

Project Title : Investigations on the Utilization of Mating Disruption Technique against European Grapevine Moth (*Lobesia botrana* DEN.-SCHIFF.) in The Aegean Region

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Supporting Body : GDAR

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Summary : Mating disruption has been applied against *Lobesia botrana* in Izmir (Menemen) Province in 1999. Quant Lb dispensers by BASF containing 350 mg pheromone in each were installed in 1,7 ha-Round seedless Sultana vineyard to the shoots with 6 m intervals on the rows in the center and 2 m intervals on the borders. Infestation rates were found as 21,6 % in MD₁ and 14 % in C₁ vineyard at harvest. It should be tested one year more. RAK 2 R (BASF) dispensers containing 500 mg pheromone in each were installed to shoots at 6 m intervals on each three rows and 2 m intervals on the borders in 2000. Infestation rates were found as 4.05, 3 and 3 % in MD₁, MD₂ and MD₃, and 0 % in C₁ vineyard at harvest. When compared to economic threshold (1 %), the results obtained from MD technique were excellent. Isonet-L dispensers by Shin-Etsu containing 172 mg pheromone in each had been installed at 6 m intervals on each row and 2 m intervals on the borders. Infestation rate of final assessment was 4 %. Technique was considered as acceptable because of the infestation rates were very next to economical threshold level (1%). In 2001, infestation rates at harvest were found as 16,5 %, 9,5 %, 9,5 % and 15,5 % in the vineyards where RAK 2 R dispensers had been used, respectively. The infestation rates of MD vineyards were quite higher. Accordingly, it has been concluded that RAK 2 R dispensers is not effective on the control of EGVM as a single method. No insecticide application was made against *Lobesia botrana* in the vineyards where Isonet-L dispensers had been installed. The infestation rates of final assessment were 7,69 and 0,66 in MD vineyards, and 2 % in C₂ in 2001, respectively. As a conclusion, 600-650 Isonet-L dispensers per ha could be used against *Lobesia botrana* as a single method in the raisin-aimed vineyards. Mating disruption should be combined with a biological agent, which is protective and supportive for the beneficial insects on condition that infestation would be higher than 5% at first generation.