Project Title: The Investigation of Pesticide Residue Levels and Lead on Raising in the Aegean Region

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Supporting Body: GDAR

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Summary: According to pesticide residue analyses, there was no residue problem in case the preharvest interval for imazalil was considered as 3 days and for iprodine as 15 days after the treatments against Grey mould. 21 day-preharvest interval of procymidone had residue problem. The preharvest interval of this fungicide should be suggested as 27 days.

There was no residue problem 14 days after the last treatment of parathion methyl against European grapevine moth (Lobesia botrana Den.-Schiff.). Although phosalone residue level (2,75 ppm) 15 days after the last treatment was below the tolerance value in Kanada (5 ppm) and Codex (5 ppm), it was over the tolerance value in Turkey (0,05 ppm). A study was carried out with the aim of re-determination of preharvest interval for phosalone and log(y)=0,324-0,009x (y=ppm residue, x=days, r=-0,872) equation was obtained. As a result, even 28 days after the last treatment, phosalone residue was over the tolerance value in Turkey. Phosalone residue level is not a problem for export but it will be a problem for domestic consumption. The tolerance value in Turkey should be reviewed.

Bromopropylate residues were over the tolerance values of Turkey and Codex 21 days after the last treatment against two spotted spider mite. Accordingly, it is concluded that the active ingredient can cause residue problem. However, the residue level of bromopropylate was below the tolerance value in Canada. Therefore, bromopropylate would not cause the residue problem in the exports to Canada. Before making a decision on this pesticide, the tolerance value in Turkey should be reviewed. Propargite residue was below the tolerance values 21 days after last treatment, so this insecticide had not residue problem on the control of two spotted spider mite.

Bordeaux mixture for Dead arm; copper oxychloride, Bordeaux mixture and folpet for Downy mildew; WP Sulfur, triadimefon and penconazole for Powdery mildew; procymidone, imazalil and iprodione for Grey mould; parathion methyl, phosalone and Bacillus thuringiensis for European grapevine moth; bromopropylate and propargite for two spotted spider mite were applied in trial vineyard according to the Instructions. These pesticide applications were examined whether cause lead residue problem. As a consequence, it was found that the pesticides had not caused a residual problem of lead.