*Zootaxa* 1317: 1–19 (2006)
www.mapress.com/zootaxa/


ISSN 1175-5326 (print edition)
**ZOOTAXA**
ISSN 1175-5334 (online edition)

**1317**

# First description of deep-sea polyclad flatworms from the North Pacific: *Anocellidus* n. gen. *profundus* n. sp. (Anocellidae, n. fam.) and *Oligocladus voightae* n. sp. (Euryleptidae)

SIGMER Y. QUIROGA, D. MARCELA BOLAÑOS & MARIAN K. LITVAITIS

*Department of Zoology and Center of Marine Biology, Rudman Hall, University of New Hampshire, Durham, NH 03824, USA. E-mail: m.litvaitis@unh.edu*

## Abstract

Two deep-sea polyclad species are described. Both species were found in association with wood-boring bivalves on oak and fir wood blocks that had been deployed on heavy sediment in the Cascadia Basin and Escanaba Trough in the North Pacific Ocean. *Anocellidus profundus* **n. gen. n. sp.** warrants erection of Anocellidae, **n. fam.** because of the unique position and orientation of the male copulatory apparatus. *A. profundus* lacks eyes but has long, nuchal tentacles and a ventral, arrowhead-shaped organ of putative sensory function. The male copulatory apparatus is located posterior to the male gonopore and is directed anteriorly. Highly muscularized spermiducal bulbs are present, a prostatic vesicle is lacking. A large Lang's vesicle characterizes the female reproductive system. *Oligocladus voightae* **n. sp.** is defined by the presence of a mouth located anterior to the brain. Few and minute tentacular eyes are present. The seminal vesicle is connected to an auxiliary sperm storage vesicle, and a posterior anal pore is present in the main median branch of the intestine. All type material is deposited at the Field Museum of Natural History, Chicago, Illinois, USA.

## Resumen

Se describen dos nuevas especies de policládidos de la profundidad marina. *Anocellidus profundus* **n. gen. n. sp.** garantiza el establecimiento de la nueva familia Anocellidae, n. fam. debido a la posición y orientación única del aparato copulatorio masculino. *A. profundus* carece de ojos pero presenta tentáculos largos y un órgano ventral con forma de punta de flecha cuya función se presume es sensorial. El aparato copulatorio masculino esta localizado posterior al gonoporo masculino y dirigido anteriormente. En lugar de vesícula seminal dos bulbos espermiducales musculares están presentes y el sistema femenino se caracteriza por una vesícula de Lang de gran tamaño. La boca de *Oligocladus voightae* **n. sp.** esta localizada anterior al cerebro. Pocos diminutos ojos están presentes. La vesícula seminal esta conectada con una vesícula auxiliar que almacena esperma y un poro anal esta presente en la rama media del intestino. Todo el material tipo esta

*Accepted by S. Wolfgang: 28 Aug. 2006; published: 21 Sept. 2006*