



Taxonomy of *Clathria* (*Thalysias*) (Demospongiae: Poecilosclerida: Microcionidae) from the Colombian Caribbean, with description of three new species

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Abstract

Thinly encrusting sponges are diverse and ecologically important, but their taxonomy is challenging. In the Greater Caribbean, the recognition of species of *Clathria* (*Thalysias*), most of which are encrusting, is still problematic. Here we describe and clarify the taxonomy of eight species, three new to science, from material collected mostly in Colombia. These are *C. (T.) virgultosa*, *C. (T.) curacaoensis*, *C. (T.) venosa*, *C. (T.) minuta*, *C. (T.) oxeota*, *C. (T.) sulfocleistochele* n. sp., *C. (T.) chelosigmoidea* n. sp., and *C. (T.) opalina* n. sp. Underwater color photographs are provided, together with drawings of spicules and skeleton, and SEM images of spicules. Two other well-established Caribbean species of the subgenus, viz. *C. (T.) isodictyoides* and *C. (T.) collosclera* (both from Curaçao) were not found in the studied material. A key for their identification is provided. Three more records, *C. (T.) fascicularis* Topsent, 1889, *C. (T.) procera* (Ridley, 1884) and *C. (T.) basiarenacea* (Boury-Esnault, 1973) are outlined for further study.

Key words: Sponges, *Clathria*, *Thalysias*, new species, Caribbean, Colombia

- 10a. Sigma-like chelae. Live color sulfur yellow in between a transparent star-shaped vein pattern of the canal system and oscules. *C. (T.) chelosigmoidea* n. sp. (11)
- 10b. Palmate isochelae with enlarged alae and/or ridged shaft.
- 11a. Palmate isochelae with a ridged shaft; alae normal. Live color bright red. *C. (T.) isodictyoides*
- 11b. One category of palmate isochela with enlarged alae and shaft (cleistochelae), the other normal. Live color sulfur yellow in between a transparent star-shaped vein pattern of the canal system and oscules *C. (T.) sulfocleistocheila* n. sp.
- 12a. Oxeote toxa present, next to normal, wing-shaped ones. Acanthostyles 40–70 µm. Slightly thick (up to 2 mm) and soft. External color pinkish to grayish with a strongly developed star-shaped vein pattern of the canal system and oscules; internal color bright orange *C. (T.) venosa*
- 12b. Only normal, wing-shaped toxa present, characteristically recurved. Acanthostyles in a wider range of sizes, 60–180 µm. Color red to scarlet; canal system little evident *C. (T.) minuta*

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