

Application Strategies with the Method of Disorientation in the Control of Grape Berry Moth

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Abstract

The disorientation method was recently developed also for the control of grape berry moths, Lobesia botrana (Den. & Schiff.) and Eupoecilia ambiguella Hb. It uses a high density of Ecodian® dispensers with reduced pheromone charge, made of biodegradable material.

*In this paper, the dispenser characteristics and application methods are described and the application strategies in different environmental conditions are discussed. Moreover, multiyear disorientation experiences conducted in several vineyards in the Veneto region are presented. The results show how disorientation is a versatile control strategy, which can be easily introduced in integrated control strategies of grape berry moths and applied to small vineyards with a sloping soil position. The application strategies show that in the presence of a medium population, good results can be obtained, comparable to or even better than the traditional chemical strategy. When the population density is high, the use of disorientation as the only control strategy does not always guarantee a complete protection of the crop. In these situations, it turns out to be useful to integrate the dispensers with insecticidal applications (*Bacillus thuringiensis*), at least in the first years of the disorientation strategy. This strategy method is of special interest in the last part of the defense period, especially on late ripening cv, where the larval attacks can cause heavy damage soon before the harvest.*