

**DETERMINATION OF HEAVY METALS UPTAKE BY ACACIA
MANGIUM GROWN IN EX-MINING AREA IN KG GAJAH, PERAK**

NOR FADILAH CHAYED

**BACHELOR OF SCIENCE (Hons.) CHEMISTRY
FACULTY OF APPLIED SCIENCE
UNIVERSITI TEKNOLOGI MARA**

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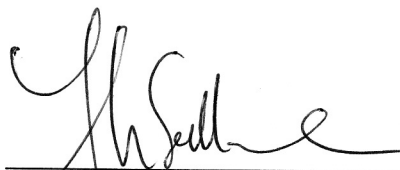
Assoc. Prof. Dr. Zaini Hamzah
Supervisor
Faculty of Applied Sciences
Universiti Teknologi MARA
40450 Shah Alam
Selangor



Assoc. Prof. Dr. Ahmad Saat
Co-Supervisor
Institute of Science
Universiti Teknologi MARA
40450 Shah Alam
Selangor



Dr. Famiza Abdul Latif
Project Coordinator
B. Sc. (Hons.) Chemistry
Faculty of Applied Sciences
Universiti Teknologi MARA
40450 Shah Alam
Selangor



Assoc. Prof. Dr. Faizah Md. Salleh
Head of Program
B. Sc. (Hons.) Chemistry
Faculty of Applied Sciences
Universiti Teknologi MARA
40450 Shah Alam
Selangor

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Date _____

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ABSTRACT

DETERMINATION OF HEAVY METALS UPTAKE BY *ACACIA MANGIUM* GROWN IN EX-MINING AREA AT KAMPUNG GAJAH, PERAK

Heavy metals content of chromium, copper, iron, lead, and nickel in *Acacia mangium* in a former iron and tin mining land at Kampung Gajah, Perak were determined. Heavy metals content were determined in three plant component namely roots, stems and leaves. 19 *Acacia mangium* plants were collected for analysis from twelve different locations. The heavy metals content in plants sample were extracted by using wet digestion method using the mixture of nitric acid and hydrogen peroxide. Heavy metals content in solution extract of plant sample were determined with Flame Atomic Absorption Spectrometer. The analyses indicate that the concentration of iron in the plant sample is the highest followed by chromium, copper, lead and nickel. Roots show highest content of heavy metals followed by leaves and finally the stems. As expected, those location which contained higher levels of heavy metals which is near to the mine area showed to have higher heavy metals uptake by various parts of *Acacia mangium*. These data demonstrate *Acacia mangium's* ability to uptake heavy metals such as chromium, copper, iron, lead and nickel from ex-mining area.