



Monogenoids (Diplectanidae, Polyonchoinea) from the gills of mojarras (Perciformes, Gerreidae) with the resurrection of *Neodiplectanum* Mizelle & Blatz, 1941 and the proposal of *Darwinoplectanum* n. gen.

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Abstract

Neodiplectanum Mizelle & Blatz, 1941 is resurrected and emended for monogenoids from the gills of gerreid hosts from Western Atlantic: *Neodiplectanum weningeri* from *Eucinostomus gula* (Quoy & Gaimard) [type-host] and *Gerres cireneus* (Walbaum); *N. magnodiscatum* (Fuentes Zambrano, 1997) **n. comb.** (syn. *Diplectanum magnodiscatum* Fuentes Zambrano, 1997) from *Eugerres plumieri* (Cuvier); *Neodiplectanum gatunense* (Mendoza Franco, Roche & Torchin, 2008) **n. comb.** (syn. *D. gatunense* Mendoza Franco, Roche & Torchin, 2008) from *Eugerres brasiliensis* (Cuvier); *N. mexicanum* (Mendoza Franco, Roche & Torchin, 2008) **n. comb.** (syn. *D. mexicanum* Mendoza Franco, Roche & Torchin, 2008) from *Diapterus rhombeus* (Cuvier). *Neodiplectanum* is characterized for diplectanids with male copulatory organ and accessory piece non-articulated, heavily sclerotised vaginal atrium, ventral anchors with deep root twice as long as superficial root, dorsal anchors with conspicuous superficial and deep roots and squamodiscs with spinelike rodlets in the posterior rows. *Darwinoplectanum* **n. gen.** is proposed for species with male copulatory organ articulated to the accessory piece, vaginal opening sinistral, marginal or submarginal; non-sclerotised vagina atrium; and egg ovate with short filament. Here, we described three new species of *Darwinoplectanum* **n. gen.** from the gills of gerreid hosts from the Eastern and/or Western Atlantic: *Darwinoplectanum figueiredoi* **n. gen. n. sp.** [type species] from *Eucinostomus argenteus* Baird & Girard; *D. amphiatlanticus* **n. gen. n. sp.** from *Eucinostomus melanopterus* (Bleeker) [Type host] from Africa, and *E. argenteus* from Brazil; and *D. pilittae* **n. gen. n. sp.** from *G. cireneus*.

Key words: Monogenoidea, Diplectanidae, Diplectaninae, *Neodiplectanum*, *Darwinoplectanum* **n. gen.**, Gerreidae, taxonomy

Introduction

Gerreids are primary marine fishes occurring most in warm seas (Nelson 2006) and are known to host five species of diplectanids (Domingues & Boeger 2008; Mendoza Franco *et al.* 2008). *Neodiplectanum* Mizelle & Blatz, 1941 was the first diplectanid genus reported from gerreid host. This genus was proposed by Mizelle & Blatz (1941) to accommodate their new species, *N. weningeri* Mizelle & Blatz, 1941 from the gills of *Eucinostomus gula* (Quoy & Gaimard) from Everglade Canal, north of Everglade City, Florida, USA. Skinner (1982) reported *N. weningeri* from *Gerres cinereus* (Walbaum) from south Biscayne Bay, Florida, USA. Oliver (1987) considered *Neodiplectanum* a junior synonym of *Diplectanum* Diesing, 1858, based on the morphology of squamodiscs. Bunkley-Williams & Williams (1994) reported *Diplectanum collinsi* (Mueller, 1936) from *Diapterus plumieri* (= *Eugerres plumieri* (Cuvier)) and *Gerres cireneus* (Walbaum) collected in Puerto Rico. Fuentes Zambrano (1997) described *Diplectanum magnodiscatum* Fuentes Zambrano, 1997 from the gills of *Eugerres plumieri* collected in the La Laguna de la Restinga, Venezuela. López-Jiménez *et al.* (2001 *apud* Kohn *et al.*, 2006, p. 43) as well as Aguirre-Macedo *et al.* (2007) accepted *Neodiplectanum* as a valid genus. López-Jiménez *et al.* (2001) indicated *Eugerres*