

Article



First record of *Hyalascus* (Hexactinellida: Rossellidae) from the Indian Ocean, with description of a new species from a volcanic seamount in the Andaman Sea

SABYASACHI SAUTYA¹, KONSTANTIN R. TABACHNICK² & BABAN INGOLE¹

¹National Institute of Oceanography (CSIR), Dona Paula, Goa, 403004, INDIA. E-mail: sabya_aqua@rediffmail.com; baban@nio.org

Abstract

A new species of *Hyalascus* is described from the submarine volcanic crater seamount of Andaman Back-arc Basin, Indian Ocean. The genus was previously known in the Pacific Ocean only.

Key words: Hexactinellida; Hyalascus; new species; seamount; Back-arc Basin; Andaman Sea; Indian Ocean

Introduction

Hyalascus was established by Ijima in 1896 for a sponge from Sagami Bay (Japan). The genus comprised eight doubtless species until now: H. baculifer (Schulze, 1886); H. stellatus (Schulze, 1886); H. sagamiensis Ijima, 1896; H. giganteus Ijima, 1898; H. similis Ijima, 1904; H. attenuatus Okada, 1932; H. anisoactinus Tabachnick & Levi, 2004; and H. pinulohexactinus Tabachnick & Levi, 2004; all occurring in the Pacific Ocean only. Hyalascus hodgsonii Kirkpatrick, 1907 from the Antarctic Ocean appears to be a doubtful representative of the genus due to the presence of two types of microdiscohexasters; one with numerous secondary rays, and another possessing a reduced number of these rays. The transfer of this species to Scyphidium by Tabachnick & Lévi (2004) appears reasonable since presence of two types of discoidal microscleres is the diagnostic character for Scyphidium (Tabachnick, 2002). The assignment by Koltun (1964) of Hyalascus attenuatus Okada, 1932 to the synonymy of Aulosaccus schulzei Ijima, 1896 was rejected later (Tabachnick, 2002). Koltun found two specimens, identified by him as Hyalascus attenuatus, with large spherical discohexasters. As a consequence, these specimens should be regarded as representatives of Aulosaccus Ijima, 1896. In part, Ijima's decision was derived from the observation that hypodermal pentactins were absent in Aulosaccus (cf. Ijima, 1904). Nevertheless, Okada (1932) noticed that this trait does not seem to be important, as opposed to the large discohexasters, judged a more reliable diagnostic character for Aulosaccus. Some hypodermal pentactins may be present in the latter. Following this argument, later inadvertently supported by Tabachnick (2002), A. mitsukurii Ijima, 1898 (1904, 1928) from Sagami Bay (Japan), was referred to Hyalascus. This was a mistaken decision nevertheless, as this species has two distinct types of discoidal microscleres and should finally be considered a doubtless representative of Scyphidium Schulze, 1900.

Hyalascus is defined as Rossellinae with saccular body and only one type of discoidal microscleres—the smallest ones microdiscohexasters. Dermalia are pentactins and stauractins, hypodermal pentactins (if present) have orthotropal tangential rays (Tabachnick, 2002).

²Institute of Oceanology Ac. of Sc. of Russia, Nahimovsky 36, Moscow, 117997, Russia. E-mail: tabachnick@mail.ru