Copyright © 2010 · Magnolia Press

Article



A new species of the genus Boltenia (Ascidiacea) from the Red Sea

NOA SHENKAR^{1,3} & GRETCHEN LAMBERT²

¹Department of Biology, University of Washington, Seattle, WA 98195 U.S.A. E-mail: nshenkar@u.washington.edu ²University of Washington Friday Harbor Labs, Friday Harbor, WA 98250 U.S.A. ³Corresponding author

Abstract

Between 2003 and 2008 during surveys and collection of ascidians along the Red Sea coast of Israel several specimens of an undescribed species of *Boltenia* were collected by SCUBA from man-made structures at 1–20 m depth. This is the first species of the genus *Boltenia* described from the Red Sea. We name the new species *Boltenia yossiloya* in honor of Professor Yossi Loya, a world renowned researcher of the coral reefs of Eilat.

Key words: taxonomy, ascidian, coral reef, Red Sea, Gulf of Aqaba, Eilat, Boltenia

Introduction

The ascidian fauna of the northern Gulf of Aqaba (Eilat) is relatively unknown. The most recent list of ascidians from Eilat contains only 19 species (Pérès 1962). This list is certainly incomplete considering the number (approximately 40) reported in the past from the Red Sea (Michaelsen 1918, 1920a, b). Although situated at the northernmost boundaries of coral reef distribution, these reefs are among the most spectacular and diverse in the world and include many endemic species (Loya 1972, Goren 1993). The relatively low numbers of ascidian species described from Eilat thus are probably the result of inadequate sampling. A new collection of ascidians of this region was recently established at the National Collections of Tel-Aviv University in order to provide an up-to-date species description for the region. A previous publication (Shenkar and Monniot 2006) describes a new species of *Botryllus* which appears to be a very successful competitor for space in this region, overgrowing dead coral skeletons and rapidly colonizing artificial substrates (Shenkar et al. 2008).

In the present paper we describe the morphology and distribution of a new species of *Boltenia* from the coral reefs of Eilat. The genus *Boltenia*, in the stolidobranch family Pyuridae, resembles the genus *Pyura* in many respects but is distinguished primarily by the transverse, rather than longitudinal, arrangement of the elongate stigmata, which are crossed by the internal longitudinal vessels. About nine species of *Boltenia* have been described, mostly from temperate and arctic regions; of these, two abyssal species with unusual morphology were moved to the genus *Hemistyela* (Sanamyan and Sanamyan 2006). There are only two species known from warmer waters: *Boltenia transversaria* (Sluiter 1904) from the tropical coral reefs of Indonesia, found also in the Sea of Japan (Nishikawa 1991) and *Boltenia africana* (Millar 1962, Monniot et al. 2001) from warm and temperate waters in South Africa. We name the new species *Boltenia yossiloya* in honor of Professor Yossi Loya who has devoted his career to the study and protection of the coral reefs of Eilat.

Material and methods

Between 2003 and 2008 routine surveys and samplings of ascidians were conducted along the Red Sea coast of Israel (29°30' N, 34°56' E) in order to establish a current list of the ascidian fauna of this region. During