

***Rhipidocotyle labroidei* n. sp. (Digenea: Bucephalidae) from *Labroides dimidiatus* (Valenciennes) (Labridae)**

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**Abstract**

*Rhipidocotyle labroidei* n. sp. is described from the rectum of cleaner fish, *Labroides dimidiatus* (Labridae), on the Great Barrier Reef. *R. labroidei* differs from its congeners by the combination of its small size, anteriorly directed caecum, the shape and positioning of its gonads, and by its posteriorly confined uterus. We have found *Rhipidocotyle* in species of *Labroides* from New Caledonia and Moorea that differ from the described material in the size of eggs, but these worms are not suitable for description. We suggest there are at least two species of *Rhipidocotyle* in *Labroides* spp. from the tropical Pacific.

**Key words:** Great Barrier Reef, fish parasites, new species

**Introduction**

Cleaner fish such as *Labroides dimidiatus* (Valenciennes) and *L. bicolor* Fowler & Bean, feed by removing parasites, mucus and host tissues from external surfaces of teleosts and elasmobranchs (Randall, 1958; Keyes, 1982; Grutter, 1996; 1997b). Several surveys of gut contents have investigated ectoparasite consumption by *L. dimidiatus* (Choat, 1969; Grutter, 1996; 1997a; 1997b; 2000), however, no studies have investigated its parasitic fauna. Randall (1958) refers to “tiny digenetic flukes” in *L. bicolor*, yet these remain undescribed. Here we report a species of the bucephalid genus *Rhipidocotyle* Diesing. Although larval bucephalids have been reported from wrasses by many authors (Carrère, 1938; Campos & Carbonell, 1993; Costello *et al.*, 1995; Kornichuk 2001), this report is only the third record of an adult bucephalid found in wrasses. *Prosorhynchus aculeatus* Odhner has been found in the Mediterranean wrasses *Symphodus tinca* (Linnaeus) and *S. mediterraneus* (Linnaeus) by Papoutsoglou (1976).