Use of two odorants to control bactrocera oleae and ceratitis capitata
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To cite this version:
Cindy Ménagé, Martine Berthelot-Grosjean, Yael Grosjean. Use of two odorants to control bactrocera oleae and ceratitis capitata. 4. TEAM meeting, Oct 2020, La Grande-Motte, France. . hal-03053779

HAL Id: hal-03053779
https://hal.inrae.fr/hal-03053779
Submitted on 11 Dec 2020

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Recently we discovered an innovative solution to control *Drosophila suzukii* behavior\(^1\). Using this knowledge, we started to investigate the possibility to apply this strategy to insects considered as pests, like *Bactrocera oleae* (olive fruit fly) and *Ceratitis capitata* (Mediterranean fruit fly) to modify their social behavior.

### 1. Social interaction

*B. oleae* males show less interactions towards females if there is propanoic acid.

### 2. Reversible anesthesia

The time to anesthesia decrease with the increase of concentration of propanoic acid. *C. capitata* are more sensitive than *B. oleae*.

### 3. Diffusion and persistence of the odor

In a closed environment, the diffusor release slowly the odor. After removing the diffusor, acids are still detected.

This new technology\(^2\) could be interesting to avoid infestation of fruits by limiting egg laying and population propagation while respecting the environment.

**References:**

1. Poster «BIOCONTROL OF DROSOPHILA SUZUKII BY TWO FATTY ACIDS», Berthelot-Grosjean, in this meeting.