

Program IOBC/wprs WG meeting April 21-25 2008,
Sint Michielsgestel, The Netherlands

Sunday 20 April Agenda

15:00-20:00 Registration

In front of the Atrium

20:00 Informal welcome reception

In the D-Lounge

Sponsored by The Royal Netherlands Society of Plant Pathology



Monday 21 April Agenda

07:30-8:30 Registration
(in front of the Atrium)

08:30-09:00 Opening greetings

Annie Enkegaard, convenor
Gerben Messelink, local organiser
Historical tale of our Working Group, Pierre Ramakers, Local organiser

09:00-10:30 Opening session

Moderator: Gerben Messelink **Recorder:** Pierre Ramakers

09:00 *Sjaak Bakker, Wageningen UR Greenhouse Horticulture, The Netherlands*
Developments in greenhouse horticultural production systems
09:30 *Ari van der Linden, The Greenery, The Netherlands*
Market demands for food safety: perception of a public sale company
10:00 *Felix Wäckers, Lancaster University, United Kingdom*
Food for thought: How to cater the nutritional needs of biological control agents?

10:30-11:00 Coffee/tea

11:00-12:30 New biocontrol agents

Moderator: Richard Greatrex **Recorder:** Jan Hulshof

11:00 Keynote speaker:
Maurice Sabelis, University of Amsterdam, The Netherlands
Developments in the use of predatory mites for biological pest control
11:20 *Gerben Messelink, Wageningen UR Greenhouse Horticulture, The Netherlands*
Improving thrips control by the soil-dwelling predatory mite *Macrocheles robustulus*
11:35 *Yvonne van Houten, Koppert Biological Systems, The Netherlands*
The generalist predator *Typhlodromalus limonicus* (Acari: Phytoseiidae): a potential biological control agent of thrips and whiteflies
11:50 *Suzanne Lommen, University of Leiden, The Netherlands*
Can natural flightless ladybird beetles improve biocontrol of aphids?
12:05 *Michael Parrella, College of Agricultural and Environmental Sciences Dean's Office, USA*
A preliminary predictive model for the consumption of powdery mildew by the obligate mycophage *Psyllobora vigintimaculata* (Coleoptera: Coccinellidae)
12:20 General discussion

12:30-14:00 Lunch

14:00-14:30 Student competition

- 14:00 Introduction Annie Enkegaard
14:05 Winner presentation:
Lisa Conroy, University of Guelph, Canada
Wilt-Pruf: a novel control agent for American serpentine leafminer
14:20 Discussion

14:30-16:00 Alternative food and IPM

Moderator: Irene Vänninen

Recorder: Paul van Rijn

- 14:30 Keynote speaker:
Patrick De Clercq, Ghent University, Belgium
Artificial production of arthropod biological control agents
14:55 *Jude Bennison, ADAS, United Kingdom*
Development of a grower rearing-release system for *Atheta coriaria*, for low cost biological control of ground-dwelling pest life stages
15:10 *Vanda Bueno, Federal University of Lavras, Brazil*
Potential of alternative prey in the conservation and establishment of *Orius insidiosus* (Say) (Hemiptera: Anthocoridae)
15:25 *Hans Hoogerbrugge, Koppert Biological Systems, The Netherlands*
Alternative food sources to enable establishment of *Amblyseius swirskii* (Athias-Henriot) on chrysanthemum without pest presence
15:40 Discussion

16:00 Announcements re. the tour

16:05-16:30 Coffee/tea

19:00 Dinner at "De Ruwenberg"

The dinner's wine is sponsored by Certis/BCP



Tuesday 22 April Agenda

07:30-22:00 Tour “IPM in high tech horticulture”

| 7:30 | Bus 1 | Bus 2 | Bus 3 |
|------|---------------------------------------|---|-------------------------------------|
| | Tour guide: Jeroen van Schelt | Tour guide: Anton van der Linden | Tour guide: Juliette Pijnakker |
| | blackberry & redcurrant Veghel (1) | raspberry, Veghel (2) | strawberry, Drunen (3) |
| | raspberry, Veghel (2) | chrysanthemum, Made (4) (Coffee) | chrysanthemum, Made (4) (Coffee) |
| | chrysanthemum, Made (4) (Coffee) | Research in tomato, cucumber, sweet pepper and roses, Bleiswijk (5) | anthurium, Bleiswijk (6) |

12:00-13:00 Lunch at Wageningen UR Greenhouse Horticulture

*sponsored by the
International Biocontrol Manufacturers Association*



| | | | |
|--|---|------------------------------------|---|
| | Research in tomato, cucumber, sweet pepper and roses, Bleiswijk (5) | sweet pepper, Bleiswijk (7) | Research in tomato, cucumber, sweet pepper and roses, Bleiswijk (5) |
| | roses, Waddinxveen (9) (Coffee) | anthurium, Bleiswijk (6) | sweet pepper, Bleiswijk (7) (Coffee) |
| | strawberry, Moerkapelle (10) | roses, Waddinxveen (9) (Coffee) | gerbera, Zevenhuizen (8) |
| | sweet pepper, Bleiswijk (7) | strawberry, Moerkapelle (10) | roses, Waddinxveen (9) |

18:00 Dinner at “Taste of Asia” in Zoetermeer

Sponsored by Syngenta Bioline



Wednesday 23 April Agenda

09:00-10:30 Biological and integrated control of thrips

Moderator: Rosemarije Buitenhuis

Recorder: Hendrik Brødsgaard

- 09:00 *Yannie Trottin-Caudal, Ctilf Balandran, France*
Experimental studies on *Typhlodromips (Amblyseius) swirskii* in greenhouse cucumbers
- 09:20 *Juliette Pijnakker, Wageningen UR Greenhouse Horticulture, The Netherlands*
Predatory mites for biocontrol of western flower thrips, *Frankliniella occidentalis* (Pergande), in cut roses
- 09:40 *Andrew Chow, Texas A&M University, USA*
Control of *Frankliniella occidentalis* (Thysanoptera: Thripidae) on greenhouse roses with *Amblyseius (Typhlodromips) swirskii* (Athias-Henriot) (Acari: Phytoseiidae) and *Orius insidiosus* (Hemiptera: Anthocoridae)
- 10:00 *Vanda Bueno, Federal University of Lavras, Brazil*
Storage of adults of two species of Orius (Hemiptera: Anthocoridae) at low temperature
- 10:20 Discussion
-

10:30-11:00 Coffee/tea

11:00-12:30 Biological and integrated control of whiteflies, aphids and leafminers

Moderator: Reinhard Albert

Recorder: Sylvia Blümel

- 11:00 *Graeme Murphy, Ontario Ministry of Agriculture and Food, Canada*
Biological control of whitefly in poinsettia in Ontario, Canada
- 11:15 *Nina Svae Johansen, Bioforsk Plantehelse, the Norwegian Institute of Agricultural and Environmental Research, Norway*
Influence of continuous lighting on the biology of *Trialeurodes vaporariorum* (Homoptera: Aleyrodidae)
- 11:30 *Doo Hyung Lee, Cornell University USA*
The potential of eggplant as a trap crop for the management of *Trialeurodes vaporariorum* (Homoptera: Aleyrodidae) on poinsettia
- 11:45 *Valiollah Baniameri, PPDR, Iran*
Study of the efficacy of different concentrations of insecticidal soap, in comparison oxydemeton-methyl (Metasystox) to control *Aphis gossypii* in greenhouse cucumber
- 12:00 *Guido Sterk, Biobest NV, Belgium*
Side-effects of pesticides on the predators and parasitoids of whiteflies and aphids
- 12:15 Discussion
-

12:30-14:00 Lunch

14:00-15:30 Biological and integrated control of mites

Moderator: Eric Palevsky

Recorder: Clare Sampson

- 14:00 *Adam Root, BCP Ltd, United Kingdom*
Efficacy of Eradicoat and Eradicoat T against *Tetranychus urticae* (Koch), their toxicity to *Phytoseiulus persimilis* (Athias-Henriot) and their role in integrated pest management programs
- 14:22 *Sylvia Blümel, Institute for Plant Health, AGES, Austria*
Effects of trade dependent transport conditions and storage duration on the biological fitness of *Phytoseiulus persimilis* with different origin – interim result
- 14:44 *Neda Kheradpir, Azad University, Iran*
Occurrence and population trends of spider mite specialist predators under field and greenhouse conditions
- 15:06 *Eric Palevsky, ARO, Israel*
Complex interactions between *Rhizoglyphus robini* and *Fusarium oxysporum*: implications on onion pest management
-

- 15:30 Announcements
15:35-16:00 Coffee/tea
16:00 Group photo in front of the Ruwenberg
-

16:15-17:45 Workshop photographing and filming insects and mites

Moderator: Jeroen van Schelt

- 16:15 *Urs Wyss, Intitute of Phytopathology, Kiel University Germany*
How to make movies of insects and mites?
- 17:00 *Hans Smid & Nina Fatouros, Bugs in the picture*
How to make insect macro's using a digital camera?
-

18:30-19:00 WPRS Business Meeting

- 18:30 New convenor – presentation and election
18:35 Next meeting place – presentation and election
18:40 *Mohamed Besri, IOBC/WPRS council member; WG liaison officer*
About IOBC-wprs, including general assembly
Questions, comments
-

- 19:00 Dinner at “De Ruwenberg”
The dinner's wine is sponsored by Certis/BCP



Thursday 24 April Agenda

09:00-10:30 IPM in ornamentals

Moderator: Michael Parrella

Recorder: Juliette Pijnakker

- 09:00 *Juliette Pijnakker, Wageningen UR Greenhouse Horticulture, The Netherlands*
Adoption of IPM by rose growers
- 09:15 *Martin Zijderwijk, Syngenta Bioline, The Netherlands*
Creating crop solutions in chrysanthemums by using combined strengths of beneficials and chemicals
- 09:30 *Jeroen van Schelt, Koppert Biological Systems, The Netherlands*
Releasing beneficials with an airblower, a new wind in biocontrol
- 09:45 *Irene Vänninen, Agrifood Research Finland MTT, Finland*
Knowledge transfer of IPM to Finnish ornamental growers in 2004-2007
- 10:00 Discussion
-

10:30-11:00 Coffee/tea

11:00-12:30 Pest management in organic production

Moderator: Rob Jacobson

Recorder: Leigh Pilkington

- 11:00 Introduction by the moderator
- 11:05 *Rob Jacobson, RJC Ltd, United Kingdom*
Towards a robust IPM programme for organic tomato
- 11:20 *Michael Parrella, College of Agricultural and Environmental Sciences Dean's Office USA*
Synergistic interaction between parasitoids and sterile insects
- 11:35 Discussion – theme
“Novel products / techniques to support biologicals in organic production”
- 11:45 *Pierre Ramakers, Wageningen UR Greenhouse Horticulture, The Netherlands*
Strategies for aphid control in organically grown sweet pepper in the Netherlands
- 12:00 *Barbro Nedstam, Swedish Board of Agriculture, Sweden*
Some pest problems and solutions in Swedish organic greenhouse production
- 12:15 Discussion – theme
“Is there scope for marketing standard intermediate between organic and ICM?”
- 12:25 Summarising discussion
-

12:30-12:35 Announcements

12:35-1330 Lunch

Please note that we have two parallel sessions!

13:30-15:00 **Food web interactions and IPM**

(Atrium)

Moderator: Maurice Sabelis

Recorder: Cynthia Scott-Dupree

- 13:30 *John Sanderson, Cornell University USA*
Intraguild predation among biological control agents used in greenhouse floriculture crops: a preliminary review
- 13:45 *Rosemarije Buitenhuis, University of Guelph, Canada*
Intra-guild predation between *Amblyseius swirskii* (Athias-Henriot) and *Neoseiulus cucumeris* (Oudemans) (Acari: Phytoseiidae)
- 14:00 *Gerben Messelink, Wageningen UR Greenhouse Horticulture, The Netherlands*
Do whiteflies help controlling thrips?
- 14:15 *Roos van Maanen, University of Amsterdam, The Netherlands*
Prey preference of the generalist predator *Amblyseius swirskii*
- 14:30 Discussion
-

13:30-15:00 **Microbial control of pests**

(amphitheatre)

Moderator: Willem Ravensberg

Recorder: Les Shipp

- 13:30 Introduction by the moderator
- 13:35 Keynote speaker:
Lance Osborne, University of Florida, USA
The Use of Entomopathogenic Fungi in Protected Culture
- 13:55 *Les Shipp, Agriculture and Agri-Food Canada, Canada*
Using bees to disseminate multiple fungal agents for insect pest
- 14:10 *Marja-Leena Lahdenperä, Verdera Oy, Finland.*
Application methods for commercial biofungicides in greenhouses
- 14:25 *Willem Ravensberg, Koppert Biological Systems, The Netherlands*
The lactoperoxidase-system as a novel, natural anti-microbial product for use as an agricultural fungicide
- 14:40 Discussion
-

15:00-15:15 Departure to Den Bosch

15:15- 22:30

At leisure in Den Bosch

15:15 Departure by bus
16:00 Coffee and “Bosche bol”
Boat trip
City walk

18:00 Dinner at Central Hotel in the 14th century cellar, “de Hoofdwacht”
Some music will be presentend during dinner by the group “Mirasol”

*This dinner is sponsored by
Koppert Biological Systems*

KOPPERT
BIOLOGICAL SYSTEMS



Friday, 25 April Agenda

08:30-12:00 IPM in Outdoor and Hardy Nursery Stocks

Moderator: Jude Bennison

Recorder: Neil Heyler

- 08:30 *Martin Hommes, BBA, Germany*
Plant protection in organic nursery production in Germany
- 08:50 *Michelle Nakano, Kwantlen University College, Canada*
Bug gardens for education and research in conservation biological control
- 09:10 *Brian Spencer, Applied Bio-nomics Ltd. Canada*
Commercial application of beneficial insects in Canadian outdoor ornamental nurseries
- 09:30 *Anton van der Linden, Wageningen UR Greenhouse Horticulture, The Netherlands*
1. *Silena dioca* as a reservoir and hibernation site for predatory mites
2. Natural occurrence and establishment of predatory mites on nurseries for amenity trees
- 10:00-10:30 Coffee/tea
- 10:30 *Robin Rosetta, Oregon State University, USA*
Development and implementation of biological control of spider mites in Oregon nurseries
- 10:50 *Mario Lanthier, CropHealth Advising & Research Canada*
1. Status of IPM practices in outdoor nursery production in Canada
2. Prospects for biological control in outdoor nursery production in Canada
- 11:30 General discussion and future plans
-

12:00-12:30 Closing session

Annie Enkegaard, University of Aarhus, Faculty of Agricultural Sciences Denmark
Wrap-up of conference

Announcements if any

Concluding remarks

12:30-14:00 Lunch and departure

A Shuttle service is offered for free from De Ruwenberg to the railway station in Den Bosch
