Project Title : The Investigation on Residues of Some Pesticides and Their Risk

Possibilities in Grapes and Raisins Obtained From Vineyards in

Aegean Region

Start / End Date : 2006-2008

Supporting Body : GDAR

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Summary : Grape production was done approximately in 7,5 million

hectares area in the world. Italy, France, Spain, USA, Turkiye, Portugal and Independent Nations Society are premier

producers of grapes.

Turkiye has a powerful place in the production of grapes in the world. Our country was corresponded 30% of world total sultana production by itself as 343,000 tons in year of 2005. Lots of sultana production is done especially in Manisa, Turgutlu, Salihli, Akhisar, Menemen, Kemalpasa, Cal and Civril.

The biggest factors effecting grape production is illness in vineyards, harmful and external plants. The most commonly used method against those, is chemical combat. Random usage of pesticides can increase the problems.

In this research, grape samples were taken from 99 vineyards and sultana samples were taken from 74 vineyards in conventional, entegrated, and organic vineyards in Izmir, Denizli and Manisa, which are premier grape production areas in Aegean region. Number of effective matters analyzed is 27.

In this research Gas Chromatography – Mass Spectrophotometer devices were used and residue was determined over MRL, in 17 of 99 grape samples, 7 of 74 sultana samples in 173 total samples. Residue of pesticide was not found in samples taken from organic and entegrated vineyards.

Using of 3 different risk evaluation models are displayed and showed which method will be used in long period in our country.