



Study on water quality in extensive shrimp farming at Bangkhuntein District, Bangkok

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The extensive shrimp farming in Thailand has been faced with a destructive problem, which leads the high mortality rate before harvested. Water quality degradation is a major cause of shrimp disease. The objective of this research was to study the existing conditions of water quality in extensive shrimp farm and compared with water quality criterion for aquaculture in coastal line areas. This study investigated water qualities in extensive ponds at Bangkhuntein District, Bangkok during March to August 2016 as representative of dry and wet periods. Results showed that dissolve oxygen (DO), pH and total suspended solid (TSS) in dry and wet period were 7.86 and 6.63 mg/L, 8.1 and 7.8, 131 and 1,727 mg/L, respectively. Nutrients concentration as ammonia and phosphate were found to be 0.013 and 0.31 mg/L, respectively. Almost all water quality parameters were in range of the standard of seawater in Thailand, except TSS. Results showed that water qualities at the study area were still suitable for marine culture. However, it should be continuously surveillance due to overload of suspended solids.

Keywords: Extensive shrimp farming; Water quality; Bangkhuntein district