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Article



Helminth parasites from Red Sea fishes: *Neowardula brayi* gen. nov., sp. nov. (Trematoda: Mesometridae Poche, 1926) and *Sclerocollum saudii* sp. nov. (Acanthocephala: Cavisomidae Meyer, 1932)

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Abstract

Specimens of the fishes *Acanthopagrus bifasciatus* Forsskål (Sparidae) and *Siganus rivulatus* Forsskål (Siganidae) were caught in the Red Sea off the coast of Rabigh, Saudi Arabia. Four (25%) and 24 (80%) of these fishes, respectively, were found to harbour intestinal helminths. *Acanthopagrus bifasciatus* was parasitised by *Neowardula brayi* gen. nov., sp. nov. (Trematoda: Mesometridae) and *S. rivulatus* by *Sclerocollum saudii* sp. nov. (Acanthocephala: Cavisomidae). *Neowardula brayi* gen. nov. is similar to *Wardula* Poche, 1926, but clearly differs from it and from the other four genera of the family Mesometridae Poche, 1926 in having a ventral surface anterior to the intestinal bifurcation greatly modified into a well-developed, relatively deep pouch encircling the genital pore and constantly diagonal testes. *Sclerocollum saudii* sp. nov. is similar to *S. rubrimaris* Schmidt et Paprena, 1978 (type species), but clearly differs in having a proboscis only armed with 10 rows of hooks, smaller proboscis hooks, lemnisci much longer than proboscis receptacle and much smaller egg size. The developmental stages of this acanthocephalan (cystacanths, juveniles and immature worms) are also described and figured.

Key words: Digenea, Mesometridae, *Neowardula brayi* gen. nov., sp. nov., Acanthocephala, Cavisomidae, *Sclerocollum saudii* sp. nov., fishes, Red Sea

Introduction

Studies on the helminth parasites of Red Sea fishes tend to be limited to short papers describing new taxa or longer works where the Red Sea is dealt with in larger studies on the Indian Ocean. Consequently, parasitic helminths are one of the least known parts of the Red Sea fauna (Hassanine and Gibson 2005). The present report deals with two new helminth species from the Red Sea fishes, including a new trematode genus and a new acanthocephalan species collected from sparid and siganid fishes.

Material and methods

During June of 2009, 16 and 30 specimens of the fishes *Acanthopagrus bifasciatus* Forsskål (Teleostei, Sparidae) and *Siganus rivulatus* Forsskål (Teleostei, Siganidae), respectively, were examined for infections by intestinal helminths. These fish were caught by hand net (by scuba-diving) in the Red Sea off the coast of Rabigh, Saudi Arabia, and identified according to Randall (1983) and the names follow Froese and Pauly (04/2009). Living fish were killed using an overdose of benzocaine anaesthetic, pithing through the brain, or by a blow to the head prior to dissection. The entire alimentary canal of each fish was immediately removed. Trematodes and acanthocephalans were observed alive and carefully teased from the gut of each fish under a dissecting stereomicroscope; the opened gut was then shaken vigorously in a jar of saline to dislodge further worms and to remove mucus. Trematodes were fixed in hot alcohol-formalin-acetic acid (AFA) under a slight