

Some Trace and Toxic Metal Content of Crude Ethanol Leaf Extract of *Globimetula Oreophila* (Hook. F) Danser *Azadirachta Indica* Using Atomic Absorption Spectroscopy

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Abstract : Introduction: *Globimetula oreophila* is a parasitic plant with a known therapeutic value that is widely used in the treatment of various ailments, including malaria, hypertension, cancer, diabetes, epilepsy and as a diuretic agent. Objectives: The present study is aimed at analyzing and documenting the level of trace and toxic metals in the crude ethanol leaf extract of *G. oreophila*. Methods: After collection and authentication, the leaves were air-dried, mashed into powder, weighed and extracted using aqueous ethanol (70%). The crude extract (0.5g) was digested with HNO₃: HCl (3:1); then heated to 200°C and analyzed for its metal content by atomic absorption spectroscopy (AAS). Results: Fe had the highest concentration (32.73mg/kg), while Pb was not detected. The concentrations of Co, Cu, Ni, Zn and Cd detected were 5.97, 10.8, 8.01 and 0.9mg/kg, respectively. The concentration of Cd, Fe and Ni were above the permissible limit of FAO/WHO. Conclusion: The results also show that the analyzed plant is a beneficial source of appropriate and essential trace metals. However, the leaf of *G. oreophila* in the present study was probably unsafe for long-term use because of the level of Fe, Ni, and Cd concentration.

Keywords : *Globimetula oreophila*, minerals, trace element, crude extract

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