

## Morphological variability of *Bathydella sawyeri* (Hirudinida: Piscicolidae) from hydrothermal vents on the Galápagos Rift and the South East Pacific Rise.

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### Abstract

The deep-sea fish leech *Bathydella sawyeri* Burreson has recently been collected from two sites on the South East Pacific Rise at approximately 14° and 17°S, 2623–2586 m depth. Leeches were obtained from washings of vent mussels *Bathymodiolus thermophilus* (Mytilidae) and clams *Calypptogena magnifica* (Vesicomidae) collected with a grab by a submersible, or were found attached to the cheliped of the crab *Cyanograea praedator* (Bythograeidae) collected in baited traps at 14°S. Most individual leeches had morphology typical of *B. sawyeri* as originally described, with suckers of approximately equal size, but all specimens collected from the crab *C. praedator* had unusually large oral suckers that were distinctly larger than the caudal sucker. However, internal morphology of the specimens from *C. praedator* was identical to *B. sawyeri* on the basis of serial sections; thus all specimens were identified as *B. sawyeri*. The only previous report of *B. sawyeri* is from the Galápagos Rift, so these collections extend the range to the South East Pacific Rise.

**Key words:** Hirudinida, Piscicolidae, East Pacific Rise, hydrothermal vent, *Bathydella*, Bythograeidae, *Cyanograea*

### Introduction

*Bathydella sawyeri* Burreson was described from material collected on the first Galápagos Rift Biology Expedition in the eastern Pacific Ocean in 1979 (Burreson 1981). Most specimens collected have been found free in washings from clumps of mussels *Bathymodiolus thermophilus* Kenk & Wilson (Mytiloidea: Mytilidae), the clam *Calypptogena magnifica* Boss & Turner (Veneroidea: Vesicomidae), or the vestimentiferan tube worm *Riftia pachyptila* Jones (Sabellida: Siboglinidae). *Bathydella sawyeri* is unusual in a number of respects including depth of capture, high abundance, and reproductive system anatomy.