IPM adoption in my hub

Facilitation approach and progress made in IPM adoption

Cropping sector icon

inagro
RESEARCH & ADVICE IN AGRICULTURE & HORTICULTURE

My group

Jonathan De Mey
Inagro

PRESENTATION OF THE HUB COACH ORGANISATION

Inagro vzw. conducts practice-oriented research in function of profitable innovations in West Flanders (Belgium) agriculture and horticulture. We deliver independent advice, tailored to farmers and horticulturists, tested and validated in practice.

THE HUB

Around 11 companies are involved in the hub processes. They often combine zucchini activities with other labour intense vegetables like Brussel sprouts and leek, but also arable crops like potato, maize and wheat.

All members are located not far from the Inagro field station.

OBJECTIVES AND MOTIVATIONS OF THE FARMERS

The main objective of the growers is to improve their IPM-strategy so they can have a sustainable and profitable crop production system. They want to limit the use of insecticides and fungicides on their product. Furthermore, they are eager to learn from each other and exchange knowledge so they can find solutions.

DRIVERS

The local good soils, knowledge and logistic opportunities are used to grow great vegetables for the internal market and export. Family driven farms are still at the heart of this, but a shift towards specialisation and expansion has been going on for a couple of decades.
Competition for land use and the intensity of the specific higher value crops provide challenges towards sustainability and pesticide use.

BARRIERS

For the hub members growing zucchini in spring and autumn, they are facing the meteorological risk factors of cold and cloudy days. This means lower pollination activity and higher disease risks. Other barriers are climate change with more dry seasons, making planting conditions in summer more difficult. Wetter autumns make it more difficult to sow catch crops on time.

IPM challenges and results

IPM Challenges

At the start of the hub formation, the following IPM Challenges were identified:

- Pollination, proportion of male flowers
- Fruit setting
- Aphids (mainly because of virus)
- Promote beneficial insects
- Crop cover and mulch materials
- Variety choice
- Planting material/output material
- Harvest hygiene
- Climate (under cover)
- Pesticide choices, disease control
- Spraying technique
- Watering and irrigation technique
- Water management
- Weed control
- Sustainability of the cultivation

The hub's results

What progress has the hub made on these challenges ?

Progress, although sometimes not significant, is made for promoting beneficial insects, use of biocontrol agents, water management, disease management and fruit setting. Support for variety choice and biodegradable mulching has been given by the hub and between hub members. We also demonstrated parthenocarpic cultivars in the last project year.

What issues still need to be addressed ?

The fruit setting issues are still not fully resolved. Hub members would benefit from a parthenocarpic cultivar that also has the fruits and qualities to market and grower standards.

How are the hub farmers going to proceed ?

The group connection will remain through Whatsapp and the hubcoach will explore possible operational groups or demo projects in the future.

Key conclusions

Organizing growers in a hub is not an easy task.

Trust in the hub coach and objective information is key.

Farmers are more reluctant to experiment themselves if a trial station is nearby.

Setting and selecting demos on the field station for (open air) horticulture is still a strong means of innovating and education.

Facilitation approaches

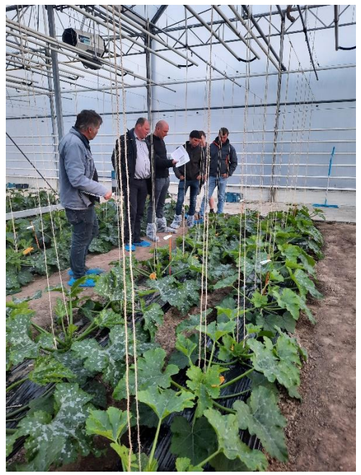
Usage of biodegradable plastic mulch

What are the issues the hub work on more precisely?

Fruit setting, powdery mildew and aphid control are important items the hub works on. But also biodegradable mulches are of large interest with the farmers.

How did you proceed? What did you do?

During the cross visit to Finland, the hub members got to know a Finnish plastic producer. A hub member tested the mulch and the hub coach facilitated a comparison at the trial station



What conclusions can you draw?

Exchanges cross borders are an inspiration to try new things. It also gives farmers the opportunity to reflect on their business and adhere to the larger European community.

My tips for making it work

Try to use facilitation to get free samples or material for the farmers so they can test with minimal financial effort. This will leverage on farm experimentation.

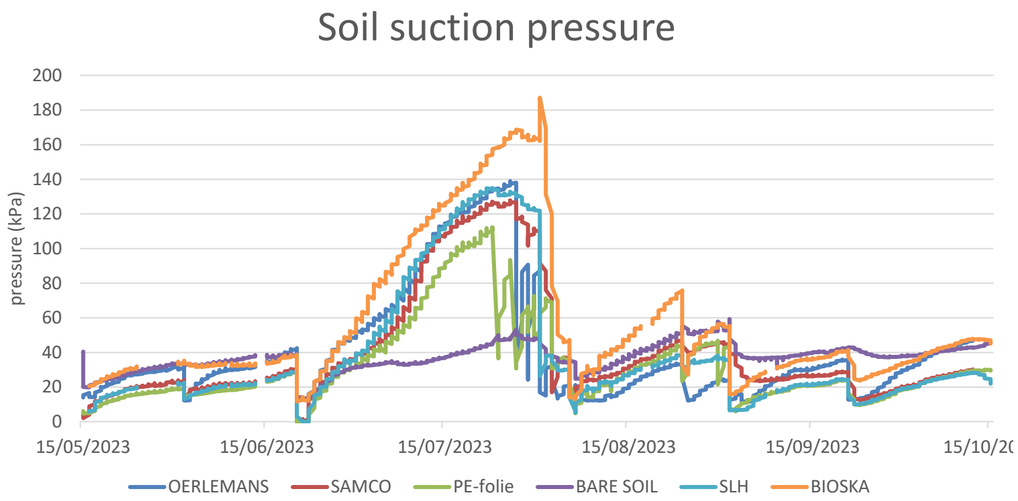
Individual facilitation

The intake meetings with the individual hub members was a great way of getting to know them, the things they work on and the problems and challenges they face.

Collective facilitation

Demo activities made the core of the collective facilitation. The looking back and forward method is very handy for keeping track of the goals and achievements.

IPM adoption



Soil plastic mulches are used in zucchini cultivation to supress weeds, heat the soil and retain soil moisture.
More and more growers are keen on biodigradable mulches as it allows them to sow a cover crop more quickly after the zucchini crop.

A demo trial was designed to address questions on how plastic mulch effects soil moisture content and how different brands are performing.

> I completely switched to biodegradable mulch in my zucchini crop. Last years comparison with regular foil did not show any difference.

Jonathan De Mey, hub coach

> I'm fond of the evolution towards biodegradable mulch, as long as the products used have the correct quality control.
>
> Meaning they should really decompose by the soil microbiome.

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