



## ***Acanthotetilla celebensis* sp. nov., a new species from North Sulawesi, Indonesia (Porifera: Demospongiae: Spirophorida: Tetillidae)**

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### **Abstract**

A new megacanthoxea-bearing tetillid *Acanthotetilla celebensis* sp.nov. (Porifera: Demospongiae: Spirophorida: Tetillidae) is described from North Sulawesi, Indonesia. The new species is compared with all other (four) *Acanthotetilla* species occurring in the Indian Ocean and the West Indies. The new species differs from these other species by the overall morphology, and especially the presence of two sizes of megacanthoxeas. This is the first record of *Acanthotetilla* in Indonesia.

**Key words:** Porifera, Demospongiae, Spirophorida, Tetillidae, *Acanthotetilla*, new species, Sulawesi, Indonesia

### **Introduction**

Indonesian sponges still pose a considerable challenge to marine taxonomists and ecologists working in this region (Van Soest, 1989; De Voogd *et al.*, 2006). Much of the sponge fauna remains insufficiently known and this hampers scientific endeavours to synthesize knowledge of marine systems for purposes of conservation (e.g. De Voogd *et al.*, 2006; Cleary *et al.*, 2005) or responsible exploitation of its components (e.g. De Voogd *et al.*, 2005; de Voogd, 2007). Alpha taxonomic work in this region thus remains a prerequisite for any progress in scientific programs involving sponges. The present contribution is intended as a small step on the way to assess the richness of the Indonesian seas.

The genus *Acanthotetilla* (Porifera: Demospongiae: Spirophorida: Tetillidae) was erected in 1959 by Maurice Burton receiving tetillid sponges with peculiar megacanthoxeas as auxiliary megascleres. The type and only species of the new genus was *A. hemisphaerica* Burton, 1959. In 1964, Lévi described the genus *Acanthocinachyra* for the type species *A. enigmatica* that was distinguished from *Acanthotetilla* by the presence of sigmaspires, which were expressly stated to be absent in *Acanthotetilla* by Burton (1959). This was followed by the description of a second species in *Acanthocinachyra*, viz. *A. seychellensis* Thomas, 1973. Van Soest (1977) re-examined the type species of both genera and synonymized them under *Acanthotetilla* because Burton had obviously overlooked the sigmaspires in his type material. He added a fourth species to the revised *Acanthotetilla*, *A. gorgonosclera* Van Soest, 1977 from Barbados.

In this paper we describe a new megacanthoxea-bearing sponge, *Acanthotetilla celebensis* sp.nov. recently found at a single locality in North Sulawesi, Indonesia. The new species is compared with the other described *Acanthotetilla* species occurring in the Indian Ocean and the West Indies. This is the first record of the genus in the Indonesian archipelago.