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Caligus rotundigenitalis (Copepoda: Caligidae) infestation of crimson snapper (*Lutjanus erythropterus*) from Sungai Udang, Malaysia: Prevalence and recovery after freshwater bath treatment

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Crustacean parasitic infestation particularly *Caligus* spp. on farmed fish has been reported more frequently in Malaysia since 2008. The infestation usually associated with morbidity and mortality had caused significant economic losses. Freshwater bath has been used as treatment for *Caligus* spp. However, the effectiveness against copepod *Caligus* spp. infestation had never been reviewed despite high prevalence reported. The study focused on determination of inner operculum caligids *C. rotundigenitalis* prevalence and their recovery percentage after freshwater treatment. 92 farmed crimson snapper weighed 11 to 360 g were obtained from Sungai Udang cages monthly. Each fish was treated individually with freshwater bath. The number of copepod dislodged from fish and showed no movement after 10 minutes were recorded. The individual copepod was then removed and placed in seawater for determination of recovery percentage. Prevalence ranging from 40 to 90% of *C. rotundigenitalis* with average mean intensity of 6 copepods *C. rotundigenitalis* in individual fish were isolated from the crimson snapper. The recovery percentage in seawater of 361 copepod *C. rotundigenitalis* showed average 45.7% after treated with freshwater bath. The freshwater bath showed that copepod *C. rotundigenitalis* were able to regain movement after 2 hours in seawater. Further observation on the survival of recovery copepod *C. rotundigenitalis* showed 44% and 37% after 6 and 24 hours respectively. The findings showed that there was a high possibility of copepod *C. rotundigenitalis* to re-infect when they are introduced back into the system, leading to recurrence of copepod *C. rotundigenitalis* in floating cages.

Biography

Kua Beng Chu has completed her PhD from University Science of Malaysia (USM) in 2002. She is currently a Senior Research Officer at National Fish Health Research Division (NaFisH) of Fisheries Research Institute under Department of Fisheries Malaysia. Since 1996, she has been involved in research on fish health; focusing in fish parasite, pathology, disease prevention, treatment and management. She has published more than 40 technical papers in reputed journals.

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