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ABSTRACTS BOOK

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Grapevine yeast attracts grapevine moth

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Abstract

Monitoring pest populations is a key aspect of Integrated Pest Management (IPM). However, in vineyards under mating disruption against *Lobesia botrana* male response to the female sex pheromone is compromised. Therefore, new attractive volatile compounds are wanted in order to monitor *L. botrana* males and females. We tested if the volatiles released by the prominent grapevine yeast, *Hanseniaspora uvarum*, attract *L. botrana* adults in a wind tunnel assay. Two sticky trap liners were placed side by side in the upwind end of the tunnel each with a different Petri dish containing either *H. uvarum* growing on solid, half strength, MS300 (synthetic grape must) medium or uninoculated medium. Unmated males, unmated females and mated females were released on different days in groups of 50-150 individuals and left for 24h. The captures where video-recorded. Significant differences in the flight activity were detected between sexes. About 65% of the males but 6-16% of the females were captured in the traps. *H. uvarum* traps captured significantly more adult males, unmated females and mated females than the control traps. Males showed a peak of activity during the first part of the scotophase (corresponding with the female calling period) and a second peak of activity at the start of the photophase. Females presented a single peak of the activity at the start of the photophase. Yeasts may provide a useful IPM tool for monitoring *L. botrana* in grapevines.

Key words: insect, *Vitis*, microbial, attractant, IPM, *Hanseniaspora*