



New species of *Latrunculia* from the Agulhas shelf, South Africa, with designation of a type species for subgenus *Biannulata* (Demospongiae, Poecilosclerida, Latrunculiidae)

TOUFIEK SAMAAI^{1,2,4}, LIESL JANSON¹ & MICHELLE KELLY³

¹Department of Environmental Affairs, Oceans & Coasts Branch, Marine Biodiversity and Ecosystem Research, Private Bag X2, Roggebaai, 8012, Cape Town, Western Cape, South Africa. E-mail: tsamaai@environment.gov.za

²Marine Research Institute (MA-RE), University of Cape Town, Private Bag X3, Rondebosch 7701, Cape Town, South Africa

³National Institute of Water & Atmospheric Research Ltd, Private Bag 99940, Auckland 1149, New Zealand.

E-mail: michelle.kelly@niwa.co.nz

⁴Corresponding author. E-mail: tsamaai@environment.gov.za; toufiek.samaai@gmail.com

Abstract

Three new species of *Latrunculia* are described from Algoa Bay, and Alphen and 45-Mile Banks, on the Agulhas continental shelf off the southern coast of South Africa. *Latrunculia gotzi* **sp. nov.**, from Alphen Banks, forms a thick raised pad with broad, low, meandering areolate porefields that are characteristically lighter in colour than the surrounding mahogany brown ectosome. *Latrunculia kerwathi* **sp. nov.**, from 45-Mile Banks, forms a thin, dark greenish brown encrustation, with very small, discrete, crater-shaped porefields. *Latrunculia algoaensis* **sp. nov.**, from Algoa Bay, is a green hemisphere with relatively large, thick-lipped, circular areolate porefields. While the megascleres in these new species vary specifically in their dimensions, the former two species have small irregular spines on the styles. The anisodiscorhabds of the new species also vary specifically in dimensions and degree of ornamentation, but have an undifferentiated basal whorl and manubrium, with only median and subsidiary whorls around the shaft. These are identical in overall form to the anisodiscorhabds in several South African and New Zealand species currently recognised within the subgenus *Latrunculia* (*Biannulata*) Samaai *et al.*, 2006, a group of 13 species for which no type species was ever assigned. A type species is designated herein.

Key words: Porifera, Latrunculiidae, *Latrunculia*, *Latrunculia* (*Biannulata*), new species, South Africa, sponges, taxonomy

Introduction

Latrunculia du Bocage, 1869 contains 30 valid species, over half of which occur in the Southern Hemisphere around Antarctica (Kirkpatrick 1908; Ridley & Dendy 1886, 1887), the south-eastern coastline of South America (Ridley & Dendy 1886, 1887; Kirkpatrick 1908; Mothes *et al.* 2008; Willenz *et al.* 2010), South Africa (Samaai *et al.* 2003, 2006), and Australia (Carter 1881). New Zealand waters harbour 11 described species (Alvarez *et al.* 2002) and several new, undescribed species are known (Kelly *et al.* 2009). The genus extends further north into the Pacific Ocean in deep waters off New Caledonia (Lévi 1993; Samaai *et al.* 2006), Japan (Tanita 1968), and the Philippines (Lévi 1964). *Latrunculia* is also present in the northern regions of the Atlantic Ocean off the west coast of Africa (du Bocage 1869; Topsent 1905) and the deep Mediterranean (Vacelet 1969).

In recent years the known distribution of *Latrunculia* has extended into the North Pacific beyond Japan, to the Aleutian Islands (Lehnert *et al.* 2006) and Kurile Island (Samaai and Krasokhin 2002) in the west, and into the East Pacific off British Columbia (Samaai *et al.* 2006). Several more new species are known to exist in the North Pacific region (Kelly *et al.* unpublished data, see Abbas *et al.* 2011). Three new species were also recently discovered on the Agulhas continental shelf off the southern coast of South Africa. These species have anisodiscorhabds with an