Parasites and Vibrio Flora of Wild Broodstock Banana Shrimp
(Penaeus merguiensis) from Eastern Gulf of Thailand

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Abstract

Studies on parasites and vibrio flora of wild banana shrimp (Penaeus merguiensis) in Eastern Gulf of Thailand were carried on sixty samples of female brood stock were collected from Chonburi Province, the famous source of banana shrimp broodstock in the eastern Gulf of Thailand site, during October 2003 to September 2004. Seawater from the sampling areas were also collected for bacterial flora study.

Results show that external parasites found in the gill filament were Zoothermnium sp. and Acineta sp. with incidence of infestation 28 and 2 %, respectively. Two kinds of internal parasite were found in the intestine. One is an unidentified larval stage of parasitic nematode, the other is parasitic protozoa, Nematopsis sp. Incidence of infestation of these parasites were 2 and 97 % respectively and parasite burden of Nematopsis sp. was 990 cells/sample. Four species of vibrio bacteria were isolated from hemolymph and hepatopancreas of banana shrimp including Vibrio vulnificus, V. fluvialis, V.alginolyticus and V. damsel (luminous bacteria). Aside from these 4 species, V.parahaemolyticus was also isolated from seawater at the sampling sites. Average total bacterial counts from hemolymph and hepatopancreas were 2.16X10⁷ cfu/ml and 4.10X10⁷ cfu/g respectively. Average total vibrio counts from hemolymph and hepatopancreas were found 1.60X10⁷ cfu/ml and 7.27X10⁷ cfu/g respectively. Constitutions of yellow colony vibrios were obtained at higher percentage in hemolymph and hepatopancreas than green colony and luminouse vibrio throughout the year.

Key words: Banana shrimp, Penaeus merguiensis, parasites, vibrio

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