

Brief note on the infestation of pedunculate barnacles in crabs

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An investigation was made to isolate and identify parasites from *Charybdis lucifera* landed at Cochin

Fisheries Harbour in January, 2018. The carapace, branchial chambers and gills of each crab was

observed for the presence of octolasmids. *Octolasmis* spp. are generally known as stalked barnacles or pedunculate barnacles. They are common in shallow waters and often found attached to the exoskeleton of the decapod crustacea, including crabs. This can affect the marketing of such infected commercially important crabs.

Octolasmis sp. were identified on the basis of morphological features such as overall shape, capitular shape and capitular plate morphology. Length and width of the peduncle and capitulum were taken a stereomicroscope.

The following terminology was used to describe the parasitic infestations.

$$\text{Prevalence (\%)} = \frac{\text{Total number of infected fishes}}{\text{Total number of fish hosts examined}} \times 100$$

Relative density or Abundance(%)

$$= \frac{\text{Total Number of individuals of particular parasite species in a sample of host}}{\text{Total number of fish hosts examined (infested + uninfested)}}$$

$$\text{Mean intensity(\%)} = \frac{\text{Total Number of individuals of parasite species in a sample of host}}{\text{Total no of infected fishes}}$$

A few crabs were highly infected with *Octolasmis* sp. which were found attached on the carapace and swimming legs (Fig. 1). Prevalence, relative density, mean intensity and severity of infestation of *Octolasmis* sp. was recorded (Table 1). Severity of infestation was assessed based on a score, 0 = Absent; 0.5 = Present, low grade; 1 = Present, mild;

2 = Present, moderately; 3 = Present, infective; 4 = Present excessively and severely infected.

This study showed that 12% of the crabs examined were heavily infested. The impact of heavy infestation on the marketing of the crab is to be assessed.



Fig. 1. Crab infected with *Octolasmis* sp. (Dorsal & Ventral view)

Table 1. Assessment of *Octolasmis* sp. infestation in *Charybdis lucifera*

Crab Species	Site of infestation	Numbers Examined (n)	Numbers infected	Number of parasites recovered	Parasitic Frequency Index, PFI (%)	Relative density	Mean intensity	Severity of infestation
<i>Charybdis lucifera</i>	carapace and swimming legs	25	3	48	12	1.92	16	4