

***Attenborougharion* gen. nov.**  
**(Mollusca: Pulmonata: Helicarionidae):**  
**A Likely Case of Convergent Evolution in**  
**Southeastern Tasmania**

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**ABSTRACT.** *Helicarion* Férussac, 1821 from southeastern Australia currently comprises five species of endemic semislugs. Analyses of comparative morphological data and partial sequences of the mitochondrial genes cytochrome c oxidase subunit I (COI) and 16S rRNA (16S) reveal that one of these species, *Helicarion rubicundus* Darnall & Kershaw, 1978, which is restricted to southeastern Tasmania, is not closely related to the other known species of this genus. This species is distinguished from *Helicarion* in several key morphological characters, such as the bright two-toned red and green colouration of its larger body with a flattened tail that is keeled only at the tip, the triangular shape of the pneumostome, the degree and type of folding present in the spermoviduct and free oviduct, the presence of a longer, more slender bursa copulatrix, the presence of a small epiphallic caecum and a hooked flagellum, and the presence of irregular longitudinal pilasters in the penial interior in contrast to the v-shaped rows of papillose lamellae seen in *Helicarion*. Moreover, the mitochondrial phylogeny provides evidence that this species is phylogenetically distinct from *Helicarion* as well as any other currently described genus from southeastern Australia. Based on these findings, we here describe a new genus, *Attenborougharion*, for this species.

**KEYWORDS.** Helicarionoidea; morphology; mitochondrial DNA; land snail; taxonomy.

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The Helicarionidae is a family of land snails in which about half of all species have evolved a reduced, ear-shaped shell into which they cannot fully retract (i.e., they have evolved into so-called semislugs). The type genus of the family, *Helicarion* Férussac, 1821, is part of a monophyletic radiation that is restricted to southeastern Australia and includes six additional genera (*Mysticarion* Iredale, 1941, *Parmavitrina* Iredale, 1937, *Cucullarion* Stanistic, 1998, *Peloparion* Iredale,

1937, *Ubiquitarion* Hyman, Lamborena & Köhler, 2017 and *Brevisentis* Hyman, 2007), all of which have recently been revised comprehensively (Hyman & Ponder, 2010; Hyman, Lamborena & Köhler, 2017). This clade is supported by several morphological synapomorphies, including the presence of a spiralling, spinose spermatophore, a flagellum with internal cryptae, at most a very short vagina, and the absence of an epiphallic caecum. The seven genera included

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