



## Three Pseudocerotidae species (Platyhelminthes, Polycladida, Cotylea) from the Argentinean coast

VERÓNICA N. BULNES<sup>1</sup>, MARIANO J. ALBANO<sup>2</sup>, SANDRA M. OBENAT<sup>2</sup> & NÉSTOR J. CAZZANIGA<sup>1</sup>

<sup>1</sup>Universidad Nacional del Sur, Departamento de Biología, Bioquímica y Farmacia, Zoología de Invertebrados I, San Juan 670, 8000 Bahía Blanca, Argentina. E-mail: vebulnes@criba.edu.ar

<sup>2</sup>Universidad Nacional de Mar del Plata, Facultad de Ciencias Exactas y Naturales, Departamento de Biología. Funes 3250, 7600 Mar del Plata, Argentina

### Abstract

Three species of flatworms, *Phrikoceros mopsus* (Marcus, 1952), *Thysanozoon brocchii* (Risso, 1818) and *Thysanozoon mirtae* **sp. nov.**, are described from specimens collected from shallow rocky shores of Mar del Plata harbour, in the south-western Atlantic. *P. mopsus* had been described as living in the coasts of Brazil and southern Patagonia. *T. brocchii* has a more extensive known distribution, from the Mediterranean to the coasts of Brazil and the Argentinean Patagonia. Their morphological variation is here recorded and discussed. *Thysanozoon mirtae* **sp. nov.** is characterized by its colour pattern, colourless tentacles, and the presence of well developed spermiducal vesicles and a strong parenchymatic musculature.

**Key words:** *Phrikoceros*, *Thysanozoon*, taxonomy, South West Atlantic, Argentina

### Introduction

Pseudocerotidae is one of the most diverse families within the Cotylea, with almost 200 species distributed into 14 genera, mostly known from tropical and subtropical waters, especially in the Indo-Pacific region (Prudhoe 1985). Only five of these species were described for tempered and cold regions: *Thysanozoon skottsbergi* Bock, 1913 from Juan Fernández and Eastern Island; *Pseudoceros canadensis* Hyman, 1953 from Canada; *Tytthosoceros inca* Baeza *et al.*, 1997 from the Chilean coasts; and *Phrikoceros mopsus* (Marcus, 1952) and *Thysanozoon brocchii* (Risso, 1818), recorded from Brazil and the Argentinean Patagonia (Brusa *et al.* 2009).

The present paper reports the occurrence of three species of cotylean polyclads inhabiting Mar del Plata harbour in the Atlantic coast of Argentina. Although studies on benthic and fouling communities were done at Mar del Plata harbour during more than four decades (Bastida 1968, 1971, 1979; Spivak *et al.* 1975; Bastida & L'Hoste 1976; Bastida & Adabbo 1977; Rivero *et al.* 2005; Albano *et al.* 2006a, 2006b; Albano & Obenat 2009) the presence of Polycladida was seldom cited (Bastida & Adabbo 1977; Boschi & Cousseau 2004).

The Polycladida often exhibit conspicuous colours and striking colour patterns. Hyman (1954), Prudhoe (1985, 1989) and Newman and Cannon (1995) argued that colour patterns are valid characters allowing accurate taxonomic identifications. However, Rawlinson and Litvaitis (2008) concluded that colour patterns are highly homoplasious in the Pseudocerotidae, as already suggested by Faubel (1983, 1984), who considered that species description, identification and taxonomic revision should involve not only external features, but also serial sections of the reproductive system and other anatomical singularities. Therefore, in this paper we also contribute anatomical descriptions of the flatworms studied.

### Material and methods

The specimens were collected at the Mar del Plata harbour (38° 02' S, 57° 31' 30" W), Buenos Aires province,