

**DETERMINATION OF SOME TRACE ELEMENTS WITH KNOWN
IMMUNOLOGICAL RESPONSE AND CURATIVE PROPERTIES IN SOME
SELECTED MEDICINAL PLANTS**

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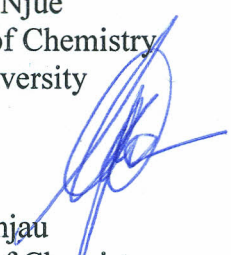
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ABSTRACT

The emergence of drug resistant diseases coupled with the ever-rising cost of drugs and difficulties in assessing health care in Kenya has resulted in an upsurge of interest in herbal plants. Many synthetic drugs among them artemisinin used for malaria treatment have been derived from herbal plants. There has been a great emphasis on analysis of organic compounds in the herbal plants over the years. These bioactive compounds are part of the plant matrix which include the trace elements. Some trace elements have known immunological response and curative properties which might explain the efficacy of the herbal plants and thus the significance of this study. This study will be carried out to determine the concentrations of trace elements with known immunological response and healing properties in selected medicinal plants available in Kenya and used for treating various diseases. These plants are *Prunus Africana* (Hook f.) Kalkman, *Urtica doica* L., *Maytenus obscura* (A. Rich.) Cuf., *Maytenus putterlickiodes*, *Azadiracta indica* A. Juss , *Mondia whytei* (Hook. F.) , *Zanthoxylum usambarensense*, *Maerua edulis* (Gilg & Gilg-Ben) , *Trigonella foenum-graecum* L. and *Glycyrrhiza glabra* . L. The last two are common exotic species. The concentrations of Zinc, Chromium, Vanadium and Selenium will be determined by the use of Atomic Absorption Spectroscopy (AAS) and Energy Dispersive X-ray Fluorescence Spectroscopy (EDXRF). The data will be analysed using SPSS and Ms Excel computer software. Spectral data analysis for EDXRF elemental concentration will be done using QAES, AXIL and S-100 computer software. The information obtained will be used to enhance the indigenous knowledge of the medicinal plants through dissemination to the public and health care providers.