SCREENING OF VEGETABLES FOR ORGANOPHOSPHATE RESIDUES PART-I

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Most of the pesticides used for agricultural purposes in Sri Lanka belong to the toxic types of organophosphates and carbamates. However no systematic study has been done on the residue levels of these toxic pesticides in food and environment. Therefore a programme was initiated to screen the vegetables and pulses available in the Sri Lankan markets. This paper outlines the work carried out on green gram and cowpea samples purchased in the Kurunegala district.

Both TLC and GLC with TSD were used to identify and quantitate the surface residues present in these pulses. The results revealed that out of the twenty one samples analysed, ten samples contained malathion, five samples contained pirimiphos methyl and six samples contained both malathion and pirimiphos methyl. The residue levels ranged from 0.005 - 6 ppm for malathion and 0.002 - 4.85 ppm for pirimiphos methyl.

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