Paradeontacylix godfreyi n. sp. (Digenea: Sanguinicolidae) from the heart of wild Seriola lalandi (Perciformes: Carangidae) in southern Australia

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Abstract

Paradeontacylix godfreyi n. sp. (Digenea: Sanguinicolidae) is described from the heart of wild yellowtail kingfish, Seriola lalandi Valenciennes, 1833, collected near Port Augusta, northern Spencer Gulf, South Australia. One specimen of P. godfreyi was also collected from the heart of a single wild specimen of S. lalandi captured near Killarney, Victoria. Paradeontacylix godfreyi is distinguished from other species in the genus by a combination of morphological characters including the shape and number of posterior tegumental spines, the number of rows of tegumental spines along the ventral body margin, the maximum number of marginal tegumental spines per row, the number of testes and the extent of the testicular field. Comparisons are made with a Paradeontacylix sp. collected from the heart of wild Samson fish, S. hippos Günther, 1876 from Greenly Island, South Australia and from the heart of wild S. lalandi from Killarney, Victoria. We also document a new host record for P. sanguinicoloides McIntosh, 1934 from the heart of wild S. hippos from Greenly Island, South Australia. The importance of determining potential intermediate hosts for Paradeontacylix species in relation to South Australian S. lalandi aquaculture is discussed.

Key words: Digenea, Sanguinicolidae, Paradeontacylix godfreyi n. sp., blood fluke, Seriola lalandi, Seriola hippos, Carangidae, aquaculture, South Australia, Victoria

Introduction

Sanguinicolids are digenean parasites that inhabit the circulatory system of a broad diversity of fish species worldwide. For Seriola species (Carangidae), Paradeontacylix