PRACTICE ABSTRACT

Apple sawfly *(Hoplocampa testidunea)*: Catch that fly

Problem

Apple sawfly *(Hoplocampa testidunea)* is a major pest in organic fruit production. Eggs are laid during bloom in the flower bottom. Larvae move to 2-3 other fruits and devastate the young fruitlets.

Solution

Sawflies are attracted to the white colour of the flowers. White sticky traps have been used for many years to monitor flight. An innovative method is to catch sawflies with white sticky tape to decrease the population.

Benefits

Catching sawflies reduces the need for intervention and decreases damage.

Practical recommendations

Fixing the white sticky tape:

- Start before the first flowers are open with Rimpro / Fruitweb models that predict the start of the flight.
- Hang 150-250 sticky tapes per hectare, depending on infection pressure.
- Fix the sticky tapes with staplers between the horizontal wires of the trellis system between the trees.
- In orchards without a trellis system, research about an effective method of fixing the tapes is needed.
- No branches should cover or move against the sticky tapes.
- One person on the working platform for the top wire and two persons for the lower wires are needed.
- Two rows can be done at once.
- The distance between the wires can vary from 1 to 2 m. Start at the high wire and go down to the lower wire.
- Remove the bands soon after flowering to prevent the bycatching of bees and natural enemies.

Monitoring the effect: Check the number of egg-laying stiches in the flower bottom. The threshold is 1-4 stitches/100 flower clusters.

Direct control measurements

- Remove infested fruits manually in spring (reduces primary- and secondary infestation).
- When necessary, use Quassia or NeemAzal-T/S at bloom/petal fall.
- Check the permission status for Quassia in your country.

Costs: 255-502€/ha, depending on length and number of tapes (length 1 or 2 m, amount 150-250/ha, 10-14 hours labour à 18€/hr, tape 0,5€/m).

Applicability box

Theme

Crop production, Horticulture, Temperate fruits

Keywords

Pest control, Biological pest control, Apple sawfly

Context

Central Europe

Application time

Just before and during bloom

Required time

6-10 hours/ha hanging up, 4 hours/ha removing

Period of impact

One year, plus effect over years

Equipment

Prognose model, CatchIT sticky tape (Andermatt), working platform, stapler

Best in

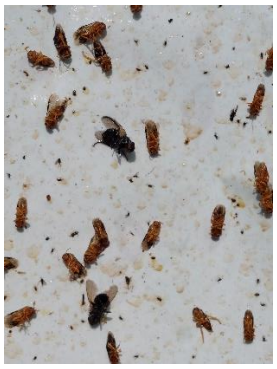
Orchard with trellis system and horizontal wires

BIOFRUITNET
Boosting Innovation in ORGANIC FRUIT production through stronger networks

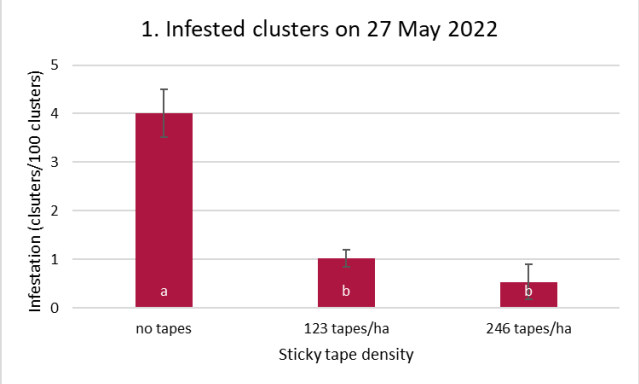
Delphy

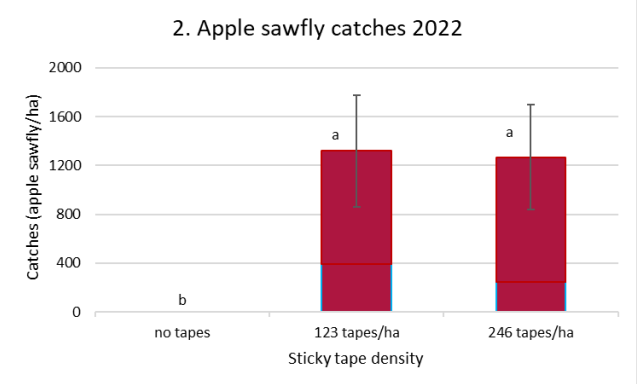
PRACTICE ABSTRACT





2022 Hanging the tapes (see video[Fehler! Verweisquelle konnte nicht gefunden werden.]) (1). In the orchard (2). Glued apple sawfly (3). Photo's: Gerjan Brouwer, Delphy 2022





Graphs 1 and 2: In a Santana plot, two variants were tested with a different number of sticky tapes per hectare. The number of infested fruits (1) was counted, and the number of caught apple sawflies (2) on the tapes. In all variants, the damage was significantly reduced in the plots with tapes compared to the control plots (no tapes). Sarah Kemp, Delphy

Further information

Video

- Biofruitnet: Catching sawflies with sticky bands

Further reading

- H. Helsen, P.J. Jansonius, G.W. Brouwer, B. van der Sluis, R. van Tol, A. de Groot, R. van Kats, R. van de Maas. 2020. Mass trapping of the apple sawfly *Hoplocampa testudinea*. Proceedings Ecofruit p. 99-102.
- Adolphi, C., Oeser, N. 2022. Practice abstract Regulation of sawflies in organic orchards. FÖKO. BIOFRUIT-NET.

Weblinks

- Check the Organic Farm Knowledge platform for more practical recommendations.

About this practice abstract

Publisher: Delphy, Agro Business Park 5
6708 PV NE-Wageningen
+31-317491519, https://delphy.nl

Author: Gerjan Brouwer

Contact: g.brouwer@delphy.nl

Review: Niklas Oeser (FÖKO), Ambra De Simone (IFOAM Organics Europe), Lauren Dietemann (FiBL)

Permalink: Organic-farmknowledge.org/tool/44938

Project name: BIOFRUITNET- Boosting Innovation in ORGANIC FRUIT production through stronger networks

Project website: https://biofruitnet.eu

This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 862850. This communication only reflects the author's view. The Research Executive Agency is not responsible for any use that may be made of the information provided. The authors and editors do not assume responsibility or liability for any possible factual inaccuracies or damage resulting from the application of the recommendations in this practice abstract.