



***Hurleytrematoides justinei* n. sp. (Digenea: Monorchiidae) from Valentinni's sharpnose puffer, *Canthigaster valentini* (Bleeker) (Tetraodontiformes: Tetraodontidae) from Heron Island, Queensland, Australia**

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Abstract

A new species, *Hurleytrematoides justinei* n. sp., is described from Valentinni's sharpnose puffer, *Canthigaster valentini*, from Heron Island, Queensland, Australia. It is characterized within the genus by a sinistral genital pore opening anterior to the posterior margin of the ventral sucker, a spiny ejaculatory duct ranging from 34 to 61 µm in length, and vitelline follicles extending from about the anterior margin of the testis to the posterior margin of the ventral sucker. Monorchiids are rare in the tetraodontids. This is the third species reported from the family and the first from the genus *Canthigaster*.

Key words: Monorchiidae; Digenea; *Hurleytrematoides*; *Hurleytrematoides justinei* n. sp.; *Canthigaster valentine*, Tetraodontidae; Valentinni's sharpnose puffer; Australia; Heron Island; Great Barrier Reef

Introduction

Hurleytrematoides Yamaguti, 1953 is a genus of Monorchiidae Odhner, 1911 defined by a single testis, bipartite seminal vesicle, unipartite terminal organ, and filamentous eggs (Nahhas & Grewal 1999). Ten species are currently recognized in this genus (Nahhas & Grewal 1999; Machida 2005). Here we report *Hurleytrematoides justinei* n. sp., originally recorded but not named by Lester & Sewell (1989), from the intestine of Valentinnis's sharpnose puffer, *Canthigaster valentini* (Bleeker) (Tetraodontidae).

Materials and methods

Fish were caught by spear at Heron Island, Australia, over several years. Parasites were fixed unflattened in hot saline and then stored in formalin. Whole mounts were stained with Mayer's haematoxylin, dehydrated in a graded alcohol series, cleared in methyl salicylate, and mounted in Canada balsam. Measurements were made on an Olympus BH-2 microscope with a calibrated eye piece micrometer. Figures were made using a drawing tube, an Intuos3 9x12 graphics tablet and Adobe Illustrator software. All measurements are in micrometers.

Results

Family Monorchiidae Odhner, 1911