

Determination of Heavy Metal Concentration in Soil from Flood Affected Area

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Abstract : In mid-December 2014, the biggest flood event occurred in East Coast of Peninsular Malaysia especially at Dabong area, Kelantan. As a consequent of flood disaster, the heavy metals concentration in soil may changes and become harmful to the environment due to the pollution that deposited in soil. This study was carried out to determine the heavy metal concentration from flood affected area. Sample have been collected and analysed by using Atomic Absorption Spectroscopy (AAS). Lead (Pb), Cadmium (Cd), Mercury (Hg), and Arsenic (As) were chosen for the heavy metals concentration. The result indicated that the heavy metal concentration did not exceed the limit. In-situ parameters also were carried out, were the results showed the range of soil pH (6.5-6.8), temperature (25°C - 26.5°C), and moisture content (1-2), respectively. The results from this study can be used as a base data to improve the soil quality and for consideration of future land use activities.

Keywords : flood, soil, heavy metal, AAS

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