

RELATIONSHIP BETWEEN ENVIRONMENTAL FACTORS AND OUTBREAK OF SWOLLEN SIPHON DISEASE IN OTTER CLAM (*Lutraria philippinarum* Reeve, 1854) CULTURED IN CAT BA, HAI PHONG

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Summary

Swollen siphon disease has been considered as a serious threat to otter clam farming in our country. The main causative agent is identified as virus-like particles (VLPs), however, pathogenesis of the disease has not been determined. In this study, some environmental water parameters (temperature, pH, salinity) were monitored frequently in otter clam farms in Cat Ba, Hai Phong during the period time from June, 2015 to December, 2015 in combination with surveillance of the occurrence and outbreak of the swollen siphon disease in otter clam at the nursery stage (from seeds level 1 to level 2) and the grow-out stage (from seeds level 2 to commercial sizes). The data analysis showed that high salinity (higher or equal to 35 ppt) was significantly related to the outbreak of the swollen siphon disease, no relationship between temperature and pH factors and the disease outbreak was observed. This finding confirmed that high salinity is a risk factor associated with the outbreak of the swollen siphon disease in otter clam, providing a scientific basis for strategy development of measures for disease control.

Keywords: *Sanility, temperature, pH, otter clam, swollen siphon, VLPs.*