

DETERMINATION OF CAUSATIVE AGENT OF BACILLARY NECROSIS DISEASE IN SNAKE-HEAD FISH (*Channa striata*) CULTURED IN THE MEKONG DELTA

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Summary

Bacillary necrosis disease has been one of significant problem in cultured snake-head fish (*Channa striata*) in the Mekong delta, Vietnam. Typical clinical signs of the disease include internal organs (liver, kidney and spleen) swollen and have white inclusions with a diameter from 0.1 to 0.2 mm. Bacteria isolated from diseased snake-head fish were identified as *Aeromonas schubertii* based on morphological, physiological, biochemical, API 20E kit, PCR and sequencing of 16S rRNA genes. Challenge experiments using injection method showed that they can cause the observed disease signs with the LD₅₀ value about $3.3.2 \times 10^4$ CFU/ml. Histopathological examination of diseased specimens recorded typical characteristics of bacillary necrosis in fishes including the formation of granulomas and the inflammatory kidney, liver, spleen and muscle. This is the first report on *Aeromonas schubertii* outbreak in snake-head fish in Vietnam.

Keywords: *Aeromonas schubertii*, Bacillary necrosis disease, pathogenicity, snake-head fish (*Channa striata*).