

PRELIMINARY STUDIES ON THE NUTRITIONAL CONTENT OF
SOME LEAFY VEGETABLES FOUND IN SRI LANKA

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The food tables¹ used in Sri Lanka contain only about 10% of data on Sri Lankan food varieties. The rest of the data are mostly from Indian publications. Hence, the food composition data users are dependent on a food table which is inadequate. Here, we report the fibre and moisture content as well as the concentrations of certain nutritionally important metal ions of some Sri Lankan leafy vegetables [Centella asiatica (Gotukola), Asparagus racemosus Willd (Hathawariya), Ipomoea aquatica Forsk (Kankun), Sesbania grandiflora (Kathurumurunga), Gynema lactiferum (Kurinan), Alternanthera Sessilis (Mukunuwenne), Basella alba (Niviti), Boerhavia diffusa (Sarana), Cardiospermum microcarpum (Velpenela)].

Determination of metal ion contents were carried out after digestion by atomic absorption spectroscopy² and spectrophotometry³. The fibre content was determined by digesting a moisture and fat free sample with acid and alkali followed by burning in a muffle furnace⁴.

K was found to be the most abundant mineral in these leafy vegetables (1621.6 - 688.7 mg/100g) but the sodium content of the same leafy vegetables were comparatively small (250.0-4.9 mg/100g), the contrast being greatest with Mukunuwenna (K: 1249.7 mg/100g, Na: 4.9 mg/100g). Leafy vegetables were found to be rich sources of Ca(300.0-28.6 mg/100g) and Mg(125.0-37.0 mg/100g). Fe(4.46-0.37 mg/100g) was found to a very much lesser extent and Zn(1.80-0.38 mg/100g) and Cu(0.21-0.03 mg/100g) were found only in very small quantities.

The moisture content of these leafy vegetables did not show a significant variations. The fibre content of Hatawariya was considerably higher than that of the other leafy vegetables.

- References: 1. Tables of food Composition- For use in Sri Lanka compiled by W.A.D. Perera, P.M.Jayasekera and S.Z.Thaha with the assistance of WHF of Ceylon.
2. The analysis of Nutrients in Food- D.R.Osborne and P.Voog. Academic Press INC (London) Ltd., 1978.
3. Colorimetric Determination of Trace of Metals. E.B. Sandell, - 3rd edition, 1965, 553. -Interscience Publishers, INC., New York.
4. Official Methods of Analysis of the Association of Official agricultural Chemists-Tenth edition, 1965, 332.