



## Pesticide Residues in Selected Vegetables Collected from Local Markets in Vijayawada City

M. Krishna Murthy<sup>1\*</sup>, N. J. Solomon Babu<sup>2</sup>, M. J. Kennedy<sup>2</sup>,  
Y. Durga Prasad<sup>2</sup> and M. Kamala Karuna<sup>3</sup>

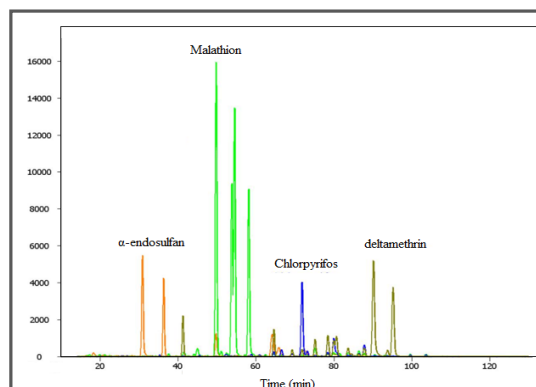
1. Acharya Nagarjuna University Research Center, SVRM College, Nagaram - 522268, **INDIA**
  2. Department of Chemistry, Andhra Christian College, Guntur – 522001, **INDIA**
  3. Department of Chemistry, Government Degree College for Women, Guntur – 522001, **INDIA**
- Email: [mannamkm@gmail.com](mailto:mannamkm@gmail.com)

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### ABSTRACT

Vegetable samples of green chilly, cabbage, tomato and brinjal collected from market in five regions of Vijayawada municipality in April 2017. Selected vegetables tested for the presence of pesticide residues like pyrethroids, organo chlorine compounds and organo phosphorous compounds using a gas chromatograph equipped with electron capture and Thermo sensitive detectors of the samples tested, chilly, cabbage, Tomato and brinjal were found to have pesticide residues in above the permissible residues. Among the organo chlorine compounds  $\alpha$ -endosulfan, was detected in 2.34 % of the samples with residues. These were taken from green chili and cabbage samples. Parathyroid residues, such as deltamethrin detected in 10.24 % of the samples with residues in tomato and brinjal, organo phosphate compound residues such as chlorpyrifos and Malathion were found in 18 % of the samples with residues, which were taken from all vegetable of the positive samples, 10.2 % were found contain residues exceeding the prescribed maximum residue limit. The average pesticide residue content across all the vegetable samples was ranging from 0.04 to 1.024 ppm.

### Graphical Abstract



GC MS spectra of pesticide residues in the vegetable samples

**Keywords:** Pesticide Residues, Vegetable samples.