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**INVESTIGATION OF TOXIC ELEMENTS IN  
GREEN LEAVE SPECIES OF SELECTED  
LOCATIONS IN SRI LANKA**

by

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## ABSTRACT

Green leaves are an important element in diet and if toxic elements are contained in them are of greater concern. The daily consumption of green leaves in Sri Lanka is about 25g per person (economic review 2001). Among European communities, greater concentration is on toxics in items (green leaves and others), water and soil equally well

When considering risk to consumers of elevated contaminant intake through the consumption of homegrown vegetables, it is also necessary to consider the distribution of the contaminant through the plant and differences between vegetables in their ability to accumulate contaminants. In the Sri Lankan context toxic elements like Cd, Pb, are very much abundant in surface water bodies particularly in industrial sites. It is nearly 68% and 56% greater than the guideline values of drinking water, issued by the Industries Technology Institute (ITI).

In this context it is timely and great value to our consumer society to find out the types of toxic elements and their concentrations in food items especially green leaves in Sri Lanka.

Several samples of green leaf species (Gotukola, Kankun, Mugunuwenna, Sarana) at selected locations were collected, and these samples were determined using Atomic Absorption Spectrometer. To use this data to quantify effects of industry induced pollution on food items grown in its vicinity. Result analysis has shown that in every location toxic elements content of water samples are very high compared to green leaves samples. It is approximately 60% greater than the guideline values of drinking water.

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