

**INVESTIGATION OF TASIK PERDANA AND TASIK
TITIWANGSA ACIDIFICATION PROCESS**

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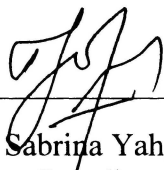
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ABSTRACT

Investigation of Tasik Perdana and Tasik Titiwangsa acidification process

Acid deposition is a problem that requires international cooperative efforts for its solution, which is emphasized in Chapter 9 of Agenda 21 (on transboundary atmospheric pollution), adopted at the 1992 United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro. The main objective of this study does to investigate the state of acidification at Perdana lake and Titiwangsa lake, Kuala Lumpur. The acidification of both lakes results in a number of chemical, physical and biological changes. The most noteworthy impact of acidification relates to change in the acid-base status of surface and soil water, sometimes resulting in short term or long term toxicity of the water to aquatic or terrestrial biota. The study of role aquatic system at both of lakes was conduct for three weeks time. The physical and chemical concentration for individual parameter for each sampling location with three depth. The physical (In-situ measurements) parameters are stated are EC ($\mu\text{S}/\text{cm}$), temperature ($^{\circ}\text{C}$) and pH while the chemical parameters (trace elements and nutrients) are SO_4^{2-} , NO_3^- , PO_4^{3-} , Na^+ , K^+ , Ca^{2+} and Mg^{2+} . Base on the analysis of physical and chemical characteristics of Perdana and Titiwangsa lakes, we define that the water is strongly buffered lakes and categorized as high alkalinity. This is because both of lakes have pH range between 6.7-8.11, this reading show that both lakes are alkaline. This results shows that Perdana and Titiwangsa lakes are not experiencing acidifying. The high value of alkalinity, thus high ANC and indicate high buffering capacity. These sites can be categorized urban area which exposed to urban activities and is undergoing urban development. Current available data reveals that both lakes have not suffered acidification even both lakes situate in urban area. Results also indicate that whatever acidification which might be introduced the water in the lakes has a neutralizing effect due to its basic content. Overall, both lakes are not an acid sensitive lakewater.