

**Title** Multiresidue screening method for pesticides in cauliflower with Gas Chromatographic/Mass spectrometric detection

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### **Abstract**

Methods for analyzing pesticide residues have been studied extensively over the years. Maximizing the number of analysis to be determined with given resources is considered the best practical approach in a monitoring program. A Gas Chromatographic/ Mass Spectrometric (GC/MS) screening method has been developed for the determination of (-HCH,  $\gamma$ -HCH, Aldrin, Dieldrin, Heptachlor, Endosulfan, Methoxychlor and Cypermethrin in cauliflower. Samples are extracted with acetonitrile/ acetone and partitioned with sodium chloride saturated aqueous solution. The pesticide analyst are separated on a BP5 capillary columns with a column length of 30 m and id of 0.32 mm, identified by electron ionization MS scanned from 50 to 500 amu and quantified by the monitoring by base ions. The accuracy of the quantitative determination measured in terms of average percentage recovery of eight compounds in cauliflower varied from 71 to 105% (except for aldrin & Heptachlor the recoveries of which are 65 and 58%) with a relative standard deviation of 18%.