PRELIMINARY ANALYSIS OF WATER QUALITY IN UITM KUALA PILAH PONDS FOR AQUACULTURE PURPOSES

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ABSTRACT

PRELIMINARY ANALYSIS OF WATER QUALITY IN UITM KUALA PILAH PONDS FOR AQUACULTURE PURPOSE

Understanding about water quality was needed to successfully manage a pond for aquaculture. The aims of this study were to determine the correlation of physicochemical parameters towards the ability of fresh water fish to survive and to screen the total Coliform bacteria inside the ponds. In situ parameters analysis was done on site in which involved temperature by using conventional thermometer. Water samples were collected for every two weeks within 3 months at the selected ponds which were ponds A and B. In order to obtain an average value for analysis, the samples was triplicate. Water sample was collected using 1.5 L bottle and directly being transferred to UiTM Kuala Pilah Laboratory for further lab analysis. Colony forming unit is a measure of viable bacterial cell. The bacteria were growth on EMB agar and incubated inside incubator for 24 hours with temperature at 37°C. Number of colonies per mL (CFU) of sample was calculated manually. The results of this study showed that the physicochemical parameters like temperature, pH, dissolved solid, conductivity, and salinity reading has no significant different (p>0.05) between pond A and pond B after being compared which is compliment with the standard by Interim National River Water Quality Standards Classification thus it is suitable for aquaculture purposes. However, the salinity reading was lower than the suitable range. The total coliform present inside both ponds was in standard range for aquaculture purposes.