THE SPOTFIN BURRFISH (CHILOMYCTERUS RETICULATUS), A NEW HOST RECORD FOR CYMOTHOA PULCHRA (ISOPODA, CYMOTHOIDAE)

BY

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The cymothoid isopod Cymothoa pulchra Lanchester, 1902 is a parasite found in the buccal cavity of puffers and porcupinefish (Tetraodontiformes, Tetraodontidae and Diodontidae) in the central and western Pacific and the Indian Ocean. This species was originally described by Lanchester (1902) based on a single female specimen collected at Pulau Bidan in the Malacca Strait, Malaysia. It has been reported since from Sri Lanka (Monod, 1924), Australia (Avdeev, 1978), Indonesia (Nierstrasz, 1915, 1931; Trilles, 1975), Vietnam (Monod, 1934), Gulf of Thailand (Trilles, 1975), French Polynesia (Galzin & Trilles, 1979), China (Yu & Li, 2003a, b) and Japan (Shiino, 1951; Williams et al., 1996; Kuramochi et al., 2003). It was redescribed by Galzin & Trilles (1979) using material of male and female adults and juveniles (pullus II) from French Polynesia.

Known hosts of C. pulchra are the stellate puffer (Arothron stellatus (Bloch & Schneider, 1801), as Tetraodon stellatus Bloch & Schneider, 1801 or Arothron alboreticulatus (Tanaka, 1908)) (cf. Monod, 1934; Avdeev, 1978; Galzin & Trilles, 1979), the guineafowl puffer (Arothron meleagris (Lacepède, 1798)) (cf. Galzin & Trilles, 1979), the longspined porcupinefish (Diodon holacanthus Linnaeus, 1758) (cf. Shiino, 1951; Williams et al., 1996; Kuramochi et al., 2003), the spotfin porcupinefish (Diodon hystrix Linnaeus, 1758) (cf. Galzin & Trilles, 1979; Williams et al., 1996) and the black-blotched porcupinefish (Diodon liturosus Shaw, 1804) (cf. Williams et al., 1996). The first two species of puffers belong to the family Tetraodontidae, while the three other species of porcupinefishes belong to the family Diodontidae. The isopod was also reported from a fish of the genus Caranx Lacepède, 1801 (Perciformes, Carangidae) (cf. Monod, 1924), which may be an accidental host.

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In mid-September and late October 2010 we collected specimens of *C. pulchra* (fig. 1) from the buccal cavity of 12 spotfin burrfish (*Chilomycterus reticulatus* (Linnaeus, 1758)) (Diodontidae) held in a quarantine tank at the Shimonoseki Marine Science Museum in Shimonoseki, Yamaguchi Prefecture, Japan, which are herein reported as a new host record. These fish were caught from late August to early September 2010 in a set net installed at a depth of 12 m in the western North Pacific Ocean off Kan-no-ura (33°32′N 134°18′E) in Toyo, Kochi Prefecture, Shikoku, and then transferred to the aquarium for exhibit. The isopod specimens were removed from the fish and fixed in 100% ethanol. They were subsequently examined for morphological characters, sexed (based on the presence or absence of the appendix masculina on the second pleopod, cf. Galzin & Trilles, 1979, fig. 31) and measured for total length (TL). Drawings were made with the aid of a drawing tube fitted on a dissection microscope. Voucher (5 female and 5 male) specimens are deposited in the Crustacea collection at the National Museum of Nature and Science, Tokyo (NSMT-Cr 21570). The scientific and common names of fishes follow Froese & Pauly (2011).

All (100%) of the 12 spotfin burrfish (39-62 (mean 50) cm TL) examined in this study were found infected with a total of 16 individuals of *C. pulchra* (8 and 4 fish with 1 and 2 isopods, respectively). The specimens ranged from 24.6-36.5 mm TL (mean 31.2) in females (n = 7) and 14.7-23.1 mm TL (mean 17.9) in males.