



Elemental status of the medicinal plant-*Moringa oleifera*

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ABSTRACT

Different elements at trace levels of plants play an effective role in the medicines prepared. Characterization of elements in different parts of *Moringa oleifera* including leaves, stems and seeds has been studied using Scanning Electron Microscope (SEM) with an energy dispersive x-ray spectrometer (EDX). The present paper work highlights the elemental profile of this plant. Analysis was carried out for individual plant part (leaves, stems and seeds) of *Moringa oleifera*. The plant samples were found to contain essential elements such as sodium, magnesium, calcium, potassium, copper and zinc which are well known for their important roles in herbal drugs. Most of the medicinal plants were found to be rich in one or more of the essential elements under study. The obtained data will be helpful for making medicinal formulation and deciding dosage of the medicine made from this plant.

Graphical Abstract



Moringa leaves

Moringa stems

Moringa seeds

Highlights

- Elemental profile of the three parts of *Moringa oleifera* was studied using SEM-EDX.
- The samples consist of elements such as Sodium, Magnesium, Calcium, Potassium, Copper and Zinc.
- The present findings will be useful in the preparation of medicine.

Keywords: Elemental profile, medicinal plants, *moringa oleifera*, SEM-EDX.