsbry, 1891: 262–265; Gude, 1906; Iredale, 1938; Zilch, 1966). Iredale (1933) argued that the presence of periostracal setae alone was not a sufficient character to unify all Australian "chloritids" under one genus name, let alone the New Guinean species, and successively allocated Australian species into several genera based on assessments of additional shell characters, such as protoconch sculpture, the elevation of the shell spire, and the size and shape of the

Keywords: Stylommatophora; taxonomic revision; reproductive anatomy; shell morphology; Hadrinae

Taxonomic registration: (LSID publication) <http://zoobank.org/BC469398-0572-492D-A29F-37F5BFF9199C>

Corresponding author: Michael Shea Michael.Shea@austmus.gov.au

Received: 15 February 2019 **Accepted:** 23 May 2019 **Published:** 24 July 2019 (in print and online simultaneously)

Publisher: The Australian Museum, Sydney, Australia (a statutory authority of, and principally funded by, the NSW State Government)

Citation: Shea, Michael, and Frank Köhler. 2019. Towards a systematic revision of the eastern Australian land snail *Austrochloritis* Pilsbry, 1891 (Eupulmonata, Camaenidae): re-description of its type species, *A. porteri* (Cox, 1866). *Records of the Australian Museum* 71(4): 111–120.

<https://doi.org/10.3853/j.2201-4349.71.2019.1699>

Copyright: © 2019 Shea, Köhler. This is an open access article licensed under a Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original authors and source are credited.

