

**A NOTE ON THE OCCURRENCE OF A BRANCHIAL PARASITE,
Epipenaeon ingens NOBILI IN *Penaeus semisulcatus* DE HAAN IN
PUTTALAM LAGOON, SRI LANKA**

by

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Penaeus semisulcatus De Haan is generally considered to be one of the most desirable species for shrimp culture (Bardach et al., 1972). Any parasitic infection in the natural populations of *P. semisulcatus* could be a potential threat to shrimp farming for which juveniles are obtained from the natural habitats. The present paper reports the occurrence of a branchial parasite in the natural populations of *P. semisulcatus* in Puttalam lagoon. This parasite was identified as *Epipenaeon ingens* Nobili, 1906 by Dr. R. Bourdon using the key given by Schultz (1969).

E. ingens occurs inside the branchial cavity of *P. semisulcatus* and is attached firmly to the gills of the shrimps. The parasite exerts pressure on the gills of the host animal causing destruction of gill tissues. The infected *P. semisulcatus* by *E. ingens* can easily be recognized from the tumour-like protrusion on the carapace of the shrimp. *E. ingens* has been recorded to occur in *P. semisulcatus* and *P. japonicus* in Philippines (Palisoc, 1986). The possible harmful influence of the parasite on *P. semisulcatus* could be the reduction of respiratory surface by causing the atrophy of the gills on which they press. Even if this reduction in the respiratory surface may not directly cause death, it may impair the ability of the shrimp to cope with stressful conditions.

P. semisulcatus caught in drag nets (Kadippu del) and Push nets (Thallu del) were observed from January to March 1986 at four landing sites in Puttalam lagoon. The size range of *P. semisulcatus* infected by the parasite, *E. ingens* was observed to be 8.1 - 21.1 cm total length (1.8 - 5.9 cm carapace length). Mean percentage infection of *P. semisulcatus* by this epicaridian parasite in the observed catches was 12.2% by weight.

Usually *P. semisulcatus* juveniles of the size range 1.5 - 10.0 cm (total length) are preferred by the shrimp farmers who obtain juveniles from the wild populations (J.M.P.K. Jayasinghe, Pers. Comm.). As the present study indicates that this size range overlaps with the size range of *P. semisulcatus* infected by *E. ingens*, measures may be necessary to control the entry of this epicaridian branchial parasite into shrimp farms in Sri Lanka.

The specimens of *E. ingens* have been deposited in the NARA Museum.

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