



**IOBC / WPRS  
OILB / SROP**

# PROFILE

**Internal IOBC/wprs Newsletter issued by the Publication Commission**

<http://www.iobc-wprs.org>

**International Organization for Biological and Integrated Control of  
Noxious Animals and Plants – West Palearctic Regional Section**

**ISSUE Nr. 46**

**January 2009**

## **In this Issue**

The Presidents Page .....	2
IOBC/wprs Commissions, Working Groups (including Sub Groups), Study Groups .....	3
IOBC/wprs Officers and their Addresses .....	5
“Semio-chemicals without Borders” Joint Conference of the Pheromone Groups of IOBC/WPRS and IOBC/EPRS”, November 2009 .....	10
SOFTPEST: a website on the use of pesticides & biocontrol agents in soft fruit.....	11
WG “Integrated Protection in Viticulture” – Next meeting .....	12
WG “Integrated Control in Protected Crops, Mediterranean Climate” – Next meeting.....	13
WG “Integrated Protection of Olive Crops” – Next meeting .....	14
WG “Insect Pathogens and Insect Parasitic Nematodes” – Next meeting.....	15
WG “GMO’s in Integrated Plant Production” – Next meeting.....	16
WG “Multitrophic Interactions in Soil” – Next meeting .....	16
WG “Induced Resistance in Plants against Insects and Diseases” – Next meeting .....	18
WG “Integrated Protection of Stored Products” – Next meeting .....	18
WG “Integrated Control in Olive Crops” – Next meeting .....	19
Minutes of the IOBC/WPRS Executive Committee Meeting, Zürich, June 12-14, 2008 .....	20
IOBC/Global: New Executive Committee 2008 – 2012.....	22
World-wide database of insect cultures available for distribution.....	22
General Assembly of IOBC/wprs, Agadir Morocco, September 30th to October 3rd 2009.....	23
New IOBC/wprs Publications: Bulletins, Including Contents.....	23
Other interesting publications brought to attention of Profile .....	43
Time-Table of Forthcoming Events.....	44
Study Group “Benefits and risks associated with exotic biological control agents” – 1st meeting	46
Next issue of Profile (No. 47) .....	48

## The Presidents Page

Dear reader,

Genetically modified crops (GMC) were grown in 2007 on over 114 million hectares worldwide (which is about 7-8 % of all agricultural land), and there is a clear trend that the total surface of GMC will continue to increase. After the first commercial planting of insect resistant *Bt* maize in the USA 13 years ago, the total area planted with the two only *Bt* crops, cotton and maize, is now about 35 million hectares. It is a fact that China, India, Brazil and other countries of importance for food and feed production have adopted GMC and it is to be expected that these countries will soon enlarge their GMC production with commercially grown *Bt* rice and *Bt* sugar cane, the two most important crops in the world for staple food and energy production. Europe still struggles with GMC, and it may continue doing so as long as member countries of the EU have opposed positions about risks and benefits, and as long as decisions in many countries are mainly policy driven and not science based. As a scientific society, IOBC should be concerned about the misuse of scientific arguments by politicians and lobbyists for their own purposes.

IOBC's viewpoints towards GM plants have been formulated as early as 1998 by the former IOBC-Global President Jeff Waage (Global Newsletter 67) and they were reaffirmed by Joop van Lenteren in 2005 (Global Newsletter 77). I fully share their views and messages. One of the major issues IOBC should advocate is that GMC need to be treated as components of integrated pest management (IPM) systems, and scientists working in these systems must be involved to make best use of the potential of GM plants. GMC will not be sustainable if they are used as "stand alone solutions" to crop protection problems, and in this context GM technology is no different from chemical pesticides or resistant crop varieties bred with classical technologies. Other areas deserving research is the overall impact of GMC on the natural enemies of pests and possible effects on biological control functions, their effect on changing the pest complex of crops and their overall impact and value in IPM systems. IOBC is in a unique position to assess potential effects and impacts of new GM plants and to investigate useful applications in IPM. IOBC is recognized worldwide as a competent and impartial organization of experts for biological control and IPM, and as such, IOBC can help scattered research initiatives to communicate, to share information, to develop common methods and approaches to form links between researchers in different areas of the world and to strengthen public and private partnership. The WPRS working group "Genetically modified plants in IPM" which is active since 2002 offers an excellent platform to these ends and brings together researchers, regulators and scientists of the private sector.

There is increasing evidence that health and environmental effects of GMC that are commercially grown today are no different from non-GMC. A large body of information coming out recently confirms previous findings that, for example, biological control functions of natural enemies are not adversely affected by *Bt* crops and higher population densities of natural enemies are often found compared to insecticide treated crops. Other benefits that are well documented now, such as less insecticide use in *Bt* crops, less toxic effects on farm workers (especially in developing countries) and higher economic benefits for the farmer using GMC should encourage biocontrol scientists and IPM specialists to have a closer look to future GMC to realise their full potential in biological control, IPM and sustainable agriculture. The widespread application of *Bt* crops in large monocultures is certainly not the way of sustaining the long term use of GM *Bt* plants because of potential resistance build-up of pests and related landscape effects. New GM plants with multiple *Bt* genes inserted may delay such problems but, their beneficial potential can be realised by farmers only if applied in IPM systems. IOBC and public research scientists should keep an impartial, objective and science-driven position to evaluate potential benefits and risks of GM plants and raise their voice against distorted and dogmatic views of lobbyists and policy makers that misuse science to their own profit.

Franz Bigler

# IOBC/ WPRS

## Commissions, Working groups, Study groups

December, 2008

Commissions	Convenor	Liaison
Publications	BATHON H. / TIRRY L.	–
Determination and identification of entomophagous insects and insect pathogens	BAUR H. / KLEESPIES R.	–
Guidelines for integrated production	AVILLA J.	ALBAJES R.
Harmonized regulation of biological control agents	BALE J.	BIGLER F.

### Working groups and Sub Groups (SG)

Integrated protection of fruit crops	IORIATTI C.	SIGSGAARD L.
SG <i>soft fruits</i>	LINDER CHR.	
SG <i>pome fruit arthropods</i>	Escudero-Colomar A.	
SG <i>IFP guidelines</i>	MALAVOLTA C.	
SG <i>pome fruit diseases</i>	STENSVAND A.	
SG <i>stone fruits</i>	MOLINARI F.	
Pesticides and beneficial organisms	JANSEN J.P.	VOGT H.
Breeding for plant resistance to pests and diseases	BIRCH N.	TIRRY L.
Pheromones and other semiochemicals in integrated production	TASIN M.	VOGT H.
Multitrophic interactions in soil	STEINBERG C.	WHIPPS J.
Integrated protection in viticulture	CALONNEC A. / LUCCHI A.	BLUEMEL S.
SG <i>insects</i>	THIÉRY D. / MAIXNER M.	
SG <i>fungus, bacterial and physiological diseases</i>	GESSLER C. / KASSEMAYER H.-H.	
SG <i>integrated pest management</i>	ZAHAVI T. / DUSO C.	
Integrated protection in oilseed crops	KOOPMANN B.	EKBOM B.
SG <i>pathology</i>	KOOPMANN B.	
SG <i>entomology</i>	COOK S.	
Integrated protection of field vegetables	COLLIER R.	VIEIRA M.M.

Integrated control in protected crops, temperate climate	VANNINEN I.	BESRI M.
Integrated control in protected crops, Mediterranean climate	CASTAÑÉ C.	WEINTRAUB P.
Insect pathogens and entomoparasitic nematodes	EHLERS R.	HUBER J.
<i>SG fungi</i>	TKACZUK C.	
<i>SG entomoparasitic nematodes</i>	GLAZER I.	
<i>SG virus</i>	LOPEZ-FERBER M.	
<i>SG soil insect pests</i>	ENKERLI J.	
<i>SG slugs and snails</i>	SYMONDSON W.	
Integrated control of plant pathogens	PERTOT I. / GESSLER C.	NICOT P.
Integrated protection in oak forest	SOUSA E.M.	VILLEMANT C.
<i>SG fungi</i>	FRANCESCHINI A.	
<i>SG forest management</i>	BENJAMAA M.	
Integrated protection of stored products	ATHANASSIOU C.G.	WEINTRAUB P.
Integrated protection of olive crops	KALAITZAKI A.	WEINTRAUB P.
Integrated protection of citrus crops	GARCIA MARI F.	BESRI M.
Induced resistance in plants against insects and diseases	SCHMITT A.	HUBER J.
GMO's in integrated plant production	ROMEIS J.	BIGLER F.
Landscape management for functional biodiversity	HOLLAND J. / GEROWITT B.	EKBOM B.
Integrated control of mite pests	PALEVSKI E.	BLUEMEL S.

### Study group

Benefits and risks associated with exotic biological control agents	ROY H.	SIGSGAARD L.
---	--------	--------------

## IOBC/wprs Officers and their Addresses

All Officers are asked to send corrections and additions to this compilation of addresses to the editor of *Profile* and to the treasurer.

### 1 – Executive Committee

*Bigler*, Dr. Franz (President), Federal Department of Economic Affairs DEA, Agroscope Reckenholz-Tänikon Research Station ART, Biosafety Group, Reckenholzstrasse 191, CH-8046 Zürich (SWITZERLAND), Tel: +41-44-3777111, Fax: +41-44-3777201, e-mail: [franz.bigler@art.admin.ch](mailto:franz.bigler@art.admin.ch), URL: [www.reckenholz.ch](http://www.reckenholz.ch)

*Blümel*, Dr. Sylvia (Vice-President), Austrian Agency for Health and Food Safety (AGES), Institute of Plant Health (PGH), Spargelfeldstrasse 191, P.O.Box 400, A-1126 Wien (AUSTRIA), Tel: +43-50555-33300, Fax: +43-50555-33303, e-mail: [sylvia.bluemel@ages.at](mailto:sylvia.bluemel@ages.at)

*Tirry*, Prof. Dr. Luc (Vice-President), Ghent University, Laboratory of Agrozoology, Department of Crop Protection, Coupure Links 653, B-9000 Gent (BELGIUM), Tel: +32-9-2646152, Fax: +32-9-2646239, e-mail: [luc.tirry@ugent.be](mailto:luc.tirry@ugent.be)

*Vogt*, Dr. Heidrun (Vice-President), Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Plant Protection in Fruit Crops and Viticulture, Schwabenheimer Strasse 101, D-69221 Dossenheim (GERMANY), Tel: +49-6221-8680530, Fax: +49-6221-8680515, e-mail: [heidrun.vogt@jki.bund.de](mailto:heidrun.vogt@jki.bund.de)

*Nicot*, Dr. Philippe C. (Secretary-General), INRA, Unité de Pathologie Végétale, Domaine St. Maurice, B.P. 94, F-84143 Montfavet Cedex (FRANCE), Tel: +33-432722841, Fax: +33-432722842, e-mail: [nicot@avignon.inra.fr](mailto:nicot@avignon.inra.fr)

*Albajes*, Prof. Dr. Ramon (Treasurer), Universitat de Lleida, Centre UdL-IRTA, Rovira Roure, 177, E-25006 Lleida (SPAIN), Tel: +34-973-702571 Fax: +34-973-238301, e-mail: [ramon.albajes@irta.es](mailto:ramon.albajes@irta.es)

### 2 – Council

*Besri*, Prof. Dr. Mohamed, Institut Agronomique et Vétérinaire Hassan II, Département de Phytopathologie, BP 6202, Rabat-Instituts (Marocco), Tel: +212-3777-8364, Fax: +212-3777-8364, e-mail: [m.besri@iav.ac.ma](mailto:m.besri@iav.ac.ma)

*Ekbom*, Prof. Barbara, Swedish University of Agricultural Sciences, Department of Entomology, P.O.Box 7044, SE-750 07 Uppsala (SWEDEN), Tel: +46-1867-2625, Fax: +46-1867-2890, e-mail: [barbara.ekbom@entom.slu.se](mailto:barbara.ekbom@entom.slu.se)

*Huber*, Dr. Jürg, Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Biological Control, Heinrichstrasse 243, D-64287 Darmstadt (GERMANY), Tel: +49-6151-407220, Fax: +49-6151-407290, e-mail: [juerg.huber@jki.bund.de](mailto:juerg.huber@jki.bund.de)

*Sigsgaard*, Dr. Lene, Royal Veterinary and Agricultural University, Department of Ecology - Zoological Group, Thorvaldsensvej 40, DK-1871 Frederiksberg C (DENMARK), Tel: +45-35282674, Fax: +45-35282670, e-mail: [les@kvl.dk](mailto:les@kvl.dk)

Weintraub, Dr. Phyllis G., Gilat Research Station, Entomology Unit, D.G. Negev 85280 (ISRAEL), Tel: +972-8-9928678, Fax: +972-8-9926485, e-mail: [phyllisw@volcani.agri.gov.il](mailto:phyllisw@volcani.agri.gov.il)

Whipps, Prof. Dr. John, Warwick HRI, University of Warwick, Wellesbourne, Warwick CV35 9EF (UK), Tel: +44-24-76575084, Fax: +44-24-76574500, e-mail: [john.whipps@warwick.ac.uk](mailto:john.whipps@warwick.ac.uk)

### Deputy Members

Vieira, Dr. Maria Margarida, Direcção-Geral de Protecção das Culturas, Quinta do Marquês, P-2780-155 Oeiras (PORTUGAL), Tel: +351-21-4464000, Fax: +351-21-4420616, e-mail: [margaridav@dgpc.min-agricultura.pt](mailto:margaridav@dgpc.min-agricultura.pt)

Villemant, Dr. Claire, Museum National d'Histoire Naturelle, USM 601, UMR 5202 CNRS-MNHN, CP 50, Entomologie, 45, rue Buffon, F-75005 Paris (FRANCE), Tel: +33-1-40793841, Fax: +33-1-40793699, e-mail: [villeman@mnhn.fr](mailto:villeman@mnhn.fr)

### 3 – Auditing Committee

Adler, Dr. Cornel, Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Ecological Chemistry, Plant Analytics and Stored Product Protection, Königin-Luise-Strasse 19, D-14195 Berlin (Germany), Tel: +49-30-83042502, Fax: +49-30-83042503, e-mail: [cornel.adler@jki.bund.de](mailto:cornel.adler@jki.bund.de), <http://www.bba.de>

Freuler, Dr. Jost A., Station Fédérale de Recherche en Production végétale de Changins, Route de Duillier, Case postale 254, CH-1260 Nyon (Switzerland), Tel: +41-22-3634383, Fax: +41-22-3634394, e-mail: [jost.freuler@bluewin.ch](mailto:jost.freuler@bluewin.ch)

Rezapanah, Dr. Mohammadreza, Biocontrol Control Research Dept, Plant Pests and Diseases Research Institute (PPDRI), Agricultural Research and Education Organization (AREO), P.O. Box: 19395-1454, Velenjak, Tehran (Iran), Tel: +98-21-2420224 / +98-21-2420225, Fax: +98-21-2403691, e-mail: [rezapana@yahoo.com](mailto:rezapana@yahoo.com), <http://www.areeo.or.ir>

Royle, Dr. David J., East End Stable, Nowhere Lane, Nailsea, Bristol BS48 2PT (UK), Tel: +44-12-75857197

### 4 – Convenors

#### of the Commissions, Working Groups (their Sub Groups), and Study Groups

Athanassiou, Prof. Christos G., Laboratory of Agricultural Zoology and Entomology, Agricultural University of Athens, 75 Iera Odos, 11855, Athens (GREECE), Tel: +30-2105294582, Fax: +302105294577, e-mail: [athanas@aua.gr](mailto:athanas@aua.gr), [xathanas@uth.gr](mailto:xathanas@uth.gr)

Avilla, Dr. Jesús, University of Lleida, Centre UdL-IRTA, Rovira Roure 191, E-25198 Lleida (SPAIN), Tel: +34-973-702581, Fax: +34-973-238301, e-mail: [jesus.avilla@irta.es](mailto:jesus.avilla@irta.es)

Bale, Prof. Dr. Jeff, School of Biosciences, University of Birmingham, Edgbaston, Birmingham, B15 2TT (UK), Tel: +44-121-414 5908, e-mail: [j.s.bale@bham.ac.uk](mailto:j.s.bale@bham.ac.uk)

Bathon, Dr. Horst, Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Biological Control, Heinrichstrasse 243, D-64287 Darmstadt (GERMANY), Tel: +49-6151-407225, Fax: +49-6151-407290, e-mail: [horst.bathon@jki.bund.de](mailto:horst.bathon@jki.bund.de)

*Baur*, Hannes, Natural History Museum, Department of Invertebrates, Bernastrasse 15, CH-3005 Bern (SWITZERLAND), Tel: +41-31-3507264, Fax: +41-31-3507499, e-mail: [hannes.baur@nmbe.ch](mailto:hannes.baur@nmbe.ch), <http://www.nmbe.ch>

*Ben Jamaâ*, Mohamed, Institut National de Recherches en Génie Rural, Eaux et Forêts, BP 10, 2080 Ariana-Tunis (TUNISIA), e-mail: [benjamaa.lahbib@iresa.agrinet.tn](mailto:benjamaa.lahbib@iresa.agrinet.tn)

*Birch*, Dr. A. Nick, Scottish Crop Research Institute, Invergowrie, Dundee DD2 5DA (SCOTLAND, UK), Tel: +44-1382-562731, Fax: +44-1382-562426, e-mail: [n.birch@scri.sari.ac.uk](mailto:n.birch@scri.sari.ac.uk), <http://www.scri.sari.ac.uk>

*Calonnec*, Agnès, INRA Bordeaux, UMR INRA-ENITA, Santé Végétale, BP 81, 33883 Villenave d'Ornon cedex (FRANCE), Tel: + 33-5-57122611, Fax: +33-557122621 e-mail: [Agnes.Calonnec@bordeaux.inra.fr](mailto:Agnes.Calonnec@bordeaux.inra.fr)

*Castañé*, Dr. Cristina, IRTA, Centre de Cabrils, Carretera de Cabrils s/n, E-08348 Cabrils (Barcelona) (SPAIN), Tel: +34-93-7507511, Fax: +34-93-7533954, e-mail: [cristina.castane@irta.es](mailto:cristina.castane@irta.es)

*Collier*, Dr. Rosemary, Warwick HRI, The University of Warwick, Wellesbourne, Warwick, CV35 9EF (UNITED KINGDOM), e-mail: [rosemary.collier@warwick.ac.uk](mailto:rosemary.collier@warwick.ac.uk)

*Cook*, Samantha, Plant and Invertebrate Ecology Division, Rothamsted Research, Harpenden, Hertfordshire, AL5 2JQ (UK), Tel: + 44-1582-763133, e-mail: [sam.cook@bbsrc.ac.uk](mailto:sam.cook@bbsrc.ac.uk), Web: <http://www.rothamsted.bbsrc.ac.uk>

*Cross*, Dr. Jerry, East Malling Research, New Road, East Malling, Kent ME19 6BJ (United Kingdom), Tel: +44-1732-8430833, Fax: +44-1732-849067, e-mail: [jerry.cross@emr.ac.uk](mailto:jerry.cross@emr.ac.uk)

*Duso*, Prof. Dr. Carlo, Università degli studi di Padova, Dipartimento di Agronomia Ambientale e Produzioni Vegetali, Viale dell'Università, 16, 35020 Legnaro (Italy), e-mail: [carlo.duso@unipd.it](mailto:carlo.duso@unipd.it)

*Ehlers*, Prof. Dr. Ralf-Udo, Institute for Phytopathology, Christian-Albrechts-University, Dept. Biotechnology & Biological Control, Hermann-Rodewald-Str. 9, D-24118 Kiel (GERMANY), Tel: +49-431-880-4864, Fax: +49-431-880-1583, e-mail: [ehlers@biotec.uni-kiel.de](mailto:ehlers@biotec.uni-kiel.de)

*Enkerli*, Dr. Jürg, Molecular Ecology, Agroscope Reckenholz-Tänikon Research Station ART, Reckenholzstrasse 191, 8046 Zürich (SWITZERLAND), Tel: +41-44-377-7206, Fax: +41-44-377-7201, e-mail: [juerg.enkerli@art.admin.ch](mailto:juerg.enkerli@art.admin.ch), <http://www.art.admin.ch>

*Escudero-Colomar*, Dra. Adriana, Crop Protection (Entomology), IRTA, Agricultural Experiment Station Mas Badia, 17134 La Tallada d'Empordà (Girona) (SPAIN), Tel: +34-972-780275, Fax: +34 972 780517 e-mail: [adriana.escudero@irta.es](mailto:adriana.escudero@irta.es)

*Franceschini*, Dr. Antonio, Dipartimento di Protezione delle Piante, Sezione di Patologia vegetale, Università degli Studi, Facoltà di Agraria, Via E. de Nicola, 9, 07100 Sassari (ITALY), e-mail: [afran@uniss.it](mailto:afran@uniss.it)

*Garcia-Marí*, Dr. Ferran, Universitat Politècnica de València, Departament Ecosistemes Agroforestals, Entomologia E.T.S. Enginyers Agrònoms, Camí de Vera 14, E-46022 València (SPAIN), Tel: +34-638-79250, Fax: +34-638-79269, e-mail: [fgarciam@eaf.upv.es](mailto:fgarciam@eaf.upv.es)

*Gerowitt*, Dr. Bärbel, Universität Rostock, Agrar- und Umweltwissenschaftliche Fakultät, Institut für Landnutzung, Phytomedizin, 18051 Rostock (Germany) Tel: +44-381-498 3160, Fax: +44-381-498 3162, e-mail: [baerbel.gerowitt@uni-rostock.de](mailto:baerbel.gerowitt@uni-rostock.de)

**Gessler**, Prof. Dr. Cesare, Phytopathology, Institute of integrative Biology, Swiss Federal Institute of Technology, ETH Zentrum, LFW C 15, Universitätstrasse 2, CH-8092 ETH-Zurich (Switzerland), Tel: +41-44-632 38 71, Fax: +41-44-632 15 72, e-mail: [cesare.gessler@agrl.ethz.ch](mailto:cesare.gessler@agrl.ethz.ch), URL: [www.path.ethz.ch](http://www.path.ethz.ch)

**Glazer**, Dr. Itamar, Agricultural Research Organization, The Volcani Center, P.O.Box 6, Bet Dagan 50250 (ISRAEL), Tel: +972-3-9683334, Fax: +972-3-9604180, e-mail: [glazerit@volcani.agri.gov.il](mailto:glazerit@volcani.agri.gov.il)

**Holland**, John, Game & Wildlife Conservation Trust, Fordingbridge, Hampshire, SP6 1EF (U.K.), Tel: +44 1425 651035, Fax: +44 1425 651026, e-mail: [jholland@gct.org.uk](mailto:jholland@gct.org.uk), URL: [www.gct.org.uk](http://www.gct.org.uk)

**Ioriatti**, Dr. Claudio, Istituto Agrario San Michele all'Adige, Via Edmondo Mach, 1, 38010 S. Michele all'Adige (TN) (ITALY), Tel: ++39-0461-615111, Fax: ++39-0461-650872, e-mail: [claudio.ioriatti@iasma.it](mailto:claudio.ioriatti@iasma.it)

**Jansen**, Jean Pierre, Department of Biological control and Plant genetic resources, Walloon Agricultural Research Centre, Chemin de Liroux 2, 5030 Gembloux (BELGIUM), Tel: +32-(0)81-62.56.83, Fax: +32-(0)81-62.56.89, e-mail: [labecotox@cra.wallonie.be](mailto:labecotox@cra.wallonie.be)

**Kalaitzaki**, Dr. Argyro, National Agricultural Research Foundation, Institute of Olive Tree and Subtropical Plants, Laboratory of Entomology, Agrokipio, G-73100 Chania (GREECE), Tel: +30-28210-83449, Fax: +30-28210-93963, e-mail: [akalaitzaki@nagref-cha.gr](mailto:akalaitzaki@nagref-cha.gr), [argkalaitzaki@gmail.com](mailto:argkalaitzaki@gmail.com)

**Kassemeyer**, Dr. Hanns-Heinz, Dept. Biology, Plant Pathology & Plant Protection, Staatliches Weinbauinstitut, Merzhauser Strasse 119, D-79100 Freiburg im Breisgau (GERMANY), Tel: +49-761-40165 30, Fax: +49-761-40165 70, e-mail: [hanns-heinz.kassemeyer@wbi.bwl.de](mailto:hanns-heinz.kassemeyer@wbi.bwl.de), URL: [www.wbi-freiburg.de](http://www.wbi-freiburg.de)

**Kleespies**, Dr. Regina, Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Biological Control, Heinrichstrasse 243, 64287 Darmstadt (GERMANY), Tel: +49-6151-407-226, Fax: +49-6151-407290, e-mail: [regina.kleespies@jki.bund.de](mailto:regina.kleespies@jki.bund.de)

**Koopman**, Dr. Birger, University of Göttingen, Department of Crop Sciences, Division of Plant Pathology and Crop Protection, Grisebachstr. 6, D-37077 Göttingen (GERMANY), Tel: +49-551-393776, Fax: +49-551-394187, e-mail: [bkoopma@gwdg.de](mailto:bkoopma@gwdg.de)

**Linder**, Christian, Agroscope, RAC Changins, Route de Duillier, CP 1012, CH-1260 Nyon 1 (SWITZERLAND), Tel: +41-22-3634389, Fax: +41-22-3621325, e-mail: [christian.linder@rac.admin.ch](mailto:christian.linder@rac.admin.ch)

**Lopez-Ferber**, Dr. Miguel, LGEI, Industrial Environment Engineering Center, Ecole des Mines d'Alès, 6 avenue de Clavières, F-30319 Alès Cedex (FRANCE), Tel: +33-4-66782704, Fax: +33-4-66782701, e-mail: [miguel.lopez-ferber@ema.fr](mailto:miguel.lopez-ferber@ema.fr)

**Lucchi**, Andrea, Dip. Coltivazione e Difesa delle Specie Legnose, Sez. Entomologia agraria, Via San Michele degli Scalzi 2, I-56124 Pisa (ITALY), Tel: +39-050.57.15.59, Fax: +39-050.59.84.78, e-mail: [alucchi@agr.unipi.it](mailto:alucchi@agr.unipi.it), URL: <http://utenti.lycos.it/lucchi>

**Malavolta**, Dr. Carlo, Servizio Produzioni Vegetali, Viale Silvani, 6, I-40122 Bologna (ITALY), Tel: +39-051-284654, Fax: +39-051-284337, e-mail: [cmalavolta@regione.emilia-romagna.it](mailto:cmalavolta@regione.emilia-romagna.it)

**Maixner**, Dr. Michael, Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Plant Protection in Fruit Crops and Viticulture, Brüningstr. 84, D-54470 Bernkastel-Kues (GERMANY), Tel: +49-6531-9718, Fax: +49-6531-4936, e-mail: [michael.maixner@jki.bund.de](mailto:michael.maixner@jki.bund.de)



*Molinari*, Prof. Fabio, Istituto di Entomologia e Patologia Vegetale, Università Cattolica del Sacro Cuore, Via Emilia Parmense, 84, 29100 Piacenza (ITALY), Tel: +39-0523-599236, Fax: +39-0523-599235, e-mail: [fabio.molinari@unicatt.it](mailto:fabio.molinari@unicatt.it)

*Palevsky*, Dr. Eric, Department of Entomology, Neve Ya'ar Research Center, The Agricultural Research Organization of Israel, Ministry of Agriculture, P.O.Box 1021, Ramat Yishay 30095, (ISRAEL), Tel: +972-4-9539546, mobile: +972-056-220111, Fax: +972-4-9836936 e-mail: [palevsky@volcani.agri.gov.il](mailto:palevsky@volcani.agri.gov.il), [palevsky@int.gov.il](mailto:palevsky@int.gov.il)

*Pertot*, Ilaria, Fondazione Edmund Mach, FEM-IASMA, Plant Protection Department, EFP Research Unit, via Mach 1, S. Michele all'Adige, 38010 TN (ITALY), Tel: +39 0461 615 515, Fax: +39 0461 650 872, e-mail: [ilaria.pertot@iasma.it](mailto:ilaria.pertot@iasma.it)

*Romeis*, Dr. Jörg, Federal Department of Economic Affairs DEA, Agroscope Reckenholz-Tänikon Research Station ART, Biosafety Group, Reckenholzstrasse 191, Postfach, 8046 Zürich (SWITZERLAND), Tel: +41-44-3777299, Fax: +41-44-3777201, e-mail: [joerg.romeis@art.admin.ch](mailto:joerg.romeis@art.admin.ch)

*Roy*, Dr. Helen, Coordinator of Zoological Data & Research, Biological Records Centre, CEH Monks Wood, Abbots Ripton, Huntingdon, PE28 2LS (UK), Tel: +44-1487-772406 e-mail: [hele@ceh.ac.uk](mailto:hele@ceh.ac.uk)

*Schmitt*, Dr. Annegret, Julius Kühn-Institute (JKI), Federal Research Centre for Cultivated Plants, Institute for Biological Control, Heinrichstr. 243, 64287 Darmstadt (GERMANY), Tel: +49-6151-407-241, Fax: +49-6151-407290, e-mail: [annegret.schmitt@jki.bund.de](mailto:annegret.schmitt@jki.bund.de)

*Sousa*, Edmundo, Estação Florestal Nacional, Departamento de Protecção Florestal, Avenida da República, Quinto do Marquês, P-2780-159 Oeiras (PORTUGAL), Tel: +351-21-4463712, Fax: +351-21-4463702 e-mail: [edmundo.sousa@efn.com.pt](mailto:edmundo.sousa@efn.com.pt)

*Steinberg*, Dr. Christian, INRA, Université de Bourgogne, UMR Microbiologie du Sol et de l'Environnement, CMSE, 17, rue Sully, B.P. 86510, F-21065 Dijon Cedex, (FRANCE), Tel: +33/380693050, Fax: +33/380693224, e-mail: [christian.steinberg@dijon.inra.fr](mailto:christian.steinberg@dijon.inra.fr)

*Stensvand*, Arne, Bioforsk, Plant Health and Plant Protection Division, Department of Plant Pathology, Høgskoleveien 7, 1432 Ås (NORWAY), Tel + 47 911 83 430, e-mail: [arne.stensvand@bioforsk.no](mailto:arne.stensvand@bioforsk.no), [www.planteforsk.no](http://www.planteforsk.no)

*Symondson*, Dr. William O.C., School of Biosciences, Cardiff University, PO Box 915, Cardiff, CF10 3TL (UK), Tel: +44-2920-875151, Fax: +44-2920-874305, e-mail: [symondson@cardiff.ac.uk](mailto:symondson@cardiff.ac.uk)

*Tasin*, Marco, Istituto Agrario San Michele all'Adige, Dip. Protezione delle piante, Via Edmondo Mach, 1, 38010 S.Michele all'Adige (TN) (Italy), Tel: + 39-0461-615143, Fax: +39-0461-650872 e-mail: [marco.tasin@iasma.it](mailto:marco.tasin@iasma.it)

*Thiéry*, Denis, INRA, UMR 1065 Santé Végétale Institut des Sciences de la Vigne et du Vin, UFR 103, BP 81, F-33883 Villenave d'Ornon Cedex (FRANCE), Tel: +33-(0)557122639, Fax: +33-556843276, e-mail: [thierry@bordeaux.inra.fr](mailto:thierry@bordeaux.inra.fr)

*Tirry*, Prof. Dr. Luc, Ghent University, Laboratory of Agrozoology, Department of Crop Protection, Coupure Links 653, B-9000 Gent (BELGIUM), Tel: +32-9-2646152, Fax: +32-9-2646239, e-mail: [luc.tirry@ugent.be](mailto:luc.tirry@ugent.be)

*Tkaczuk*, Dr. Cezary, University of Podlasie, Department of Plant Protection, ul. Prusa 14, 08-110 Siedlce (POLAND),

e-mail: [tkaczuk@ap.siedlce.pl](mailto:tkaczuk@ap.siedlce.pl)

*Vänninen*, Irene, MTT, Plant Production Research, Plant Protection, 31600 Jokioinen (FINLAND), Tel: +358 3 4188 2580, Fax: +358 3 4188 2584, e-mail: [irene.vanninen@mtt.fi](mailto:irene.vanninen@mtt.fi), URL: [www.mtt.fi](http://www.mtt.fi)

*Weintraub*, Dr. Phyllis G., Gilat Research Station, Entomology Unit, D.G. Negev 85280 (ISRAEL), Tel: +972-8-9928678, Fax: +972-8-9926485, e-mail: [phyllisw@volcani.agri.gov.il](mailto:phyllisw@volcani.agri.gov.il)

*Zahavi*, Tirtza, Ministry of Agriculture, Plant Protection, Kibbutz Gshur, 12942 Ramat Hagolan (Israel), e-mail: [tirtzaz@yahoo.com](mailto:tirtzaz@yahoo.com)

---

## **IOBC/wprs COMMISSIONS AND WORKING GROUPS**

---

### **„Semio-chemicals without Borders” Joint Conference of the Pheromone Groups of IOBC WPRS and IOBC EPRS Budapest, Hungary, 15 – 20 November 2009**

First Announcement

Dear Colleagues,

You are cordially invited to the meeting SEMIO-CHEMICALS WITHOUT BORDERS a joint conference of Working Groups „Pheromones and other semio-chemicals in integrated production” IOBC WPRS and „Selective Control Methods” of IOBC EPRS  
Planned Date Span: Sunday 15 to Friday 20 November 2009

Place: Budapest, Hungary

Semio-chemicals act as information-transferring agents of the most ancient type of communication between living organisms. Research on semio-chemicals is conducted extensively worldwide. Overviewing of the recent results and discoveries in this is the aim of the present conference. People interested in semio-chemicals are invited to present their recent research. The conference will take place within the 25-year anniversary of the first joint WPRS-EPRS Pheromone Conference (held at Balatonalmádi, Hungary in 1984). This was one of the reasons why we selected Hungary as the site of the anniversary joint meeting.

This first announcement provides the date and location of the meeting for your planning purposes and a second announcement will follow in January 2009 with additional information. A website is under construction. We look forward to seeing you at the conference. Please forward this message to colleagues potentially interested in the conference topic.

In case you have questions please do not hesitate to contact:

Miklós Tóth  
Plant Prot. Inst., HAS, Budapest, POB 102, H-1525 Hungary,  
Tel. +36-1-3918639, Fax: +36-1-3918655, e-mail: [h2371tot@ella.hu](mailto:h2371tot@ella.hu))

Marco Tasin  
FEM-IASMA Research Center, I-38010 San Michele a/A, Italy,  
Tel. +39 0461 615509, Fax: +39 0461 615500, e-mail: [marco.tasin@iasma.it](mailto:marco.tasin@iasma.it)

Dr. Miklós TÓTH local organizer	Dr. Marco TASIN convenor of WG IOBC WPRS	Dr. István EKE president of the IOBC EPRS
------------------------------------	--	---

---

## **SOFTPEST**

### **a website on the use of pesticides & biocontrol agents in soft fruit**

The use of plant protection products and biocontrol agents in soft fruit production has always been an important subject for the IOBC/WPRS Working Group "Integrated Plant Protection in Orchards" Subgroup "Soft Fruits". The usage of pesticides and biological control methods varies considerably between countries and it is very difficult to get a good overview on the range of products that are applied or in development in soft fruits. In order to share and facilitate the flow of information, the Working Group "Soft Fruit" initiated a survey in 2007 on the usage and availability of pesticides and biocontrol agents in the different European countries. First we identified the five most important pests and diseases in strawberry and raspberry production. Then members of the different countries listed available products on the domestic market and indicated their usage in the field. So far 15 countries have contributed to the survey. The received data are accessible on the website

<http://www.any3.ch/IOBC/Softpest/index.html>.

In the near future, the Working group intends to integrate more countries, crops, pests and diseases in the database. However, it should be noted that the website does not intend to replace national pesticides lists. The website should simply facilitate the exchange of information among scientists, advisory services and everybody interested in the availability and use of pesticides and biocontrol agents in soft fruits.

Christian Linder and the WG 'Soft Fruits' members

**Christian Linder** (Entomologiste)  
Département fédéral de l'économie DFE  
Station de recherche Agroscope Changins-Wädenswil ACW  
CP 1012, 1260 Nyon/Suisse (SWITZERLAND)  
Tél. +41 22 363 43 89  
Fax +41 22 363 43 94  
[christian.linder@acw.admin.ch](mailto:christian.linder@acw.admin.ch)  
[www.acw.admin.ch](http://www.acw.admin.ch)

## Meeting of the IOBC/WPRS Working group “Integrated Protection and Production in Viticulture” – Staufen/Breisgau, Germany, 1 – 4 November, 2009

Dear colleagues,

The next meeting of the IOBC/WPRS Working group “Integrated Protection and Production in Viticulture” will take place from

**1<sup>st</sup> to 4<sup>th</sup> of November 2009 in Staufen im Breisgau (Germany)**

This venue is an idyllic, medieval town, situated ca. 12 km in the South of Freiburg im Breisgau and is easy accessible by train or bus; the next airport is Basel-Mulhouse (50 km) (<http://www.stadt-staufen.de/>). The meeting will be held in the Musikakademie Staufen (Academy of Music), a conference centre with an auditorium and some lecture rooms. A guest house is affiliated, so we have board and lodging for all participants during the meeting.

In the program two and a half days are scheduled for oral presentations and poster sessions. In addition, an excursion into the surrounding viticultural region of the Markgräflerland <http://www.markgraefler-land.com/> and the experimental farm of the State Institute for Viticulture and Oenology, Freiburg, in the Kaiserstuhl is planned.

### Contributions

The meeting seeks to assemble colleagues from all the fields of integrated plant protection in viticulture in order to constitute a platform for a stimulating discussion. Therefore, we invite you to present oral and/or poster contributions from all the fields of integrated plant protection in viticulture. The meeting will address the following topics:

- Biological – biotechnological control methods – Host Plant interactions
- Biology and epidemiology of pathogens – Forecast modeling
- Biology and population dynamics of insects and moths and modeling

The contributions will be published in the IOBC/wprs Bulletin.

### Registration and abstract submission

The registration fee will be for members 210,-- € / non members 260,-- € including the book of abstract, boarding during the meeting including coffee breaks during the meeting, social gathering and excursion.

Further information and detailed instructions for the registration and submission of oral or poster contributions will be provided in the second announcement, distributed at the begin-ning of 2009.

[http://www.iobc-wprs.org/wg\\_sg/index.html](http://www.iobc-wprs.org/wg_sg/index.html)

Sincerely

Hanns-Heinz Kassemeyer  
Dept. Biology, Plant Pathology & Plant  
Protection, Staatliches Weinbauinstitut,  
Merzhauser Strasse 119,  
79100 Freiburg im Breisgau (GERMANY),  
Tel: +49-761-40165 30  
[hanns-heinz.kassemeyer@wbi.bwl.de](mailto:hanns-heinz.kassemeyer@wbi.bwl.de)

Agnès Calonnec  
INRA Bordeaux, UMR INRA-ENITA,  
Santé Végétale,  
BP 81,  
33883 Villenave d'Ornon cedex (FRANCE),  
Tel: + 33-5-57122611  
[Agnès.Calonnec@bordeaux.inra.fr](mailto:Agnès.Calonnec@bordeaux.inra.fr)

## Next meeting of the Working Group “Integrated Control in Protected Crops, Mediterranean Climate” Chania, Crete (Greece), 6 – 11 September, 2009

Next meeting of this working group will be organized by our Greek colleagues led by Dr. DIONYSSIOS PERDIKIS from the Agricultural University of Athens. The meeting will be held in the summer of 2009 at the Mediterranean Agronomic Institute of Chania (MAICh). This is one of the most beautiful cities of Greece which is located at the north-eastern part of Crete Island. The meeting will consist of 3 days of presentations and discussions on integrated pest and disease management in greenhouses and one day for visiting the greenhouse industry. The meeting will address the possibilities and challenges that Biological Control has, especially in Mediterranean conditions, and the different strategies to face it will be discussed. The aim of the meeting is to bring together researchers and implementers of IPM (both arthropod pests and plant diseases) in protected crops, and we particularly encourage young scientists to join the working group and to contribute to this meeting with their results. Topics included will be

- Bio-ecology of pests, diseases and natural enemies
- Damage evaluation and assessment
- Pest and disease control strategies
- Epidemiology
- Diagnostic methods
- Trophic relationships
- Monitoring systems
- Biotechnological control methods
- Invasive species
- New challenges – climate change, globalization

I encourage those of you interested in this meeting to visit the web site [www.aua.gr/IOBC](http://www.aua.gr/IOBC) in which we will keep you informed with all the news.

### Convenor

Dr. Cristina Castañé  
IRTA  
Ctra. de Cabriels, Km 2  
E-08348 Cabriels (Barcelona), SPAIN  
Tel. +34 93 7507511  
Fax: +34 93 7533954  
e-mail: [Cristina.Castane@irta.es](mailto:Cristina.Castane@irta.es)

### Local organizer

Dr. Dionyssios Perdakis  
Agricultural University of Athens  
Laboratory of Agricultural Zoology and  
Entomology  
Iera Odos 75, 11855, Athens,  
GREECE  
Tel: +30 210 529 4581  
e-mail: [dperdikis@aua.gr](mailto:dperdikis@aua.gr)



## 4th European Meeting of the IOBC/WPRS Working Group “Integrated Protection of Olive Crops” Córdoba (Spain), June 1 – 4, 2009

The aim of the meeting is to provide a forum for openly discussing on knowledge currently available about pests, diseases and weeds affecting olive groves worldwide. During the last few years, an increasing concern has been repeatedly shown of the needs to develop control strategies for the efficient management of olive pests, diseases and weeds which are convincingly compatible with new forms of agricultural production, including Sustainable and Organic or Ecological Agriculture. Also, challenges are to be faced concerning the impact of the Global Climatic Change on the development of olive pests, diseases and weeds, as well as their management strategies.

Consequently, the main topics of the meeting are:

- Biology, ecology and behavior of arthropods associated to the olive grove
- Population detection and assessment of pests and their natural enemies
- Monitoring systems: attractants and traps
- Olive diseases caused by bacteria, fitoplasma, fungi and straminopiles, nematodes, and viruses: Etiology and Epidemiology
- Spatio-temporal analyses of olive pests and diseases
- Genetic diversity of olive pest and disease agents
- Plant-parasite interactions in olive pests and diseases
- Chemical control: efficacy, selectivity, resistance and side effects
- Biological and biotechnological methods for the control of pests and diseases
- Integrated pest and disease control strategies
- New problems in the integrated management of olive pests, diseases and weeds
- Pest and disease control in ecological olive growing
- New methods for the diagnosis and identification of olive pest and disease agents, and certification of olive planting stocks
- Effect of climatic change on olive pest and disease incidence

This event is intended to provide a stimulating platform for the exchange of multidisciplinary research results dealing with improving olive protection. The meeting will include oral presentations and poster sessions.

Authors wishing to participate at the Congress are requested to submit the preliminary registration form indicating their field of research and a tentative title using the website of congress before December 31, 2008.

For further information see: <http://www.protecolicordoba2009.com>

### Convenor

Dr Argyro Kalaitzaki  
Institute of Olive Tree and Subtropical  
Plants  
Agrokipio, 731 00 Chania, Crete,  
GREECE  
Tel.: +30 28210 83449, 71760  
Fax: +30 28210 93963  
e-mail: [akalaitzaki@nagref-cha.gr](mailto:akalaitzaki@nagref-cha.gr),  
[argkalaitzaki@gmail.com](mailto:argkalaitzaki@gmail.com)

### Chairperson

Dr. E. Quesada-Moraga  
Department of Agricultural and Forestry  
Sciences  
ETSIAM, University of Cordoba  
Campus de Rabanales. Building C4,  
“Celestino Mutis”  
Cordoba 14071, SPAIN  
e-mail: [cr2qumoe@uco.es](mailto:cr2qumoe@uco.es)

## 12th European Meeting of the IOBC/WPRS Working Group "Insect Pathogens and Insect Parasitic Nematodes" and Cost Action 862 "Bacterial Toxins for Insect Control" Pamplona (Spain), 22 – 25 June 2009

You are cordially invited to attend the 12th European Meeting of the IOBC/WPRS Working Group "Insect Pathogens and Insect Parasitic Nematodes" and Cost Action 862 "Bacterial Toxins for Insect Control".

"Future Research and Development in the Use of Microbial Agents and Nematodes for Biological Insect Control"

The meeting will take place in Pamplona, Spain from 22 to 25 June 2009. Local Organizer is PRIMITIVO CABALLERO, Universidad Publica de Navarra, Campus Arrosadia s/n, Pamplona 31006, SP

Given the urgent need for new developments in plant protection, the 12th meeting will particularly gather and discuss information on future trends in the use of insect pathogens and insect parasitic nematodes for biocontrol. One of the objectives will be to produce a paper to be submitted to the Commission of the European Union DG Research for implementation in the forthcoming calls in the FP7 or future programmes. With this aim, the two plenary sessions will present the views of academia and private sector. These will be followed by workshops, which will discuss further trends and produce the official working group position paper. Contributions to the meeting will be accepted as posters or oral contributions. It is the intention to print the IOBC/wprs-Bulletin with the proceedings before the meeting, so that it can be distributed at the beginning of the conference. Therefore, deadline for the submission of the manuscripts is 1<sup>th</sup> March 2009.

Venue: The conference will take place in the Sario Building at Arrosadia Campus of the Public University of Navarra, situated in the southern part of Pamplona. The Public University of Navarra is only 22 years old and accommodates presently 11.000 students.

The northern-Spanish town of Pamplona sits in the middle of the map of Navarre on a plateau 449 m above sea level located in the pre-Pyrenees mountain belt. It was the historical capital city of the Kingdom of Navarra and the first town in Spain to welcome the pilgrims on their way to Santiago de Compostela. Nowadays, it is a charming tourist destination with its cobblestone streets and 16th century intact city walls. This is the town of the "Running of Bulls", one of the most famous events in Spain.

Further information can be found under: <http://www.iobc-pamplona-2009.com/>

### Convenor

Ralf-Udo Ehlers  
Institute for Phytopathology, Christian-Albrechts-University,  
Dept. Biotechnology & Biol. Control,  
Hermann-Rodewald-Str. 9,  
D-24118 Kiel (GERMANY),  
Tel: +49-431-880-4864,  
Fax: +49-431-880-1583,  
e-mail: [ehlers@biotec.uni-kiel.de](mailto:ehlers@biotec.uni-kiel.de)

### Local Organizer

Primitivo Caballero  
Universidad Publica de Navarra,  
Departamento de Producción Agraria  
Campus Arrosadia s/n,  
Pamplona 31006, Spain  
Tel: +34 948 16 9129  
Fax: +34 948 16 9732  
e-mail: [pcm92@unavarra.es](mailto:pcm92@unavarra.es)

## **Working Group “GMOs in Integrated Plant Production” Next Meeting in Rostock (Germany), 14 – 16 May, 2009**

The next EIGMO (Ecological Impact of Genetically Modified Organisms) meeting will take place from 14-16 May 2009, Rostock, Germany. Detailed information about the meeting is available on the following website

<http://www.eigmo-rostock.de/>

Three key-note speakers have already confirmed their participation in the meeting:

- EMILIO RODRIGUEZ CEREZO (European Commission-Joint Research Centre, Sevilla, Spain) – Agronomic and economic impacts of Bt maize in Spain:evidence from a large survey of commercial farms.
- BEHZAD GHAREYAZIE (Agricultural Biotechnology Research Institute, Karaj, Iran) – Biosafety concerns of the worlds first commercialized Bt rice.
- BRYAN GRIFFITHS (Teagasc, Environment Research Centre, Ireland) – Effects of Bt-maize within a GM-farming system on soil populations and processes: A review of the ECOGEN project.

Please remember the deadlines for abstract submission (February 28, 2009) and for registration (March 15, 2009).

Since I'm the convenor of this WG since its establishment in 2003, the next convenor will be elected by WG participants that are members of IOBC/WPRS (individual members and each member covered by an institutional membership; non-IOBC/WPRS members have no vote) during the forthcoming meeting. Proposals of potential candidates should be sent to me by the end of March 2009. I would, however, be willing to serve as the convenor for a second term.

In case that you have any suggestions regarding the organization or structure of the meeting or any further question please feel free to contact either me or anyone from the organizing committee.

Jörg Romeis  
Working Group convenor  
Agroscope Reckenholz-Tänikon Research Station ART,  
Zürich, Switzerland

---

## **Working Group “Multitrophic Interactions in Soil” Next Meeting in Uppsala (Sweden), 10 – 13 June, 2009**

The IOBC meeting 'Multitrophic Interactions in Soil' is a multidisciplinary research forum for discussion of new developments in the integrated control of soil-borne diseases, nematodes and insects. Stress is placed on an interdisciplinary approach with scientists from a broad range of disciplines so that a holistic view of the problems facing plant root systems can be discussed. An overall aim is to develop innovative strategies for understanding and managing the biotic components of soil in order to promote soil health and integrated control of soil borne pests and diseases, and to improve sustainability of agricultural practices.



Industrial partners are active at all meetings. The meetings are also a platform for the development of collaborative projects for submission to the EU and other funding agencies.

### ***The 2009 meeting in Uppsala***

The 2009 meeting will include experts on fungi, bacteria, protists, nematodes, insects, biological control, soil microbiology, soil microbial and faunal ecology, molecular ecology and molecular biology. Some suggested topics are listed below but we welcome other suggestions:

- Spatial and temporal dynamics and activity of soil-borne organisms
- Scaling-up from soil aggregates to field applications and commercialization
- Management of agricultural practices to suppress diseases
- Climatic changes and multitrophic interactions
- Co-evolution of the plant-the pathogenic agent and the biocontrol agents
- Registration, legal aspects and commercial applications of beneficial organisms
- Biocontrol and plant growth regulation through plant microbe interactions
- The role of microbial toxins and metabolites
- Functional aspects of biodiversity

The 2009 meeting will be held in Uppsala, the scientific and cultural capital of Sweden, with easy international access (17 min by direct train) via Stockholm Arlanda international airport. A full social programme will be organised. Experience the long summer evenings of Scandinavia, visit the house and garden of Linnaeus, see the anatomical theatre of Rudbeck and the original thermometer of Celsius – or enjoy some post-conference sightseeing in the old city and archipelago of Stockholm.

Participants may like to note that the meeting will be followed by the BAGECO 10 conference in Uppsala.

The organizers of the IOBC-2009 meeting ‘Multitrophic Interactions in soil’ are “the MASE Laboratories” and the “Department of Forest Mycology and Pathology, at the Swedish University of Agricultural Sciences” in Uppsala.

International Advisory Scientific Committee:

C. ALABOUVETTE, G. BERG, J. RAAIJMAKERS, R. SIKORA, C. STEINBERG, A. TRONSMO

Local Organizing and Scientific Committee:

CHRIS WELCH, ROGER FINLAY, MARGARETA HÖKEBERG, DAN FUNCK JENSEN,  
HANNA FRIBERG, JAMSHID FATEHI

For more information, please contact the secretariat

Christopher Welch,  
MASE Laboratories,  
Box 148,  
SE 754 40 Uppsala (SWEDEN)  
Tel +46 (0) 18 67 48 58, Fax +46 (0) 18 67 49 01,  
e-mail: [chris.welch@maselab.se](mailto:chris.welch@maselab.se)

Visit the web site: <http://www-mykopat.slu.se/IOBC/index.html>

## Working Group “Induced Resistance in Plants against Insects and Diseases”

### Next Meeting in Granada (Spain), 12 – 16 May 2009

The next meeting of the IOBC/WPRS working group “Induced resistance in plants against insects and diseases” will be held from 12 to 16 May 2009 in Granada. The meeting will cover all aspects of induced resistance and induced tolerance. However, special emphasis will be placed on chances and limits of induced resistance/induced tolerance, resulting in the following sessions:

- Chances and limits in multitrophic interactions
- Chances and limits of model systems
- Chances and limits in crop protection

Each of the three sessions will be opened by invited speakers, followed by oral and poster contributions from the participants. The meeting is open to presentations of work on fundamental and applied aspects, dealing with insects, diseases and stresses. We aim to attract, like in former years, young and senior scientists of different fields, as well as companies, and we will provide a platform to exchange experience and views, and to interact with each other.

Important deadlines are:

**Early registration:** ..... **28 February 2009**

**Submission of abstracts:** ..... **13 March 2009**

**Submission of 4-page manuscripts:** ... **16 May 2009**

Further information can be found under: <http://www.fvccee.uji.es/>

On behalf of the steering committee and the local organisers

Annegret Schmitt (convenor),  
JKI Darmstadt, Germany  
e-mail: [annegret.schmitt@jki.bund.de](mailto:annegret.schmitt@jki.bund.de)

---

## Working Group “Integrated Protection of Stored Products”

### Next Meeting: Campobasso (Italy), 29 June – 2 July, 2009

Our next WG meeting will take place in University of Molise, Campobasso, Italy, June 29 - July 2, 2009. For further details, the first circular is at <http://www.iobc-wprs.org/events/index.html>

The topics of the IOBC/WPRS Working Group on "Integrated Protection of Stored Products" are:

- biology of stored product pests
- methods of pest prevention during storage, transportation and handling
- pheromones, traps and other methods to detect stored product pests
- all aspects of biological control
- prevention of microflora infection and development of mycotoxins

- physical, chemical and other techniques for stored product pest control
- futurology: overviews and future trends on all aspects of storage pest control
- wood-boring, urban, quarantine and museum pests

Christos Athanassiou,  
Laboratory of Agricultural Zoology and Entomology,  
Agricultural University of Athens, Greece,  
75 Iera Odos, 11855 Athens (Greece)  
e-mail: [ceaz2atx@noc.aua.gr](mailto:ceaz2atx@noc.aua.gr)

---

## **Working Group “Integrated Protection of Olive Crops” 4<sup>th</sup> European Meeting: Córdoba (Spain), 1 – 4 June, 2009**

The aim of the meeting is to provide a forum for openly discussing on knowledge currently available above pests, diseases and weeds affecting olive groves worldwide. During the last few years, an increasing concern has been repeatedly shown of the needs to develop control strategies for the efficient management of olive pests, diseases and weeds which are convincingly compatible with new forms of agricultural production, including Sustainable and Organic or Ecological Agriculture. Also, challenges are to be faced concerning the impact of the Global Climatic Change on the development of olive pests, diseases and weeds, as well as their management strategies.

Consequently, the main topics of the meeting are:

- Biology, ecology and behavior of arthropods associated to the olive grove
- Population detection and assessment of pests and their natural enemies
- Monitoring systems: attractants and traps
- Olive diseases caused by bacteria, fitoplasma, fungi and straminopiles, nematodes, and viruses: Etiology and Epidemiology
- Spatio-temporal analyses of olive pests and diseases
- Genetic diversity of olive pest and disease agents
- Plant-parasite interactions in olive pests and diseases
- Chemical control: efficacy, selectivity, resistance and side effects
- Biological and biotechnological methods for the control of pests and diseases
- Integrated pest and disease control strategies
- New problems in the integrated management of olive pests, diseases and weeds
- Pest and disease control in ecological olive growing
- New methods for the diagnosis and identification of olive pest and disease agents, and certification of olive planting stocks
- Effect of climatic change on olive pest and disease incidence

Further informations and registration:

<http://www.protecolicordoba2009.com>

---

## **Minutes (short version) of the IOBC/WPRS Executive Committee Meeting, Zürich, June 12-14, 2008**

**Present:** R. Albajes (RA), F. Bigler (FB), S. Blümel (SB), P. Nicot (PN), H. Vogt (HV)

### **Budget**

#### ***Presentation of 2007 income and expenses by R. Albajes***

The balance is negative, as anticipated in the provisional budget. This situation results in part from the fact that costs initially planned for 2006 (in particular for printing and shipping 2006 bulletins) were incurred in early 2007. Another reason is the continued erosion of income from Institutional members. To compensate, the efforts to lower costs and increase income (eg by attracting new members) will need to be amplified. Ideas will be discussed by the Executive Committee during the next meeting in January 2009. A possible target for cost reduction is those related to printing and shipping the Bulletins, as they account for a large portion of total IOBC-wprs costs.

#### ***Electronic payment of membership and book orders: almost there***

After running into complications that could not be solved with a first bank, RA and FB have been in contact with a specialised Service Centre in Zürich to set up this service for IOBC members.

### **Status of membership**

The status of membership is reviewed. Decisions are taken to remove members from the list (and discontinue benefits) according to the rules of the Statutes/Byelaws, when membership dues remain unpaid. Ideas for stimulating membership are discussed.

### **Publications: *Bulletins***

In November 2007, the Council had decided to initiate the electronic publication of the Bulletins and to prepare new offers for members, to be discussed by General Assembly in 2009. One offer would be a choice for members between paper versions and CD versions of the Bulletins. Another would be online access on the web site in a password-protected "restricted area".

The technical aspects for the implementation of these decisions are discussed, based on price estimates provided by L. Tirry for the production of CDs. Concerning online access on the web site, a trial run will be conducted with several of the Bulletins and feed back will be sought from the Convenors.

### **IOBC-wprs web site:**

The report from the webmaster and her various suggestions for improvement of the web site are discussed and approved. Further action is planned to increase the attractiveness and visibility of several pages, to stimulate Convenors for updating the information that concerns their Working/Study Group or Commission. Decisions are taken on the information to be posted in the restricted areas for Members (Bulletins in the future), Convenors (eg minutes of Convenors and Council meetings) and Council (minutes of Council and Exec meetings).

### **Preparation for the 2009 General Assembly**

#### ***Venue in Morocco***

Initially planned preferably for Agadir during the Nov 2007 Council meeting, the specific

location of the General Assembly is re-examined, due to possibly high costs and long travel times to this city from various locations in Europe, in comparison to other destinations in Morocco. Specific price information will be gathered and options (eg formerly envisioned Rabat) will be further discussed with Prof Besri.

### ***Provisional program***

A provisional program is designed to include 2 days combining reports from Convenors and "business issues" (reports from Exec Committee and Audit Commission, elections and consultation of the General Assembly) preceded by a meetings of the Convenors and of the "old" Executive committee, and followed by a meeting of the "old" and the "new" Council and a joint Convenor-Council meeting.

### ***Prepare consultation of the General Assembly***

Possible issues to be proposed for a vote of the General Assembly are discussed (eg changes in statutes / byelaws). This topic will be further prepared during the next Executive meeting in January 2009.

### ***Prepare elections for new Council of the General Assembly***

As several Council members will not postulate for new mandates, new candidacies need to be encouraged. Candidates for the key position of Treasurer in the Executive Committee will also need to be found. Several possible ways are discussed and will be pursued (including consulting various colleagues, posting information on the web site and in Profile).

The election procedure is reviewed and various possible versions of the ballots are examined. One version is selected because it corresponds best to the request of the last General Assembly concerning the organisation of elections, and should prevent the types of problems encountered in the past.

## **Working / Study Groups and Commissions**

### ***Publication Commission: Replacement of Convenor after September 2009***

Horst Bathon (HB) will stop his activity as Convenor of the Publication Commission after the next General Assembly. Efforts to find a successor since November 2007 have not been successful. Other options are discussed. One possibility would be the creation of an editorial board with at least 4 members to lighten the burden on each person, and to enlist the help of Convenors and the Liaison officers. To facilitate the search for members of this board, the help of H. Bathon will be sought to write a short but specific description of the tasks.

### ***Review of activities of WG, SG, Commissions***

Various issues are covered.

One important point concerns the future of WG "Breeding for plant resistance". The search for a new Convenor has remained unsuccessful despite the efforts of the current Convenor and various actions carried out to assist him. Options are discussed. A decision will need to be taken during the next Executive meeting of January 2009, to submit a proposition to the Council.

Collaboration of Commission "Harmonized regulation of biological control agents" with EPPO. The program of collaborative work has been activated. Several meetings have taken place.

Minutes by Philippe Nicot, Secretary-General of IOBC/WPRS

## IOBC/Global: New Executive Committee 2008 – 2012

The following people were elected for the various functions of the IOBC Global Executive Committee:

President	Prof. Dr. Jacques Brodeur (Canada)
Vice-President	Dr. Barbara I.P. Barratt (New Zealand)
Vice-President	Prof. Dr. Jose Roberto P. Parra (Brazil)
Secretary General	Prof. Dr. Joop C. van Lenteren (The Netherlands)
Treasurer	Dr. Alberto Urbaneja (Spain)



Prof. Dr. Jacques  
Brodeur



Dr. Barbara I.P.  
Barratt



Prof. Dr. Jose  
Roberto P. Parra



Prof. Dr. Joop C.  
van Lenteren



Dr. Alberto  
Urbaneja

More information see: <http://www.unipa.it/iobc/download/newsletter84.pdf>

---

## World-wide database of insect cultures available for distribution

The Canadian Forest Service, Natural Resources Canada, is sponsoring the establishment of a comprehensive world-wide listing of producers who are willing to sell or donate live insects. **We are currently soliciting the enrolment of insect producers.** This database is intended to provide those in need with a current source for accessing live insect cultures and to give producers the opportunity to expand their client base. Our database is in the early stages of development, but will become more useful as additional insect producers decide to participate and have their cultures listed. We hereby solicit your enrolment and encourage you to make your colleagues and peers aware of the database:

<http://www.insect.glfsc.cfs.nrcan.gc.ca>

Contact: Peter Ebling, e-mail: [pebling@nrcan.gc.ca](mailto:pebling@nrcan.gc.ca)

(IOBC Newsletter 84 – October 2008)

## General Assembly of IOBC-wprs September 30th to October 3rd 2009 in Agadir (Morocco)

We kindly invite you to the next General Assembly of IOBC-wprs, which will convene from September 30th to October 3rd 2009 in Morocco. It will be hosted by our colleague Prof. Dr. M. BESRI. **Elections will be held for a new Council and a new Executive Committee.** The persons interested in serving IOBC-wprs as member of the Council or Executive Committee are kindly invited to contact the General Secretary ([philippe.nicot@avignon.inra.fr](mailto:philippe.nicot@avignon.inra.fr)) or other members of the Executive Committee. A description of the role of Council and the Executive Committee, and the rules and Guidelines governing the organisation of the elections can be found in the Statutes and Byelaws of IOBC-wprs (which can be downloaded from the website: <http://www.iobc-wprs.org/events/index.html>).

## New IOBC/wprs Publications

### New IOBC/wprs Bulletins

The Publication Commission of the IOBC/wprs has issued the following Bulletins in 2008 [For Bull. 32 – 37, 2008 see *Profile* 45: 24-35 or visit the IOBC/wprs website]:

### IOBC/wprs Bulletin Vol. 30 (8), 2007

Working Group "Integrated Protection in Field Vegetable Crops". Proceedings of the meeting at Ljubljana (Slovenia), October 3-7, 2005. Edited by: Rosemary Collier. ISBN 92-9067-203-8 [vi + 159 pp.].

Preface .....	i
List of participants .....	iii
<b>Insect behaviour and ecology</b>	
Bioactive plant compounds for control of <i>Thrips tabaci</i> <i>E.H. Koschier, J. Riefler, K. Sedy</i> .....	1-8
Host-plant finding by insects – the role of volatile plant chemicals <i>S. Finch, R.H. Collier</i> .....	9-16
The role of non-cultivated plants in the colonization of a tomato field by polyphagous mirid predators (abstract only) <i>D. Perdikis, A. Giatropoulos, P. Labropoulos, D. Maselou, A. Fantinou, D. Lykouressis</i> .....	17
<i>Agrotis segetum</i> in Denmark: first signs of global climate change <i>P. Esbjerg</i> .....	19-24
The life cycle of <i>Delia radicum</i> in turnip crops in the Northwest of Portugal <i>A. Aguiar, A. Ferreira, D. Martins, S. Paúl</i> .....	25-30
Effect of the surrounding landscape on the abundance of cabbage aphid in Brussels sprout fields <i>E. den Belder, J. Elderson, G. Schelling</i> .....	31-36
Weather and insect dispersal <i>B.R. Flood, M. Sandstrom, D. Changnon, T. Flood Bramall</i> .....	37-42

Pest insect control by predatory ground beetles – 40 years of doubt S. Finch, R.H. Collier .....	43-51
---	-------

### Insecticidal Control

Controlling the carrot fly ( <i>Psila rosae</i> ) by sowing carrot seeds film-coated with single and combination of insecticides A. Ester, E.O. Fuss, H. de Putter, K. van Rozen.....	53-60
Natural insecticides for the control of root flies in <i>Brassicac</i> R. Meadow, A. Folkedal.....	61-63

### Integrated pest management

Searching for the optimal sustainable control method against <i>Thrips tabaci</i> on early white cabbage S. Trdan, N. Valič, L. Andjus, D. Žnidarčič.....	65-73
A pest and disease warning system for cole crops and leek in Flanders: a practical approach K. Martens, N. Plovie .....	75-82
Thrips control on <i>Allium</i> crops R.H. Collier, M. Saynor, J. Burnstone .....	83-90
Triptacon, a strategy for a supervised control of <i>Thrips tabaci</i> Lind in leek crops in Flanders (Belgium) F. Van De Steene, L. Tirry .....	91-100
Yellow rocket ( <i>Barbarea vulgaris</i> ) as a trap crop in cole crops? G. Siekmann, M. Hommes .....	101-106
Exclusion fences against cabbage root fly and carrot fly G. Siekmann, M. Hommes .....	107-112
Selection of trap crop and companion plants for the management of pest insects in field vegetables D. George, G. Port, R. Collier .....	113-121
The use of straw mulch against aphids in field vegetables G. Siekmann, M. Hommes .....	123-129
Rapid forecasting of the Western Corn Root work ( <i>Diabrotica virgifera virgifera</i> LeConte), a pest of sweetcorn in Hungary J. Takács, P. Balogh, M. Nádasy.....	131-136
Vegetable Insect Management - 2 <sup>nd</sup> edition B.R. Flood, R. Foster .....	137-139

### Weed control

Problems and experiences with chemical seed control in green pear crops in Hungary E. Nádasy, D. Szám, Z. Sumegi, G. Wágner, G. Kazinczi, L. Labancz .....	141-146
---	---------

### Plant Diseases

A laboratory stuffy of the fungus <i>Alternaria brassiciola</i> (Schweinitz) Wiltshire from <i>Brassica rapa</i> L subsp. <i>rapa</i> L. Milevoj, F. Celar, K. Skalič.....	147-152
Effect of herbicide (pendimethalin, Stomp) and virus infection on the photosynthetic activity of pepper G. Kazinczi, J. Horváth, A. Takács, L. Milevoj, M. Nádasy, E. Nádasy.....	153-159

## New numbering of IOBC/wprs Bulletins

Starting in 2008 the IOBC/wprs Bulletins only have a running volume number starting with vol. 31. Issue numbers within a year will not be any longer added to the volume numbers.



**IOBC/wprs Bulletin, Vol. 34, 2008:**

Working Group "Landscape management for functional biodiversity", Preceedings of the meeting at Bordeaux (France), 14 - 17 May, 2008. Edited by: Walter Rossing. ISBN 978-92-9067-208-1 [vii + 136 pp.].

Preface .....	iii
Contents .....	v
Which biotopes can supply the arable field with natural enemies? <i>Valentina M. Afonina, Wladimir B. Tshernyshev, Olga V. Solovchenko</i> .....	1-4
Model for integrating internal and external drivers for dispersal and distribution pattern in carabid beetles <i>Bas Allema, Walter Rossing, Wopke van der Werf, Tibor Bukovinszky, Eveliene Steingröver, Ariena van Bruggen, Joop van Lenteren, Kees Booij</i> .....	5-8
Insectary plants to enhance the biological control of <i>Nasonovia ribisnigri</i> and <i>Frank- liniella occidentalis</i> in lettuce <i>Oscar Alomar, Judit Arnó, Rosa Gabarra</i> .....	9-12
Hover-Winter: a multi-agent model to simulate the overwintering of a beneficial insect ( <i>Episyrphus balteatus</i> , Diptera, Syrphidae) in a heterogeneous landscape <i>Florent Arrignon, Claude Monteil, Jean-Pierre Sarthou, Marc Deconchat, Gérard Balent</i> .....	13-16
Gis-based methodology to assess pesticide risk on biodiversity in terrestrial eco- systems <i>Stefania Barmaz, Serenella Sala, Marco Vighi</i> .....	17-20
Mapping the ecosystem service of pest control associated with forest in agricultural landscapes; a proof of concept <i>J.M. Baveco, F.J.J.A. Bianchi, W. van der Werf, P.W. Goedhart</i> .....	21-23
Vegetation on field margins as a source of predatory mites (Phytoseiidae) for strawberry plantations in Poland: Preliminary observations <i>Zbigniew T. Dabrowski, Danuta Kropczyńska, Jakub Garnis</i> .....	25-28
Green bridges over the winter: consequences for <i>Brassica</i> pests <i>Eefje den Belder, Jane Landure, Janneke Elderson, Marian Vlaswinkel, Jeroen Willemse, Frans van Alebeek, Paul van Rijn, Henny van Gorp</i> .....	29-32
The impact of agri-environment schemes on cereal aphid control <i>John Holland, Heather Oaten, Steve Moreby, Sue Southway</i> .....	33-36
Long-term set-asides and functional biodiversity <i>Erja Huusela-Veistola</i> .....	37-40
Botanical and social aspects of conservation headlands in Switzerland <i>Katja Jacot, Lisa Eggenschwiler, Nina Richner, Daniel Schaffner</i> .....	41-44
Combining studies on crop mosaic dynamics and pest population dynamics to foster biological control <i>Alexandre Joannon, Aude Vialatte, Chloé Vasseur, Jacques Baudry, Claudine Thenail</i> .....	45-48
Explaining participation in multifunctional agricultural activities: an empirical analysis of the Winterswijk region in The Netherlands <i>Roelof A. Jongeneel, Nico B.P. Polman, Louis H.G. Slangen</i> .....	49-52
Reservoirs role of some weed plants in the agroecosystem-dominated landscapes of southeastern Europe (Hymenoptera: Braconidae: Aphidiinae) <i>Nickolas G. Kavallieratos, Željko Tomanović, Petr Starý, Christos G. Athassiou</i> .....	53-55
Biodiversity of spiders appearing on nettle ( <i>Urtica dioica</i> L.) in natural stands <i>Hanna Legutowska, Magdalena Sitko</i> .....	57-60
The 'Cake on the plate' syndrome ... and how specialist tansy aphids avoid extinction by hungry predators and parasitoids: insights from the use of polymorphic micro-satellite markers <i>Hugh D. Loxdale, Franklin Nyabuga, Wolfgang W. Weisser</i> .....	61-64

Determinants for implementing different types of conservation measures in intensive arable regions <i>Juliane Mante, Bärbel Gerowitt</i> .....	65-68
Are landscape structures important for the colonization of spinach fields by insects? <i>Rainer Meyhöfer, Thomas Klug, Hans-Michael Poehling</i> .....	69-72
Does the spatial density of field margins affect aerially dispersing aphid predators, if so, at what scale? <i>Heather Oaten, John Holland, Barbara Smith, Simon Leather</i> .....	73-76
Evaluating predator diversity and abundance in vineyards and the contiguous hedgerows <i>Stefan Otto, Filippo Maria Buzzetti, Giuseppe Zanin, Carlo Duso</i> .....	77-80
Biodiversity and its interactions with viticulture in a wine-growing area in the west of France: case study of a local initiative in a controlled origin appellation (AOC Saumur-Champigny) <i>Guillaume Pain, Véronique Beaujouan, Hervé Daniel, David Montembault, Joséphine Pithon, Annie Sigwalt</i> .....	81-84
Expression of on-farm functional biodiversity as affected by management and multi-scale agroecosystem disturbance <i>Souzi Roupheal, Anna-Camilla Moonen, Paolo Bàrberi, Ruggero Petacchi, Luigi Boccaccio</i> .....	85-88
The effect of source habitats on arable spider communities: is proximity the most important? <i>Ferenc Samu, András Horváth, Éva Szita, Balázs Bernáth, Erika Botos, Kinga Fetykó</i> .....	89-92
Stable isotopes as a tool for food web analysis <i>Stefan Scheu</i> .....	93-96
Implementation of an agri-environmental scheme providing sown boundary strips in an agricultural landscape of northern Germany <i>Horst-Henning Steinmann, Jan Freese, Sebastian Klimek</i> .....	97-100
Some approaches to natural enemies management <i>Wladimir B. Tshernyshev</i> .....	101-104
The dynamics of generalist predators in two different six years crop rotation systems: sources and sinks? <i>F. van Alebeek, R. van den Broek, J.H. Kamstra, W. van den Berg, A. Visser</i> ..	105-108
Ecological infrastructure and polycultures to improve natural control of insect pests in cabbage: first year results <i>Rob van den Broek, Frans van Alebeek, Wim van den Berg</i> .....	109-112
Kernel approach for quantifying the spatial extent of the ecosystem service of pest control provided by non-crop habitats in agricultural landscapes <i>W. van der Werf, P. Goedhart, F.J.J.A. Bianchi &amp; H. Baveco</i> .....	113-116
Experimenting with landscape management to control pest populations in viticulture <i>Maarten van Helden, Guillaume Pain, Josephine Pithon, Marie-Anne Simonneau</i> .....	117-120
Perspectives for functional agro biodiversity in Brussels sprouts <i>Paul van Rijn, Eefje den Belder, Janneke Elderson, Marian Vlaswinkel, Frans van Alebeek</i> .....	121-124
Functional agro biodiversity in Dutch arable farming: results of a three year pilot <i>Paul van Rijn, Frans van Alebeek, Eefje den Belder, Felix Wäckers, Jan Buurma, Jeroen Willemse, Henny van Gulp</i> .....	125-128
Spatial analysis of greenhouse density in relation to western flower thrips ( <i>Frankliniella occidentalis</i> ), onion thrips ( <i>Trips tabaci</i> ) and minute pirate bug ( <i>Orius</i> spp.) population in greenhouses <i>Andrea Veres, Ferenc Tóth, Szilvia Orosz, Daniel Kristóf, Kinga Fetykó</i> .....	129-132
Tracing food source use by nectarivorous insects <i>Felix L. Wäckers</i> .....	133-136

### Invited papers

Citrus IPM in Florida: chaos after Canker and Greening diseases invade <i>M.A. Hoy</i> .....	1
The current situation of citrus pests and their control methods in Turkey <i>N. Uygun, S. Satar</i> .....	2-9
Current situation of citrus pest and the control methods in use in Morocco <i>A. Mazih</i> .....	10-16

### California Red Scale

Population dynamics of <i>Aonidiella aurantii</i> on citrus nursery trees in northern and eastern Sicily in the period 1997-2006. <i>F. Conti, R. Fisicaro</i> .....	19-24
Seasonal trend of California Red Scale ( <i>Aonidiella aurantii</i> ) populations in eastern Spain 2005-2007. <i>A. Castaño, B. Escrig, M. Guillén, O. López, M. Llopis, A.B. Martínez, A. Moreira, L. Peris, J.J. Pérez, J. Sepúlveda, M. Vicente, F. García-Marí, J.M. Guitián, M.P. Baraja, J.M. Llorens, P. Moner, V. Dalmau</i> .....	25
Parasitism levels and species of natural enemies in field populations of California red scale <i>Aonidiella aurantii</i> (Hemiptera: Diaspididae) in Eastern Spain <i>J. José Sorribas, F. García-Marí</i> .....	26-33
Host size availability for <i>Aphytis</i> parasitoids in field populations of California Red Scale <i>Aonidiella aurantii</i> , in citrus groves in Eastern Spain <i>A. Pekas, A. Aguilar, F. García-Marí</i> .....	34-40
Parasitoids survey of California red scale ( <i>Aonidiella aurantii</i> ) in Citrus groves in Andalucía (South Spain). <i>J.M. Vela, M.J. Verdú, A. Urbaneja, J.R. Boyero</i> - .....	41
On the presence and diffusion of <i>Comperiella bifasciata</i> How. (Hymenoptera: Encyrtidae) in Sicily. <i>G. Siscaro, F. Di Franco, L. Zappalà</i> .....	42-45
A new <i>Aphytis</i> species on <i>Aonidiella aurantii</i> ? <i>T. Pina, M.J. Verdú, A. Urbaneja, B. Sabater-Muñoz</i> .....	46
Predation of <i>Aonidiella aurantii</i> (Maskell) crawlers by phytoseiids. <i>A. Urbaneja, M. Juan-Blasco, M.J. Verdú</i> .....	47
A demonstrative program using augmentative releases of <i>Aphytis melinus</i> DeBach for the biological control of <i>Aonidiella aurantii</i> (Maskell) in Sicilian orchards. <i>E. Raciti, A. Messana, G. Pasciuta, G. Perrotta, E. Sapienza, F. Saraceno, V. Sciacca, R. Finocchiaro, R. Maugeri, A. Strano</i> .....	48
Augmentative releases of <i>Aphytis melinus</i> (Hymenoptera: Aphelinidae) to control <i>Aonidiella aurantii</i> (Homoptera: Diaspididae) in a Sicilian citrus grove <i>L. Zappalà, O. Campolo, F. Saraceno, S.B. Grande, E. Raciti, G. Siscaro, V. Palmeri</i> .....	49-54
Dispersal capacity of <i>Aphytis melinus</i> (Hymenoptera: Aphelinidae) after augmentative releases. <i>V. Palmeri, O. Campolo, S.B. Grande, F. Saraceno, G. Siscaro, L. Zappalà</i> .....	55-58
Petroleum spray oils and releases of <i>Aphytis melinus</i> to control <i>Aonidiella aurantii</i> (Maskell) in Spain <i>A. Urbaneja, P. Vanaclocha, A. García, M. Laurín, J.L. Porcuna, A. Marco, M.J. Verdú</i> .....	59
Control of California red scale in Citrus orchards, using mineral oil and biological control. <i>S. Eltazi, A. Mazih, I. Srairi, Y. Bourachidi</i> .....	60

Preliminary data on mating disruption of red scale in Portugal. <i>H. Sousa, C. Soares, N. Ramos, H. Laranjo, I. Gonçalves, M. Rosendo, M. Neves, J.C. Franco</i> .....	61-65
Mating disruption to control California Red Scale ( <i>Aonidiella aurantii</i> Maskell). <i>S. Vacas González, C. Alfaro Cañamás, V. Navarro Llopis, J. Primo Millo</i> .....	66
Biological efficacy of two organophosphate insecticides against California red scale ( <i>Aonidiella aurantii</i> Maskell) related to deposition parameters under laboratory conditions. <i>C. Garcerá, P. Chueca, S. Santiago, E. Moltó</i> .....	67-74
A binomial sampling method for the California Red Scale ( <i>A. aurantii</i> ) in Citrus groves. <i>J.R. Boyero, N. Rodríguez, J.M. Vela, R. Moreno, F. Pascual</i> .....	75
Host preference of <i>Aonidiella orientalis</i> on citrus in South Baghdad (Homoptera: Coccidae). <i>M.Z. Khalaf, A.K. Abed, H.M. Alrubaie, R.A. Okaily, A.K. Minshed</i> .....	76

### Other Scale Insects

<i>Chrysomphalus aonidum</i> (L.) (Hemiptera: Diaspididae) in Spain. Studies on its biology and population dynamics. <i>A. Soto, M. Borrás, R. Vercher, F. García-Marí</i> .....	77-81
Parasitoid complex of black scale <i>Saissetia oleae</i> on Citrus: species composition and seasonal trend. <i>A. Tena, A. Soto, F. García-Marí</i> .....	82-86
Scale insects (Hemiptera Coccoidea) on citrus in Tunisia. <i>H. Jendoubi, K. Lebdi Grissa, P. Suma, A. Russo</i> .....	87-93
May vine mealybug sex pheromone improve the biological control of the citrus mealybug? <i>J.C. Franco, T. Fortuna, E. Borges da Silva, P. Suma, A. Russo, L. Campos, M. Branco, A. Zada, Z. Mendel</i> .....	94-98
Pesticide secondary effects on <i>Anagyrus pseudococci</i> , parasitoid of the citrus mealybug <i>Planococcus citri</i> in laboratory <i>P. Suma, G. Mazzeo</i> .....	99-103
Influence of ant-exclusion on <i>Planococcus citri</i> density in a citrus orchard. <i>P.M. Marras, F. Sanna, R.A. Pantaleoni</i> .....	104-110
Side-effect of seven pesticides residues on <i>Anagyrus pseudococci</i> (Girault) and <i>Leptomastix dactylopii</i> Howard (Hymenoptera, Encyrtidae), parasitoids of citrus mealybug <i>Planococcus citri</i> (Risso) (Hemiptera: Pseudococcidae). <i>J.M. Campos Rívela, M.T. Martínez-Ferrer</i> .....	111-116
Treatment thresholds for the Citrus Mealybug <i>Planococcus citri</i> (Hemiptera: Pseudococcidae) based on the relationship between male abundance and fruit infestation. <i>M.T. Martínez-Ferrer, J.L. Ripollés Moles, F. García-Marí</i> .....	117-123
The adoption rate of biological control of <i>Icerya purchasi</i> Maskell in Mazandaran, Iran. <i>A. Papzan, H. Vahedi</i> .....	124

### Mediterranean Fruit Fly

Parasitism of <i>Diachasmimorpha tryoni</i> (Hymenoptera: Braconidae) on the host <i>Ceratitis capitata</i> (Diptera: Tephritidae) under Mediterranean temperatures <i>E. Garzon Luque, F. Beitia, J.V. Falcó</i> .....	125-129
Parasitism of <i>Spalangia cameroni</i> (Hymenoptera, Pteromalidae), an idiobiont parasitoid on pupae of <i>Ceratitis capitata</i> (Diptera, Tephritidae). <i>M. Pérez-Hinarejos, F. Beitia</i> .....	130-133
Importance of ground-dwelling predators on controlling <i>Ceratitis capitata</i> in Spanish citrus orchards <i>C. Monzó Ferrer, B. Sabater, J.L. García, A. Urbaneja, P. Castañera</i> .....	134

Study of mass trapping devices to control <i>Ceratitis capitata</i> (Wiedemann). J. Domínguez Ruiz, F. Alfaro Lassala, V. Navarro Llopis, J. Primo Millo.....	135
Status of Mediterranean Fruit Fly, <i>Ceratitis capitata</i> Wied. (Diptera: Tephritidae), and its control in Turkey. N.Z. Elekçioğlu, N. Uygun, R. Bozbuğa .....	136-141
Field experiments towards the development of a strategy for the control of the MedFly ( <i>Ceratitis capitata</i> ) using Match Medfly RB03 (Syngenta) in Citrus orchards. A. Mazih, S. Eltazi, I. Srairi, S. Sahil, H. Bouguiri, M. Miloudi, Y. Moubaraki, Y. Bourachidi .....	142
Evaluation of mass trapping using M3 bait-station to control Medfly in Citrus orchards. S. Eltazi, A. Mazih, I. Srairi, Y. Bourachidi .....	143
Improvement of <i>Ceratitis capitata</i> mass-trapping strategies on citrus in Northeastern Spain. J.M. Campos Rivela, M.T. Martínez-Ferrer, J.M. Fibla Queralt .....	144-149
Integrated control of Mediterranean fruit fly <i>Ceratitis capitata</i> (Wied.) with an enzymatic hydrolyzed protein by mass trapping J.M. Llorens Climent, E.M. Valls, A.L. Espadas, C.M. Garrido, N. Sierras Serra	150-156
The use of Biofeed devices in Israel's agriculture aimed for export N. Israely.....	157
Preliminary evaluation of GF-120 to control of <i>Ceratitis capitata</i> (Wiedemann) (Diptera, Tephritidae) in commercial citrus orchards. D. Rinaldi, M.E. Porto, E. Tescari, G. Cocuzza.....	158
New results with the ADRESS® bait station system based on lufenuron to control the Mediterranean Fruitfly, <i>Ceratitis capitata</i> Wiedemann. S.W. Skillman, R. Liguori, A. Lopez, E. Mas, A. Morcos, J. Pedras.....	159
Mass trapping of <i>Ceratitis capitata</i> Wied. with Tephri-Trap and Tripack MFL: optimizing the control strategy. M.E. Wong, J. Olivero, A.L. Márquez, F. Montoro, N. Rivera, E.J. García .....	160
The importance of spread surveys on the behaviour knowledge of Medfly sterile males ( <i>Ceratitis capitata</i> Wiedemann) (Diptera: Tephritidae) released over Bicas and Biscoitos orchards, in Terceira Island, Azores D.J. Horta Lopes, L. Pimentel, L. Dantas, A. Figueiredo, N. Macedo, J. Mumford, A.M.M. Mexia .....	161-169
Effectiveness of clays and copper products in the control of <i>Ceratitis capitata</i> (Wiedemann) in organic orange orchards V. Caleca, G. Lo Verde, M. Palumbo Piccionello, R. Rizzo .....	170-175
Characterization of a <i>Bacillus thuringiensis</i> strain collection isolated from Spanish citrus agro-ecosystem and evaluation of insecticidal activity on <i>Ceratitis</i> <i>capitata</i> (Diptera: Tephritidae) J.C. Vidal Quist, D. Castanera, G. Cabrera .....	176
<b>Citrus Leaf Miner</b>	
Citrus leafminer <i>Phyllocnistis citrella</i> (Lepidoptera: Gracilariidae) and its parasitoids: Ten years after the implementation of Classical Biological Control in Spain F. Karamaouna, S. Pascual Ruiz, A. Urbaneja, J. Jacas.....	177
Evolution of <i>Phyllocnistis citrella</i> Stainton (Lepidoptera, Gracillariidae) and its parasitoids in the last five years in citrus orchards of the western Sicily (Italy). A. Lo Genco, C. Ciotta, M. Lo Pinto.....	178-182
Bio-ecological study of the parasitic complex of <i>Phyllocnistis citrella</i> Stainton (Lepidoptera: Gracillariidae) in Western Algeria. M. Boualem, A. Berkani, C. Villemant.....	183-188
On what scale native plants can enhance biological control? The case of the parasitoid complex of <i>Phyllonorycter delitella</i> (Duponchel) on Quercus trees and the citrus orchard. M.C. Rizzo, P. Lucido, A. Agrò.....	189

Damages and control of <i>Phyllocnistis citrella</i> Stainton (Lepidoptera Gracillariidae) in Sicilian citrus nurseries after 13 years of its arrival. V. Caleca .....	190
The control of Citrus leaf miner <i>Phyllocnistis citrella</i> Stainton with bioinsecticides. T. Perović, S. Hrnčić .....	191-194
Control trials of the Citrus Leaf Miner <i>Phyllocnistis citrella</i> Stainton (Lepidoptera, Gracillariidae, Phyllocnistinae) in nurseries. T. Perović, S. Hrnčić .....	195-198
Field evaluation of the influence of different citrus rootstocks on <i>Phyllocnistis citrella</i> Stainton, <i>Aphis spiraecola</i> Pacht and <i>A. gossypii</i> Glover incidence on 'Clementina de Nules' trees. S. Trapero Muñoz, Á. Hervalejo García, M. Jiménez Pérez, J.R. Boyero, J.M. Vela, E. Martínez-Ferri.....	199

### Thrips, Whiteflies and Aphids

Field evaluation on citrus fruit scars in Italy G. Siscaro, G. Perrotta, F. Conti, L. Zappalà .....	200-203
A threshold hypothesis for an integrated control of thrips infestation on citrus in South Eastern Sicily. G. Perrotta, F. Conti .....	204-209
Citrus whiteflies in Israel D. Gerling, Y. Argov .....	210-213
First observations on the influence of <i>Bacillus subtilis</i> on the populations of <i>Dialeurodes citri</i> (ASH.) (Hom. Aleurodidae) in various citrus fruits orchards of Mitidja (Blidean Atlas, Algeria): is there an insecticidal effect? L. Allal-Benfekih, Z. Djazouli, F. Rezig, O. El Mokaïd, F. Hamaïdi .....	214
Field evaluation of the entomopathogenic fungi, <i>Beauveria bassiana</i> and <i>Verticillium lecanii</i> against jasmine whitefly <i>Aleuroclava jasminee</i> on citrus. H.F. Alrubeai, S.O. Klawi, J.B. Hammad, M.W. Khader.....	215
Life cycle of <i>Aphis spiraecola</i> Patch (Homoptera: Aphididae) in East Mediterranean region of Turkey and its development on some important host plants S. Satar, N. Uygun .....	216-224
<i>Toxoptera citricida</i> (Kirkaldy) [Hemiptera, Aphididae] and its natural enemies in Spain. A. Hermoso de Mendoza, A. Álvarez, J.M. Michelena, P. González, M. Cambra .....	225-232

### Ants, Coleoptera and others

Survey of the ants (Hymenoptera: Formicidae) in citrus orchards with different types of crop management in Sicily. A. La Pergola, A. Alicata, S. Longo.....	233-237
Potential natural enemies of the Citrus Longhorned Beetle, <i>Anoplophora chinensis</i> (Col.: Cerambycidae), an invasive Asian pest in Italy F.M. Hérard, M. Ciampitti, M. Maspero, C. Cocquempot, G. Delvare, J. Lopez, N. Ramualde, C. Jucker, M. Colombo.....	238
Present situation of <i>Anoplophora chinensis</i> (Forster) in Italy C. Jucker, M. Maspero, M. Ciampitti, M. Colombo.....	239
<i>Anoplophora chinensis</i> (Forster): a threat to Citrus and other ornamentals. M. Maspero, C. Jucker, M. Colombo.....	240
The fading of citrus fruits in the Mitidja (Algeria). D. Toua, D. Fadil, S. Yahou, S. Lamine, T. Guettache, M. Benchabane .....	241
Citrus phytosanitary survey project in the Comunitat Valenciana. J.M. Llorens, F. García-Mari .....	242

### Mites

Structure of <i>Tetranychus urticae</i> (Acari: Tetranychidae) populations occurring in Spanish clementine orchards ( <i>Citrus reticulata</i> Blanco) and its relevance for	
--	--

pest management <i>M. Hurtado Ruiz, T. Ansaloni, J.A. Jacas, M. Navaja</i> .....	243
Economic thresholds for <i>Tetranychus urticae</i> in clementine: the effect of flushing on fruit damage <i>S. Pascual-Ruiz, M. Hurtado, E. Aguilar, T. Ansaloni, J.A. Jacas</i> .....	244
The first record of <i>Tetranychus urticae</i> Koch (Acarina, Tetranychidae) on citrus in Montenegro. <i>S. Radonjić</i> .....	245-248
Phytoseiid mites on Citrus in Souss valley, Morocco <i>M. Bounfour</i> .....	249
Prospecting of the phytoseiids species on citrus in Malaga (Spain). <i>M.E. Wong, A.L. Márquez, E.J. García, J. Olivero</i> .....	250
Conservation of natural enemies of <i>Tetranychus urticae</i> in clementines: the effect of ground cover management <i>E. Aguillar Fenollosa, S. Pascual Ruiz, J. Jacas</i> .....	251
Intraguild predation between <i>Euseius stipulatus</i> and the phytoseiid predators of <i>Tetranychus urticae</i> in clementines, <i>Neoseiulus californicus</i> and <i>Phytoseiulus persimilis</i> . <i>R. Abad, A. Urbaneja, P. Schausberger</i> .....	252
Efficacy of some acaricides on <i>Tetranychus urticae</i> (Acari: Prostigmata) and their side-effects on selected natural enemies occurring in citrus orchards <i>A. Urbaneja, S. Pascual-Ruiz, T. Pina, R. Abad, P. Vanaclocha, H. Montón, P. Castañera, J.A. Jacas</i> .....	253
Evaluation of a mixture of Caraway oil and fatty acid potassium salts on <i>Tetranychus urticae</i> Koch (Acariformes, Tetranychidae) in laboratory trials. <i>H. Tsolakis, S. Ragusa</i> .....	254
Effects of <i>Melia azedarach</i> L. extracts on <i>Panonychus citri</i> (McGregor) (Acariformes, Tetranychidae) in laboratory trials. <i>H. Tsolakis, R. Jordà Palomero</i> .....	255
Experimental evaluation of spiroadiclofen efficacy in the control of spider mites and armored scales in Sicilian citrus orchards. <i>G. Tropea Garzia, G. Mazzeo</i> .....	256-260
<b>Beneficials and Biological Control</b>	
Seasonal and spatial population trend of predatory insects in eastern-Spain citrus orchards <i>P. Bru, F. García-Marí</i> .....	261-266
Ground-dwelling spiders (Araneae) in citrus orchards in Spain. <i>C. Monzó, O. Mollà, H. Montón, A. Melic, P. Castañera, A. Urbaneja</i> .....	267
Studies on pest and beneficial insects of Citrus in Izmir province (Turkey) <i>A. Guncan, Z. Yoldas, T. Koclu</i> .....	268-274
Biodiversity and distribution of beneficial arthropods within hedgerows in organic Citrus orchards in Valencia (Spain) <i>S. González, R. Vercher Aznar, A. Domínguez Gento, P. Maño, V. Borrás</i> .....	275-279
Establishment of <i>Neodryinus typhlocybae</i> (Ashmead) (Hymenoptera: Dryinidae) in Sicilian lemon orchards. <i>L. Zappalà, G. Siscaro, S. Longo</i> .....	280-283
Natural parasitism of chrysopid eggs by the parasitoid <i>Telenomus acrobates</i> Giard (Hymenoptera: Scelionidae). <i>S. Pascual-Ruiz, E. Aguilar, M.J. Verdú, J.A. Jacas</i> .....	284
<b>IPM and Chemical Control</b>	
Current situation and new approaches to old challenges in citrus IPM in Israel <i>Y. Drishpoun</i> .....	285
Sicily IPM Demonstration Project. <i>R. Tumminelli, R. Finocchiaro, E. Raciti, C. Pedrotti, S. Calcaterra</i> .....	286-289

Integrated Pest Management in two citrus varieties Navel and Maroc Late in Sidi Slimane Area, Western North of Morocco. <i>C. Smaili, D. Bouya</i> .....	290
Side-effects of insecticides on <i>Leptomastix dactylopii</i> under semi-field conditions in Italy. <i>G. Mazzeo, P. Suma, S. Longo</i> .....	291-294
Response of larval <i>Ephestia kuehniella</i> (Lepidoptera: Pyralidae) to individual <i>Bacillus thuringiensis kurstaki</i> toxins and toxin mixtures and effect of delta-endotoxin ratio in <i>Bacillus thuringiensis</i> crystals <i>S. Tounsi, M. Dammak, S. Jaoua</i> .....	295
Functional diversity and distribution of the insects pests and their auxiliary fauna in relation to an insecticidal treatment with the Zolone in an orchard of orange trees in the Central Mitidja (Blidean Atlas, Algeria) <i>Z. Djazouli, L. Allal-Benfekih, A. Mahamat-Salah</i> .....	296
<b>Diseases</b>	
Seasonal variation in the population level of <i>Fusarium</i> spp. in citrus nurseries in Southern Italy <i>A. Khlij, T. Yaseen, A.M. D'Onghia, G. Cirvilleri, A. Ippolito</i> .....	297
Quantitative detection of <i>Phytophthora nicotianae</i> zoospores and chlamydospores by real-time Scorpion PCR <i>T. Yaseen, L. Schena, F. Nigro, A. Ippolito</i> .....	298
Seasonal variation in <i>Phytophthora</i> spp. in citrus nurseries in Southern Italy: preliminary results. <i>A. Salama Eid, G. Cirvilleri, T. Yaseen, A.M. D'Onghia, A. Ippolito</i> .....	299
Application of <i>Metschnikowia fructicola</i> for the integrated control of postharvest diseases of citrus in commercial packinghouses <i>P. Di Primo, M. Coniglione, M. Lazare, M. Keren-Zur, A. Bercovitz, D. Blachinsky, A. Husid, V. Bonaccorso</i> .....	300
New or re-emerging fungal citrus diseases in the Mediterranean. <i>F.M. Grasso, P. Bella, S. Grasso A. Catara</i> .....	301-304
Effectiveness of acetic and peracetic acid to control <i>Penicillia</i> agents of postharvest decay of citrus. <i>C. Oliveri, A. Bonaccorsi, V. Coco</i> .....	305
Host-pathogen interaction phenotype in citrus seedlings inoculated with <i>Phoma tracheiphila</i> . <i>M. Russo, F.M. Grasso, G. Licciardello, V. Catara</i> .....	306
Colonization of <i>Fusarium solani</i> isolate in Troyer citrange seedlings. <i>S. Spina, V. Coco, A. Gentile, A. Catara, G. Cirvilleri</i> .....	307-316
New phytosanitary scenarios for Mediterranean citriculture as a result of the diffusion of the Citrus tristeza virus? <i>A. Catara, S. Rizza, M. Tessitori</i> .....	317-324
Incidence, distribution and diversity of citrus tristeza virus in two different areas of Sicily. <i>S. Davino, G. Sorrentino, M. Guardo, A. Caruso, M. Davino</i> .....	325
Monitoring and eradication of citrus tristeza virus in Apulia region, Southern-Eastern Italy <i>A. Percoco, F. Valentini, K. Djelouah, D. Frasherri, T. Colapietro, A. Guarino, A.M. D'Onghia</i> .....	326
Indicator cuttings instead of seedlings for a rapid biological indexing of the main citrus viruses and viroids <i>A.M. D'Onghia, M. Meziane, R. Brandonisio, K. Djelouah</i> .....	327
Transmission of turkish citrus tristeza virus isolates by <i>Aphis gossypii</i> Glover (Homoptera: Aphididae) in the laboratory. <i>S. Satar, U. Kersting, N. Uygun</i> .....	328-335



High density citrus orchard sustainability through a non-pathogenic viroid. S. Rizza, G. Nobile, M. Tessitori, R. La Rosa, A. Catara .....	336
Use of lux-marked genes to monitor antagonistic <i>Pseudomonas syringae</i> on citrus fruits. A. Bonaccorsi, G. Cirvilleri .....	337-344
Microbial antagonists of the citrus nematode, <i>Tylenchulus semipenetrans</i> , in Southern Italy and host-parasite rhizosphere interactions A. Ciancio.....	345

**IOBC/wprs Bulletin, Vol. 39, 2008 – in print –**

Working Group “Integrated Plant Protection in Fruit Crops”, Sub Group “Soft Fruits”. Proceedings of the “Workshop on Integrated Soft Fruit Production” at East Malling (UK), 24-27 September, 2007. Edited by: Christian Linder & Jerry V. Cross. ISBN 978-92-9067-213-5 [x + 224 pp.].

Development of semiochemical attractants, lures and traps for raspberry beetle, <i>Byturus tomentosus</i> at SCRI; from fundamental chemical ecology to testing IPM tools with growers. N. Birch, S. Gordon, T. Shepherd, W. Griffiths, G. Robertson, T. Woodford, R. Brennan .....	1-3
Mass trapping of raspberry beetle as a possible control method - pilot trials in Norway. N. Trandem, S. Gordon, N. Birch, M. Ekeland, N. Heiberg .....	5-10
Monitoring raspberry cane midge, <i>Resseliella theobaldi</i> , with sex pheromone traps: results from 2006. J. Cross, C. Baroffio, A. Grassi, D. Hall, B. Łabanowska, S. Milenković, T. Nilsson, M. Shternshis, C. Tornéus, N. Trandem, G. Véték .....	11-17
Raspberry cane midge – flight dynamics, egg laying and the efficacy of the neonicotinoid insecticide acetamiprid on primocane fruiting raspberry. B. Łabanowska, J. Cross.....	19-25
Interference between raspberry cane midge ( <i>Resseliella theobaldi</i> ) sex pheromone traps – A one season trial in a Swedish raspberry plantation. T. Nilsson, C. Tornéus.....	27-31
Some preliminary investigations into the sex pheromones of mirid soft fruit pests. M. Fountain, J. Cross, G. Jaastad, D. Hall .....	33-40
Identification of black currant leaf midge <i>Dasineura tetensi</i> (Rübsaamen) female sex pheromone. L. Amarawardana, D. Hall, J. Cross, C. Nagy .....	41-46
Biological control of the currant clearwing moth <i>Synanthedon tipuliformis</i> by mating disruption. C. A. Baroffio, Ch. Carlen .....	47-49
Notes on the parasitoids of the raspberry cane midge, <i>Resseliella theobaldi</i> (Barnes, 1927) (Diptera: Cecidomyiidae) and the rose stem girdler, <i>Agrilus cuprescens</i> (Ménétriés, 1832) (Coleoptera: Buprestidae). G. Véték, C. Thuróczy, B. Péntzes .....	51-64
Open field and laboratory surveys to evaluate the susceptibility of red raspberry genotypes to <i>Tetranychus urticae</i> Koch and <i>Resseliella theobaldi</i> (Barnes). A. Grassi, R. Maines, M. Grisenti, M. Eccher, A. Saviane, L. Giongo .....	65-70
Harmfulness of raspberry gall midge, <i>Lasioptera rubi</i> Schrank (Diptera, Cecidomyi- idae), to some raspberry cultivars. S. Milenković, S. Tanasković.....	71-75
Patterns in the within-cane distribution of the gall-like swellings caused by <i>Agrilus</i> <i>cuprescens</i> (Coleoptera: Buprestidae) and the rate of raspberry infestation. M. Váňová, P. Tóth, J. Lukáš .....	77-84

Post harvest control of the eriophyoid mite <i>Phyllocoptes gracilis</i> on raspberries. Ch. Linder, C. Baroffio, Ch. Mittaz .....	85-87
Biological control of two-spotted spider mite with <i>Phytoseiulus persimilis</i> in ever- bearer strawberry. C.A. Baroffio, Ch. Linder .....	89-92
Does the presence of multiple phytoseiid species affect biocontrol of <i>Tetranychus</i> <i>urticae</i> on strawberry? J. Fitzgerald .....	93-96
Field control of strawberry mite <i>Phytonemus pallidus</i> . B. Gobin, E. Bangels .....	97-100
New generation acaricides for control of two important strawberry pests: The Two- spotted spider mite and the strawberry mite. B. Łabanowska .....	101-106
Efficacy of 3 neonicotinoid insecticides for the control of the green leafhopper <i>Asymmetrasca (Empoasca) decedens</i> Paoli, a new pest on cultivated red raspberry in Trentino, Italy. A. Grassi, R. Maines, A. Saviane .....	107-113
Integrated Pest Management in protected strawberry crops: Increased returns, fewer pests and reduced pesticide use. C. Sampson .....	115-120
Integrating biological control measures against strawberry pests – Preliminary results with strawberry tortrix in Denmark. L. Sigsgaard .....	121-124
Biological control of aphids with <i>Chrysoperla carnea</i> on strawberry M. Turquet, J.-J. Pommier, M. Piron, E. Lascaux, G. Lorin .....	125-129
Severing damage by <i>Anthonomus rubi</i> populations in the UK. C. Jay, J. Cross, C. Burgess .....	131-136
Studies on control of the vine weevil, <i>Otiorhynchus sulcatus</i> using entomopathogenic nematodes. S. Haukeland .....	137-138
Use of entomopathogenic fungi for vine weevil and thrips control T.M. Butt, F.A. Shah, M.A. Ansari .....	139
Breeding for durable resistance to the large raspberry aphid, <i>Amphorophora ideai</i> , in field and protected raspberry plantations: Co-evolution and IPDM. N. Birch, S. Gordon, R. Brennan, N. Jennings, C. Mitchell .....	140
Aphid biology and the development of a programme to manage the spread of <i>Blue-</i> <i>berry scorch virus</i> in south western British Columbia, Canada. D.A. Raworth, S. Mathur, M. Sweeney, V. Brookes .....	141-147
Advances in IPM for black currant A. Harris, J. Cross .....	149-154
Sub-lethal exposure of honey bees to crop-protection – Feeding behaviour and flower visits. B. Gobin, K. Heylen, J. Billen, R. Huybrechts, L. Arckens .....	155-159
Raspberry certification: How it benefits the raspberry sector? C. Eckert, C. Calvin .....	161-163
Raspberry root rot control in the Scottish raspberry certification scheme. A. Schlenzig .....	165-167
Biofumigation to control <i>Verticillium</i> wilt of strawberry: Potency and pitfalls. V.V. Michel, S. Dahal-Tscherrig, H. Ahmed, A. Dutheil .....	169-176
The influence of weed covering on short-day strawberries in the autumn. R. Faby .....	177-179
Evaluation of alternative chemicals for control of botrytis in raspberry. A. Berrie, T. O'Neill, E. Wedgwood, B. Ellerker .....	181-187

Efficacy of <i>Metschnikowia fructicola</i> (Shemer®) against post-harvest soft fruit (berries) rots in northern Italy (Trentino). <i>D. Prodorutti, A. Ferrari, A. Pellegrini, I. Pertot</i> .....	189-192
Low doses of copper control leaf spot diseases caused by <i>Mycosphaerella ribis</i> and <i>Drepanopeziza ribis</i> in black currants. <i>A. Stensvand, A. Dobson, S. Mogan</i> .....	193-196
Effectiveness of a tryfloxystrobin and tolyfluanid mixture for control of blackcurrant diseases. <i>A. Broniarek-Niemiec, A. Bielenin</i> .....	197-201
Interactions between isolates of powdery mildew ( <i>Podosphaera aphanis</i> ) and cultivars of strawberry, <i>Fragaria x ananassa</i> . <i>X. Xu, J. Robinson, D. Simpson</i> .....	203-209
Potential role of cleistothecia in strawberry powdery mildew. <i>X. Xu, J. Robinson, A. Berrie</i> .....	211-215
Ontogenic resistance against powdery mildew ( <i>Podosphaera macularis</i> ) in leaf tissue of strawberry. <i>D.M. Gadoury, A. Stensvand, R.C. Seem, M.C. Heidenreich</i> .....	217
<i>Colletotrichum acutatum</i> : Survival in plant debris and infection of some weeds and cultivated plants. <i>P. Parikka, A. Lemmetty</i> .....	219-222
Wild and cultivated <i>Potentilla</i> spp. may serve as alternate hosts and possible reservoirs of strawberry viruses. <i>D. Yohalem, K. Lower</i> .....	223-224

---

**IOBC/wprs Bulletin, Vol. 40, 2008** – in print –

Working Group “Integrated Protection of Stored Products”, Proceedings of the meeting at Poznan (Poland), 20-23 August, 2007. Edited by: Shlomo Navarro, Cornel Adler & Lise Stengård Hansen. ISBN 978-92-9067-214-2 [xii + 379 pp.].

Group photo .....	i
Introduction.....	iii
Introduction by the New Convenor .....	iv
List of participants and authors .....	v

**Overviews and trends on stored product protection**

Implementation of methyl bromide alternatives in Poland <i>Ignatowicz S., Olejarski P.</i> .....	3-7
Restrictions to the use of fumigants and opportunities for substitution with botanicals and modified atmospheres <i>Navarro S., Donahaye, E.</i> .....	9-22
<i>Anobium punctatum</i> (Coleoptera: Anobiidae), a new pest of books in Israel <i>Wilamowski A., Schnur H., Kessler I., Navarro S.</i> .....	23-28
Potential of parasitic protozoans in biological control of stored products pests <i>Lipa J.J.</i> .....	29

**Biology and ecology of stored product pests**

Description and putative function of the antennal sensilla of <i>Habrobracon hebetor</i> (Say) (Hymenoptera: Braconidae) <i>Dweck H.K., Gadallah N.S.</i> .....	33
<i>Plodia interpunctella</i> (Hübner) mating suppression with an emulsive pheromone preparation - laboratory experiments <i>Komorowska-Kulik, J., Celmer-Warda K., Bombinska D., Al Amin I.</i> .....	35-39
Attraction of <i>Sitophilus zeamais</i> Motschulsky to different types of cereal pasta <i>Trematerra P., Visini G., Romagnoli L., Palladino A., Mancini E.</i> .....	41-48

Bacterial flora of <i>Lasioderma serricorne</i> (F.) (Coleoptera: Anobiidae) from several tobacco stores in Turkey Yaman M., Aslan I., Görmez A., Ertürk Ö.....	49-52
Studies on the feeding, reproduction and development of <i>Cheletomorpha lepidopterorum</i> (Schaw) (Prostigmata: Cheyletidae) on various food sources Yassin E.M.A., Sallam G.M.E. Ibrahim S.A. ....	53-62
Suitability of species as food for mould mite ( <i>Tyrophagus putrescentiae</i> (Selm)) Czajkowska B. ....	63
<b>Insect detection, monitoring, trapping, pheromones and mating disruption</b>	
Comparison of methods for sampling psocids in stored wheat Throne J.E., Opit G.P., Flinn P.W.....	67-74
Evaluating treatment efficacy in commercial food facilities: Insights gained from small-scale simulated warehouse experiments Campbell, J. F. Toews, M. D., Arthur F. H.....	75-83
The use of sex pheromone traps for cigarette beetle as a tool for IPM in a cigarette factory in Cape Verde islands Carvalho M.O., Mexia A., Torres L. M. ....	85-92
Monitoring of insect populations by using adhesive surfaces of different colours in a dried fig warehouse in Southern Greece Karlis G., Athanassiou C.G., Buchelos C.Th. ....	93-106
Monitoring mill moth ( <i>Ephestia küehniella</i> Zell.) by pheromone traps in Belarus Kozich I. ....	107-111
Potential of near infrared spectroscopy (NIRS) technology to discriminate between infestations of stored product pests in rice Pascual-Villalobos M.J., Font R., De Haro-Bailon A., Riudavets J.....	113-117
Monitoring of insect populations in a pasta factory and related facilities in Greece Kaltsikes P. J., Athanassiou C. G., Goufa M., Repanis M., Bakodimos D., Gouveri M. ....	119-125
New funnel pheromone trap for monitoring of moths in dusty places Komorowska-Kulik J., Ignatowicz S., Sieminska E.....	127-130
<b>Biological control</b>	
Population dynamics of the natural enemies of stored product pests in cereal and dried fruit companies Belda C., Pons M <sup>a</sup> . J., Gabarra R., Riudavets J. ....	133-139
The biology of <i>Lariophagus distinguendus</i> a natural antagonist of stored grain beetles – film presentation Collatz J., Wyss U., Steidle J.L.M.....	141
Biological control of <i>Anobium punctatum</i> in infested books, using the parasitoid <i>Lariophagus distinguendus</i> - preliminary results Wilamowski, A., Kessler, I. Rabin, I., Prozell, S. Navarro, S. ....	143-147
Virulence of isolates of the entomopathogenic fungus <i>Beauveria bassiana</i> (Bals.) Vuillemin to adults of <i>Acanthoscelides obtectus</i> Say (Coleoptera: Bruchidae) Draganova S., Staneva E. ....	149-154
Experiences with beneficial insects for pest control in storage buildings and processing units Meierhofer B., Fassbind D., Brand S., Kraaz I., Zingg D., Wyss G.S.....	155-159
<i>Lariophagus distinguendus</i> Förster (Hym.: Pteromalidae): development on <i>Sitophilus granarius</i> L. (Col.: Curculionidae) at low temperatures Stengård Hansen L.....	161-164
Development of a mass rearing device for the use of <i>Lariophagus distinguendus</i> (Förster) against <i>Sitophilus granarius</i> L. in grain Niedermayer S., Steidle J.L.M. ....	165-169

Studies on storage, release and host finding of <i>Trichogramma evanescens</i> to control <i>Ephestia kuehniella</i> <i>Tuncbilek A.S., Canpolat U., Sumer F.</i> .....	171-179
Factors affecting the attachment of conidia of <i>Metarhizium anisopliae</i> (Metschnikoff) Sorokin (Deuteromycotina: Hyphomycetes) to different body parts of <i>Tribolium confusum</i> Jacquelin du Val (Coleoptera: Tenebrionidae) adults <i>Kavallieratos N.G., Wakefield M.E., Athanassiou C.G.</i> .....	181-190
Efficacy of submultiples doses of <i>Bacillus thuringiensis</i> compounds against the Mediterranean flour moth <i>Ephestia kuehniella</i> (Zeller) (Lepidoptera: Pyralidae) <i>Kontodimas D., Nikoloudies K.J.</i> .....	191
<i>Enterococcus mundtii</i> , a pathogenic bacterium to <i>Ephestia kuehniella</i> Zeller <i>Yaman M., Aslan I.</i> .....	192
Effect of gamma radiation and cold storage on emergence and life time adults <i>Venturia canescens</i> Gravenhorst (Hymenoptera: Ichneumonidae) parasiting larvae of <i>Ephestia kuehniella</i> Zeller (Lepidoptera: Pyralidae) <i>Celmer-Warda K., Ignatowicz S.</i> .....	193-201

### Phytochemicals

Repellent activity and persistence of the essential oils from <i>Carum copticum</i> and <i>Vitex pseudo-negundo</i> on <i>Tribolium castaneum</i> <i>Sahaf B.Z., Moharramipour S., Meshkatalasadat M.H., Filekesh E.</i> .....	205-210
Insecticidal activity of volatile monoterpenoids to <i>Sitophilus oryzae</i> L. (Coleoptera: Curculionidae), <i>Rhyzopertha dominica</i> Fabricius (Coleoptera: Bostrichidae) and <i>Cryptolestes pusillus</i> Schönherr (Coleoptera: Cucujidae) <i>Lopez M.D., Pascual-Villalobos M.J.</i> .....	211-219
Toxicity and repellency of essential oils of <i>Lippia adoensis</i> from two agro-ecological zones in Cameroon to <i>Prostephanus truncatus</i> and two strains of <i>Sitophilus zeamais</i> <i>Nukenine E.N., Adler C., Reichmuth C.</i> .....	221-230
Effectiveness of novel compounds for the control of stored product mites <i>Wakefield M.E., Ford H.L.</i> .....	231-241
Comparative fumigant toxicity of <i>Rosmarinus officinalis</i> and <i>Artemisia sieberi</i> against <i>Tribolium castaneum</i> <i>Ahmadi M., Moharramipour S., Zolfagharieh H.R.</i> .....	243-247
Fumigant toxicity of essential oil from <i>Tanacetum polycephalum</i> against <i>Tribolium castaneum</i> and <i>Callosobruchus maculatus</i> <i>Arabi F., Moharramipour S., Sefidkon F.</i> .....	249-252
The effect of <i>Mentha piperita</i> L. and <i>Geranium robertianum</i> L. on the course of population processes of the lesser grain borer <i>Rhyzopertha dominica</i> F. (Coleoptera, Bostrichidae) <i>Ktys M.</i> .....	253-259
Effectiveness of bitterbarkomycin against <i>Prostephanus truncatus</i> (Horn) (Coleoptera: Bostrichidae), <i>Rhyzopertha dominica</i> (F.) (Coleoptera: Bostrichidae) and <i>Sitophilus oryzae</i> (L.) (Coleoptera: Curculionidae) in stored maize <i>Milonas D., Athanassiou C.G., Maistrou S., Saitanis C.J.</i> .....	261-266
Insecticidal activity of essential oil from <i>Vitex agnus-castus</i> against <i>Callosobruchus maculatus</i> <i>Moharramipour S., Arabi F., Bagheri H.</i> .....	267-270

### Physical, chemical and other techniques for stored product protection

Susceptibility of life stages of <i>Tribolium confusum</i> du Val. to gaseous ozone <i>Isikber A.A., Öztekin S.</i> .....	273-279
Application of ozone as fumigant to prevent unwanted biological activity in stored grain <i>Hansen P.</i> .....	281

Combination of biological control and CO <sub>2</sub> treatments against <i>Plodia interpunctella</i> (Hübner) <i>Pons, M<sup>a</sup>.J., Castañé C., Riudavets J.</i> .....	283-287
Effectiveness of DEBBM-P, a new enhanced diatomaceous earth formulation for the control of <i>Tribolium castaneum</i> (Herbst.) (Coleoptera: Tenebrionidae) on stored wheat <i>Wakil W., Ashfaq M.</i> .....	289-294
Distribution and efficacy of aerosol insecticides in commercial facilities <i>Arthur F.H., Campbell J.F.</i> .....	295-301
Evaluation of the knockdown activity of some pyrethroids on different types of surfaces against larvae of <i>Plodia interpunctella</i> larvae (Hbn.) (Lepidoptera: Pyralidae) <i>Locatelli D.P., Girgenti P., Caldiroli A., Stampini M.</i> .....	303-311
Preliminary investigations about tolerance to phosphine in <i>Tribolium</i> strains (Coleoptera; Tenebrionidae) in Italy <i>Savoldelli S., Süss L.</i> .....	313-317
Evaluation of a new enhanced diatomaceous earth formulation (DEBBM-P) against <i>Rhyzopertha dominica</i> (F.) (Coleoptera: Bostrychidae) on stored wheat <i>Wakil W., Javed A.</i> .....	319-323
Efficacy of a new grain fumigant: ethyl formate/allyl isothiocyanate for the control of two stored grain beetles, the rice weevil, <i>Sitophilus oryzae</i> L. and the granary weevil, <i>Sitophilus granarius</i> L. <i>Ciesla Y., Rouzes R., Fritsch J., Ducom P.</i> .....	325-334
Ethyl formate efficacy in combination with low pressure or at atmospheric pressure in mixture with CO <sub>2</sub> against the dried fruit beetle, <i>Carpophilus hemipterus</i> (L.) on prunes <i>Rouzes R., Ciesla Y., Dupuis S., Ducom P.</i> .....	335-344
<b>Integrated pest prevention methods during storage, transportation and handling</b>	
Contemporary enhancement of post-harvest IPM programs by selected physical methods <i>Fleurat-Lessard F., Dupuis S.A.</i> .....	347-362
Insect-proof packaging to avoid stored product insects <i>Adler C.</i> .....	363-369
Aeration, fumigation by Siroflo®/Eco <sub>2</sub> Fume® and storage in modern bunkers and hermetic platforms under PVC - A review of three ecologically friendly technologies used for grain storage and protection in Cyprus <i>Varnava A., Yiasoumis D.</i> .....	371-379

**IOBC/wprs Bulletin Vol. 41, 2009 – in print –**

Working Group “Pheromones and and other Semiochemicals in Integrated Production”. Proceedings of the meeting at Lund (Sweden), 9 - 14 September 2007. Edited by: Marco Tasin & Peter Witzgall. ISBN 978-92-9067-215-9. [ix + 149 pp.]

Preface .....	i
Contents .....	iii
List of participants .....	vii

**Sex-pheromones**

Mate location and sexual maturity of adult male mealybugs: narrow window of opportunity in a short lifetime <i>Elsa Borges da Silva, Joana Mouco, Rita Antunes, Zvi Mendel, José Carlos Franco.</i> ..	3-9
Codling moth, <i>Cydia pomonella</i> (L.), canopy distribution and implications for mating disruption applications <i>David Epstein, Larry Gut, James Miller, Lucasz Stelinski</i> .....	11-15

CIRCE – an addition to the toolbox for assessment / improvement of mating disruption <i>Uwe T. Koch, Eric Doye, Klaus Schumann, Ulf Andrick</i> .....	17-24
Mating disruption of the oriental fruit moth by concentrated applications of micro- encapsulated pheromone in Turkey <i>Orkun Baris Kovanci, Nimet Sema Gencer, Tom Larsen, Alan Knight</i> .....	25
Mating disruption of codling moth, <i>Cydia pomonella</i> (L.), using Isomate C plus dis- pensers in apple orchards of Bulgaria <i>Hristina Kutinkova, Jörg Samietz, Vasiliy Dzhuvinov, Pierre-Joseph Charmillot, Vittorio Veronelli</i> .....	27-32
Sustainable codling moth mating disruption in diverse agricultural environments <i>Peter McGhee, David Epstein, Donald Thomson, Larry Gut</i> .....	33-39
The use of pheromone mating disruption technique for the control of <i>Ostrinia nubilalis</i> : preliminary research and field applications. <i>Fabio Molinari, Andrea Iodice, Piergiorgio Cappellaro, Carlo Bassanetti, Paolo Sambado, Manuela Cigolini, Matteo Anaclerio, Francesco Savino</i> .....	41-44
Use of mating disruption for <i>Zeuzera pyrina</i> control <i>Maria Isabel Patanita, Enrique Vargas</i> .....	45-51
Commercial use of codling moth mating disruption: a success story despite the limi- tations <i>Don Thomson, Jay Brunner, Jack Jenkins, Larry Gut</i> .....	53-60
Opportunities and limitations of mass trapping of difficult-to-control fruit pests: efforts in Hungary <i>Erzsebet Voigt, Miklos Tóth</i> .....	61-66
<b>Host volatiles</b>	
Odour signals for detection and control of indoor pyralid moths <i>Olle Anderbrant, Camilla Ryne, Edyta Sieminska, Glenn P. Svensson, P.-O. Christian Olsson, Erling Jirle, Christer Löfstedt</i> .....	69-74
Development of semiochemical attractants, lures and traps for raspberry beetle, <i>Byturus tomentosus</i> at SCRI; from fundamental chemical ecology to testing IPM tools with growers <i>A. Nicholas E. Birch, Stuart Gordon, Carolyn Mitchell, Tom Shepherd, Wynne Griffiths, Graham Robertson, Rex Brennan</i> .....	75-78
Kairomonal response of a parasitic wasp to the sex pheromone of the vineyard mealybug <i>Elsa Borges da Silva, Taiadjana Fortuna, José Carlos Franco, Leonor Campos, Manuela Branco, Anat Zada, Zvi Mendel</i> .....	79-82
A bioassay-based approach for the evaluation of host-plant cues as oviposition stimuli in grapevine moth <i>Marco Tasin, Gianfranco Anfora, Elisabetta Leonardelli, Claudio Ioriatti, Andrea Lucchi, Antonio De Cristofaro, Ilaria Pertot</i> .....	83-86
Oviposition response of grapevine moth to microorganisms isolated from grape <i>Marco Tasin, Carmela Sicher, Ilaria Pertot</i> .....	87-89
Chemical communication of European cabbage flea beetles (Coleoptera: Chrysomel- idae, Halticinae): overview of research in Hungary <i>Miklós Tóth, Éva Csonka</i> .....	91-99
<b>Others</b>	
The leaf beetle <i>Diabrotica virgifera virgifera</i> LeConte: a merciless entomological challenge for agriculture <i>Hans E. Hummel, Arno Deuker, Günter Leithold</i> .....	103-110
External complex of leaf-eating Lepidoptera on apple in two regions of Bulgaria <i>Penka Peeva, Nyonka Velcheva</i> .....	111-121
Spatio-temporal distribution of <i>Ceratitidis capitata</i> trap catches in an agricultural landscape <i>Andrea Sciarretta, Daniela Cesare, Roberto De Salvador, Maria Rosaria Tabilio, Pasquale Trematerra</i> .....	123-129

## Abstracts

Stereoisomeric separation of the sex pheromone component 6,10,14-trimethyl-2-pentadecanol <i>Joakim Bång</i> .....	133
Role of semiochemicals in crop protection in South Asia <i>Alan Cork</i> .....	134-135
Plant parasitic nematodes detect environmental signals present in the rhizosphere using their chemosensory organs <i>R.H.C. Curtis</i> .....	136
Multitrophic interactions between insects, phytopathogens and plants: Phytoplasma manipulates vector behaviour by means of plant odour <i>J. Gross, C.J. Mayer, A. Vilcinskas</i> .....	137
High-performance mating disruption can be achieved using formulations that provide many attractive point sources <i>Larry Gut, James Miller, Lukasz Stelinski, Peter McGhee, David Epstein</i> .....	138
Odour coding in antennal sensilla of the southern house mosquito, <i>Culex quinquefasciatus</i> <i>Sharon R. Hill, Rickard Ignell, Bill S. Hansson</i> .....	139
Monitoring the minute: pheromone-based monitoring of gall midges <i>Ylva Hillbur</i> .....	140
Volatile compounds of the main hosts of the European Cherry Fruit Fly, <i>Rhagoletis cerasi</i> <i>Kirsten Köppler, Frank Sporer, Michael Wink, Heidrun Vogt</i> .....	141
Concerted evolution of female and male pheromones in corn borers <i>Ostrinia</i> spp. (Lepidoptera: Crambidae) <i>Christer Löfstedt, Jean-Marc Lassance</i> .....	142
Preformed and induced chemical resistance of tea leaf against <i>Exobasidium vexans</i> infection <i>Nimal Punyasiri</i> .....	143-144
Host-plant selection by <i>Spodoptera littoralis</i> , a laboratory and field study <i>M.M. Sadek, B.S. Hansson, P. Anderson</i> .....	145-146
Does the parasitoid <i>Anagyrus pseudococci</i> respond to the sex pheromone of major host-mealybug species? <i>E.B. Silva, T. Fortuna, J.C. Franco, L. Campos, M. Branco, A. Zada, Z. Mendel</i> .....	147
Multitrophic interactions between insects, fungi and plants: Using naturally produced chemicals to solve an invasive species problem <i>P.E.A. Teal, B. Torto, T. Arbogast, J.H. Tumlinson, H.T. Alborn, D.G. Boucias</i> .....	148
Mating disruption to control pea moth in on-farm experiments <i>H. Saucke, A. Balasus, A. Kratt, U. Koch</i> .....	149

---

## IOBC/wprs Bulletin, Vol. 42, 2009 – in print –

Working Group “Multitrophic Interactions in Soil”, Proceedings of the meeting at Dijon (France), 24-27 June, 2007. Edited by: Christian Steinberg, Véronique Edel-Hermann, Hanna Friberg, Claude Alabouvette and Arno Tronsmo. ISBN 978-92-9067-216-6 [xii + 206 pp.].

Preface .....	i
List of participants .....	iii
Mechanisms involved in spatial and temporal mobility of disease patches caused by <i>Rhizoctonia solani</i> in sugar beet field: Induction of antagonists within disease patch <i>Muhammad Anees, Arne Tronsmo, Véronique Edel-Hermann, Nadine Gautheron, Christian Steinberg</i> .....	1-5



Take-all decline: An epidemiological analysis <i>Douglas Bailey, Nik Cuniffe, Philippe Lucas, Marie Gosme, Neil Paveley, John Spink, Christopher Gilligan</i> .....	7-10
<i>Pythium</i> elicitors in biological control of <i>Botrytis cinerea</i> <i>Kanak Bala, Dalia Rav David, Bernard Paul, Yigal Elad</i> .....	11-14
Population dynamics of beneficial microorganisms co-applied to seed during drum priming <i>Amanda J. Bennett, John M. Whipps</i> .....	15-18
Microbial analysis of soils from avocado crops modified by different organic amendments and its role in disease suppressiveness <i>Nuria Bonilla, Juan A. Torés, Alejandro Pérez-García, José M. Hermoso, Jorge Gonzalez, David Sarmiento, Francisco M. Cazorla, Antonio de Vicente</i> .....	19-22
Diversity of <i>Sclerotinia sclerotiorum</i> in the UK and variability in germination of sclerotia <i>John Clarkson, Emily Clewes, John Whipps</i> .....	23-26
Towards understanding the temporal dynamics of <i>Allium</i> white rot: factors affecting the infectivity of <i>Sclerotium cepivorum</i> sclerotia <i>John Clarkson, Anita Scruby, John Whipps</i> .....	27-30
Antagonistic ability of <i>Bacillus subtilis</i> strains against <i>Fusarium oxysporum</i> f.sp. <i>radicis lycopersici</i> <i>Constantinescu Florica, Voshol G.P., Validov Shamil, Bloemberg Guido</i> .....	31-35
Biodiversity and soil quality in agroecosystems: the use of a qualitative multi-attribute model <i>Jérôme Cortet, Marko Bohanec, Bryan Griffiths, Martin Žnidaršič, Marko Debeljak, Sandra Caul, Jacqueline Thompson, Paul H. Krogh</i> .....	37-40
Real-time PCR assay for identification and quantification of <i>Rhizoctonia solani</i> AG-2-2 in soil <i>Véronique Edel-Hermann, Marlène Jobard, Nadine Gautheron, Hanna Friberg, Christian Steinberg</i> .....	41-46
Effect of organic matter on soil inoculum potential and soil suppressiveness to <i>Gaeumannomyces graminis</i> var. <i>tritici</i> and <i>Rhizoctonia solani</i> <i>Léon Fayolle, Claude Alabouvette, J.M. Bodet, Christian Steinberg</i> .....	47-51
Identification of a fungal population associated with soil suppressiveness to <i>Rhizoctonia solani</i> diseases in a biofumigated soil <i>Marie Fiers, Céline Janvier, Christian Steinberg, Véronique Edel-Hermann, François Villeneuve, Claude Alabouvette</i> .....	53-56
Interactions between bacteria and ectomycorrhizal fungi: what's new? <i>Pascale Frey-Klett, Aurélie Deveau, Mika Tarkka, Stéphane Uroz, Béatrice Palin, Jean-Claude Pierrat, Francis Martin, Jean Garbaye</i> .....	57-61
Response of <i>Rhizoctonia solani</i> to soil faunal grazing and organic amendments – different from general microbial dynamics <i>Hanna Friberg, Léon Fayolle, Véronique Edel-Hermann, Nadine Gautheron, Céline Faivre Christian Steinberg</i> .....	63-67
Synergy of <i>Brassica napus</i> green manure and <i>Trichoderma</i> seed treatment against <i>Sclerotium rolfsii</i> of sugar beet <i>Stefania Galletti, Pier Luigi Burzi, Eleonora Sala, Simona Marinello, Claudio Cerato</i> .....	69-72
Contribution of bacteria to the functional diversity of ectomycorrhizas in forest ecosystems <i>Jean Garbaye</i> .....	73-76
Differentially expressed genes during interactions in a fungistatic bacterial mixture <i>Paolina Garbeva and Wietse de Boer</i> .....	77-81
Induction of systemic resistance by PGPR, a suitable means to consider for managing of cucurbit powdery mildew <i>Laura García-Gutiérrez, Diego Romero, Houda Zeriouh, Francisco M. Cazorla, Antonio de Vicente, Alejandro Pérez-García</i> .....	83-86

Ecophysiological Influence of TerralytPlus® on electrochemical soil parameters <i>Hartmut Heilmann</i> .....	87-90
Trophic interactions between soil fungi and Collembola <i>Gloria Innocenti, Maria Agnese Sabatini, Sonia Ganassi, Matteo Montanari, Maria Barbara Branzanti</i> .....	91-94
Towards indicators of soil health <i>Céline Janvier, François Villeneuve, Véronique Edel-Hermann, Thierry Mateille, Claude Alabouvette, Christian Steinberg</i> .....	95-100
Spatial pattern and temporal dynamics of <i>Sclerotium</i> root rot ( <i>Sclerotium rolfsii</i> ) in fall sown sugar beet crops in southern Spain <i>Rafael Jordán-Ramírez, Rafael M. Jiménez-Díaz, Juan A. Navas-Cortés</i> .....	101-103
Biocontrol activity of <i>Collimonas fungivorans</i> against tomato foot and root rot caused by <i>Fusarium oxysporum</i> f. sp. <i>radicis-lycopersici</i> <i>Faina Kamilova, Johan Leveau, Ben Lugtenberg</i> .....	105-108
Implications of root spatial relationships in young wheat obtained from CT-scanning for an invasion by fungal pathogens <i>Adam Kleczkowski, Douglas J. Bailey, Wilfred Otten, Margaret Grose, Christopher A. Gilligan</i> .....	109-112
Phylogenetic analysis of endophytic <i>Fusarium oxysporum</i> strains inducing systemic resistance against the burrowing nematode <i>Radopholus similis</i> in banana <i>Andreas Kurtz, Alexander Schouten and Richard A. Sikora</i> .....	113-118
Influence of Disease Resistant Management Strategies on Genetic and Pathogenic Diversity in Plant Pathogen Populations: <i>Fusarium</i> wilt of chickpea, a case study <i>Blanca B. Landa, M. Mar Jiménez-Gasco, and Rafael M. Jiménez-Díaz</i> .....	119-122
Compost performances in a turf system <i>Matteo Montanari, Gloria Innocenti, Sante Scagliarini</i> .....	123-126
Transformation of <i>Gnomonia fragariae</i> , the cause of strawberry root rot and petiole blight, with GFP gene and the study of host infection and colonization <i>Inga Moročko, Jamshid Fatehi</i> .....	127-130
Interconnectivity of habitats in soil: combining X-ray micro tomography and thin sectioning to reveal fungal-soil structure interactions <i>Wilfred Otten, Kirsty Binnie, Iain Young, Jonathan Villot, Dmitri Grinev</i> .....	131-134
Effect of <i>Glomus mosseae</i> BEG12, <i>Trichoderma viride</i> TV1 and <i>T. harzianum</i> T39 on plant growth of healthy and <i>Armillaria mellea</i> inoculated strawberry plants under greenhouse controlled conditions <i>Ilaria Pertot, Federica De Luca</i> .....	135-138
Agricultural practices affect microbial functional diversity, microbial activity and suppressiveness against soil-borne diseases <i>Michael Raviv, Ido Aviani, Yael Laor, Anat Yogev, Ibrahim Saadi, Rony Cohen, Shlomit Medina</i> .....	139-144
Consequences of liming on ectomycorrhizal community structure and functioning <i>François Rineau, Jean Garbaye</i> .....	145-150
Interaction between <i>Brassica carinata</i> seed meal and <i>Trichoderma</i> in soil infected by <i>Pythium ultimum</i> <i>Eleonora Sala, Stefania Galletti, Pier Luigi Burzi, Claudio Cerato</i> .....	151-154
Characterizing defense responses in banana induced by endophytic <i>Fusarium oxysporum</i> against the burrowing nematode <i>Radopholus similis</i> <i>Alexander Schouten, Kerstin Schäfer, Richard A. Sikora</i> .....	155-158
Biocontrol of root-knot nematodes by <i>Trichoderma</i> – modes of action <i>Edna Sharon, Ilan Chet, Meira Bar-Eyal, Yitzhak Spiegel</i> .....	159-163
Root exudates as important factor in the <i>Fusarium</i> – host plant interaction <i>Siegrid Steinkellner, Roswitha Mammerler, Horst Vierheilig</i> .....	165-168
Operalizing soil quality <i>Aad J. Termorshuizen, Peter van Erp, Renske Landeweert, Arjan Reijneveld, Roel Staps, Peter Veenhuizen, Petra C.J. van Vliet, Jos Wubben</i> .....	169-172
Saprotrophic basidiomycete <i>Hypholoma fasciculare</i> affects fungal and bacterial community composition in colonized wood and soil.	

<i>Vendula Valášková, Jaroslav Šnajdr, Pauline K. Gunnewiek, Wietse de Boer, Petr Baldrian</i> .....	173-176
Monitoring of pathogenic and nonpathogenic <i>Fusarium oxysporum</i> strains during tomato plant infection <i>Shamil Z. Validov, Faina D. Kamilova and Ben J.J. Lugtenberg</i> .....	177-183
Lignin enhances mycoparasitism of <i>Rhizoctonia solani</i> and <i>Botrytis cinerea</i> sclerotia <i>Sarah Van Beneden, Joachim Audenaert, Greet De Backer, Monica Höfte</i> .....	185-190
Comparison of four tillage systems in organic farming. Effect of soil structure modification and organic matter repartition on microbial biomass and soil respiration <i>Jean François Vian, Joséphine Peigné, Rémi Chaussod and Jean-Roger Estrade</i> .....	191-194
Characterization of bacteriophages of <i>Verticillium</i> -antagonists originated from the strawberry rhizosphere <i>Arite Wolf, Sabine Schulze, Horst Neve</i> .....	195-199
Selection and partial characterisation of biofumigants for management of <i>Verticillium</i> wilt in strawberries <i>David Yohalem, David Hall</i> .....	201-206

**Bulletins 31, 33, 34, and 35 will be shipped in the next few days. Bulletins 36 – 40 have been printed, but will be collected, glued and covered in January 2009.**

The regular prices for the Bulletins are:

- up to 100 pages/Bulletin: 10 € per copy
- up to 300 pages/Bulletin: 15 € per copy
- > 300 pages/Bulletin: 30 € per copy

You can find an **order form for Bulletins** in our website:

[www.iobc-wprs.org/pub/index.html](http://www.iobc-wprs.org/pub/index.html)

Mailing costs will be added. If you pay by check, please add 5.00 EURO for banking fees. If you pay by money-order please make sure that all costs are dept to you.

## Other interesting publications brought to attention of Profile

- Alford, D.V. (2007): Pests of Fruit Crops. A Color Handbook. – 461 pp., 1113 color photographs, Academic Press, US\$ 148.00, ISBN: 978-0-12-373676-5.
- Bourtzis, K. & Th.A. Miller (eds., 2008): Insect Symbiosis. Vol. 3. – 384 pp., CRC Press (Boca Raton), £ 62.99, US\$ 119.95, ISBN: 978-1-4200-6410-0.
- Bowsher, C., Steer, M. & Tobin, A. (2008): Plant Biochemistry. – 446 pp., Garland Science, £ 41.99, ISBN: 978-0-8153-4121-5.
- Eilenberg, J. & H.M.T. Hokkanen (eds.) (2007): An Ecological and Societal Approach to Biological Control. – xii + 322 pp., Springer (Series: Progress in Biological Control, Vol. 2), Hardcover € 112.30, ISBN: 978-1-4020-4320-8.
- Gould, J., K. Hoelmer & J. Goolsby (eds.) (2008): Classical Biological Control of *Bemisia tabaci* in the United States - A Review of Interagency Research and Implementation. – xviii + 343 pp., Springer (Series: Progress in Biological Control, Vol. 4), Hardcover € 128.35, ISBN: 978-1-4020-6739-6.

- Hajek, A.E., T.R. Clare & M. O'Callaghan (eds.) (2009): Use of Microbes for Control and Eradication of Invasive Arthropods. xvi + 368 pp., Springer (Series: Progress in Biological Control, Vol. 6), € 128.35, ISBN: 978-1-4020-8559-8.
- Nation, J.L. (2008): Insect Physiology and Biochemistry, 2<sup>nd</sup>. ed. – 560 pp., CRC Press (Boca Raton), £ 39.99, US\$ 79.95, ISBN: 978-1-4200-6177-2.
- Robertson, J.L., R.M. Russell, H.K. Preisler & N.E. Savin (2007): Bioassays with Arthropods, 2<sup>nd</sup> ed. – 224 pp., CRC Press (Boca Raton), £ 48.99, US\$ 89.95, ISBN: 978-0-8493-2331-7.
- Romeis, J.; A.M. Shelton, & G. Kennedy (eds.) (2008): Integration of Insect-Resistant Genetically Modified Crops within IPM Programs. – xviii + 446 pp., Springer (Series: Progress in Biological Control, Vol. 5), Hardcover € 85.55, ISBN: 978-1-4020-8372-3.
- Walters, D., Newton, A. & Lyon, G. (eds.) (2007): Induced Resistance for Plant Defence. A Sustainable Approach to Crop Protection. – 272 pp., John Wiley & Sons, Hardcover, € 145.00, ISBN: 978-1-4051-3447-7.

Additional information in

**IOBC-Global Newsletter 84** – October 2008

<http://www.unipa.it/iobc/download/newsletter84.pdf>

**Sting 32** – September 2008

Newsletter on biological control in greenhouses  
of the IOBC/WPRS WG “Integrated control in Protected Crops, Temperate Climate“

<http://web.agrsci.dk/plb/iobc/sting/sting32.pdf>

## Time-Table of forthcoming events

For the Meetings of the IOBC/wprs Working Groups see also the IOBC/wprs homepage:  
<http://www.iobc-wprs.org>

8 - 13 February, 2009: 3rd International Symposium on Biological Control of Arthropods, Christchurch (New Zealand). – Sara Russell, Professional Development Group, PO Box 84, Lincoln University, Canterbury, New Zealand, e-mail: [russels4@lincoln.ac.nz](mailto:russels4@lincoln.ac.nz), <http://www.isbca09.com/>

9 - 12 March, 2009: IOBC/wprs Working Group “Integrated Control of Plant-feeding Mites”, Centro per l'Agrobiologia e la Pedologia, Experimental Institute for Agricultural Zoology (ISZA), Firenze (Italy). – Local Organizer: Sauro Simoni, ISZA, Firenze, Italy. [sauro.simoni@isza.it](mailto:sauro.simoni@isza.it), <http://www.isza.it/IOBCflorence2009/>, WG Convener: Eric Palevsky, Dept. of Entomology, Agricultural Research Organization (ARO), Israel, e-mail: [palevsky@volcani.agri.gov.il](mailto:palevsky@volcani.agri.gov.il)

26 - 30 April, 2009: 5th International Conference on Biopesticides: Stakeholders' Perspective, New Delhi (India). – 5th International Conference on Biopesticides, The Energy and Resources Institute, Darbari Seth Block, IHC Complex, Lodhi Road, New Delhi-110 003 (INDIA), Tel. +91-11-2468-2100 or 4150-4900, Fax +91 11-2468-2144 or 2468-2145, e-mail: [icob5.biopest@nic.in](mailto:icob5.biopest@nic.in), <http://www.icob5.nic.in>

- 12 - 16 May, 2009: IOBC/wprs Working Group “Induced Resistance in Plants against Insects and Diseases”, Granada (Spain). – Annegret Schmitt (convenor), JKI Darmstadt, Germany, e-mail: [annegret.schmitt@jki.bund.de](mailto:annegret.schmitt@jki.bund.de), <http://www.fvccee.uji.es/>
- 14 - 16 May, 2009: IOBC/wprs Working Group “GMOs in Integrated Plant Production” 4th EIGMO (Ecological Impact of Genetically Modified Organisms) Meeting. Rostock (Germany). – Jörg Romeis, Agroscope Reckenholz-Tänikon Research Station ART, Zurich, Switzerland; [joerg.romeis@art.admin.ch](mailto:joerg.romeis@art.admin.ch), <http://www.eigmo-rostock.de/>
- 19 May, 2009: 61st International Symposium on Crop Protection, Gent (Belgium). – Pieter Spanoghe, Faculty of Bioscience Engineering, Ghent University, Coupure Links 653, 9000 Gent (BELGIUM), Tel +32 9-2646009, Fax +32 9-2646249, e-mail: [iscp@ugent.be](mailto:iscp@ugent.be), <http://www.iscp.ugent.be>
- 1 - 4 June, 2009: IOBC/wprs Working Group “Integrated Protection of Olive Crops”, Córdoba (Spain). – Dr. E. Quesada-Moraga, Department of Agricultural and Forestry Sciences, ETSIAM, University of Cordoba, Campus de Rabanales. Building C4, “Celestino Mutis”, Cordoba 14071 (SPAIN), e-mail: [cr2qumoe@uco.es](mailto:cr2qumoe@uco.es), <http://www.protecolicordoba2009.com>
- 10 - 13 June, 2009: IOBC/wprs Working Group "Multitrophic Interactions in Soil", Uppsala (Sweden). – Christopher Welch, Tel ++46/709 322696, e-mail: [christopher.welch@maselab.se](mailto:christopher.welch@maselab.se), <http://www-mykopat.slu.se/IOBC/index.html>
- 22 - 25 June, 2009: *Future Research and Development in the Use of Microbial Agents and Nematodes for Biological Insect Control*. IOBC/wprs Working Group “Insect Pathogens and Insect Parasitic Nematodes” and COST Action 862 “Bacterial Toxins for Insect Control”, Pamplona (Spain). – Local organizer: Primitivo Caballero, Universidad Pública de Navarra, Producción Vegetal, 31006 Pamplona (Navarra) (SPAIN), Tel ++34 948-16-9129, e-mail: [pcm92@unavarra.es](mailto:pcm92@unavarra.es), <http://www.iobc-pamplona-2009.com/>
- 29 June - 2 July, 2009: IOBC/wprs Working Group “Integrated Protection of Stored Products”, Molise, Campobasso (Italy). – Christos Athanassiou, Laboratory of Agricultural Zoology and Entomology, Agricultural University of Athens, Greece, 75 Iera Odos, 11855 Athens Greece, e-mail: [ceaz2atx@noc.aua.gr](mailto:ceaz2atx@noc.aua.gr), <http://www.iobc-wprs.org/events/index.html>
- 7 - 9 September 2009: *Harmonia axyridis and other invasive ladybirds*. IOBC/wprs Study Group “Benefits and risks of biological control”, Engelberg (Switzerland). – Marc Kenis, Delémont (Switzerland), CABI Europe-Switzerland, 1, Rue des Grillons, 2800 Delémont (Switzerland), Tel +41-32-4214884, Fax: +41-32-4214871, [m.kenis@cabi.org](mailto:m.kenis@cabi.org)
- 6 - 11 September 2009: Working Group “Integrated Control in Protected Crops, Mediterranean Climate”, Chania, Crete (Greece). – Dr. Cristina Castañé, e-mail: [Cristina.Castane@irta.es](mailto:Cristina.Castane@irta.es) and/or Dr. Dionyssios Perdakis, e-mail: [dperdikis@aua.gr](mailto:dperdikis@aua.gr) <http://www.aua.gr/IOBC>

**30 September – 3 October, 2009: General Assembly of IOBC/wprs in Agadir, Morocco. See also: <http://www.iobc-wprs.org/events/index.html>**

15 - 20 November 2009: Joint Meeting of the WPRS Working Group “Pheromones and other semiochemicals in integrated production” and EPRS Working Group “Selective Control Methods”, Budapest (Hungary). – Miklós Tóth (Plant Protection Institute, HAS, POB 102, Budapest, 1525 Hungary, Tel +36-1-3918639, Fax: +36-1-3918655, e-mail: [h2371tot@ella.hu](mailto:h2371tot@ella.hu). – Marco Tasin (FEM-IASMA Research Center, 38010 San Michele a/A, Italy, Tel +39-0461-615509, Fax: +39-0461-615500, e-mail: [marco.tasin@iasma.it](mailto:marco.tasin@iasma.it)

7 - 9 October, 2009: IOBC/wprs Working Group “Pesticides and Beneficial Organisms”, Dubrovnik (CROATIA). – Local Organizer: Dr. BOŽENA BARIĆ, Department for Agricultural Zoology, Faculty of Agriculture, Zagreb. – Dr.Ir. J.-P. Jansen (Convenor), CRA-W, Departement Lutte biologique et Ressources phytogénétiques, Laboratoire d'Ecotoxicologie, 2, Chemin de Liroux, 5030 Gembloux, (Belgique), Tel + 32 (0)81 625 683, e-mail: [labecotox@cra.wallonie.be](mailto:labecotox@cra.wallonie.be)

October, 2009: 4<sup>th</sup> Meeting of the IOBC/wprs Working Group “Integrated Protection of Olive Crops”, Cordoba (SPAIN). – Dr. E. Quesada-Moraga, Department of Agricultural and Forestry Sciences, ETSIAM, University of Cordoba. Campus de Rabanales. Building C4 “Celestino Mutis”, Cordoba 14071 (Spain), e-mail: [cr2qumoe@uco.es](mailto:cr2qumoe@uco.es)

1 - 4 November, 2009: Meeting of the IOBC/wprs Working Group “Integrated Protection and Production in Viticulture”, Staufen/Breisgau (Germany). – Hanns-Heinz Kassemeyer, Agnès Calonnec, [http://www.iobc-wprs.org/wg\\_sg/index.html](http://www.iobc-wprs.org/wg_sg/index.html)

## 2010

20 - 23 September, 2010: 7th Meeting of the IOBC/wprs Working Group "Integrated Protection of Fruit Crops", Study Group "Soft Fruits". "Workshop on Integrated Soft Fruit Production", Budapest (Hungary). – Claudio Ioriatti, e-mail: [claudio.ioriatti@iasma.it](mailto:claudio.ioriatti@iasma.it), Christian Linder, e-mail: [christian.linder@acw.admin.ch](mailto:christian.linder@acw.admin.ch)  
Local organizer: Gábor Véték, e-mail: [gabor.vetek@uni-corvinus.hu](mailto:gabor.vetek@uni-corvinus.hu)

---

## 1st meeting of the new IOBC/WPRS Study Group “Benefits and risks associated with exotic biological control agents” – *Harmonia axyridis* and other invasive ladybirds –

**Date:** September 6-9, 2009. (Arrival and registration on 6<sup>th</sup> September 2009, Conference 7-9 September)

**Place:** Hotel Europe, Engelberg, Switzerland (a beautiful village in the middle of the Swiss Alps)

*Harmonia axyridis*, the harlequin ladybird or multicoloured Asian ladybeetle, is a coccinellid of Asian origin used for biological control purposes worldwide. In recent years, it has become invasive in many parts of the world, including North and South America, Europe and South Africa. Significant negative effects of the establishment of *H. axyridis* have been reported. Due to its predatory and competitive abilities, *H. axyridis* may have strong negative effects on biodiversity, impacting on many non-target species, including native ladybirds and other aphidophagous insects. Moreover, *H. axyridis* has been reported to damage fruit crops in late summer and to taint wine when harvested and crushed with grapes. It may also affect humans directly when it seeks overwintering

sites in buildings. At the same time, *H. axyridis* has become an exciting and very convenient model species for invasion ecologists.

This conference will offer an opportunity for research scientists, invasion ecologists, biological control specialists and interested colleagues to meet and discuss the invasion of *H. axyridis* and other invasive ladybirds worldwide. Discussion topics will include: risk assessment in biological control, invasion ecology, spread, genetics of invasion, management of ladybirds, ecological impact on native fauna, agricultural impact, association with symbionts, tri-trophic interactions, etc. Invited keynote speakers (to be announced) will provide unique background information related to the invasion of *H. axyridis* (and other ladybirds worldwide) as well as information on the ecology of *H. axyridis* in its area of origin. The conference will also offer a unique platform for developing multilateral collaboration activities and concerted research strategies.

This brief note intends to provide you with the date and the place of the meeting for your long-term planning purposes. More detailed information (including registration information, how to reach Engelberg and materials concerning the submission of talks and posters) will follow in the coming weeks on the conference website, which will be available on:

[www.iobc-harmonia-meeting.com](http://www.iobc-harmonia-meeting.com)

We look forward to a stimulating conference and hope that you will manage to participate. If you are interested in attending this symposium please respond as soon as possible to: [info@iobc-harmonia-meeting.com](mailto:info@iobc-harmonia-meeting.com) and provide your name, institute affiliation and address. This will help us with planning the conference and providing you with updates. Please forward this message to colleagues potentially interested in the conference topic.

Marc Kenis and Dirk Babendreier  
CABI Europe-Switzerland, Delémont, Switzerland

Alexandre Aebi  
Agroscope Reckenholz-Tänikon, Zurich, Switzerland

Helen Roy  
Biological Records Centre, CEH Wallingford, UK

---

## Beneficials available in Germany

An actual compilation of 81 beneficials (nematodes and arthropods) for biocontrol in Germany is presented on the website of JKI (Julius Kühn-Institute, Federal Research Centre for Cultivated Plants):

[http://www.jki.bund.de/cln\\_045/nn\\_807134/DE/Home/pflanzen\\_schuetzen/biologisch\\_alternativ/nuetzl\\_anbiet/nuetzl\\_anbiet\\_node.html\\_nnn=true](http://www.jki.bund.de/cln_045/nn_807134/DE/Home/pflanzen_schuetzen/biologisch_alternativ/nuetzl_anbiet/nuetzl_anbiet_node.html_nnn=true)

The two lists contain informations on the scientific names, the pest species against which the beneficials are active and the addresses (including e-mail and web addresses) of producers and/or distributors in Germany. Also included in the list are parasitoids of stable flies.

---

## Next Issue of Profile

---

The summer-issue of Profile (number 47) will be edited in July 2009. Please send your contributions (reports from meetings and announcements for meetings, interesting scientific results, new books and others) for this issue of Profile to me at the latest:

**15 June, 2009**

but don't hesitate to contact me long before this deadline! Please send Announcements of Meetings as early as possible to the editor of Profile **and** to our Webmaster, MADELEINE BÜHLER ([madeleine.buehler@e-maintenance.ch](mailto:madeleine.buehler@e-maintenance.ch)). Please send your contributions for Profile by e-mail (preferably), on CD or as fax to:

Dr. Horst Bathon  
Institute for Biological Control  
Heinrichstrasse 243  
**64287 Darmstadt (Germany)**

e-mail: [horst.bathon@jki.bund.de](mailto:horst.bathon@jki.bund.de)  
Tel +49-6151-407225  
Fax +49-6151-407290



[www.iobc-wprs.org](http://www.iobc-wprs.org)