

New species of deep-sea demosponges (Porifera) from the Aleutian Islands (Alaska, USA)

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Abstract

Deep-sea sponge habitat of the Aleutian Islands was investigated with the ROV *Jason II*. Identification of the more than 60 specimens collected at depths between 179 and 2827 m revealed nine new species of demosponges. *Megaciella anisochela* **sp. nov.**, *Stelodoryx oxeata* **sp. nov.**, *Monanchora laminachela* **sp. nov.**, *Echinoclathria vasa* **sp. nov.**, *Euchelipluma elongata* **sp. nov.**, *Esperiopsis flagrum* **sp. nov.**, *Mycale jasoniae* **sp. nov.**, *Latrunculia velera* **sp. nov.** and *Latrunculia occulta* **sp. nov.** are described and compared with congeners of the area.

Key words: Porifera, Poecilosclerida, new species, taxonomy, Aleutian Islands, N-Pacific, deep-sea

Introduction

Sponges were collected from the deep waters near the central Aleutian Islands during a research cruise to study deepwater sponge and coral habitat. The geographically closest record of other deep-sea sponges is the publication of Koltun (1970) who described a collection of deep-sea sponges from the Kuril Trench, a deep submarine depression in the western Pacific Ocean between the Kamtchatka Peninsula, the Kuril Islands and Hokkaido Island, Japan. The trench extends for 2900 km north and south with a maximum depth of 10542 m. Seafloor habitats from the two regions are likely similar given their geographical proximity and similar depth range and indeed we found several species in the Aleutian Islands known previously only from one or a few specimens in Koltun's collections. Our deepwater collection included a relatively high percentage of new species (24%) clearly indicating that the region's sponge fauna and deepwater habitats are poorly studied. Previous studies from Lambe (1892, 1893, 1894), Koltun (1959) and de Laubenfels (1953) didn't focus on the area of the Aleutian Islands and were mostly restricted to shallower depths. Our previous contributions (Lehnert, Stone & Heimler 2005a, 2005b, 2006) were