RECOVERY STUDIES OF PESTICIDES FROM TOMATO PULP

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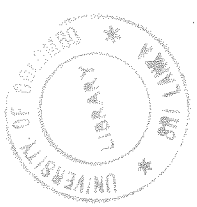

HIMALEE WIJEYAWARDANA

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ABSTRACT

Tomato is one of the very popular vegetables consumed in Sri Lanka and pesticides are widely used on this food crop. Therefore this project was aimed at determining pesticide residues in tomatoes sold in the city of Colombo, in order to ensure the safety of consumers .A market survey was carried out in order to come up with a statistical plan to collect samples from main markets of the fifteen zones of the city of Colombo. The analytical method chosen in the study was one of the standard methods recommended in the pesticide laboratory training manual. Miniaturized method was used in order to save time, solvents and also to minimize the amount of hazardous chemical to be disposed of. In order to determine the validity of the method recovery studies were carried out at two fortified levels (1.151ppm and 0.222ppm). Mean recoveries for target analytes ranged from 45 - 126% at 1.151 ppm with CVs of 0.5 - 22% whereas at 0.222ppm it ranged from 59-131% with CVs of 9-49%. In both cases recovery percentage for Dimethoate was not within the acceptable range which suggests that this particular clean-up method is not very suitable for the analysis of Dimethoate.