



Determination of Deltamethrin Residue Levels in Selected Vegetables Consumed in Nairobi, Kenya Using HPLC[#]

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Abstract Vegetables provide vital minerals and other nutrients to our bodies. However, pests destroy vegetables. This as lead to rampant use of pesticides on vegetables in Kenya. The pesticides that are commonly used on vegetables in Kenya are the pyrethroids which include; deltamethrin, lambda-cyhalothrin and chismethrin. In this study deltamethrin was analysed in selected vegetables which include; kales, cabbages and tomatoes during the dry and wet seasons. The vegetables were bought from some markets in Nairobi city in Kenya. Deltamethrin residues were extracted from the samples using organic solvents. The residues were then determined by high performance liquid chromatography ¹(HPLC). The results shows that the deltamethrin mean residue levels ranged between 0.0700 ± 0.0200 and 0.2000 ± 0.1000 mg/kg during the dry season and between 0.0080 ± 0.0500 and 0.0400 ± 0.0001 mg/kg during the wet season. The deltamethrin residue levels were significantly higher during the wet season than during the wet season in most of the samples.

Keywords: *Vegetables, pyrethroids, deltamethrin, residues and HPLC*

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