Zootaxa 1191: 21–34 (2006)
www.mapress.com/zootaxa/

ISSN 1175-5326 (print edition)
ZOOTAXA
ISSN 1175-5334 (online edition)

1191

Redescription of *Mycale tunicata* (Schmidt, 1862) (Porifera, Demospongiae, Poecilosclerida) from Rovinj, Croatia, northern Adriatic Sea

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Abstract

Entire specimens of the sponge *Mycale (Aegogropila) tunicata* (Schmidt, 1862) (Porifera, Demospongiae, Poecilosclerida) were obtained from a soft-bottom environment through dredging and SCUBA-diving from the bay of Rovinj. Reliable identification was only possible after thorough comparisons with Museum specimens, including the original material from O. Schmidt. For the first time photographs of various aspects (sponge in situ, freshly collected sponges, both ectosomal and choanosomal skeleton, the surface, all spicules) of the sponge can be presented. Since a lot of material exists and the available descriptions of the species are in parts incomplete or misleading (especially the original description by O. Schmidt) a redescription of the species with recently collected material is an urgent task. A lectotype from the Schmidt-syntypes is designated.

Key words: Adriatic Sea, Mediterranean, *Mycale tunicata*, Porifera, redescription

Introduction

In recent years entire specimens of a soft-bottom sponge were repeatedly dredged in the bay of Rovinj, Croatia, northern Adriatic Sea. If it produces bioactive compounds, the probably fast growing sponge would be suitable for future biotechnological use. Identification of this sponge was not as easy as thought in the beginning. Despite the fact that in recent years some important synthetic literature appeared (the most important: Hooper & van Soest 2002), the identification of Mediterranean sponges relies still mostly on works from the 19th and early 20th century like those of Topsent or Schmidt. Especially Schmidt (1862, 1864, 1866, 1868) made several substantial contributions to the knowledge of the sponges of the Adriatic Sea. Shortcomings of his works are his often

Accepted by G. Wörheide: 22 Mar. 2006; published: 1 May 2006