

Book of Abstracts



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Success of mating disruption technique against the European grapevine moth, *Lobesia botrana* (Den. & Schiff): a case-study in Douro Wine Region

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Abstract: The European grapevine moth, *Lobesia botrana* (Den & Schiff.) is the most important pest in Douro Wine Region (Portugal). In this region, this moth has, normally, three generations being the last one, the most damaging to grapes. Damages are highly variable between years, ranging from 0 to 90% of infested clusters, at harvest. The use of mating disruption, an environmentally friendly method to control this pest, has been widely recommended in IPM strategies. However, some constrains to its implementation have been identified, such as the high biotic potential of the pest, the high summer temperatures and the orography (high steepness). Moreover, the size of area under treatment is another important factor with impact on the success of this method, working better in larger and continuous extents. In fact, the landscape of this region is very fragmented, being typical wine farms characterized by a small size, often bounded by other crops, such as olive groves, and untreated natural habitats, where alternative hosts (e.g. *Daphne gnidium* L.) are common. The objective of this work was to investigate the effectiveness of the mating disruption technique against *L. botrana* in a case-study in Douro Wine Region. Moreover, it was intended to demonstrate to growers the importance of applying mating disruption on an area-wide scale. The technique has been applied in Quinta de S. Luíz (Sogevinus Fine Wines S.A.), since 2001, when an area of 4 hectares was treated, until nowadays with an extended area of 90 hectares. The technique showed to be more efficient after a long period of application, when large areas were involved and also in years of low pest population density.

Key words: mating disruption, *Lobesia botrana*, vineyard, pheromone, area