Brief Communications

Argulus quadristriatus infestation in cage cultured Asian seabass

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Forty six numbes of Asian seabass *Lates calcarifer* (length:21.5 ±35.9cm; weight: 161.6±2.36g) collected from fish culture cages in three locations (Naganathwada, Sunkeri and Kumta) of Uttara kannada district, Karnataka were found infected with ectoparasites identified as *Argulus quadristriatus*. Major external symptoms of infected Asian seabass was the erratic swimming, behavior of fish of rubbing against net of the cage, hemorrhages and lesions of epithelial tissues in the infected regions. This is a first report of *A. quadristriatus* infection on seabass in cage culture ecosystem.

Prevalence of *A. quadristriatus* infestation was more on the head and operculum (Fig.1) and was high in the month of March,2019. Prevalence (%), severity of infection, gender status, mean intensity and abundance of *A. quadristriatus* was noted during study period. Parasitic Frequency Index (PFI %) was scored as : a=rare (0-9.9%); b=occasional (10-29.9%); c = common (30-69.9%); d = abundant (70-100%) and Severity score as: 0 = Absent, 0.5 = Present, low grade, 1=present, High grade, 2= present, Very high grade. The prevalence of infection was high in Naganathwada (PFI:50%) followed by Sunkeri (PFI:30%) and Kumta (PFI:7%). However, severity of infection was found to be more in Kumta (2) and low (0.5) in the other two sites. It was also observed that there was no variation in occurrence and abundance between male and female fishes in all the three locations. There was no record of mortality of cage cultured Asian seabass in any of the farms from where sampling was done. This parasite can induce lot of stress to the host when water quality is poor. Hence care should be taken with management protocols in order to prevent occurrence of these parasites.

Fig.1. Asian seabass infested with *Argulus quadristriatus*

Fig.2. *A.quadristriatus* (40X) isolated