



<http://dx.doi.org/10.11646/zootaxa.3981.2.9>

<http://zoobank.org/urn:lsid:zoobank.org:pub:C91343BD-FA86-4870-B9B2-638E5CD92EB6>

***Styela cearense* n. sp. (Ascidiacea: Styelidae) from the Northeastern Brazilian Coast**

RONALDO RUY DE OLIVEIRA FILHO¹ & TITO MONTEIRO DA CRUZ LOTUFO^{1,2}

¹Graduate Program in Tropical Marine Sciences, Universidade Federal do Ceará, Ceará, Brazil. Av. Abolição 3207, CEP 60165-082 Fortaleza—CE, Brasil

²Instituto Oceanográfico, Universidade de São Paulo, Praça do Oceanográfico, 191, 05508-120, São Paulo—SP, Brazil.
E-mail: tmlotuf@usp.br

Abstract

The species *Styela cearense* n. sp. is described from material collected in shallow waters at the Ceará State, Northeastern Brazil. Discussion includes several other species with one gonad on each side of the body, and a tabular key is provided. A set of important anatomical features and their intraspecific variability within the genus is considered, including the number of branchial and stomach folds, the presence of endocarps, and anal border shape.

Key words: Ascidian, Brazil, Ceará

Introduction

The genus *Styela* Fleming, 1822 is widely distributed throughout the oceans, occurring from shallow waters until more than 6000 m deep (Monniot & Monniot, 1975). Its members are characterized primarily by their gonads with “male follicles projecting, but not in close association with, the elongated ovarian tube” (Kott, 1985). The taxon is currently represented by 73 valid species and belongs to the family Styelidae Sluiter, 1895, one of the most diversified within the Ascidiacea (Shenkar & Swalla, 2011). Of all species, 29 have only one gonad on each side of body, and almost all of these were described from deep and cold waters.

Only two species of *Styela* were recorded along the Northeastern Brazilian coast: the endemic *Styela eurygaster* Millar, 1977, and *Styela canopus* (Savigny, 1816), a widespread species usually found on artificial rather than natural substrates (Lotufo, 2002; Rocha *et al.* 2012). However, this area is poorly known, so that undescribed species are expected to be found as sampling effort increases.

In the present study we describe *Styela cearense* n. sp., collected in shallow waters at the Ceará State, Northeastern Brazil. The specimens were found very close to each other, indicating a larval behavior for aggregation, but not truth coloniality as already noticed for the genus (Kott, 1995). This is the first record of a *Styela* species with a single gonad on each side of the body in Atlantic shallow waters.

Description

***Styela cearense* n. sp.**

(Figures 1–4)

Nomenclatural act at Zoobank: A8D7CFC0-9CD2-4DD1-9A0C-D845A7A31CFD

Type material. Holotype: MZUSP 00122, artificial pilings at the Praia da Pedra Rachada, Paracuru, Ceará State (03°23'53.03"S; 039°00'54.03"W), about 80km western Fortaleza city, ~2m depth, in November 21th 2011.

Paratypes: five specimens from same date and location are deposited at MZUSP under numbers 00123 to 00127.

Etymology. The specific name refers to the Brazilian state (Ceará) where this species was collected.