

The concentrations of zinc, magnesium and iron in some selected medicinal plants used by the Chuka community in Kenya

Medicinal plants are essential components of primary health care, especially for rural communities in developing countries. The medicinal plants contain mineral elements that are beneficial therapeutically. In this study, concentration levels of Zn, Mg and Fe in *Tagetes minuta*, *Senna didymobotrya*, *Bidens pilosa*, *Caesalpinia volkensii*, *Iboza riparia* and *Commiphora zimmermanii* were analysed using Flame absorption spectroscopy (AAS) was used to determine the levels of Mg, Fe and Zn. Mean levels of Mg in the medicinal plants ranged from 6.00-164.00 mg/Kg. *A. secundiflora* (leaves) had the highest mean levels of Mg (163.00 ± 1.00 mg/Kg) while *S. incanum* (roots) showed the lowest mean levels (6.33 ± 0.29 mg/Kg). Levels of iron ranged from 1.45-9.54 mg/Kg. Leaves and stems combined of *T. minuta* had the highest level of Fe (9.43 ± 0.110 mg/Kg) while leaves of *C. volkensii* had the lowest levels of Fe (1.47 ± 0.02 mg/Kg). The mean levels of Zn ranged from 0.67-4.29 mg/Kg. *A. secundiflora* (leaves) had the highest mean levels of Zn (4.24 ± 0.06 mg/Kg) while stem bark of *C. zimmermanii* had the lowest levels (0.67 ± 0.00 mg/Kg). Concentration levels of minerals in these medicinal plants may be responsible for their medicinal properties.