JOIN THE BUMBLEBEE REVOLUTION!

Insect pollination in greenhouses – a secret weapon? Research has found that using insect pollinators in greenhouse farming can result in increased yield, enhanced quality and better shelf life. About 90% of plants, including 75% of all crops, benefit from insect pollination. On top of that, pollination by bees and other pollinators is estimated to account for almost 10% of the value of all food produced. There is also growing evidence that the contribution of wild bees (bumblebees, stingless bees, and solitary bees) to crop production may be equal to, or even surpass, that of honeybees.¹

Boxes of bees

For the last four years, Romanian greenhouse farmer Ciprian Nincu has been using bees sent to him from the Netherlands to pollinate his tomatoes. Previously, tomato growth was stimulated through the application of plant hormones. This process is very time consuming and needs a major investment of labour. Despite the effort put in, the tomatoes grown were not always of good quality and even the taste was unsatisfying.

The bees he receives have an 8 week lifespan and can be released into the wild after they have performed their task of pollinating the greenhouse. Of the bees, Ciprian says, "Man cannot do what the bumblebee can, it’s impossible. It’s all about the precision and timing of pollination, the bumblebees are masters of that. The tomatoes obtained after this type of pollination are of better quality."

Bee benefits

As well as being efficient pollinators, bees are also being used to help in crop protection. Nicknamed ‘flying doctors’, the BICOPOLL project has discovered that using bees to carry beneficial microbes to strawberry plants gives equal or even better crop protection from grey mould than using chemical fungicides. These results have been replicated in soft fruit production all over Europe, and not just with strawberries. As well as the valuable protection provided, marketable yields in organic strawberry farming have also been increased by over 50%.

Support bees to support farmers

Unfortunately nowadays bees are exposed to cocktails of agrochemicals, various diseases, lack of diversity of flowers and other food sources, and changing environmental conditions such as habitat loss, climate change, invasive species and pesticide use.

The Campaign for the Farmed Environment (CFE) (UK) guides farmers on the voluntary sustainable management of landscape features by advising on pollinator support. It also provides online training modules and hands-on advice to farmers for the hibernation and nesting of bees. By implementing the following CFE voluntary measures farmers can provide food and shelter for pollinators:

- Sow a wildflower or a pollen and nectar mix to provide food
- Provide legume and herb rich temporary grass to provide enhanced food supplies and habitat
- Avoid spraying or adding fertiliser to cereal headlands

¹ Source: EIP-AGRI Focus Group on ecological focus area, final report
PRESS ARTICLE POLLINATORS 22 DECEMBER 2016

- Reduce the use of spring herbicide on land to encourage a diverse range of non-competitive weeds in the crop
- More information is on the CFE website

Join the revolution: Horizon 2020 Research projects to support bees

SFS-16-2017/ Bee health and sustainable pollination call has opened 4 October 2016, deadline 14 February 2017, funding up to 9 million EURO

This H2020 call invites farmers, foresters, researches, beekeepers, and others to work together in multi actor projects. The aim is to identify the most critical gaps/stressors/threats in achieving bee health, sustainable pollination and sustainable beekeeping in different European countries.

Press article 250 words

JOIN THE BUMBLEBEE REVOLUTION!

Healthy populations of bees and other insect pollinators are essential to food production. Research has found that using insect pollinators in greenhouse farming can result in increased yield, enhanced quality and better shelf life. In fact, greenhouse farmers are mobilising bumblebees to improve their crops.

Research on bees and other insect pollinators is supported by the EU programme for Research and innovation - H2020.

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EU support for pollinators

Support for projects on pollinators is available through the EU programme for Research and Innovation. You can find information on open calls for projects, inviting farmers, foresters, researchers, beekeepers, and others to work together in multi-actor projects.

More information

This press article is based on two inspirational ideas that appeared in the EIP-AGRI newsletter.

- Inspirational ideas: Creating a buzz in Romanian greenhouses
- Inspirational idea: Healthy strawberries thanks to ‘flying doctors’

More background information on pollinators and issues affecting them:

- EIP-AGRI Focus Group on Ecological Focus Areas
- Inspirational ideas: Perfumes for pests

More inspirational ideas on agriculture, forestry & innovation are available on the EIP-AGRI website

Background information

EIP-AGRI

The European Innovation Partnership 'Agricultural Productivity and Sustainability' (EIP-AGRI) is one of five EIPs which were launched by the European Commission to promote rapid modernisation of the sectors concerned, by stepping up innovation efforts. The EIP-AGRI aims to foster innovation in the agricultural and forestry sectors by bringing research and practice closer together – in research and innovation projects as well as via the EIP-AGRI Network.

EIPs aim to streamline, simplify and better coordinate existing instruments and initiatives and complement them with actions where necessary. Two specific funding sources are particularly important for the EIP-AGRI: the EU Research and Innovation framework, Horizon 2020, as well as the EU Rural Development Policy.

www.eip-agri.eu

Focus Groups

EIP-AGRI Focus Groups are temporary groups of selected experts focusing on a specific subject, sharing knowledge and experience.

Each group explores practical innovative solutions to problems or opportunities in the field, and draws on experience derived from related useful projects. Each EIP-AGRI Focus Group meets twice and produces a recommendations and outcomes report.

The EIP-AGRI Focus Groups also discuss and document research results, best practices and identify the implications for further research activities that will help to solve practical problems in the sector. These may be related to production, processing, consumption, transport or other issues.

Other EIP-AGRI Brochures

EIP-AGRI Network
EIP-AGRI Service Point. How can we help you?
Innovation support services
EU funding opportunities related to innovation in agriculture, food and forestry
EIP-AGRI Focus Group Brochure
EIP-AGRI Focus Group Charter

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