

Project Title : Investigation of Pesticide Residues on Some Fruits and Vegetables Marketed in Aegean Region

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Supporting Body : GDAR

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Summary : It can be residue problem on marketed products as a result of pesticide use against diseases, pests and weeds that damage the agricultural commodity. Residue levels on products treated with pesticides should not threaten consumer health that is to say it should not exceed the MRLs.

Studies were carried out on the samples of peppers, tomatoes, cucumbers, lettuces, aubergines, strawberries, apricots, peaches, grapes and raisins marketed in Aegean Region.

Samples of fruits and vegetables were taken from Izmir in order to determine pesticide residue content of fruits and vegetables which are most consumable in Izmir provinces. All taken samples were analyzed by using multi residue analysis method to present pesticide residue profile.

33 selected active substances were monitored as qualitative and quantitative characteristics by using Gas Chromatography/Mass Spectrometry equipment on selected samples.

75.17% of samples had no residue, rest of all had residues. 4.83 of samples had residue level high than MRLs.

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. In this project, the residue on fruit and vegetables are monitoring on apricot, peach, grape, strawberry, tomatoes, lettuce, eggplant, peppers and the cucumber at Aegean Region.

The 15 samples of peppers, 30 samples of the tomato, 15 samples of cucumber, 10 samples of romaine and 10 samples of eggplant with vegetables 10 sample of strawberry, 10 samples of apricot, 15 samples of dried grapes, 10 samples of peach and 20 samples of grape fruits are monitored to the selected 33 active substances.

The total 145 samples are monitored in the study, 109 samples have no residue and 36 samples has residue according to selected active substances.