

On a new species of *Isomeria* Beck and redescription of species of *Labyrinthus* Beck from South America (Gastropoda: Stylommatophora: Camaenidae)

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ABSTRACT

The Camaenid genera *Labyrinthus* Beck, 1837 and *Isomeria* Beck, 1837 are mainly distributed in northern South America. Current anatomical information available for both genera is scarce, particularly that concerning *Isomeria* species. The morphology of the pallial organs, genital and digestive systems of three species of *Labyrinthus* [*L. subplanatus* (Petit, 1843), *L. dunkeri* (Pfeiffer, 1852), *L. tarapotoensis* Moricand, 1858] and a new species of *Isomeria* are described. The morphology of hooked denticles that topped wall ridges inside penis and vagina in some species of *Labyrinthus* and in *Isomeria* are species-specific characters, differing in shape and size. These structures were not sufficiently studied either in *Isomeria* or in *Labyrinthus* and are absent in all anatomically studied species of *Solaropsis* Beck, 1837, their sister genus. The presence of a bursa copulatrix sac reflexed over its duct is a character shared by all *Labyrinthus* species in which soft anatomy is known, and it was identified as a synapomorphy in a published phylogeny. *Isomeria awa*. n.sp. differs from other species of the genus mainly in shell morphology and characters of the distal genitalia. The presence of a stimulator-like structure in the vagina as well as the presence of a glandular pouch in the vagina are diagnostic characters of this new species, not present in the closely Camaenid related genera.

Key words: Morphology, Taxonomy, Stylommatophora, Helicoidea, Colombia, Neotropical

INTRODUCTION

The genera *Labyrinthus* Beck, 1837 and *Isomeria* Beck, 1837, both components of the Neotropical land snail fauna, are little studied. Both genera share similarities in shell color and size and inhabit similar habitats in South America. Indeed, some authors (Zilch 1959–60) considered *Isomeria* as a subgenus of *Labyrinthus* while others maintained them as independent entities (Solem 1966, Cuezzo 2003). *Labyrinthus* comprises thirty-one nomi-