



***Botrylloides pizoni*, a new species of Botryllinae (Asciacea) from the Mediterranean Sea**

R. BRUNETTI ^{1*} & F. MASTROTOTARO ²

^{1*} External collaborator, Natural History Museum of Venice, S. Croce 1730, I-30135 Venezia, Italy. Email: ric.brunetti@gmail.com

² Department of Biology, University of Bari, Via Orabona 4, I-70125 Bari, Italy. Email: f.mastrototaro@biologia.uniba.it

* Corresponding author

Abstract

A new ascidian species belonging to the Botryllinae was discovered in the Gulf of Taranto (South Italy). This new species was collected in different seasons over a period of several years, which allowed information about its biology to be obtained. The new species presents large zooids arranged in ladder systems. The zooids have several rows of stigmata, the second one complete, ovary posterior to testis, one larva per side developing in an incubatory pouch, and a peculiar arrangement of the gut loop. The new species is named *Botrylloides pizoni* after the great French zoologist Antoine Pizon (1860–1942).

Key words: Tunicata, Asciacea, Botryllinae, *Botrylloides pizoni* n. sp., Mediterranean Sea, South Italy

Introduction

The taxonomy of the Botryllinae is far from being satisfactory: the reduced size of zooids, ignorance of the degree of variability in most characters and the possibility of morphological variability in many structures, as a consequence of the particular stage of the colonial life history at the moment of collection. All these mean that specific determination is often uncertain and, unfortunately, many previous descriptions are not really discriminant. In this situation Saito & Okuyama (2003) emphasised that underlined details of the life history may be indispensable for a precise classification of these animals. Although this opinion is indubitably valid in many cases, unfortunately, practically all ascidian taxonomists are obliged to examine dead specimens. However if sufficient material collected over a period of several seasons is available, useful indications about the life history of the species can be obtained. In any case, until the true taxonomic values of the different morphological characters have been ascertained, descriptions of these species should be very accurate and involve the highest number of characters possible (Brunetti, 2009).

In this paper, several samples of a Botryllinae species, collected from the Gulf of Taranto over various seasons during 2003 to 2011, were analysed and recognised as belonging to a new species of the genus *Botrylloides*.

Material and methods

Collection site. The species was found in mussels farms of the *Mar Piccolo* of the Gulf of Taranto (South Italy). This area is composed of two basins: an external one, called *Mar Grande*, covering an area of 35.5 km² with a maximum depth of 42 m, is in ample communication with the open sea; and a more internal one called *Mar Piccolo*, covering 20.72 km², which is made up of two inlets called *I* and *II seno*, with maximum depths of 13 and 9 m respectively (Fig. 1). The three basins present a gradient in hydrological conditions with progressive reduction of water renewal and an increase in silting and suspended matter (Umgiesser et al. 2007). All the *Botrylloides* colonies were collected by scuba divers in the *I seno* of the *Mar Piccolo* at 2–3 m depth on the submerged chains of iron buoys.