A new species of *Thaisella* (Neogastropoda: Muricidae) from Caribbean Guatemala, with accounts on the anatomy and taxonomy of the genus in the Western Atlantic

**Luiz Ricardo L. Simone**

Museu de Zoologia da Universidade de São Paulo, Cx Postal 42494, 04299-970 São Paulo, SP, Brazil (lrsimone@usp.br, lrlsimone@gmail.com).

**Abstract.** *Thaisella guatemalteca* is a new species with type locality in Puerto Barrios, Department of Izabal, Caribbean (Atlantic) coast of Guatemala. Its anatomical attributes are described. The main intention is to provide data for a future re-evaluation of a possible complex of species that inhabit different estuarine regions along the Western Atlantic, of which this species is part. The new species can be easily distinguished by its small size, well-developed anal canal, simple sculpture, stubby periumbilical keel, and an orange aperture bearing poorly developed riblets. Anatomically, the set of distinctive features include an anal flap at the mantle edge, elongated radular teeth, strong asymmetry of salivary glands, a lack of accessory salivary glands, a pair of gastric ducts to the digestive gland, a relatively small and simple penis, and a pallial oviduct lacking a bursa and other chambers. The significance of these findings is still obscure because these characters are unknown in allied species, but provisionally, the genus *Thaisella* appears to be exclusively American (mostly Atlantic), always associated with an estuarine environment, and possessing geographically restricted species.

**Key words.** Anatomy, morphology, Rapaninae, taxonomy, new species.

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**Introduction**

The genus *Thaisella* Clench, 1947 (Muricidae, Rapaninae), type species by original designation *Purpura trinitatensis* Guppy, 1869, is sometimes considered a subgenus of *Thais* Röding, 1798. It is mainly characterized by the presence of a strong and stubby keel surrounding a pseudoumbilicus (Clench 1947: 69, Claremont et al. 2011).

The genus *Thaisella* encompasses just six species, which are usually associated with an estuarine environment. In the Western Atlantic, only three species are recognized as valid: 1) *T. coronata* (Lamarck, 1816), which actually was described from Senegal, West Africa, but has been reported to occur at some locations in northern South America and southeastern Brazil; 2) *T. trinitatensis*, with type locality in Trinidad, but with records from Guatemala to southern Brazil, including a synonym, *T. brujensis* (Smith 1946: 61, as subspecies of *T. coronata*), from the Atlantic side of the Canal Zone, Panama (Bruja Point); and 3) *T. mariae* (Morretes 1954), from southern São Paulo to northern Santa Catarina, Brazil (Marini 1988).

Despite the current taxonomy, the identification of Western Atlantic *Thaisella* is not easy, as several different conchological phenotypes occur, including variants with restricted distributions. Most of the identifiable samples came from estuarine areas, with some samples showing great tolerance, for a neogastropod, to freshwater and, for example, occurring even in rice plantings of Marajó Island, Pará, Brazil (unpublished data). All these euryhaline samples are the subject of ongoing comparative and taxonomical study to possibly show that each of the isolated estuarine regions of the Brazilian coast could harbor an exclusive species. As such, only the three species mentioned above are so far formally described. A similar study documented the division of species of a related genus, *Stramonita* Schumacher, 1817, which occurs only in fully marine, stenohaline habitats. That study described the Brazilian population previously known as *S. haemastoma* Linné, 1767 as *S. brasiliensis* Claremont & Reid, 2011 (Claremont et al. 2011).

The present paper is based on samples, collected by the naturalist José Coltro Jr. and his team, of a population that supposedly represents *Thaisella trinitatensis* at its northern distributional limit along the Caribbean coast of Guatemala (Clench 1947). The distinctive conchological and anatomical characters that are reported, and which define the new species, will serve as the basis for future