

Project Title	: The Investigation of Applicability of some Multi-Residue Analysis Method for National Pesticide Residue Monitoring Program
Start /End Date	: 2005-2007
Supporting Body	: GDAR
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Summary	<p>: At the end of using pesticides to fruit and vegetables may cause to residue problems. When this product presented to the consumption, consumer health will threaten level possible. Residue monitoring programs are important In this project, multi residue method as QUECHERS the residue on fruit and vegetables are monitoring on apricot, peach, grape, strawberry, tomatoes, lettuce, eggplant, peppers and the cucumber at Aegean Region.</p> <p>33 selected active substances (with isomers total 41) were monitored as qualitative and quantitative characteristics by using Gas Chromatography/Mass Spectrometry equipment on selected samples.</p> <p>Multiple Analysis Methods are necessary to develop for the monitoring on the agricultural products monitoring This work and in our country first agricultural products will be able to actively important ingredients containing the remains of soft Gas Chromatography / Mass Spectrometry (GC/MS)'set in order to method for the work of the to determine the walk and faster, sensitive and economical multi residue analysis method are determined.</p> <p>The evaluated pesticides were chosen regarding to their usage on fruits and vegetables and amenable in GC. This method gives the chance to analyse, verify and quantitate for 33 active substances by using GC/MS-SIM. Method was validated and validation parameters were in acceptable range. Limit of detection (LOD) and quantitation (LOQ) values of active substances were lower than Maximum Residue Limits (MRL); correlation coefficients (R2) were higher than 0.99 with matrix matched calibration, recoveries (Rec) were found between 70-120% and relative standart deviations were lower than 20% (RSD%, accuracy and repeatability).</p> <p>In this work our laboratory will be able to determine important agricultural active substances by Gas Chromatography/Mass Spectrometer (GC/MS) with multi residue analysis method. This method is fast, sensitive and economical.</p>