New Occurrences of *Cymothoa eremita* in Coachwhip trevally, *Carangoides oblongus* (Cuvier, 1833) along Karaikal, Southern Coast of India

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Focal Points at a Glance

The authors appraise us of the occurrence of parasites in carangid fishes, besides black pomfret and others in the marine fish catches of Karaikal on the Southern Coast of India.

Parasitic fish diseases are one of the most important problems in the fisheries sector. Cymothoids are obligatory parasites, mostly infesting the commercially important fishes. They are blood suckers living in the skin surface, gill filaments, and or in buccal cavity of fishes. These parasites retard the growth of fishes and cause emaciation followed by death. Pathological conditions resulting from parasitic diseases assume high magnitude of epidemics under crowded and other stressed conditions among fish. Many cymothoid parasites occur attached in the buccal cavity of fishes with their head protruding out of the mouth of the fish host. Occurrence of female isopods belonging to the Genus *Cymothoa* in the buccal cavity of some fish hosts was often reported. *Lironeca desterroensis* sp. (Isopoda, Cymothoidae) is reported from the gills of a marine fish, *Centengralius edentulous* Civer. of Santa Catarina island, Brazil. *Cymothoa eremita* is a parasite of dolphin, *Coryphaena apus*. An incidence of *Cymothoa eremita* in black pomfret, *Parastromateus niger* along the Parangipettai coast of India is on record. This article reports on the species *Cymothoa eremita* from the buccal cavity of the marine fish *Carangoides oblongus* (Cuvier, 1833), belonging to the family Carangidae, from the southeast coast of India and it was found changing the hosts from time to time.

One hundred and fifty samples of coachwhip trevally, *Carangoides oblongus* (Carangidae), were collected from the trawl nets off Karaikal (10°49' and 11°01' N and 79°43' and 79°52' E), during June-November 2012. The parasites collected from gills, body surfaces of the fish were preserved in 70% ethanol (w/v). Size of the host fish ranged from 216 to 222 mm in standard length and 260-286g in weight.

Of all 150 fishes examined, two females and one male were found infected. Adult *Cymothoa eremita* were in the size range of 15 to 36 mm and 1.07-3.11 g (Fig.1, 2 &3). The female parasites (average size 33.5 mm) almost filled the entire buccal cavity of the host. Size of parasites was more or less directly proportional to the size of the host, large specimens being always present in large fish. *Cymothoa eremita* is widely distributed in the Indo-Pacific. The distribution of this species is in Japan, the Pescadores, the Philippines, Indonesia, Cape York Peninsula, Australia, the Society Islands, Singapore, Malaysia, Thailand, Sri Lanka, India,



Fig. 2: Dorsal view of Cymothoa eremita male (arrow) and females collected from the buccal cavity of coachwhip trevally, Carangoides oblongus

Mauritius, Seychelles and Red Sea. In India, Cymothoa eremita was earlier collected from the Black pomfret along the Southwest coast. However, in the present study, the parasite is noted from a different fish collected from the southern coast. Thus, in India, so far black pomfret, and the carangid, Carangoides oblongus, have been reported as preferred hosts of Cymothoa eremita.



Fig 1: Cymothoa eremita collected from the buccal cavity of coachwhip trevally, Carangoides oblongus



Fig 3: Ventral view of *Cymothoa eremita* male (smaller one) and females collected from the buccal cavity of coachwhip trevally, *C. oblongus*