



## Two new species of Dactylogyridae (Monogenoidea) on rose spotted snapper, *Lutjanus guttatus* (Osteichthyes: Lutjanidae), from the coasts of Nayarit and Sinaloa, Mexico

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## **Abstract**

Two new species, one each in *Haliotrema* and *Euryhaliotrema*, from the gills of the rose spotted snapper, *Lutjanus guttatus*, Steindachner, 1869, in Nayarit and Sinaloa, northwestern coast of Mexico, are described. *Haliotrema guttati* **n. sp.** is differentiated from its congeners *H. longihamus* and *H. heteracantha* by the presence of a delicate membranous envelope at the base of the copulatory organ, ventral and dorsal anchors with a prominent bulge on the inner face of the shaft, the base of the dorsal anchors simply fenestrated, ventral and dorsal bars having wide ends, and the ventral and dorsal bars W-shaped. *Euryhaliotrema perezponcei* **n. sp.** is characterized by a coiled male copulatory organ with three counterclockwise rings.

**Key words:** Monogenoidea, Dactylogyridae, marine fish, *Haliotrema guttati* **n. sp.**, *Euryhaliotrema perezponcei* **n. sp.**, *Lutjanus guttatus*, Mexico

## Introduction

Lutjanidae (Teleostei, Perciformes) is a large family of warm-water marine, and rarely estuarine, fishes of the Atlantic, Pacific and Indian Oceans (Nelson 1999). *Lutjanus* is the largest genus of the family and includes 66 species, nine of which are found in the eastern Pacific. The rose spotted snapper, *Lutjanus guttatus* Steindachner, 1869, is distributed from the Gulf of California to Peru, including the Galapagos Islands (Allen 1995). It is an economically important species for local fisheries along the northwest coast of Mexico (CON-APESCA 2004) and its relatively high market value suggests that it could be an appropriate species for commercial aquaculture. The biotechnology required to culture this species at experimental and pilot scales is being developed at CIAD, Mazatlan (Álvarez-Lajonchere *et al.* 2005), but the knowledge of its parasites is limited.

Dactylogyrids such as species in *Haliotrema* Johnston and Tiegs, 1922 and *Euryhaliotrema* Kritsky and Boeger, 2002 are common gill parasites from teleost fish distributed throughout warm seas, and they exhibit a great variety of forms and specific preference for their hosts (Klassen 1994; Kritsky and Stephens 2001; Wu *et al.* 2006). *Haliotrema* is one of largest genera of the Dactylogyridae and is represented by 149 species that parasitize fish from 33 families (Mago-Guevara *et al.* 2005). However it has been considered as a taxonomic wastebasket for species whose assignment was somewhat unclear and the necessity for a revision of this group of species has been carried out only partially based on morphology (Klassen 1994; Kritsky and Stephens 2001; Kritsky and Boeger 2002) and on molecular characters (Wu *et al.* 2006).