

## New species of Acoela (Acoelomorpha) from the Gulf of California

MATTHEW D. HOOGE & NEIL EPPINGER

*Department of Biological Sciences, The University of Maine, 5751 Murray Hall,  
Orono, ME, 04469-5751, USA. E-Mail: hooge@umit.maine.edu*

### Abstract

From a survey of interstitial acoel flatworms at San Felipe Bay, Baja California, Mexico, the new species *Haplogonaria amarilla* **sp. nov.** (Haploposthiidae), *Isodiametra bajaensis* **sp. nov.** (Isodiametridae), *Praeaphanostoma gusana* **sp. nov.** (Isodiametridae) are described.

**Key words:** Meiofauna, turbellarians, Platyhelminthes, interstitial, *Haplogonaria*, *Isodiametra*, *Praeaphanostoma*

### Introduction

To date, there is only one species of acoel known from Baja California, Mexico, *Solenofilomorpha guaymensis* Crezée, 1975, an interstitial species collected subtidally from Guaymas, Sonora (Crezée 1975, see also Tyler et al. 2005). As part of an ongoing investigation of the taxonomy and biogeography of the Acoela (Hooge 2003, Hooge & Smith 2004, Hooge & Tyler 2001, 2003a,b, 2005), we collected acoels from San Felipe Bay, Baja, Mexico in February 2004. We report here our finding of three previously unknown species.

### Materials and Methods

Sediment samples were collected on February 1, 2004 in Baja California, Mexico, and transported to Scripps Institution of Oceanography for extraction and observation of the animals. Specimens were extracted from sediment using magnesium-sulfate anesthetization (Sterrer 1971). Live animals were viewed by light microscopy in squeeze preparations and photographed.

For histological study, specimens were relaxed in isotonic magnesium sulfate, fixed in