



2014 Orchard Pest and Disease Management Conference



The 88th Conference is pleased to
announce our keynote speaker:

Stephen Welter
Vice President for Research and Dean
of Graduate Affairs,
San Diego State University

Keynote Address:

A Tale of Two Systems:
Social and Technical Evolution
of Mating Disruption Systems
in the Western US and the
WODPM



Hilton Portland, Portland, Oregon
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Thresholds/Monitoring

**May We Improve Trapping in Mating Disrupted Vineyards?
The Effect of Pheromone Lure and MD Technology.**

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Keywords: *Lobesia botrana*, European Grapevine Moth, grape, mating disruption, monitoring, lure, pheromone traps.

Abstract: Pheromone traps baited with 1 mg of the main sex pheromone component of *Lobesia botrana* (E)-7,(Z)-9-dodecadienyl acetate (hereafter referred as standard) are used to monitor the moth flight. Moreover, the same traps are currently used to evaluate mating disruption (MD) efficacy with limited accuracy. Actually, zero capture in the traps is still considered a “necessary but insufficient” indicator of effective MD.

In the present study we aimed at assessing if either overloaded standard pheromone lures or addition of minor components of the natural blend could improve the effectiveness of the pheromone traps as early and accurate warning tools.

A field trial was set up in large plots (min. 4 ha) treated with either commercial (Isonet L plus - Shin Etsu CBC; Rak 2 Max - BASF) or experimental (Puffer Lb – Suterra; No Mate Lb – Syngenta; Hercon® disrupt EGVM - Hercon Environmental; Splat Lobesia - Isca Technologies) MD dispensers. The pheromone release rate ranged from 325 to 900 mg/ha per day approximately, depending on the pheromone formulation.

Addition of minor components did not significantly increase the captures in MD-treated plots compared to the standard lure at the same dose. Male catches in MD-treated plots significantly increased when the pheromone load of the trap bait was increased to 10 mg. Overloaded traps were more prompt in detecting male flight than the standard in MD treated plots. Indeed, when the infestation level was low, overloaded traps generally captured males at least a week before the standard lure.