

**HEAVY METAL ANALYSIS IN SELECTED  
TRADITIONAL MALAY SALAD**

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## ABSTRACT

### HEAVY METAL ANALYSIS IN SELECTED TRADITIONAL MALAY SALAD

Human health risk could be caused by consumption of vegetable contaminated by toxic metals. Normally, human body requires some of heavy metals such as Cu, Fe and Zn. These metals are known as essential metals. However, the essential metals can be toxic if taken in large quantities. In this study, the determination of the heavy metal in traditional Malay salad were performed on three samples which are among leaf of *Cosmos caudatus* (*Ulam Raja*), leaf of *Centella Asiatica* (*Ulam Pegaga*), and shoot of *Manihot esculenta* (*Pucuk Ubi*) that collected from two different locations which were Temerloh, Pahang and Shah Alam, Selangor. The composition of heavy metals such as copper (Cu) and iron (Fe) were analysed by using Graphite Furnace Atomic Absorption Spectroscopy (GFAAS) while zinc (Zn) was analysed by using Flame-Atomic Absorption Spectroscopy (FAAS). Based on the study, average mean concentration of the selected heavy metals were found to be  $0.00275 \pm 0.00019$  mg/kg for Zn,  $0.10255 \pm 0.0011$  mg/kg for Fe and  $0.0548 \pm 0.0367$  mg/kg for Cu. The concentration for the selected element obtained from two sampling locations were rank as  $Zn < Cu < Fe$ .