

Biological control of aphids in zucchini

What is it?

The use of predatory and parasitoid invertebrates to control pest aphids. Aphids can act as vectors of multiple devastating virus diseases in cucurbits.



Prediction and monitoring Are the conditions favourable for pest populations to grow?



Detection Melon aphid, green peach aphid, cowpea aphid, black bean aphid



Biocontrol agents predatory wasps, lacewings, gall midges, hoverflies and ladybugs

Where demonstrated?

- IPMWorks vegetable hub in Belgium with focus on zucchini
- Demonstrated from grower to grower (peer-2-peer learning)
- Enclosed cultivation in polytunnels

Good alternative control measure for the cropping system – Why?

- The biocontrol agents do not harm bees and bumblebees which pollinate the zucchini flowers
- Demonstrated from grower to grower (peer-2-peer learning)
- Enclosed cultivation in polytunnels

Results

By using biological control agents, growers protect their crops without the use of insecticides. This also safeguards the pollinators used to pollinate the zucchini flowers in order to produce the fruits.

Directive 2009/128/EC

This technique adheres to the following principles of Integrated pest management according to Directive 2009/128/EC:

Principle 2: Harmful organisms must be monitored by adequate methods and tools, where available.

Principle 4: Sustainable biological, physical and other non-chemical methods must be preferred to chemical methods if they provide satisfactory pest control.

Principle 8: Based on the records on the use of pesticides and on the monitoring of harmful organisms, the professional user should check the success of the applied plant protection measures.



