CORE organic II

Softpest Multitrap

Management of strawberry blossom weevil and European tarnished plant bug in organic strawberry and raspberry using semiochemical traps

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Anthonomus rubi severing flower buds

Background

The strawberry blossom weevil (Anthonomus rubi) and the European tarnished plant bug (Lygus rugulipennis) cause large (10 - >80%) losses in yield and quality in organically grown strawberry in central and Northern Europa.

The pheromones of A. rubi and I

The pheromones of *A. rubi* and *L. rugulipennis* have been characterized in England by NRI/EMR. For the attraction of *A. rubi* the importance of combining the pheromones with the host plant volatiles has also been documented.

Implementation

The natural semiochemical mechanisms of sexual attraction and host plant finding of *A. rubi* and *L. rugulipennis* will be further studied and exploited to develop effective semiochemical traps for their management through mass trapping.

Attractive lures for these two species will be combined into a single multitrap with the aim of managing the two pests simultaneously. This will be one of the first approaches to pest management of non-lepidopteran insect pests of horticultural crops using semiochemicals in the EU, and probably the first to target multiple species from different insect orders











Lygus rugulipennis causing misshaped strawberries

Project organization

The project will be organized in the following work packages:

- 1) Chemical analysis of plant volatiles
- 2) Pest insects in strawberry
- 3) Pest insects in raspberry
- 4) Trap design and lure development

The project consortium consists of partners from 6 European countries. The project period is 2012-2014 and the project is funded by the ERA-net CORE Organic II.

Prototype funnel trap from Agralan Ltd





CORE Organic II The European transnational research cooperation project, the ERA-net named CORE Organic II, consists of a network of 26 partners from 21 European countries. The main aim of CORE Organic II is to agree on common research priorities and to select transnational research projects to be funded by the partners.