

Vineyard farm reduces pesticide use with IPM biotechnical methods to suppress the European grapevine moth and the European grape berry with mating disruption method

The Farm

Region: Podravje (north-eastern Slovenia)

Area: 5.43 ha of vineyards in the three different locations

The strategy for pest management

The number of applications with insecticides in vineyards of the north-eastern part of Slovenia has increased from one to three in recent years. Therefore, non-chemical methods are being studied to reduce the number of insecticide applications. One option is the mating disruption method to suppress the grape moth populations. For successful mating, female grape moths emit chemicals unique to each species – sexual pheromones, which allow males to find the females over long distances. The high concentration of synthetic sexual pheromones in vineyards in the various forms of dispensers confuses the males and consequently reduces the possibility of successful mating.



Conclusions

- The non-chemical method has successfully replaced chemical treatment.
- The percentage of damaged bunches in all three vineyards was below or close to the threshold of 5 % for the second generation of both types of grape moth.
- Mating disruption is a plant protection product-residue-free method and slows down development of insecticide resistance due to a reduction in the number of insecticide treatments in the vineyards.



Reduced use of pesticides!