

**SOURCES IDENTIFICATION OF SELECTED HEAVY METAL  
CONTENT IN AGRICULTURE SOILS**

**NOR AIMUNI SYAHIRAH BINTI CHE AZIZ**

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## **ABSTRACT**

### **SOURCES IDENTIFICATION OF SELECTED HEAVY METAL CONTENT IN AGRICULTURE SOILS**

This study was conducted at Felda Tekam in Jengka, Pahang, Malaysia in order to determine the contents of heavy metals in selected agricultural soil. Three agricultures soil were collected and concentration of Cd, Cr, Ni and Zn were determine. Contamination factor (CF), pollution load index (PLI) and geo-accumulation index (I-geo) were used to estimate the contaminant of heavy metal in soil. Three agricultures area involved were durian agriculture, jackfruit agriculture and mangosteen agriculture. Paved road, unpaved road and around the tree as the sources chosen for this study. Cd was found at the lowest concentration ranged between 0.01 – 0.013 mg/kg.. CFs of Durian agriculture was very high contamination respected to Cr (5.787), Ni (4.0) and Zn (5.411). Meanwhile, CFs for sources of heavy metal was very high contaminant at paved road respected to Cr (5.026), Ni (3.267) and Zn (3.244). The values of Pollution Load Index (PLI) were found at very low range that was below than one. Geo-accumulation index indicates that the sediment in the overall of studied area was unpolluted (grade 0) with respected to Cd, Cr, Ni and Zn.

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