

Technical Program - ISHS Symposium on Organic Greenhouse Horticulture 2016, Izmir (TR)

Pest management workshop report – April, 12, 2016

Moderator: Ellen Richter (Chamber of Agriculture North-Rhine-Westphalia - Plant Protection Service, DE)

Reporter: Mihaela Monica Dinu (Research-Development Institute for Plant Protection, RO)

Speakers:

1. Gerben Messelink (Wageningen UR Greenhouse Horticulture, NL)
Bringing science to practice: Recent developments in biocontrol science and their application in biocontrol in organic greenhouse horticulture. Needs for further development
2. Jérôme Lambion (GRAB, FR)
Role of functional biodiversity in pest management in OGH
3. Jeroen van Schelt (Koppert BV, NL)
Obstacles and solutions in pest management in organic greenhouse horticulture in practice nowadays.

Issues being discussed:

- current situation of biological control in greenhouse horticulture
- use of omnivorous/generalist predators in pest control
- training natural enemies to enhance their efficacy
- new invasive insects are expected in the near future/new pest in greenhouse horticulture

The **knowledge gaps** being felt

- frequent release of natural enemies is expensive – tools for conservation of beneficials are needed
- prevention of hyperparasitism or hyperpredation which disrupts control
- biodiversity and ecological balance inside/outside greenhouse is needed to foster natural regulation
- side-effects of (bio)pesticides and the integration into organic growing systems needs improvement

Further actions needed by **whom**

- enhance autonomy and competence of producers – training, workshops for **producers**
- knowledge dissemination (**researchers**)
- conservation methods for natural enemies inside (e.g. alternative food, “predator highways” and shelters for natural enemies) and outside greenhouses (e.g. annual flower strips as toll of functional biodiversity)(**producers**)
- rearing of natural enemies, long term reservoirs of natural enemies in situ/ex situ – banker plants, companion plants, supplementary food for natural enemies, helping the “standing army” (**researchers, biological control industry and producers**)
- management of infrastructure outside the greenhouse (**producers, policy for greenhouse horticulture**)
- adapting the greenhouse climate and light for enhanced biocontrol (**researchers, producers**)
- induced plant responses and natural enemies efficacy (**researchers**)
- identification of other natural enemies (**researchers**)

Mihaela Monica Dinu, 20 April 2016