

Stop fruit flies by removing rotten fruit

April 16 2015



Three years after they were first detected, the number of spotted-wing drosophila fruit flies in the Netherlands has exploded. "There are still ways to combat the harmful *Drosophila suzukii* in soft fruit," says Herman Helsen, fruit entomologist at Wageningen UR. "Farmers of fast-ripening soft fruit, such as strawberries and raspberries, have several ways to control the problem."

Wild source

The first [fruit](#) flies with red eyes and a dark spot at the top of their wings were spotted in the Netherlands in 2012. Since then their numbers have multiplied year by year. "We closely follow how wild host plants are being affected in various landscapes to see, for instance, to what extent wild blackberries can be a source of contamination for fruit farms," Helsen explains. "Additionally we are following the infestation levels at the farms. Various cherry farmers found their late-harvest fruits 100% affected over the past year, making their fruit unmarketable."

Remove all fruit

Despite the rapid rise of the harmful fruit fly there are definitely ways of preventing damage. The first is proper hygiene, says Helsen. "In fast ripening soft fruit like strawberries, the larvae will not have hatched by the time the fruit is picked. Only by leaving rotting or damaged fruit underneath the plant will larvae be able to develop into the next generation of [fruit flies](#). The message I am trying to convey is to pick or collect the bad fruit as well. Don't leave anything on the soil."

Netting

Cherry fruit on the contrary, ripens long enough for the larvae to develop. "A solution here could be netting with fine one-millimetre mesh. This type of netting is, of course, expensive, vulnerable to wind and cancels out part of the sunlight. Ongoing research should show whether the investment is worth it."



Chemical pesticides sometimes necessary

Once a major infestation of the fruit occurs, chemical pesticides remain the only efficient weapon. "Unfortunately there have been no major breakthroughs in the field of bio-pesticides to date," continues Helsen. "In the international research project DROPSA we are working on experiments with biological agents, such as fungi and nematodes. This may offer a solution for the treatment of, say, blueberries, where part of the fruit is left beneath the plant inevitably. Bio-pesticides could prevent the left behind fruit from becoming a source of contamination."

Toolbox

Despite the increasing problems, Helsen is convinced that it will eventually become possible to again cultivate soft fruit in the Netherlands without worries. "Hygiene and chemistry are currently the two main weapons, but we will gradually be able to fill our tool box with more and better instruments to control these harmful insects."

Provided by Wageningen University

Citation: Stop fruit flies by removing rotten fruit (2015, April 16) retrieved 24 April 2024 from <https://phys.org/news/2015-04-fruit-flies-rotten.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.