

Parasitic copepods infesting Cavite cardinal fish

Subjects: Cavite cardinalfish, *Ostorhinchus cavitiensis* (Teleostei: Apogonidae).
Unidentified parasitic copepod (Crustacea: Copepoda).

Subjects identified by: Contributor (fish only).

Location, date and time: Singapore Straits, reef at west of Pulau Satumu; 18 April 2014; 2100 hrs.

Habitat: Coral reef, just beyond rocky breakwaters, at about 2 m depth.

Observer: Contributor.

Observation: Two small examples of the Cavite cardinalfish, each between 3 and 4 cm standard length were observed to be infested with parasitic copepods. One of them had a copepod attached to the edge of its left gill opercle (Fig. 1). The other had two; one attached to the body at the base of the first dorsal fin, the other adhered to the base of the caudal peduncle (Fig. 2). Each copepod carries a pair of long trailing filaments.

Remarks: As seen on Fig. 1 and 2, the bodies of the external parasitic copepods are partially embedded in the body of the host fish. These copepods are female and the pair of long filaments projecting from the posterior of each individual are actually elongated egg sacs. The males are too small to be easily noticed (Humann & DeLoach, 2010: 238). It seems that these appendages increase drag, and could be causing some amount of discomfort to the hosts. Little information is available with regards to the impact of such parasitic infestation, and if it is ultimately fatal to the fish hosts.

Reference: Humann, P. & N. DeLoach, 2010. *Reef Creature Identification. Tropical Pacific*. New World Publications, Inc., Jacksonville, Florida, USA. 497 pp.



Fig. 1. Cardinalfish 1 with single parasitic copepod attached to the edge of the gill opening (indicated by arrow).



Fig. 2. Cardinalfish 2 with two parasitic copepods; one at the base of the first dorsal fin, the other on the caudal peduncle (both indicated by arrows).

Photographs by Tan Heok Hui

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