

**IOBC / WPRS
OILB / SROP**

PROFILE

**Internal Newsletter issued by the Publication Commission for the IOBC/wprs
Council and Executive Committee**

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

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

ISSUE Nr. 39

July 2005

In this Issue

The Presidents Page	2
IOBC/ WPRS Commissions, Working Groups	3
IOBC/wprs Officers and their Addresses.....	4
Joint Meeting 2006 WG "Breeding for Resistance against Insects and Diseases" and WG "Induced Resistance in Plants against Insects and Diseases"	8
WG "GMOs in Integrated Plant Production"	8
WG "Integrated Protection in Citrus Crops" – Next Meeting	10
WG "Integrated Control of Fungal and Bacterial Plant Pathogens" – Next Meeting	11
WG "Integrated Protection of Olive Crops" – Next Meeting	12
WG „Integrated Control in Protected Crops, Temperate Climate" – Report.....	17
WG "Integrated Protection of Stored Products" – Next Meeting	19
WG "Insect Pathogens and Insect Parasitic Nematodes" – Report and Elections.....	22
WG „Integrated Control in Protected Crops, Mediterranean Climate" – Next Meeting.....	23
General Assembly of IOBC/WPRS.....	25
WG "Pesticides and Beneficial Organisms" – Next Meeting	26
WG "Integrated Protection of Citrus Crops" – Next Meeting	25
EPPO: Plant Health Endangered – State of Emergency.....	28
New IOBC / wprs Publications – Bulletins: 28 (1 - 6) including Contents.....	29
New Publications of IOBC Global.....	42
Other interesting publications brought to attention of Profile.....	42
New Website of IOBC Global	46
ICIPE Marks New Era: Insect Science Research Institute Appoints New Director General..	47
Time-Table of Forthcoming Events	48
Next issue of Profile (number 40).....	52

The Presidents Page

Dear IOBC/WPRS members.

Let me take the opportunity to express a farewell greeting as outgoing President.

Having enjoyed 8 years of ongoing activities I want to express thanks to everybody who has contributed one or the other way. My special thanks go to the Convenors of Working Groups and Commissions, who carry the major activity burden at ground level. The meeting activity enabling discussions of ideas, methodologies and results in a combined scientific and applied frame is the beauty of WPRS dressed with a top layer of the Bulletins of WPRS. Having such a current series is unique. Both the WG's and the Bulletins require a skeleton to hang on, and that skeleton is provided by the WPRS Council and its Executive Committee.

As you know the Council and hence also the Executive is on election in September.

This is because of the democratically very desirable situation of competition between two teams for the Executive, the real difference laying in the positions of President and Treasurer.

Unfortunately, this situation for a while was disturbed because of a communicational confusion at top level. That I very much regret, and I hope that every one with voting right (Institutional or Individual) will kindly follow the renewed instructions with new ballots for voting from the Secretary General and take the small amount of time for voting, re-voting for some, for which I again apologize.

When voting, kindly also follow the suggestion to consider a good geographical mix, as well as some renewal and some continuity in terms of experienced people. In this connection I regret also that we cannot, in this vacation period, fulfill a desire of some members to show a CV of 5-10 lines for each candidate. This would have been nice and might be included as a future rule together with several other details connected to the overall election procedure. The conclusion to be drawn from this and from some of the confusion leading to renewed voting ballots seems to be that the WPRS Bye Laws (and Statutes?) might need some overhaul. That is very easy to request but quite boring to do for people with biological science as main interest.

Therefore, special thanks to the persons who carry the routines burdens like accounting, producing Profile and Bulletins etc. To everybody else a plea for understanding, participation and voting.

Peter Esbjerg (President of IOBC/wprs)

IOBC/ WPRS
Commissions, Working Groups
 June, 2005

Commissions	Convenor	Liaison-Officer
Publications	BATHON H. TIRRY L.	–
Determination and identification of entomophagous insects	BAUR H.	–
Guidelines for integrated production	AVILLA J.	ALBAJES R.
Harmonization of Regulation of Invertebrate Biological Control Agents (CHIBCA)	BIGLER F.	–

Working Groups

Integrated protection of fruit crops	CROSS J.	MALAVOLTA C.
Pesticides and beneficial organisms	VOGT H.	BIGLER F.
Breeding for plant resistance to pests and diseases	BIRCH A.N.	TIRRY L.
Pheromones and other semio-chemicals in integrated production	WITZGALL P.	BATHON H.
Multitrophic interactions in soil	SIKORA R.	KERRY B.
Integrated protection in viticulture	LOZZIA C.	GESSLER C.
Integrated protection of oilseed crops	KOOPMAN B.	ALABOUVETTE C.
Integrated protection of field vegetables	VIDAL S.	ESBJERG P.
Integrated control in protected crops, temperate climate	ENKEGAARD A.	BLUEMEL S.
Integrated control in protected crops, mediterranean climate	CASTAÑÉ C.	BLUEMEL S.
Insect pathogens and entomoparasitic nematods	PAPIEROK B.	HUBER J.
Integrated control of fungal and bacterial plant pathogens	ELAD Y.	ALABOUVETTE C.
Integrated protection in oak forests	VILLEMANT.C.	VIEIRA M.M.
Integrated protection of stored products	NAVARRO S.	BATHON H.

Integrated protection of olive crops	(KALAITZAKI A.)	MALATHRAKIS N.
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	(POEHLING H.M. / ROSSING W.)	VAN LENTEREN J.

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/or to the treasurer.

1 – Executive Committee

Esbjerg, Prof. Dr. Peter (President), Zoology Section, Royal Veterinary and Agricultural University, Thorvaldsensvej 40, DK-1871 Frederiksberg C., Copenhagen (Denmark), Tel +45-35282686, Fax +45-35282670, e-mail: peter.esbjerg@ecol.kvl.dk

Albajes, Prof. Dr. Ramon (Vice-President), Universitat de Lleida, Centre UdL-IRTA, Rovira Roure, 191, E-25006 Lleida (Spain), Fax +34-973-238301, e-mail: ramon.albajes@irta.es

Huber, Dr. Jürg (Vice-President), Institute for Biological Control, BBA, Heinrichstrasse 243, D-64287 Darmstadt (Germany), Tel +49-6151-407220, Fax +49-6151-407290, e-mail: j.huber@bba.de, <http://www.bba.de>

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

Alabouvette, Dr. Claude (General Secretary), INRA, Laboratoire de recherches sur la flore pathogène du sol, 17, rue Sully, BP 86510, F-21065 Dijon Cedex (France), Tel +33-3-80693041, Fax +33-3-80693224, e-mail: ala@dijon.inra.fr

Gessler, Dr. Cesare (Treasurer), Swiss Federal Institute of Technology, Institute of Plant Sciences Phytomedicin-Pathology, Universitätsstrasse 2, CH-8092 ETH-Zürich (Switzerland), Tel +41-1-6323871, Fax +41-16321108, e-mail: cesare.gessler@ipw.agrl.ethz.ch, Tel +39-0461615239 cesare.gessler@ismaa.it

2 – Council

Bathon, Dr. Horst, Institute for Biological Control, BBA, Heinrichstrasse 243, D-64287 Darmstadt (Germany), Tel +49-6151-407-225, Fax +49-6151-407290, e-mail: h.bathon@bba.de

Besri, Prof. Dr. Mohamed, Département de Phytopathologie, Institut Agronomique et Vétérinaire Hassan II, BP 6202, Rabat-Instituts, Maroc, Tel: +212-3777-8364, Fax: +212-3777-8364 / -8135, e-mail: m.besri@iav.ac.ma

Bigler, Dr. Franz, Swiss Federal Research Station for Agroecology, Reckenholzstrasse 191, CH-8046 Zürich (Switzerland), Tel +41-1-3777111, Fax +41-1-3777201, e-mail: franz.bigler@fal.admin.ch

Blümel, Dr. Sylvia, AGES, Austrian Agency for Health and Food Safety (AGES), Institute of Plant Health, Spargelfeldstrasse 191, A-1226 Wien (Austria), Tel +43-0-50555-33300, Fax +43-0-50555-33303, e-mail: pflanzengesundheit @ages.at, sbluemel@ages.at

Kerry, Dr. Brian, Rothamsted, Research, Harpenden, Hertfordshire AL5 2JQ (UK), Tel +44-1582-763133, e-mail: brian.kerry@bbsrc.ac.uk

Malathrakis, Dr. Nikolaos, Technological Education Institute, Stauromenos, G-71500 HERAKLIO, Crete, Greece, Tel: +30-81-379459, e-mail: nmal@steg.teiher.gr

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

Van Lenteren, Prof. Dr. Joop Coert, Wageningen University, Laboratory of Entomology, P.O. Box 8031, NL-6700 EH Wageningen, The Netherlands, Tel: +31-317-482327, Fax: +31-317-484821, e-mail: joop.vanlenteren@users.ento.wau.nl

Vieira, Dr. Maria Margarida, Direcção-Geral de Protecção das Culturas, Quinta do Marquês, 2780-155 Oeiras, Portugal, Tel: +351-21-4464057, Fax: +351-21-4420616, e-mail: margaridav@dgpc.min-agricultura.pt

Deputy Members

El Titi, Dr. Adel, State Institute for Plant Protection, Reinsburgstrasse 107, D-70197 Stuttgart, Germany, Tel: +49-711-6642478, Fax: +49-711-6642498, e-mail: adel.eltiti@lfp.bwl.de

Pommier, Dr. Jean-Jacques, IREF, Lanxade, Prignonieux, F-24130 La Force, France, Tel: +33-553221510 / -553829031, e-mail: pommier@ciref.asso.fr

Den Belder, Dr.E., Plant Research International, P.O. Box 16, NL-6700 AA Wageningen, The Netherlands, Tel: +31-317-476105, Fax: + 31-317-410113, e-mail: e.denbelder@plant.wag-ur.nl

3 – Auditing Committee

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

Lavadinho, Dr. Antonio Manuel Pereira, Direcção-Geral de Protecção das Culturas, Quinta do Marquês, P-2780 - 155 Oeiras, Portugal, Tel: 351-214464058, Fax: 351-214420616, e-mail: dgpc@mail.telepac.pt

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, <http://www.areeo.or.ir>

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

Adler, Dr. Cornel, BBA, Institute for Stored Product Protection, Königin-Luise-Strasse 19, D-14195 Berlin, Germany, Tel: +49-30-83042503, Fax: +49-30-83042502, e-mail: adler@bba.de, <http://www.bba.de>

4 – Convenors

- Avilla*, Dr. Jesus, Centre UdL-IRTA de Lleida, Area de Proteccio de Conreus, Alcalde Rovira Roure 191, E-25198 Lleida, Spain, Tel: +34-973-702581, Fax: +34-973-238301, e-mail: jesus.avilla@irta.es
- Bathon*, Dr. Horst, Institute for Biological Control, BBA, Heinrichstrasse 243, D-64287 Darmstadt (Germany), Tel +49-6151-407225, Fax +49-6151-407290, e-mail: h.bathon@bba.de, <http://www.bba.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.unibe.ch, <http://www.nmbe.ch>
- 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, <http://www.scri.sari.ac.uk>
- Boller*, Dr. Ernst F., Eidgenössische Forschungsanstalt Obst-, Wein- & Gartenbau, CH-8820 Wädenswil (Switzerland), Tel +41-1-7836330, Fax +41-1-7836379, e-mail: ernst.boller@faw.admin.ch
- 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
- Cravedi*, Dr. Piero, Università Cattolica del Sacro Cuore, Istituto di Entomologia e Patologia Vegetale, Via Emilia Parmense 84, I-29100 Piacenza (Italy), Fax +39-523-599235, e-mail: piero.cravedi@unicatt.it
- Cross*, Dr. Jerry, Entomology and Plant Pathology Department, East Malling Research, East Malling, West Malling, Kent ME19 6BJ, UK, Tel: +44-1732-843833, e-mail: jerry.cross@emr.ac.uk
- Elad*, Dr. Yigal, A.R.O. The Volcani Center, Department of Plant Pathology, Bet Dagan 50250 (Israel), Tel +972-3-9683580, Fax +972-3-9683688, e-mail: elady@volcani.agri.gov.il
- Enkegaard*, Dr. Annie, Danish Institute of Agricultural Sciences, Department of Crop Protection, Research Centre Flakkebjerg, DK-4200 Slagelse (Denmark), Tel +45-58113300, Fax +45-58113301, e-mail: annie.enkegaard@agrsci.dk
- Garcia-Mari*, Ferran, Dept. Ecosistemes Agroforestales, E.T.S. Enginyers Agrònoms, Universitat Politècnica de València, Camí de Vera 14, E-46022 Valencia (Spain), Tel +34-9638-79250, Fax +34-9638-79269, e-mail: fgarciam@eaf.upv.es
- Kalaitzaki*, Argyro, Division of Agricultural Development, Prefecture of Rethymno, Dimitrakaki 17, 74100 Rethymno (Greece), Tel: +30 8210 98173, Fax: +30 821 92711 e-mail: argkalaitzaki@yahoo.com
- Koopman*, Dr. Birger, Institute for Plant Pathology and Plant Protection, Universität Göttingen, Grisebachstr. 6, D-37083 Göttingen, Tel +49-551-393779, Fax +49-551-394187, e-mail: bkoopma@gwdg.de
- Lozzia*, Dr. Carlo, Istituto die Entomologia Agraria, Università degli Studi di Milano, Via Celoria, I-20123 Milano (Italy), Tel +39-2-2369191, Fax +39-2-26680320, e-mail: lozcar@mailserver.unimi.it
- Navarro*, Dr. Shlomo, The Agricultural Research Organization, The Volcani Center, Department of Stored Products, P.O. Box 6, Bet Dagan 50250, Israel, Tel: +972-3-9683587 / -9683552, Fax: +972-3-9683583, mobile +972-56-220587, e-mail: snavarro@volcani.agri.gov.il or shlomonav@hotmail.com.

- Papierok*, Dr. Bernard, Institut Pasteur, 25, rue du Dr Roux, F-75015 Paris, Tel +33-1-45688226, Fax +33-1-40613044, e-mail: papierok@pasteur.fr
- Poehling*, Prof.Dr. Hans Michael, University of Hannover, Institute for Plant Pathology and Plant Protection, Herrenhäuser Strasse 2, D-30419 Hannover (Germany), Tel +49-511-7622641, Fax +49-511-7623015, e-mail: poehling@mbbox.ipp.uni-hannover.de
- Romeis*, Dr. Jörg, Agroscope FAL Reckenholz, Swiss Federal Research Station for Agroecology and Agriculture, Reckenholzstr. 191, CH-8046 Zürich, Switzerland, Tel +41-1-3777299, Fax: +41-1-3777201, e-mail: joerg.romeis@fal.admin.ch
- Rossing*, Dr. Walter A.H., Biological Farming Systems Group Wageningen University, Marijkeweg 22, NL-6709 PG Wageningen (The Netherlands), Tel +31-317-478210, Fax ++31-317-478213, e-mail walter.rossing@wur.nl
- Schmitt*, Dr. Annegret, Institute for Biological Control, BBA, Heinrichstrasse 243, D-64287 Darmstadt (Germany), Tel +49-6151-407-241, Fax +49-6151-407290, e-mail: a.schmitt@bba.de, <http://www.bba.de>
- Sikora*, Prof.Dr. Richard, Universität Bonn, Institut für Pflanzenkrankheiten, Nussallee 9, D-53115 Bonn (Germany), Tel +49-228-732439, Fax +49-228-732432, e-mail: rsikora@uni-bonn.de
- Vidal*, Prof.Dr. Stefan, Georg-August-University, Institute for Plant Pathology and Plant Protection, Entomological Section, Grisebachstrasse 6, D-37077 Göttingen, Tel +49-551-399744, -393730, Fax +49-551-393730, -3934187, e-mail: svidal@gwdg.de
- Villemant*, Dr. Claire, Museum national d'Histoire naturelle, Laboratoire d'entomologie, 45 rue Buffon, F-75005 Paris (France), Tel +33-1-40793841, Fax +33-1-40793699, e-mail: villeman@mnhn.fr
- Vogt*, Dr. Heidrun, Institute for Plant Protection in Fruit Crops, BBA, Schwabenheimer Strasse 101, D-69221 Dossenheim, Tel +49-6221-8680530, Fax +49-6221-8680515, e-mail: h.vogt@bba.de, <http://www.bba.de>
- Witzgall*, Dr. Peter, Swedish University of Agricultural Sciences, Department of Crop Science, Box 44, S-23053 Alnarp (Sweden), Tel +46-40-415307, Fax +46-40-461991, e-mail: peter.witzgall@vv.slu.se, <http://www.phero.net>

IOBC/wprs COMMISSIONS AND WORKING GROUPS

WG „Breeding for resistance against insects and diseases“ and WG “Induced resistance in plants against insects and diseases” – Joint Meeting 2006

The two IOBC/wprs Working Groups „Breeding for resistance against insects and diseases“ and „Induced resistance in plants against insects and diseases“ will hold a joint conference in 2006 in Heraklio, Crete (Greece) under the title “Breeding for (induced) resistance against pests and diseases”. The conference will be held from 27th to 30th April 2006. Final dates will be advertised in due time via the IOBC/wprs homepage. Tentative topics to be addressed are:

- Tools to study the associations of genotypes and phenotypes
- Mechanisms involved in induced and constitutive resistance
- Types of resistance important for breeders and possible contribution of induced resistance (IR)
- Enhancing IR through biotechnology including use of priming and inducing agents, GMOs and selectable genetic markers
- Evolutionary aspects of plant resistance (aiding the development of deployment strategies for durable resistance within Integrated Crop Management = ICM)

Experts in the different fields (from fundamental molecular biology to applied plant breeding) will be invited as keynote speakers to be followed by oral and poster presentations from the participants.

For further information contact the local organizer NICOS MALATHRAKIS (nmal@steg.teiher.gr) or either Convenor: ANNEGRET SCHMITT (a.schmitt@bba.de) or NICK BIRCH (N.Birch@scri.sari.ac.uk)

Working Group “GMOs in Integrated Plant Production”

1) Report from the last full WG meeting

The second EIGMO (Ecological Impact of Genetically Modified Organisms) meeting was held at the Universitat de Lleida in Spain, from June 1-3 2005.

Local organizer of the meeting was RAMON ALBAJES. More than 80 participants from 20 countries attended the meeting.

The program consisted of 32 oral contributions and 25 posters plus three keynote presentations:

PAUL CHRISTOU (Universitat de Lleida, Spain): Recent advances in transgenic insect pest control

MARCO P. CANDOLFI (RCC Ltd., Switzerland): Standard test methods as a basis for an appropriate tiered risk assessment of GM crops

PAUL JEPSON (Oregon State University, USA): GMO's in crop production and their effects on the environment: methodologies for monitoring

A large portion of the presentations and discussions was about non-target risk assessment of transgenic crops and a number of presentations have addressed the structure of a pre-market risk assessment approach. This part of the meeting has benefited from participation by US colleagues that have a vast experience with GMO risk assessment. A second focus of the meeting was on environmental monitoring of GMOs, an issue that is currently hotly debated within the EU. Among others, different experts from the GMO Panel Working Group of the European Food Safety Agency (EFSA) have presented their work.

Throughout the meeting the focus was very strongly on *Bt*-transgenic crops (mainly maize) and only few presentations have addressed other insecticidal crops or herbicide tolerant GM crops. This clearly mirrors the focus of the current GMO research.

The proceedings of the meeting will be published as an IOBC/ WPRS Bulletin later this year.

The next full meeting of the WG is planned for the first half of 2007.

2) Satellite workshop

The convenor of the IOBC/WPRS WG had been approached by several representatives of different stakeholders (public research, industry, regulation) to set-up an event to discuss whether the IOBC/WPRS WG could help to establish generic non-target risk assessment guidelines and develop and validate standard test protocols for non-target testing as it has been done by the IOBC/WPRS WG 'Pesticides and Beneficial Organisms' for plant protection products.

After the full WG meeting, a satellite workshop was organized in Lleida on June 4, 2005, to discuss 'Non-Target Risk Assessment of GM Crops and Regulation'. This workshop was attended by participants from public research institutes (6 participants), private industry (5) and regulatory authorities (3).

3) Establishment of a steering committee

Since the working group deals with a topic of high political relevance, a steering committee has been established to support the WG convenor.

The objectives for the establishment of the steering committee are:

- i) to ensure that the interests of the different stakeholders (public research, industry, regulation) involved in the discussions about GM crops are represented in the WG
- ii) to guide the WG activities in the future and to back up decisions that have to be taken
- iii) to help linking the WG to other activities related to GMOs (including the IOBC Global WG on GMOs)
- iv) to support the increasing number of tasks of the WG

The following colleagues have agreed to support the activities of the WG as steering committee members:

- RAMON ALBAJES (Universitat de Lleida, Lleida, Spain)
- FRANZ BIGLER (Agroscope FAL Reckenholz, Zurich, Switzerland)
- ALAN RAYBOULD (Syngenta, Berkshire, UK)

In the future the steering committee will be supplemented by a representative of a regulatory authority.

Joerg Romeis (Convenor),
Agroscope FAL Reckenholz,
Swiss Federal Research Station for Agroecology and Agriculture
Reckenholzstr. 191, 8046 Zurich - SWITZERLAND
Tel.: +41-1-377 7299, Fax: +41-1-377 7201
e-mail: joerg.romeis@fal.admin.ch
<http://www.reckenholz.ch/doc/de/forsch/control/biosi/biosi.html>

WG “Integrated Protection of Citrus Crops”, Next Meeting: Lisbon (Portugal), September 2005

The next meeting of the IOBC-WPRS Group “Integrated Control in Citrus Fruit Crops” that will take place in Lisbon (Portugal) from 26 to 27 September 2005.

The meeting is locally organized by the Instituto Superior de Agronomia (Technical University of Lisbon) in collaboration with Estação Agronómica Nacional, Direcção Geral de Protecção das Culturas and Direcção Regional de Agricultura do Algarve.

The Meeting will be held at the facilities of the Instituto Superior de Agronomia, at Tapada da Ajuda, 1349-017 Lisboa.

A post-meeting (September 28th-30th) scientific excursion to Madeira Island is being prepared aiming at visiting the facilities and learn about the Madeira-Med program (<http://www.sra.pt/users/madeiramed>), a pioneering area-wide program using the Sterile Insect Technique (SIT) to control medfly, *Ceratitis capitata*. A field trip is also planned including the visit to citrus orchards and the observation of particular pest management problems, e.g., *Trioza erytreae*, *Toxoptera citricida*.

All the information related with the Meeting and the scientific excursion to Madeira Island is available and updated at

<http://www.isa.utl.pt/dppf/iobc/>.

José Carlos Franco (Local organiser, iobc2005@isa.utl.pt)

Ferran Garcia-Mari (Convenor, fgarciam@eaf.upv.es)

Mohamed Besri (Liaison officer m.besri@iav.ac.ma)

Working Group “Integrated Control of Fungal and Bacterial Plant Pathogens”

Next Meeting: September 2006

The next meeting of the ‘Phytopathogens’ working group will take place in Spa Belgium; in the Sol Cress Congress Centrum from: September 13-17, 2006.

Organizing committee: MONICA HÖFTE, HAÏSSAM JIJAKLI, MARC ONGENA, YIGAL ELAD

Scientific committee: MONICA HÖFTE, HAÏSSAM JIJAKLI, MARC ONGENA, YIGAL ELAD, JOHN WHIPPS, GABRIELE BERG

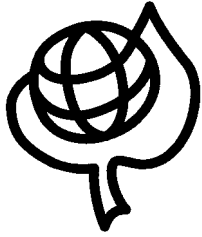
Contact: MONICA HÖFTE (monica.hofte@UGent.be) and Haïssam Jijakli (jjjakli.h@fsagx.ac.be).

The theme of this meeting will be ‘Fundamental and practical approaches to increase biocontrol effects’. The following themes will be emphasized:

- Understanding/stimulating naturally occurring antagonists in soil, substrate, rhizosphere, phyllosphere
- Understanding/stimulating the modes of action and ecological suitability of introduced antagonists in soil, substrate, rhizosphere, phyllosphere
- Influence of plant species/cultivar on natural or introduced antagonists
- Production and formulation to increase biocontrol efficacy
- Use of biocontrol agents in integrated disease management

Site of the meeting: Spa is a small resort town located in the Ardennes tableland in the eastern part of Belgium, near the German border. Spa is most renowned for its mineral water springs.

Convenor: Yigal Elad (elady@volcani.agri.gov.il)



2nd European Meeting of the IOBC/WPRS Working Group

“Integrated Protection of Olive Crops”

**POLO SCIENTIFICO DI SESTO, FLORENCE, ITALY
October 26-28, 2005**

Local Organizing Committee:

Prof. Antonio Belcari, *Chairperson*

*Dept. of Agricultural Biotechnology, Section of General and Applied Entomology,
University of Florence*

Dr. Marzia Cristiana Rosi

*Dept. of Agricultural Biotechnology, Section of General and Applied Entomology,
University of Florence*

Dr. Patrizia Sacchetti

*Dept. of Agricultural Biotechnology, Section of General and Applied Entomology,
University of Florence*

Dr. Bruno Bagnoli

Istituto Sperimentale per la Zoologia agraria, Florence

Dr. Ruggero Petacchi

Biolabs, Sant' Anna School of Advanced Studies, Pisa

Prof. Alfio Raspi

*Dept. of Cultivation and Protection of Woody Species "G. Scaramuzzi", Sector of
Agricultural Entomology, University of Pisa*

Prof. Giuseppe Surico

*Dept. of Agricultural Biotechnology, Section of Plant Pathology, University of
Florence*

Local partners-sponsors

University of Florence

ARSIA

Scientific Programme Information

Abstract: Please send the **abstract** of your oral presentation or poster not later than July 31, 2005 in electronic format (MS-Word, or RTF if possible) as an attached file, to the e-mail address **iobc.olivecrops@unifi.it**

Only abstracts received before that date will appear in the “Abstract book”.

Instructions for Preparation of Abstracts:

- Abstracts must be in English and typed in Times New Roman font, size 12, on A4 paper, only one page at maximum. Since abstracts will be reproduced by direct photo-offset, authors should take care in preparing the abstract because typographical errors and corrections will remain apparent in the abstract publication.
- The title of the abstract should be in bold and capital letters.
- The name(s) of the author(s) should be in capital letters with the name-presenting author underlined. Type the name of author(s) preceded by initials.
- Institutional affiliations should follow the list of authors on the next line.
- Leave one blank line between the address and the first line of the abstract.
- Use single line spacing and 2.5 cm margins all round.

Scientific Secretariat: All correspondence concerning the Scientific Programme, submission of abstracts, poster presentations, etc. should be addressed to:

Dr. Alessandra Camèra / Dr. Aurelio Granchiotti
Department of Agricultural Biotechnology,
Section of General and Applied Entomology,
Via Maragliano 77, 50144 Florence – Italy
Phone: +39 055 3445014
Fax: +39 055 3445035
E-mail: iobc.olivecrops@unifi.it
Meeting web site: www3.unifi.it/ipoc

Official Working Language: The official language of the meeting will be English. No simultaneous translation will be available.

Oral Presentations: The duration of each oral presentation is 15 minutes including 5 minutes for discussion.

Poster Presentations: Poster dimensions recommended are 90 cm w X 120 cm h. Text, photographs and drawings should be large enough to be readable.

Abstract Publication: A publication compiled of all abstracts will be available to registrants in the Meeting file of documents.

Audio Visual Equipment: A slide projector, overhead projector, PC with CD driver and Microsoft Power Point programme, will be available for all sessions.

Publication in IOBC/WPRS Bulletin: Full articles will be published in the Proceedings of the meeting in the IOBC/WPRS Bulletin. Authors should give their full papers (hard copy, diskette in a word format) during the registration at the meeting. The bulletin will be printed after the meeting. Only the papers received during the registration will be published in the Bulletin. Please follow the “Instruction to the Authors” for the IOBC/WPRS Bulletin at the web page:
<http://www.iobc-wprs.org/pub/index.html>.

Scientific Programme and Information on Working Group Meetings

The detailed scientific programme with definitive titles and names of chairpersons will be provided at the registration. You should also obtain the scientific programme form from the meeting website:

www3.unifi.it/ipoc/ a few days before the meeting.

Provisional Programme

Tuesday, 25 (Afternoon): Arrival, Registration.

Wednesday 26: Registration, Official opening. Scientific presentations.

Thursday 27: Scientific presentations. Gala dinner.

Friday 28: Scientific presentations.

General Information

Registration and Meeting Venue

Conference Center of Polo Scientifico di Sesto
Centro didattico, Aula Magna
Via G. Bernardini, 6
Sesto Fiorentino (FI), ITALY

More information on the web site: www.polosci.unifi.it

Florence and surroundings

For more information please visit the following web site:

www.turismo.toscana.it

or the web site of the meeting

www3.unifi.it/ipoc/

Letter of Invitation: If requested, the Chairman of the Organising Committee will be happy to provide a personal letter of invitation to facilitate visa formalities, after their registration to the conference. This letter should not be considered a commitment from the Organizing Committee to provide financial support.

Passport and Visa: A valid passport is requested for entering Italy. For citizens of EU member countries, a valid identity card is sufficient. A visa is required for many of the Eastern European, Asian, or African countries. For more information, kindly contact the Italian Consulate in your home country or a local travel agency.

Public Transportation to Polo Scientifico (Sesto Fiorentino): A local bus with the number 57 passes outside of the conference venue, information about the time table are available on the web-site www.ataf.net or www.polosci.unifi.it. Transportation from the designated hotels to the Conference Centre and vice versa will be provided by the organisers.

Electric Power: All suppliers are 220 volts, 50Hz AC.

Credit Cards: Most major credit cards are accepted in restaurants and shops.

Currency and Exchange: The national currency of Italy is the Euro. Exchange can be secured from local and exchange offices, which usually charge a commission fee.

Accommodation Information

Accommodation: Some hotels and bed & breakfast have been selected in Florence and Sesto Fiorentino; the prices indicated below are different from those you can find in the web sites of these structures, for the agreements drawn up by the Polo Scientifico. For further information please contact Dr Chiara Tagliavini at

segrpolo@polosci.unifi.it

Accommodations in Sesto Fiorentino Accommodations in Florence

VILLA STANLEY - ****
www.villastanley.it
Viale XX settembre 200 -
50019 - Sesto Fiorentino -
Tel.: 055/446121 - fax.055/440016
Single room: 98 €
Double room for one person: 108 €
Double room: 148 €

NOVOTEL - **** (Close to the airport)
www.firenzealbergo.it/hotel/novotelfirenzenordaeroporto/default.aspx
Via Tevere, 23 - Osmannoro -
50019 - Sesto Fiorentino -
Tel.: 055/308338 - fax: 055/308336
Single room: 95 €
Double room: 130 €

IBIS - ***
www.accor-hotels.it/Nuove_aperture/ibi_fi.pdf
Via Voltorno
50019 Sesto Fiorentino
Tel.: 055/34511 fax: 055/3024894
Same price for single and double rooms: 79 €

GRAND HOTEL MAJESTIC - ****
www.panciolihotels.it
Via Melarancio, 1 -
50123 - Firenze
Tel.: 055/264021 - fax: 055/268428
Single room: 123 €
Double room for one person: 144 €
Double room 183 €

PALAZZO MANNAIONI RESIDENCE -
www.florenceresidence.it
Via Maffia, 9 -
50125 Firenze
Tel. 055/271741 - fax: 055/2717402
One person flat: 70 € per night,
480 € per week,
Double flat: 120 Euro per night

HOTEL LE DUE FONTANE - ***
www.leduefontane.it
P.zza SS. Annunziata, 14 -
50122 Firenze
Tel.. 055/210185 - fax: 055/294461
Single room: 104 €
Double room: 147 €

HOTEL CAREGGI - ** www.hotelcareggi.it Via Taddeo Alderotti, 43 - 50139 - Firenze Tel.: 055/4360262 - fax: 055/416250 Single room: 68 € Double room for one peron: 75 € Triple room: 100 €	HOTEL DELLE TELE *** www.hoteldelletele.it Via Panzani, 10 - 50123 Firenze Tel.. 055/2382419 fax 055/290797 Single room: 100 € Double room: 135 € A&A BED & BREAKFAST - www.bandb-firenze.it Via N. Tagliaferro, 40 (corner with Via di Novoli, bus n° 22) Tel: 055/4368746 - fax: 1782748825 Single room: 70 € Double room for one person: 50 €
---	--

REGISTRATION INFORMATION

Registration: Please complete the registration form from the meeting web site: www3.unifi.it/ipoc. Each participant must complete a separate form.

The registration to the Meeting becomes effective by sending via e-mail or fax the receipt for payment.

Registration Fees (in Euro)	Before July 15, 2005	After July 15, 2005
Participants	220 €	270 €
Accompanying person/s	35 €	35 €
Students	80 €	80 €

Deadline for registration, July 15, 2005

The registration includes: admittance to all sessions, coffee breaks, three lunches, abstract book, meeting material, gala dinner on Thursday 27 October, certificate of attendance.

Payment: Payment of registration fees should accompany your registration form. No registration will be confirmed until payment has been received. The registration fees can be paid by:

1. Credit card, only in Euro and **only** Visa or Mastercard, using the form available on the web-site of the meeting or sending all the essential data (card type, card holder, card number, expiry date and your credit card billing address), by e-mail to the Scientific Secretariat.
2. Bank transfer in Euro, stating: **“Belcari- “2nd European Meeting of IOBC Study Group- IPM - Olive crops” and name of participant, to Banca Toscana (Firenze) Ag. 200, Via del Corso n°6 (FI) Italia, swift code: TOSCIT 3F 200 IBAN: IT75Y034000280000009500281 Account number: 000009500281, ABI: 03400, CAB: 02800, CIN: Y, Account name: Università degli Studi di Firenze**

3. By cash (Euro) to the Registration Desk of the Meeting (in this case you will not participate with your oral or poster presentation).

Cancellation Policy for Registration: For written cancellations received by 31 August cancellation fees of 50% will apply. **After that date, registration fees are not refundable.**

Registration Desk Hours: The registration desk will be open during the Meeting's hours.

Dr. Kalaitzaki Argyro (Convenor)
Institute of Olive Tree and Subtropical Plant (NAGREF)
Department of Entomology and Biological Control
Tel.: +30 28210 83449, Fax: +30 28210 93963
E-mail: argkalaitzaki@yahoo.com

Working Group "Integrated Control in Protected Crops, Temperate Climate"

Report of the meeting in Naantali, Finland, 10-14 April 2005

The working group had its triennial meeting (12th full meeting) in April 2005 in Naantali, Finland, organised by ANNIE ENKEGAARD, convenor of the WPRS Glasshouse WG, and a team of local organisers chaired by IRENE VANNINEN, Agrifood Research Finland (MTT), Jokioinen, Finland. Many thanks are due to the local organisers for their hard work and for their excellent organisation, which ensured a scientifically and socially inspiring stay in Finland.

The meeting was attended by ~120 participants (advisors, scientists, beneficial producers) from 24 countries, including – besides European states – USA, Canada, New Zealand, Russia, Australia, Brazil, Iran, Israel, and Japan. The meeting has further strengthened the contact and cooperation between the group members. The sessions of the meeting dealt with topics like Emerging tools of crop and herbivore manipulation; Systems approach to IPM in greenhouse crops; Microbial control of pests; IPM in greenhouses with artificial lighting; Biological and integrated control of thrips, whiteflies, aphids, mites, leafminers etc; Direct and indirect chemical defence of the crop plants; Need of new biocontrol agents in protected crops; New biocontrol agents; Registration of microbial and macrobial biocontrol agents; Biological control in greenhouse herbs, vegetables, berries and in ornamentals. As something new for the WG meeting an additional half day was set aside for presentations and discussions on IPM in outdoor and hardy nursery stocks. It was subsequently decided to include this topic in the next WG meeting in 2008.

The WG Student Award which was instituted at the meeting in Victoria, BC, in 2002 to recognise contributions from the new generations of greenhouse IPM workers was once more awarded after a contest between Master and PhD students to deliver the best manuscript for the Bulletin.

A full day excursion to greenhouses in south-western Finland with visits to a number of premises growing vegetables and ornamentals implementing biological and integrated control gave the opportunity to learn more about the practical use of IPM in Finland. As always, the excursion further stimulated discussions and exchange of information and experiences among the participants.

At the end of the meeting ANNIE ENKEGAARD was re-elected as convenor of the WG.

For further information, please see the Bulletin with the meeting proceedings (IOBC/wprs Bull. 28(1), 2005), the special edition of the WG Newsletter Sting with supplementary information for the meeting (Sting 27, <http://web.agrsci.dk/plb/iobc/sting/sting27.pdf>) as well as the upcoming issue of Sting (Sting 28) with summaries from the sessions (available on http://web.agrsci.dk/plb/iobc/iobc_home.htm around August 2005).

The **next meeting of the WG** will be held in **Bleiswijk, The Netherlands, 2008**. Local organisers are PIERRE RAMAKERS, Applied Plant Research, and co-workers. Further details will be given in due course on the WG homepage.

For further information about the WG 'Integrated Control in Protected Crops, Temperate Climate' please see:

http://web.agrsci.dk/plb/iobc/iobc_home.htm or contact:

Annie Enkegaard, Senior scientist (Convenor)
Danish Institute of Agricultural Sciences
Dept. of Integrated Pest Management
Research Centre Flakkebjerg
DK-4200 Slagelse, Denmark
Tel +45 89993500, Fax +45 89993501
e-mail: annie.enkegaard@agrsci.dk

**Working Group "Integrated Protection of Stored Products" Next Meeting:
Prague (Czech Republic), September 20-23, 2005**

We kindly invite you to participate in the next Conference of the IOBC / WPRS Working Group on the "Integrated Protection of Stored Products" that will be held on:

September 20-23, 2005, organised by the Research Institute of Crop Production, Prague.

The objective of this conference is to report on the new research developments in integrated protection of stored products, stressing the non-toxic methods of pest prevention, detection and control. Communication of these findings at the Conference will facilitate and maximise the dissemination of new technologies designed to reduce the use of residue building pesticides and avoid risks to non-target organisms, to the end-users, as well as providing protection of the environment from contamination.

The IOBC WPRS Working Group on Integrated Protection of Stored Products meets every two years to discuss new findings regarding the following topics:

- 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
- physical, chemical and other techniques for stored product pest control
- futurology: overviews and future trends on all aspects of storage pest control

Please find below further information regarding registration, submission deadlines, accommodation, etc. We are expecting participation from many researchers representing numerous countries and we hope that you also will be able to participate.

With kind regards,

Convenor: Shlomo Navarro

Local Organizers: Vaclav Stejskal, Zuzana Pažourková, and Zuzana Kučerová

The upper limit for the OILB – 2005 Prague conference:

110 participants

Deadline for abstracts and registration

Please be aware of the following deadlines for the Conference:

Deadline for early registration is June 15, 2005 and the deadline for sending abstracts is July 15, 2005.

Costs for registration after June 15, 2005:

145 Euros for non-members

115 Euros for IOBC-members / students

Registration fee include:

Conference fee, book of abstracts, proceedings, welcome drink, social evening, and conference field trip

Oral presentations

Short oral presentations (15 min.) are welcome; overhead, slide projection and Power Point will be available.

Proceedings

Oral presentations will be considered for publication in the Proceedings that will be fully edited. English or French written manuscripts will be published in the IOBC/OILB Bulletin. To accelerate the print of manuscripts authors are requested to follow the „instructions to authors“, and to hand in their papers and a version on computer disc (Word -file on a CD) during the meeting (deadline: September 20, 2005).

We will first meet on Tuesday, September 20, sessions and excursions are planned for September 21-23. A detailed program will be sent to registered participants.

If you plan to attend the conference, **please register until June 15, 2005 if possible**. You will find enclosed a registration form and information on financial support, please inform **your colleagues about this meeting!**

Abstracts preparation

Abstracts of presentations will be presented in the Program that will be distributed to participants upon registration at the beginning of the Conference. Therefore, a standard size and uniformity will be required of each abstract. Abstracts should be typed (preferably using a word processor such as Word for Windows). The top line should be the title of the presentation in block (all capital) letters. The second line should list the author(s) with the last name in block letters. The third and fourth line should be the full address of the institution or affiliation of the author(s). The text should follow using font size of 12 point and a plain style such as Times New Roman. The abstract text is limited to 300 words without tables and figures.

Financial support

Limited financial support is available for those students and colleagues that give a presentation and whose travelling expenses are not covered by an employer or other sources. Please contact Dr. SHLOMO NAVARRO <snavarro@volcani.agri.gov.il> directly on this matter until June 15 (please send along abstract of presentation).

Accommodation

	Price (Euros)*	
	Ramada Airport	Krystal
Double room (price per person)	45	35
Single room	79	55

* Breakfast is included in the price

All participants are kindly invited to make their reservations and pay their registration fees via form of the following travel agency:

ACTIVE TRAVEL Ltd.
Silvie Fialova
Nekazanka 9, Prague 1, CZ - 110 00 (Czech Republic)
fialova@active.cz
tel.: +420 224231671-4, fax: +420 224231675

Proceedings of the last meetings

The book of proceedings of the last meeting in Kusadasi (IOBC/wprs Bulletin Vol. 27 (9), 2004) is now available.

You may also order copies of the
IOBC/wprs Bulletin 21 (3) 1998 (Meeting in Zurich, August 1997)
IOBC/wprs Bulletin 23 (10) 2000 (Meeting in Berlin, August/Sept. 1999)
IOBC/wprs Bulletin 25 (3) 2002 (Meeting in Lisbon, Sept. 2001) and the
IOBC/wprs Bulletin 27 (9) 2004 (Meeting in Kusadasi, Sept. 2003) through
the

IOBC / WPRS Treasurer Dr. C. Gessler
Phytomedicine / Pathology, Universitaetsstr. 2
CH-8092 ETH Zurich (Switzerland)
E-mail: <cesare.gessler@ipw.agrl.ethz.ch>

For ordering of IOBC/wprs Bulletins use:
http://www.iobc-wprs.org/pub/bulletins/bulletin_order.pdf

A copy will cost 30.- Euros. You may include payment for orders of less than 100 Euros. If you pay per check please add 5.- Euros for banking fees. If you pay per money transfer please make sure that the transfer costs are debt to you.

Bank account of IOBC/WPRS:
Union Bank of Switzerland, 8021 Zurich: Account No. 230/517.950.60 F;
IBAN: CH900023023051795060F – Swift code: UBSWCHZH80

Working Group "Insect Pathogens and Insect Parasitic Nematodes"

The 10th European meeting of the Working Group, entitled "Invertebrate Pathogens and Biocontrol: Present and Future", was held in the "Basile Caramia" ITA-CRSA, located in Locorotondo near Alberobello, Italy, 10-15 June 2005, in cooperation with the COST Actions 842 "Entomophthorales" and 850 "Biocontrol Symbiosis".

It has been a very great success, owing to the Local Organizer, ORESTE TRIGGIANI, Facoltà di Agraria, Università degli Studi di Bari, and his team. Nearly 200 people attended, originating from 26 countries. The meeting offered plenary sessions, oral and poster contribution sessions, and workshops. A plenary session, chaired by BERNARD BLUM and MASSIMO BENUZZI, was devoted to the aspects dealing with bioinsecticide regulation and marketing. As a rule, the proceedings of the meeting will be published in the IOBC/wprs Bulletin.

Owing to local facilities, three workshops attracted the interested people: a workshop (in two parts) dedicated to nematodes "Diagnostics of major groups of insect parasitic nematodes used in biological control", by PATRICIA STOCK, a workshop dedicated to Microsporidia, by RUDOLF WEGENSTEINER and REGINA KLEESPIES, and a workshop (repeated twice) dedicated to fungi "Handling entomopathogenic fungi for identification purposes", by BERNARD PAPIEROK. Indeed, there is a strong demand for technical workshops and hopefully next meetings of the Working Group should try to keep on answering it.

Given BERNARD PAPIEROK was elected as convenor of the Working Group in 1999, during the biennial meeting in Vienna (Austria), his mandate was ending. Therefore, election of a new Working Group convenor took place during the meeting in Locorotondo. RALF-UDO EHLERS (Germany) was elected. Simultaneously, the Sub-group "Nematodes" elected as convenor ITAMAR GLAZER (Israel), whereas the Sub-group "Fungi" elected as convenor CEZARY TKACZUK (Poland).

During the meeting, the virologists expressed their intention to have a Sub-group of their own, a wish which was granted by the new convenor EHLERS. They elected MIGUEL LOPEZ-FERBER (France) as convenor of the newly established Sub-group "Virus". LOPEZ-FERBER also agreed to organize the next meeting of the Working Group "Insect Pathogens and Entomoparasitic Nematodes" in 2007 at Alès, France.

From the other two Sub-groups, the Sub-group "Soil Insect Pests" (former "*Melolontha*") was represented by several members and by its new convenor, JÜRGEN ENKERLI (Switzerland). From the Sub-group "Slugs and Snails", nobody attended the meeting at Bari.

Bernard Papierok (WG Convenor)
Collection des Champignons
Institut Pasteur
28, rue du Docteur Roux
75015 Paris (France)
Tel: +33 (0)1 45 68 82 26 Fax: +33 (0)1 45 68 85 87
E-mail: papierok@pasteur.fr

WG “Protected Crops, Mediterranean Climate” – Next Meeting: Murcia (Spain), 14-18 May 2006

The next Meeting of the WG will be held in the city of Murcia, which is the center of an important agricultural region located in the south east coast of Spain. It will be locally organized by JUAN ANTONIO SÁNCHEZ, from Instituto Murciano de Investigación y Desarrollo Agrario y Alimentario (IMIDA). 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:

- Present Pest Problems
- Strategies for management of Natural Enemies
- Role of spontaneous NE on pest control
- New biocontrol agents
- Integrated plant disease management

The region of Murcia has a Mediterranean semi arid climate, with hot summers and mild winters, which allows growing crops all year round. It has almost 50,000Ha of horticultural production, with an important surface of protected vegetables (6500Ha) and a minor surface of protected ornamentals (275Ha) in mainly unheated plastic greenhouses. One of the most important surfaces (1500Ha) of peppers produced with Natural Enemies as the main control strategy is located in this area and we will have the opportunity to visit some growers and discuss about the elements involved in such a success.

As has been done in previous meetings, contributions will be published in the IOBC/wprs Bulletin previously to the meeting and they should be sent to the convenor no later than January 2006.

Those interested in this meeting please visit the website http://wsiam.carm.es/imida/congresos_jornadas/oilb.htm and fill in the preregistration form in order to receive the Second Announcement. The web site will have up-to-date information of the event.

For further information, please contact:

Dr. Cristina Castañé (Convenor)
Institut de Recerca i Tecnologia Agroalimentàries (IRTA),
Ctra. de Cabrils s/n, 08348 CABRILS, SPAIN
Tel. +34 93 7507511
Fax: +34 93 7533954
e-mail: Cristina.Castane@irta.es

or

Dr. Juan Antonio Sánchez (Local organizer)
Instituto Murciano de investigación y Desarrollo Agrario y Alimentario
(IMIDA)
C/ Mayor s/n; 30150 LA ALBERCA, SPAIN
Tel. + 34 968 362787
Fax + 34 968 366792
e-mail: Juana.Sánchez23@carm.es

IOBC/WPRS GENERAL ASSEMBLY
and scientific meeting

OILB/SROP ASSEMBLÉE GÉNÉRALE
et colloque scientifique

**50 YEARS of IOBC:
from chemical control to integrated production
with biological control**

**50^{eme} anniversaire de l'OILB: de la lutte chimique
à la production intégrée grâce à la lutte biologique**

DIJON – FRANCE

Saturday 17 september, Wednesday 21 september 2005

Samedi 17 septembre, mercredi 21 septembre 2005

Details including the Programm see:

**Profile 38, 2005
and the IOBC/wprs Website:
www.iobc-wprs.org**

**IOBC/WPRS WG „Pesticides and Beneficial Organisms“ –
Next Meeting**

The forthcoming meeting of the WG takes place at **Dębe near Warsaw, Poland, from 27th to 30th September 2005**. The meeting is organized in close cooperation with the Research Institute of Pomology and Floriculture in Skierniewice (Poland). Skierniewice is often called “the capital of Polish Horticulture”. The main fruit growing region in Poland, and one of the biggest in the world, is located 40 km south-east from Skierniewice.

The place of the meeting is the Training Centre of the Ministry of Environmental Protection in Dębe, which is a small village situated by the Narwa river, 35 km north from Warsaw and about 100 km north-east from Skierniewice. The Training Centre is excellently equipped and offers us a comfortable atmosphere for our meeting. The WG is grateful about the invitation by the local organizer Prof. REMIGIUSZ W. OLSZAK.

Oral presentations (15 – 20 minutes) (and Posters) related to the topics below are invited:

- Development of **standard procedures to test side effects** of pesticides on important beneficial organisms. All testing tiers, but especially extended laboratory, semi-field and field tests.
Presentation and discussion of new or optimized methods; completion of sequential testing schemes. Please consider IOBC standards.
- **Test methods for special plant protection products**, e.g. IGRs, soil-incorporated granules or seed dressings, special use patterns
- **Results** from side-effect tests, especially with new compounds, and their **implementation into IPM**
- **Duration of effects** (natural substrates, exposure under realistic conditions, aged residues) and **implementation into IPM**
- **Field tests**: Test design, sampling techniques, statistics, interpretation
- Extrapolation of field studies to different regions, different crops: Is this possible?
- **Comparison of results** from laboratory, extended laboratory, semi-field and field tests; extrapolation laboratory – field
- **Comparison of results between species and biotypes**
- Effects of **multiple applications** of pesticides, of sequences of sprays or of combinations of pesticides. How to test multiple application products in the laboratory/extended/sf-test?
- **Side-effects of pesticides in protected crops.**
- **Side effects of biological control agents** (e.g. Bt, fungi, viruses)
- Sublethal effects of pesticides, **their significance and acceptability**
- **Other topics related to side-effects**

Further information about the meeting and the registration form is available on the IOBC website. You can also contact the convenor or the local organizers.

WG Convenor

Dr. Heidrun Vogt

BBA, Institute for Plant
Protection in Fruit Crops
Schwabenheimerstr. 101
D-69221 Dossenheim
Germany

Tel.: +49(0)6221/8680530

Fax: +49(0)6221/8680515

E-mail: H.Vogt@bba.de

Local Organizers

Prof. Remigiusz W. Olszak

Dr. Dariusz Gajek

Research Institute of Pomology
and Floriculture
Department of Plant Protection
Pomologiczna str. 18,
96-100 Skierniewice (Poland)

Tel.: +48 46 8345357

Fax: +48 46 8333228

E-mail: iobc2005@insad.pl

WG “Integrated Protection of Citrus Crops”, Next Meeting: Lisbon (Portugal), September 2005

The next meeting of the IOBC-WPRS Group “Integrated Control in Citrus Fruit Crops” that will take place in Lisbon (Portugal) from 26 to 27 September 2005.

The meeting is locally organized by the Instituto Superior de Agronomia (Technical University of Lisbon) in collaboration with Estação Agronómica Nacional, Direcção Geral de Protecção das Culturas and Direcção Regional de Agricultura do Algarve.

The Meeting will be held at the facilities of the Instituto Superior de Agronomia, at Tapada da Ajuda, 1349-017 Lisboa.

A post-meeting (September 28th-30th) scientific excursion to Madeira Island is being prepared aiming at visiting the facilities and learn about the Madeira-Med program (<http://www.sra.pt/users/madeiramed>), a pioneering area-wide program using the Sterile Insect Technique (SIT) to control medfly, *Ceratitis capitata*. A field trip is also planned including the visit to citrus orchards and the observation of particular pest management problems, e.g., *Trioza erythrae*, *Toxoptera citricida*.

All the information related with the Meeting and the scientific excursion to Madeira Island is available and updated at

<http://www.isa.utl.pt/dppf/iobc/>.

José Carlos Franco (Local organiser, iobc2005@isa.utl.pt)

Ferran Garcia-Mari (Convenor, fgarciam@eaf.upv.es)

Mohamed Besri (Liaison officer m.besri@iav.ac.ma)

Plant Health Endangered – State of Emergency

In September 2004, the administrative session of **EPPO** Council was followed by a Colloquium on 'Scientific Services in Support of NPPOs in the EPPO Region' (Madeira, 2004-09-23/24). As a result, a state of emergency was declared and the Council Colloquium agreed on the following declaration:

The work of National Plant Protection Organizations (NPPOs) relies on scientific expertise, but the services providing this expertise increasingly lack staff, funds and training.

On the one hand, the whole scientific basis of the phytosanitary field is quickly eroding. Taxonomy, classical plant pathology and other scientific fields which are vital for sustaining sound public policy are threatened with extinction, because they are no longer in the forefront of science priorities.

On the other hand, the need for phytosanitary expertise, training and research is substantially and continuously increasing. The number and complexity of plant pest problems increases every year. New developments and new technology have to be mastered, going far beyond existing expertise.

Unless urgent action is taken, indispensable expertise and scientific disciplines will irreversibly disappear, and NPPOs will be unable to do their duty.

New IOBC/wprs Publications

Individual Members: Important !

Individual members receive the Bulletins produced by **5 Working Groups or Commissions** of their choice. They may order additional Bulletins by the treasurer:

Dr. Cesare Gessler, Phytomedicine / Pathology
Universitaetsstr. 2, CH-8092 ETH Zürich (Switzerland)
e-mail: cesare.gessler@ipw.agrl.ethz.ch
cesare.gessler@ismaa.it

New IOBC/wprs Bulletins

The Publication Commission of the IOBC/wprs has issued the following Bulletins in 2005 (including the Contents of the Bulletins); see also *Profile 38*: 40-54 for IOBC/wprs Bull. **27**(2, 6-10), 2004 or visit the IOBC/wprs homepage.

IOBC/wprs Bulletin Vol. 28(1) 2005

Working Group „Integrated Control in Protected Crops, Temperate Climate“, Proceedings of the meeting at Turku (Finland), 10 - 14 April 2005. Edited by: Annie Enkegaard. ISBN 92-9067-173-2 [xiii + 328 pp.]

Preface	i
Subject index	iii
Coexistence between <i>Trialeurodes vaporariorum</i> and <i>Bemisia tabaci</i> and impact of natural enemies in tomato crops under Mediterranean conditions Judit Arnó, Montse Matas, Montse Martí, Jordi Ariño, Job Roig & Rosa Gabarra....	1
Impact of interspecific interactions on inoculative biological control of leafminers <i>Amy Bader, Kevin Heinz & Robert Wharton</i>	5
Application of non-chemical control of the slug <i>Lehmanna valentiana</i> Ferussac in <i>Gerbera</i> greenhouses in Iran <i>Valiollah Baniameri</i>	9
Developing an action threshold for the bulb mite, <i>Rhizoglyphus robini</i> on lily, onion and garlic <i>Tslila Ben-David, Leah Tsrer & Eric Palevsky</i>	11
Best Practice Guide for integrated pest and disease management on UK protected herbs <i>Jude Bennison, Kim Green & Tim O'Neill</i>	15
Intraguild predation between <i>Orius majusculus</i> (Reuter) (Hemiptera: Anthocoridae) and <i>Iphiseius degenerans</i> Berlese (Acarina: Phytoseiidae) <i>Henrik F. Brødsgaard & Annie Enkegaard</i>	19
IPM and biological control of protected cropping in some developing greenhouse regions <i>Vanda H.P. Bueno</i>	23

Control of western flower thrips with entomopathogenic nematodes, how does it work? <i>Rosemarije Buitenhuis & Les Shipp</i>	27
Survey of aphids and their natural enemies on UK nursery stock <i>John Buxton, Jude Bennison & Leslie Wardlow</i>	31
Demonstrating reduced-risk practices for control of important pests of <i>Gerbera jamsonii</i> grown as cut flower <i>V.L. Carne-Cavagnaro, K.L. Robb, S.A. Tjosvold, J.P. Newman & M.P. Parrella</i> ..	35
<i>Thrips</i> (Thysanoptera) in protected rose crops in Brazil <i>Alessandra R. Carvalho, Vanda H.P. Bueno & Alexandre J.F. Diniz</i>	39
Response of two <i>Orius</i> species to temperature <i>Livia M. Carvalho, Vanda Helena P. Bueno & Simone M. Mendes</i>	43
Companion plants for ornamental nursery stock conservation biological control programs <i>Christine Casey</i>	47
Effects of repeated applications of an azadirachtin-based product on the spider mite <i>Tetranychus urticae</i> and its phytoseiid predator <i>Neoseiulus californicus</i> <i>Marisa Castagnoli, Roberto Nannelli & Sauro Simoni</i>	51
Artificial diets for rearing predatory mirid bugs <i>Cristina Castañé & Rafael Zapata</i>	55
A “bottom up” approach to managing western flower thrips on potted mums <i>Amanda Chau, Kevin M. Heinz & Fred T. Davies, Jr.</i>	59
Manipulation of sex ratios in mass rearing of <i>Diglyphus isaea</i> (Walker), an ectoparasitoid of agromyzid leafminers <i>Andrew Chow & Kevin M. Heinz</i>	63
IPM programs in tomatoes resistant to TYLCV in Israeli screen-houses <i>Raisa Chyzik, Yoel Mesika, Miri Tregerman, Sophia Kleitman & A. Rami Horowitz</i> 67	
Impact of biological and behavioural variation in spider mites (Acari: Tetranychidae) on the success of IPM of UK tomato crops <i>Pat Croft, Rob Jacobson & John Fenlon</i>	71
Spruce spider mite (<i>Oligonychus ununguis</i> Jacobi) and its predators associated with ornamental coniferous plants in Polish nurseries <i>Barbara Czajkowska & Puchalska Ewa</i>	75
Persistence of <i>Wolbachia</i> in the guts of the predatory mite <i>Phytoseiulus persimilis</i> <i>Monika Enigl & Peter Schausberger</i>	79
Interspecific interactions among the aphid parasitoid <i>Aphidius colemani</i> and the aphidophagous gallmidge <i>Aphidoletes aphidimyza</i> <i>Annie Enkegaard, Rikke Kirkeløkke Christensen & Henrik F. Brødsgaard</i>	83
Dynamic climate control strategies influence pests and beneficials <i>Annie Enkegaard & Henrik F. Brødsgaard</i>	87
Voracity of larvae of three hoverfly species (Dip.: Syrphidae) as potential biological control agents of <i>Myzus persicae</i> (Hom.: Aphididae) on greenhouse crops <i>Yaghoub Fathipour, Farzad Jalilian, Ali Asghar Talebi & Saeid Moharramipour</i>	91
Novel isolates of the entomopathogenic fungus <i>Beauveria bassiana</i> for biological control of the shore fly, <i>Scatella tenuicosta</i> <i>Melanie Filotas, Louela Castrillo, John Vandenberg, John Sanderson & Stephen Wraight</i>	95
An investigation on biological control of the tomato russet mite <i>Aculops lycopersici</i> (Massee) with <i>Amblyseius andersoni</i> (Chant) <i>Serge Fischer, Françoise Klötzli, Léia Falquet & Olivier Celle</i>	99
New fungi to control Phytophagous mites and Phytophathogenic fungi <i>Uri Gerson, Zahi Paz, Lior Kushnir & Abraham Sztejnberg</i>	103
Development of new fungal biopesticides for the Australian greenhouse industry <i>Stephen Goodwin, Marilyn Steiner & Weiguang Liang</i>	107

Possibilities to manipulate direct and indirect chemical defence of the crop plants – benefits and drawbacks for IPM <i>Jarmo K. Holopainen</i>	111
APHCON - Computer based decision-aid for optimising biological control of aphids in greenhouses <i>Martin Hommes & Dieter Gebelein</i>	115
Biological control of the tobacco whitefly <i>Bemisia tabaci</i> with the predatory mite <i>Amblyseius swirskii</i> in sweet pepper crops Hans Hoogerbrugge, Javier Calvo, Yvonne van Houten & Karel Bolckmans	119
AYR salad production: the driving forces and potential impact on IPM <i>Rob Jacobson</i>	123
The influence of a dynamic climate on pests, diseases and beneficial organisms: recent research <i>Lene Jakobsen, Michael Brogaard, Oliver Körner, Annie Enkegaard & Jesper M. Aaslyng</i>	127
Compatibility of <i>Atheta coriaria</i> with other biocontrol agents used in greenhouse production <i>S. Jandricic, G. Murphy, B. Broadbent, C. Scott-Dupree & R. Harris</i>	135
Toxicity of soil applied pesticides to <i>Atheta coriaria</i> Kraatz <i>S. Jandricic, C. Scott-Dupree, R. Harris, B. Broadbent & G. Murphy</i>	139
Optimal concentration of <i>Beauveria bassiana</i> as vectored by bumblebees for pest control on sweet pepper <i>Jean Pierre Kapongo, Les Shipp, Peter Kevan & Bruce Broadbent</i>	143
Some natural enemies of Eriophyid mites from Western Iran <i>M. Khanjani & M. Mirab Balou</i>	147
Effect of different cucumber cultivar hybrids <i>Cucumis sativus</i> on developmental time, fecundity and intrinsic rate of increase (r_m) of <i>Tetranychus urticae</i> Koch <i>Neda Kheradpir, Jafar Khalghani, Hadi Ostovan & Mohammad Reza Rezapanah</i>	151
The potential of the parasitoid <i>Chrysonotomyia formosa</i> for controlling the tomato leafminer <i>Liriomyza bryoniae</i> in Dutch tomato greenhouses in winter <i>J. Klapwijk, E. Sanchez Martinez, H. Hoogerbrugge, M. den Boogert & K. Bolckmans</i>	
Attraction of the monoterpenoids nerol and carvacrol to the predatory flower bug <i>Orius laevigatus</i> (Fieber) <i>Christian Kornherr & Sylvia Blümel</i>	159
Side effects of the monoterpenoids nerol and carvacrol on the predatory flower bug <i>Orius laevigatus</i> (Fieber) in the laboratory <i>Christian Kornherr, Hermann Hausdorf & Sylvia Blümel</i>	163
<i>Thripinema nicklewoodi</i> performance against <i>Frankliniella occidentalis</i> in a chrysanthemum production system Peter C. Krauter, Steven Thompson & Kevin M. Heinz	167
The potential of native phytoseiid species for the control of spider mites on lindens in nurseries <i>Danuta Kropczyńska-Linkiewicz, Bartosz Kaźmierczak & Julia Górecka</i>	171
Biological control of greenhouse whitefly (<i>Trialeurodes vaporariorum</i>) on interplanted tomato crops with and without supplemental lighting using <i>Dicyphus hesperus</i> (Quebec, Canada) <i>Liette Lambert, Thierry Chouffot, Gilles Turcotte, Martial Lemieux & Jocelyne Moreau</i>	175
Regulation of invertebrate biological control agents: international context and situation in The Netherlands <i>Antoon Loomans & Susanne Sütterlin</i>	179
<i>Typhlodromips swirskii</i> (Athias-Henriot) (Acari: Phytoseiidae): a new predator for thrips control in greenhouse cucumber <i>Gerben Messelink, Sebastiaan van Steenpaal & Wim van Wensveen</i>	183

Evaluation of susceptibility of <i>Trialeurodes vaporariorum</i> (Hom: Aleyrodidae) to pyriproxyfen and buprofezin <i>Saeid Moharrampour, Ahmad Heidari, Ali Asghar Talebi, Ali Asghar Pourmirza & Yaghoub Fathipour</i>	187
New hosts of <i>Phytophthora ramorum</i> in Poland: occurrence and plant colonisation <i>Leszek B. Orlikowski</i>	191
Flower bugs of the genus <i>Orius</i> Wolff (Heteroptera: Anthocoridae) from Iran and feeding rate of predatory bug <i>Orius albidipennis</i> (Reuter) under laboratory conditions <i>Hadi Ostovan & Ali Mirhelli</i>	195
Effect of abamectin on the leafminer parasitoid <i>Diglyphus isaea</i> <i>Michael P. Parrella & Roy Kaspi</i>	197
<i>Franklinothrips vespiformis</i> (Thysanoptera: Aeolothripidae): biology on two preys <i>Leonardo S. R. Pierre, Vanda H. P. Bueno & Luís Cláudio P. Silveira</i>	201
Biocontrol of the greenhouse whitefly, <i>Trialeurodes vaporariorum</i> with the predatory mite <i>Euseius ovalis</i> in cut roses <i>J. Pijnakker</i>	205
Can integrated pesticides improve biological control of <i>Bemisia tabaci</i> in <i>Euphorbia pulcherrima</i> ? <i>Ellen Richter</i>	209
Biological control in strawberry in Japan <i>Yoko Saiki & Tetsuo Wada</i>	213
Co-occurrence of <i>Aphidius colemani</i> and other aphid parasitoids in some localities of Southeastern Brazil <i>Marcus V. Sampaio, Vanda H.P. Bueno, Bruno B.F. De Conti, Sandra M.M. Rodrigues & Maria C.M. Soglia</i>	217
Preference assessment of two <i>Orius</i> spp. for <i>Neoseiulus cucumeris</i> vs. <i>Frankliniella occidentalis</i> <i>John P. Sanderson, Henrik F. Brodsgaard & Annie Enkegaard</i>	221
Binomial count sampling for western flower thrips in greenhouses <i>J. Sanderson, J. Nyrop, L. Shipp, T. Ugine, S. Wraight & K. Wang</i>	225
Biology and predatory feeding behavior of larvae of the hunter fly <i>Coenosia attenuata</i> <i>Emily J. Sensenbach, Stephen P. Wraight & John P. Sanderson</i>	229
Rearing of predator bug <i>Orius laevigatus</i> (Fieb.) (Heteroptera, Anthocoridae) with alternative food and its application against <i>Frankliniella occidentalis</i> (Pergande) <i>Anna Shchenikova & Elena N. Stepanycheva</i>	233
Effect of host plant on control of <i>Tetranychus urticae</i> by <i>Verticillium (Lecanicillium) lecanii</i> <i>Margarita Shternshis, Irina Andreeva & Marina Trandysheva</i>	237
Fertility life table of <i>Aphis gossypii</i> on three commercial chrysanthemum cultivars <i>Maria da Conceição de M. Soglia, Vanda Helena P. Bueno & Marcus V. Sampaio</i> 241	
Managing tomato russet mite, <i>Aculops lycopersici</i> (Masse) (Acari: Eriophyiidae) in greenhouse tomato crops <i>Marilyn Steiner & Stephen Goodwin</i>	245
Compatibility of two formulations of bifenazate with <i>Phytoseiulus persimilis</i> Athias-Henriot (Acari: Phytoseiidae) <i>Marilyn Steiner & Stephen Goodwin</i>	249
Effects of selected fungicides on a Mycophagous Ladybird (Coleoptera: Coccinellidae): Ramifications for biological control of powdery mildew <i>Andrew M. Sutherland</i>	253
Future greenhouse technologies and their impact on pest management <i>Risto Tahvonen</i>	257
Eulophid parasitoids of agromyzid leafminers genus <i>Liriomyza</i> (Dip.: Agromyzidae) in Tehran, Iran	

<i>Ali Asghar Talebi, Rahil Asadi, Yaghoub Fathipour, Karim Kamali, Saeid Moharramipour & Ehsan Rakhshani</i>	263
Behaviour and activity of <i>Phytoseiulus persimilis</i> (A.-H.) on mite infested cucumber plants cultivated in the presence of plant growth promoting rhizobacteria (PGPR) <i>Anna Tomczyk & Wioletta Burda</i>	267
Differential susceptibility of western flower thrips (<i>Frankliniella occidentalis</i>) to <i>Beauveria bassiana</i> , as a function of host plant species <i>Todd A. Ugine, Stephen P. Wraight & John P. Sanderson</i>	271
Progress with IPM on nurseries in the Netherlands <i>Anton van der Linden & Frank Nouwens</i>	275
Augmentation of predatory mites in Dutch nursery stock <i>Anton van der Linden & Frank Nouwens</i>	279
Biological control of western flower thrips on sweet pepper using the predatory mites <i>Amblyseius cucumeris</i> , <i>Iphiseius degenerans</i> , <i>A. andersoni</i> and <i>A. swirskii</i> <i>Yvonne M. van Houten, Mai Linn Østlie, Hans Hoogerbrugge & Karel Bolckmans</i>	283
Risk assessment: what happened after Victoria, Canada 2002? <i>Joop C. van Lenteren</i>	287
The biology of the brown lacewing <i>Micromus variegatus</i> (Neuroptera: Hemerobiidae) and its possible use against the aphid <i>Aulacorthum solani</i> in sweet pepper <i>Jeroen van Schelt, Evagelos Pelekanis & Karel Bolckmans</i>	291
Artificial lighting (AL) and IPM in greenhouses <i>Irene Vänninen & Nina Svae Johansen</i>	295
Importance of registration and patenting of biological control agents <i>Tetsuo Wada</i>	305
Are two better than one? Combined effects of the predatory mites <i>Phytoseiulus persimilis</i> and <i>Neoseiulus californicus</i> (Acari: Phytoseiidae) on spider mite control <i>Andreas Walzer & Peter Schausberger</i>	309
Diel movement of predatory mites (<i>Neoseiulus cucumeris</i>), reared in light or dark, on greenhouse sweet pepper <i>Phyllis Weintraub, Sophia Kleitman & Eric Palevsky</i>	313
Need for new biocontrol agents in greenhouse IPM - a European perspective <i>Phyllis Weintraub & Sharon Cheek</i>	317
Influence of light on the efficacy of biological control agents in glasshouse environments <i>Gabriella M.G. Zilahi-Balogh, J.L. Shipp, C. Cloutier & J. Brodeur</i>	325

IOBC/wprs Bulletin Vol. 28(2) 2005

Working Group „Insect Pathogens and Insect Parasitic Nematodes”, Subgroup “Melolontha”, Proceedings of the meeting at Innsbruck (Austria), 11-13 October 2004. Edited by: Siegfried Keller. ISBN 92-9067-174-0 [xi + 192 pp.]

Options for developing integrated control measures against the maize pest <i>Diabrotica virgifera virgifera</i> LeConte (Coleoptera: Chrysomelidae) in Europe <i>Stefan Toepfer, Jozsef Kiss, Gyorgy Turoczi, Judit Komaromi & Ulrich Kuhlmann</i>	3
Scarabs and other soil pests in Europe: Situation, perspectives and control strategies <i>Siegfried Keller & Gisbert Zimmermann</i>	9
Non-target effects of insect pathogenic fungi <i>Nicolai V. Meyling, Jørgen Eilenberg & Charlotte Nielsen</i>	13
Field Experience in the Control of Common Cockchafer in the Bavarian Region Spessart <i>Ullrich Benker & Bernhard Leuprecht</i>	21
Isolation of <i>B. brongniartii</i> from soil: Are the available isolation tools neutral? <i>Jürg Enkerli, Priska Moosbauer, Franco Widmer, Silvia Dorn & Siegfried Keller</i> ...	25

Development of the <i>Melolontha</i> populations in the canton Thurgau, eastern Switzerland, over the last 50 years <i>Siegfried Keller & Hermann Brenner</i>	31
Biocontrol of the forest cockchafer (<i>Melolontha hippocastani</i>): Experiments on the applicability of the “Catch and Infect”-Technique using a combination of attractant traps with the entomopathogenic fungus <i>Beauveria brongniartii</i> <i>Robert Koller, Kerstin Jung, Stefan Scheu, Gisbert Zimmermann & Joachim Ruther</i>	37
Control of the garden chafer <i>Phyllopertha horticola</i> with GranMet-P, a new product made of <i>Metarhizium anisopliae</i> <i>Barbara Pernfuss, Roland Zelger, Roberto Kron-Morelli & Hermann Strasser</i>	47
Timing of nematode application to control white grubs (Scarabaeidae) <i>Arne Peters & Henk Vlug</i>	51
<i>Metarhizium anisopliae</i> for white grub control in Nepal <i>Yubak Dhoj GC, Siegfried Keller</i>	57
Screening and selection of virulent isolates of the entomopathogenic fungus <i>Beauveria brongniartii</i> (Sacc.) Petch for the control of scarabs <i>A. B. Hadapad, A. Reineke & C. P. W. Zebitz</i>	63
European wireworms (<i>Agriotes</i> spp.) in North America: Distribution, damage, monitoring, and alternative integrated pest management strategies <i>Robert S. Vernon, Wim Van Herk & Jeff Tolman</i>	73
Monitoring and control of <i>Agriotes lineatus</i> and <i>A. obscurus</i> in arable crops in the Netherlands <i>Albert Ester & Klaas van Rozen</i>	81
Practical implementation of a wireworm management strategy – lessons from the UK potato industry <i>William E. Parker</i>	87
An IPM approach targeted against wireworms: what has been done and what has to be done <i>Lorenzo Furlan</i>	91
Strategies to regulate the infestation of wireworms (<i>Agriotes</i> spp. L.) in organic potato farming: results <i>Ute Schepl & Andreas Paffrath</i>	101
Status-Quo-Analysis and development of strategies to regulate the infestation of wireworms (<i>Agriotes</i> spp. L.) in organic potato farming <i>Ute Schepl & Andreas Paffrath</i>	105
<i>Metarhizium anisopliae</i> as a biological control for wireworms and a report of some other naturally-occurring parasites <i>Todd Kabaluk, Mark Goettel, Martin Erlandson, Jerry Ericsson, Grant Duke & Bob Vernon</i>	109
Evaluation of different sampling techniques for wireworms (Coleoptera, Elateridae) in arable land <i>Nina Brunner, Bernhard Kromp, Peter Meindl, Christian Pázmándi & Michael Traugott</i>	117
Bait and pheromone trapping of <i>Agriotes</i> sp. in Lower Austria (first results) <i>Marion Landl, Lorenzo Furlan & Johann Glauningner</i>	123
A stable isotope analysis of wireworms puts new light on their dietary choices in arable land <i>Christian Pázmándi & Michael Traugott</i>	127
Pheromone composition of European click beetle pests (Coleoptera, Elateridae): common components – selective lures <i>Miklós Tóth & Lorenzo Furlan</i>	133
The Monitoring Program for the Western Corn Rootworm (<i>Diabrotica virgifera virgifera</i> Lec.) in Austria 2004 <i>Peter C. Cate</i>	145

Trap types for capturing <i>Diabrotica virgifera virgifera</i> (Coleoptera, Chrysomelidae) developed by the Plant Protection Institute, HAS, (Budapest, Hungary): performance characteristics <i>Miklós Tóth</i>	147
The impact of the fungal BCA <i>Metarhizium anisopliae</i> on soil fungi and animals <i>Martin Kirchmair, Lars Huber, Elke Leither & Hermann Strasser</i>	157
Biocontrol potential of entomopathogenic nematodes against nut and orchard pests <i>Stefan Kuske, Claudia Daniel, Eric Wyss, Jean-Paul Sarraquigne, Mauro Jermini, Marco Conedera & Jürg M. Grunder</i>	163
Occurrence and harmfulness of <i>Brachyderes incanus</i> L. (Coleoptera: Curculionidae) to young Scots pine (<i>Pinus sylvestris</i> L.) trees planted on post-fire areas <i>Henryk Malinowski & Alicja Sierpiska</i>	169
Is differentiated host plant preference of <i>Agriotes</i> sp. and <i>Melolontha</i> sp. mediated by root volatiles? <i>Sonja Weissteiner & Stefan Schütz</i>	175
Persistence of the insect pathogenic fungus <i>Metarhizium anisopliae</i> (Metsch.) Sorokin on soil surface and on oilseed rape leaves <i>Christina Pilz, Siegfried Keller & Rudolf Wegensteiner</i>	179
The natural distribution of the entomopathogenic soil fungus <i>Metarhizium anisopliae</i> in different regions and habitat types in Switzerland <i>Sónia Rodrigues, Ralf Peveling, Peter Nagel & Siegfried Keller</i>	185
What have BIPESCO and RAFBCA achieved that could help with risk assessment and registration? <i>Hermann Strasser & Barbara Pernfuss</i>	189

IOBC/wprs Bulletin Vol. 28(3) 2005

Working Group "Insect Pathogens and Insect Parasitic Nematodes", 9th European Meeting "Growing Biocontrol Markets – Challenge Research and Development" at Schloss Salzau, Kiel (Germany), 23-29 May 2003.
Edited by: Bernard Papierok. ISBN 92-9067-175-9 [xviii + 214 pp.]

Potential of entomopathogenic nematodes for biological control of selected pest insects infesting urban trees <i>Marek Tomalak</i>	3
Use of Italian EPNs in controlling <i>Rhytidoderes plicatus</i> Oliv. (Coleoptera, Curculionidae) in potted savoy cabbages <i>Eustachio Tarasco, Oreste Triggiani</i>	9
Initial results in the application of entomopathogenic nematodes against the European cherry fruit fly <i>Rhagoletis cerasi</i> L. (Diptera, Tephritidae) <i>Kirsten Köppler, Arne Peters, Heidrun Vogt</i>	13
Developing entomopathogenic nematode delivery systems for biological control of oilseed rape pests <i>Ingeborg Menzler-Hokkanen, Heikki M.T. Hokkanen</i>	19
Preference of Italian <i>Heterorhabditis</i> for different <i>Photorhabdus</i> bacterial types Eustachio Tarasco, M.R. Enright, C.T. Griffin.....	23
Dessiccation tolerance of six Italian strains of entomopathogenic nematodes <i>Eustachio Tarasco, C.T. Griffin</i>	27
Abundance of naturally occurring entomopathogenic nematodes and establishment of inoculated <i>Steinernema feltiae</i> in an organic cropping system <i>Otto Nielsen, Holger Philipsen</i>	31

Sublethal effects of the parasitic nematode <i>Phasmarhabditis hermaphrodita</i> on the slug <i>Deroceras panormitanum</i> and the snail <i>Oxyloma pfeifferi</i> <i>Ingo Schüder, Gordon Port, Jude Bennison, Heather Maher</i>	35
Slug parasitic nematodes in vegetable crops <i>Albert Ester, Hilfred Huiting, Klaas van Rozen</i>	39
Natural occurrence and spatial distribution of <i>Beauveria bassiana</i> and <i>Metarhizium flavoviride</i> in a Danish agro-ecosystem <i>Nicolai Vitt Meyling, Jørgen Eilenberg</i>	45
Observations on the occurrence of Entomophthorales in Austria <i>Marek Barta, Siegfried Keller, Peter Cate, Rudolf Wegensteiner</i>	49
Insect species used as baits for isolation of entomopathogenic fungi from the soil <i>Ryszard Mietkiewski, Cezary Tkaczuk</i>	53
Factors affecting viability of entomophthoralean fungi <i>Zigrida Cudare</i>	61
Influence of the temperature of reisolation on the virulence of the entomopathogenic fungus <i>Verticillium lecanii</i> <i>Natalja Hetsch, Helga Sermann, H. Bochow</i>	65
Records of aphidophagous Entomophthorales in Slovakia <i>Marek Barta, Ludovít Cagán</i>	69
Why does <i>Beauveria bassiana</i> predominate over <i>Metarhizium anisopliae</i> in soils from southern Spain? <i>C. Santiago-Alvarez, J. Fernández-Castellá, E.A.A. Maranhão, P. Valverde-García, E. Quesada Moraga</i>	73
The efficacy of <i>Verticillium lecanii</i> against whitefly in sweet pepper and tomato in Spain <i>Jan van der Blom, María Lafuente, Magda Galeano, Estefanía Perez, Alberto Urbaneja, Rick van der Pas, Willem Ravensberg</i>	77
Western flower thrips: biological control in greenhouse with <i>Verticillium lecanii</i> <i>Ulrike Meyer, Helga Sermann, Carmen Büttner</i>	81
Field testing of new biocontrol strategies to decrease the population density of <i>Melolontha hippocastani</i> , an important scarab species in Germany <i>Kerstin Jung, J. Gonschorrek, J. Ruther, G. Zimmermann</i>	85
Advances in the development of novel control methods against chicken mites (<i>Dermanyssus gallinae</i>) <i>Tove Steenberg, Ole Kilpinen, Jørgen B. Jespersen, Maria Desamparados Soler Cruz, Carmen Vega Robles, Mike Birkett, Sarah Dewhurst, John Pickett</i>	89
Risk assessment of <i>Beauveria brongniartii</i> for three carabid beetles <i>Sonja Weissteiner, Hermann Strasser, Michael Traugott</i>	93
Virulence of <i>Paecilomyces fumosoroseus</i> and <i>Paecilomyces lilacinus</i> on <i>Trialeurodes vaporariorum</i> <i>Ayan Gökçe, M. Kubilay Er</i>	97
Growth, persistence and virulence of strains of the entomopathogenic fungus <i>Beauveria brongniartii</i> in different pedoclimatic conditions of the Aosta Valley (Northwest Italy) <i>Paola Doci, Olga I. Ozino</i>	101
Biocontrol of <i>Melolontha melolontha</i> : the fate of a <i>Beauveria brongniartii</i> biocontrol strain in the field <i>Jürg Enkerli, Philip Kessler, Franco Widmer, Siegfried Keller</i>	105
A GLP/GEP based field study on <i>Beauveria brongniartii</i> with respect to Commission Directive 2001/36/EC <i>T. Längle, T. Bauer, B. Pernfuß, C. Seger, J. Raffalt, H. Strasser</i>	109
Selection of resistant European Corn Borer (<i>Ostrinia nubilalis</i>) to <i>Bt</i> -corn and preliminary studies for the biochemical characterization <i>Renate Kaiser-Alexnat, Wolfgang Wagner, Gustaf-Adolf Langenbruch, Regina G. Kleespies, Brigitte Keller, Thomas Meise, Bernd Hommel</i>	115

Insect resistance to <i>Bacillus thuringiensis</i> <i>Juan Ferré</i>	119
Oral toxicity of <i>Photorhabdus temperata</i> against <i>Frankliniella occidentalis</i> and <i>Thrips tabaci</i> <i>Lonne J.M. Gerritsen, Gerrie L. Wieggers</i>	123
Future potential for biological control in Latvia: occurrence and natural viability of baculoviruses <i>Līga Jankevica, Ivars Zarins</i>	131
Understanding the mechanism of increasing susceptibility of insects to baculovirus by fluorescent brightener <i>Said El-Salamouny, Regina G. Kleespies, Jürg Huber</i>	135
Competition in insect larvae between wild-type baculovirus (<i>Spodoptera exigua</i> nucleopolyhedrovirus) and a marked recombinant with enhanced speed of action <i>Liljana Georgievska, Renate Velders, Xiaojiang Dai, Felix J.J.A. Bianchi, Wopke van der Werf, Just. M. Vlak</i>	141
Morphology, pathology and phylogeny of <i>Cystosporogenes legeri</i> , a microsporidium of the European grape wine moth, <i>Lobesia botrana</i> Den. et Schiff. <i>Regina G. Kleespies, M. Lange, J.A. Jehle</i>	149
Occurrence of pathogens in bark beetles (Coleoptera, Scolytidae) from Alpine pine (<i>Pinus cembra</i> L.) <i>Uwe Händel, Rudolf Wegensteiner</i>	155
Laboratory evaluation of <i>Malamoeba scolyti</i> Purrini (Rhizopoda, Amoebidae) in different bark beetle hosts (Coleoptera, Scolytidae) <i>Joachim-Friedrich Kirchoff, Rudolf Wegensteiner, Jaorslav Weiser, Erwin Führer</i> ...	159
Preliminary survey on the occurrence of entomopathogenic nematodes and fungi in Albanian soils <i>Eustachio Tarasco, Michele Poliseo</i>	165
Laboratory evaluation of microbial control products on the Mediterranean flour moth <i>Ephestia kuehniella</i> (Zeller) (Lepidoptera, Pyralidae) <i>M. Anagnou-Veroniki, D.C. Kontodimas, S. Chaleplidi, A.G. Georgiadou, H. Menti</i>	169
The potential of entomopathogenic fungi and nematodes againsts strawberry root weevil <i>Otiorhynchus ovatus</i> L. (Coleoptera, Curculionidae) <i>Cezary Tkaczuk, Barbara H. Labanowska, Anna Augustyniuk-Kram</i>	173
Evaluation of two microbial products and an insecticide for integrated thrips control in glasshouse chrysanthemums <i>Ellen Beerling, Dick van der Berg</i>	179
Natural enemies applied in biological pest control: pathogens in field and mass-reared populations <i>Conny Schütte, Susan Bjørnson, Regina G. Kleespies, Alois M. Huger</i>	185
EPPO based efficacy study to control <i>Phyllopertha horticola</i> in golf courses <i>Hermann Strasser, Roland Zelger, Barbara Pernfuss, Tobias Längle, Christoph Seger</i>	189
Safety of entomopathogenic fungi <i>E. Quesada-Moraga, P. Valverde-García, E.A.A. Maranhão, C. Santiago-Álvarez</i>	195
Risk assessment of biological nematicides <i>Sebastian Kiewnick, Christos Roumpos, Richard Sikora</i>	201
The EU BIPESCO project – latest results on safety of fungal biocontrol products <i>Hermann Strasser, Tariq M. Butt</i>	207
A risk assessment framework for biological control agents: the ERBIC approach <i>Heikki M.T. Hokkanen</i>	211

IOBC/wprs Bulletin Vol. 28(4) 2005

Working Group "Integrated protection of field vegetables", Edited by:
Stefan Vidal. ISBN 92-9067-176-7 [xviii + 214 pp.]

Population dynamics and control of the pea leafminer, <i>Liriomyza huidobrensis</i> Blanchard in outdoor celery <i>Van de Steene, F. & Tirry, L.</i>	1
Monitoring and occurrence of thrips (Thysanoptera) on white cabbage and white cabbage undersown with white clover <i>Pobożniak, M. & Wiech, K.</i>	7
Differences in colonisation two types of horseradish by flea beetles (<i>Phyllotreta</i> spp.), diamondback moth (<i>Plutella xylostella</i> L.) and turnip sawfly (<i>Athalia rosae</i> L.) <i>Rogowska, M., Horbowicz, M., Szwejda, J. & Wrzodak, R.</i>	15
Damage of pepper cultivars in Austria by the European Corn Borer (<i>Ostrinia nubilalis</i> Hübner) <i>Kahrer, A.</i>	19
Emergence patterns of Norwegian brassica root fly populations <i>Johansen, T.J. & Meadow, R.</i>	25
Managing the cabbage maggot by means of agro-ecosystem diversification – a Newfoundland perspective <i>C. Parsons, C., Dixon, P. & Colbo, M.</i>	33
Exclusion fences against brassica root flies (<i>Delia radicum</i> and <i>D. floralis</i>) <i>Meadow, R. & Johansen, T.J.</i>	39
Attempts to reduce cabbage root fly infestations by applying garlic and other 'natural' products <i>Jukes, A., Collier, R. & Finch, F.</i>	45
Disrupting host-plant finding by pest insects of cruciferous plants using aromatic and non-aromatic plants <i>Billiard, H., Finch, S., Collier, R. & Elliott, M.</i>	53
Integrated crop protection as a system approach <i>De Haan, J., Wijnands, F. & Sukkel, W.</i>	61
Economics of biological control in open field vegetable production – a methodological introduction <i>Dirksmeyer, W.</i>	73
Comparison of pest control practices in open field vegetables among three European countries <i>Dirksmeyer, W., Waibel, H., den Belder, E. & Esbjerg, P.</i>	83
Answers to questions concerning the "Appropriate/inappropriate landing" theory of host-plant finding <i>Finch, S. & Collier, R.</i>	103
Post-alightment behaviour of the female cabbage root fly during the search for a host plant <i>Morley, K., Finch, S. & Collier, R.</i>	123
Winter host ecology of the carrot psyllid (<i>Trioza apicalis</i>) <i>Kristoffersen, L. & Anderbrant, O.</i>	129
Efficacy of insecticide seed treatment of white cabbage and cauliflower to control cabbage root fly, <i>Delia radicum</i> <i>Ester, A., de Putter, H. & van Bilsen, J.G.P.M.</i>	135
A co-operative project to create a strategy for controlling lettuce downy mildew (<i>Bremia lactucae</i>) in iceberg lettuce in Scandinavia <i>Jönsson, B., Forsberg, A.S., Hägnfelt, A., Paaske, K. & Svedelius, G.</i>	145
Research on the efficacy of three different substances to reduce the occurrence of fungus <i>Erysiphe cichoracearum</i> DC. (Erysiphales, Erysiphaceae) on chicory <i>Trdan, S., Žnidarčič, D. & Valič, N.</i>	153

IOBC/wprs Bulletin Vol. 28(5) 2005

Commission „IP Guidelines and Endorsement“: Guidelines for Integrated Production of Field Grown Vegetables. IOBC Technical Guideline III. 1st Edition, 2004. Edited by: C. Malavolta, E.F. Boller & F.G. Wijnands. ISBN 92-9067-177-5 [ii + 24 pp.]

IOBC/wprs Bulletin Vol. 28(6) 2005

Working Group “Insect pathogens and entomoparasitic nematodes”, Subgroup “Slugs and Snails”. Proceedings of the meeting at Schloss Flehingen, Stuttgart (Germany), October 26-29, 2004. Edited by: David A. Bohan. ISBN 92-9067-178-3 [vi + 134 pp.]

Snails and slugs as non-targets for environmental chemicals <i>Rita Triebkorn, Katja Bader, Beate Linder & Heinz-R. Köhler</i>	1
Antifeedant and molluscicidal activity of scented myrrh applied as a spray <i>Ahmed Y Ali & Ivor D Bowen</i>	9
New findings on metaldehyde as a slug control active ingredient in integrated production systems <i>Markus Bieri, Plozza Ernesto & K. Christensen</i>	15
Ferramol (Sluggo) – new results of slug and snail control on various crops worldwide <i>Andreas Prokop</i>	19
Evaluating the effects of beetle predators on slug population dynamics <i>Yoon Choi, David Bohan & Mikhail Semenov</i>	25
A comparison of growth trends among separate populations of the slug <i>Arion ater</i> (L.) in Biscay (Northern Spain). <i>M. Mercedes Ortega, Jesus M. Txurruka & Udane Aranbalza</i>	29
On the importance of temperature and moisture to the egg laying activity of a pest slug, <i>Deroceras reticulatum</i> (Müller) <i>J C Willis, D A Bohan, Y H Choi, M A Semenov, J Park, V K Brown & E Gussin</i> ..	35
Modelling growth of the reproductive tract of slugs (<i>Arion ater</i>) from two populations of Urdaibai (Biscay, Northern Spain) <i>Jesus M. Txurruka, Mercedes Ortega & Jon Saenz</i>	41
Estimation of surface active slug populations using refuge traps <i>Sally Howlett, Gordon Port & Alan Craig</i>	53
Responses of <i>Deroceras reticulatum</i> to the annual effects during the last three years <i>Adel El Titi</i>	59
A change in <i>Monacha cantiana</i> distribution following a change in the use of arable farmland. <i>Jane Ward-Booth & Georges Dussart</i>	65
Assessing the risk of slug damage to oilseed rape and the need for control measures <i>David Glen, Holger Kreye, Wolfgang Büchs, Adel El Titi, Bernd Ulber & Matthias Wörz</i>	75
Integrated control of slug damage in winter wheat <i>David Glen, Geoffrey Bamber, Christopher Batchelor, David Bohan, Victoria Evans, John Fisher, Michael Godfrey, David Green, Eric Gussin, Richard Meredith, Jon Oakley, Gordon Port & Christopher Wiltshire</i>	79
Influence of slug populations on green manure crops <i>Albert Ester & Hilfred Huiting</i>	83

Decision Support Systems for management of slugs <i>Gordon Port, Rosemary Collier & Caroline Parker</i>	87
Influence of the farming system and specific cultivation methods on the slug damage level in swiss potato production <i>Andreas Keiser, Martin Haeberli, Erich Schnyder & Pierre Berchier</i>	91
Simultaneous detection of the remains of multiple species of mollusc and other prey in carabids using multiplex PCR <i>King, R.A., Harper, G.L., Dodd, C.S., Harwood, J.D., Glen, D.M., Bruford, M.W. & Symondson, W.O.C.</i>	95
Impact of some agricultural practices on Carabidae beetles <i>André Chabert & Christian Beaufreton</i>	101
Impact of some insecticides on Carabidae and consequences for slug populations <i>André Chabert & Joachim Gandrey</i>	111
Facultative scavenging by <i>Pterostichus melanarius</i> on slug carrion: detectability of decayed prey in the predator's guts using PCR <i>Pavel Foltan, Samuel Sheppard, Martin Konvička & William O.C. Symondson</i> ...	115
The use of <i>Phasmarhabditis hermaphrodita</i> (Nemaslug®) for the control of slugs, an update of the most recent results <i>Cyrille Verdun & Nicolette Linton-Sleeuwenhoek</i>	121
Molecular detection of the nematode <i>Phasmarhabditis hermaphrodita</i> within slugs and predators of slugs <i>D.S. Read, M.W. Bruford, D.M. Glen & W.O.C. Symondson</i>	127
Molecular detection of slug DNA within carabid predators. <i>Ciara S Dodd, Michael W Bruford, David M Glen & William OC Symondson</i>	131

The regular prices for the Bulletins are:

- up to 100 pages: 10 EURO per copy
- up to 300 pages: 15 EURO per copy
- > 300 pages: 30 EURO per copy

New Publications of IOBC Global

IOBC-Global Newsletter 76, December 2004, 20 pp. (eds. Joop C. van Lenteren & Stefano Colazza). Contents:

- | | |
|--|---|
| 1. Editorial: Risks of biocontrol? | 11. Availability of IOBC-WPRS bulletins |
| 2. New website IOBC-Global | 12. IOBC-Global Writing Partnership |
| 3. Financial situation of IOBC-Global | 13. Next meetings of Executive Committee |
| 4. New membership fee system | 14. Summaries PhD Theses biocontrol |
| 5. State of affairs Regional Sections | 15. Publications and books biocontrol |
| 6. State of affairs Working Groups | 16. Regional Sections: addresses, short info |
| 7. Scientific meetings IOBC, 50 th anniversary and Honorary Members | 17. Working Groups IOBC-Global: addresses and short information |
| 8. In memory of Dan Smith, Australia | 18. Link to biocontrol meetings agenda |
| 9. IOBC Global Journal BioControl | |
| 10. Regulation import of exotic natural enemies | |

PDF files of previous newsletters can be found at:

www.iobc-global.org

This newsletter is available in the web at: **www.iobc-global.org** (also previous newsletters) or can be ordered by:

Prof. Dr. J.C. van Lenteren
Laboratory of Entomology, Wageningen University
P.O. Box 8031, 6700 EH Wageningen, The Netherlands,
Tel: +31 317 482327 Fax: +31 317 484821
e-mail: Joop.vanLenteren@wur.nl

Prof. Dr. S. Colazza
S.En.Fi.Mi.Zo. Department - Section of Entomology,
Acarology and Zoology, University of Palermo
Viale delle Scienze, 13 90128 Palermo, Italy
Tel. +39 091 7028825 Fax. +39 091 7028826
email: colazza@unipa.it

Other interesting publications brought to attention of Profile

- Curtis, I.S. (ed., 2004): *Transgenic Crops of the World*. – xvii + 454 pp., Springer, € 145.00 (ISBN 1-4020-2332-4).
- Elad, Y., B. Williamson, P. Tudzynski & N. Delen (eds., 2004): *Botrytis: Biology, Pathology and Control*. – xix + 428 pp., Springer, € 135.00 (ISBN 1-4020-2624-2).
- Gressel, J. (2005): *Crop Fertility and Volunteerism*. – 448 pp., Boca Raton (CRC Press), \$ 169.95 (ISBN 0849328950).
- Grimaldi, D. & M. Engel (2005): *Evolution of Insects*. – 772 pp., Cambridge University Press, € 69.90 (ISBN 0521821495).

- Horowitz, A. & I. Ishaaya (eds., 2004): Insect Pest Management. Field and Protected Crops. – xxi + 344 pp., Springer, € 169.95 (ISBN 3-540-20755-4).
- Inderjit (ed., 2005): Invasive Plants: Ecological and Agricultural Aspects. – xvi + 284 pp., Birkhäuser, € 118,00 (ISBN 3-7643-7137-4).
- Koul, O. & S. Wahab (eds., 2004): Neem: Today and in the New Millenium. – 296 pp., Springer, € 110.00 (ISBN 1-4020-1229-2).
- Logrieco, A. & A. Visconti (eds., 2004): An Overview on Toxigenic Fungi and Mycotoxins in Europe. – 252 pp., Springer, € 95.00 (ISBN 1-4020-2645-5).
- Palang, H., H. Sooväli, M. Antrop & G. Setten (eds., 2004): European Rural Landscapes: Persistence and Change in a Globalising Environment. – 496 pp., Springer, € 100,00 (ISBN 1-4020-2067-8).
- Strange, R.N. (2003): Introduction to Plant Pathology. – 480 pp., Wiley & Sons, Paperback: £ 34.95 / € 52.50 (ISBN 0-470-84973-8); Hardcover: £ 90.00 / € 135.00 (ISBN 0-470-84972-X).
- Wickens, G. (2004): Economic Botany. Principles and Practices. – 556 pp., Springer, € 60.00 (ISBN 1-4020-2228-X).
- Vidal, S., U. Kuhlmann & C.R. Edwards (eds., 2004): Western Corn Rootworm: Ecology and Management. – 320 pp., Wallingford (CABI Publishing), £ 65.00 (ISBN 0851998178).

On about 300 pages internationally well-known experts present the latest scientific results on the threatening maize pest *Diabrotica virgifera virgifera* LeConte. In the USA, the Western Corn Root Worm (WCR), which is assumed to have come from Mexico, and the other *Diabrotica* species have been considered 'billion dollar pests' for many years. That means that losses and costs on pest management exceed a billion dollar per year. The beetle is considered as the pest requiring most pesticide applications worldwide. In Europe, the pest seems to have first settled near Belgrade in the end of the 80s. It was first detected in 1992 and has been continuously spreading since then. The invasive pest is now also threatening maize growing in Central Europe.

The present book focuses on the one hand on research results obtained under an EC project (QLK5-CT-1999-01110) and presented at a final symposium in Göttingen in 2003 and on the other hand on current results from the USA. The book contains 14 chapters – all of them of a high informative level and very interesting from the scientific point of view.

The introductory chapter by WITTENBERG explains the principal problem for Europe and outlines the measures that have to be taken against invasive species. KISS *et al.* report on the results of a broad monitoring on the introduction and spreading of WCR on the European continent since its establishment. MOESER and HIBBARD present latest results on the nutritional habits of larvae and the suitability of various crops as hosts in the USA. TALLAMY *et al.* are concerned with the role of cucurbits for adult beetles. It seems that preferences for strange hosts have historically grown in connection with the crops grown. The chapter by TOEPFER and KUHLMANN deals with the so-called life table of the pest. The authors provide first precise data on fertility and mortality throughout a year. This allows to give a complex picture of the pest's biology. SPENCER *et al.* studied the alternative behaviour of the beetles of a certain biotype during preferred oviposition on soybean in the USA. They consider it a survival strategy of the soybean biotype adapted to maize-soybean crop rotation. Spread and distribution of the pest in large

fields were studied by ELLSBURTY *et al.* They obtained new information of preferred habitats. ONSTAD *et al.*, however, dealt with the large-scale spreading of WCR, especially of the soybean biotype, in different landscapes of the USA. GERBER *et al.* inform about how it is possible to estimate infestation (field monitoring) and about the use of threshold values and other decision aids employed in the USA. There is a clear connection between crop rotation and the occurrence of the pest as demonstrated by field tests in Hungary (KISS *et al.*). GERBER *et al.* report on a new interesting concept of large-scale application of insecticide baits (on the basis of cucurbitacin) in the USA. However, it does not seem to be applicable to the smaller agricultural structures in Europe. Meanwhile there has been obtained first experience on the growing of transgenic *Bt* maize against WCR as an alternative to insecticide application (WARD *et al.*). The EC project allowed first investigations into the biological control of WCR. KUHLMANN *et al.* identified a parasitic fly of the Tachnidae family - *Celatoria compressa* - that might contribute to the natural control of the pest. The last chapter is dedicated to the analysis of risk areas in the core region of the European Union. BAUFELD and ENZIAN analysed above all the different percentages of maize in crop rotation and reveal the risks to regions that show extreme concentration in maize cropping.

In general the present book is the most important publication on *Diabrotica virgifera virgifera* worldwide beside the „Methods for the Study of Pest *Diabrotica*“ published in 1986 and is recommended to everyone who deals with the pest. BERND FREIER (Kleinmachnow)

COPPING, L.G. (2004): The Manual of Biocontrol Agents. Third Edition. – 752 pp., Alton, Hampshire (BCPC), £ 115,00 [etwa 190 €] (ISBN 1 901396 35 5), Info: www.bcpc.org

This third edition of *The Manual of Biocontrol Agents* contains many new entries compared to the second edition of 2001, showing that biological control of pests, diseases and weeds is undergoing a strong growth. In this edition there are 112 entries for micro-organisms, 58 entries for natural products, 56 entries for semiochemicals, 20 entries for genes and 127 entries for macro-organisms. The strongest increase in the number of “products” took place in the category of macro-organisms and this, indeed, coincides with the growth of this sector of biological pest control. The manual provides specific information about each of the listed natural enemies / products. Data for each entry includes: nomenclature, source & production, target pests & target crops, mode of action, biological activity, efficacy, products and tradenames, manufacturers & commercial suppliers, application & compatibility, product specifications, mammalian and non-target toxicity & environmental impact

SCHOLTE, E.-J. (2004): The entomopathogenic fungus *Metarhizium anisopliae* for mosquito control. – PhD thesis Laboratory of Entomology, Wageningen University, The Netherlands.

Malaria ranks among the world's most important parasitic diseases, affecting millions of people in tropical and subtropical regions. Drug resistance is of major concern to health authorities. Prevention rather than cure is therefore of utmost importance if the limited drugs available are to serve rural resource-poor communities in the years to come. To date, the vector control tools to prevent malaria are few. For Africa, the World Health Organization (WHO) has largely adopted the use of insecticide-impregnated bed nets. Notwithstanding their efficacy in preventing premature death due to malaria in children <5 yrs of age, this strategy suffers from a variety of technical and operational problems. Additional novel control methods are urgently required. This PhD research project focused on an entirely new method for adult mosquito control, based on the use of an entomopathogenic Hyphomycete. Unlike other mosquitocidal biological control agents such as entomopathogenic bacteria, viruses, nematodes or protozoa, these fungi do not need to be ingested by the target insect for infection. Instead, physical contact of fungal conidia and the cuticle of the insect are enough: the conidium penetrates the cuticle and produces toxins which kill the mosquito within days after contamination. This characteristic forms the basis of this new vector control method, and the underlying idea is to apply conidia of this fungus in a similar way that residual insecticides are used for current vector control in Africa.

In Western Kenya, 5 different insect-pathogenic Hyphomycetes were screened on their virulence on *Anopheles gambiae*, Africa's most important malaria vector. From these, *Metarhizium anisopliae* isolate IC30 proved to be the fungus with the highest infection and pathogenicity. A standard inoculation method was developed and optimized to infect mosquitoes. A laboratory study showed that conidia, impregnated on paper and netting material, remained viable for one month. The shelf life of dry conidia and of conidia suspended in 0.05% Tween 80 was more than 6 months. In a study where the objective was to study whether the fungus could be spread through the mosquito population by means of horizontal transmission it was found that this does occur under laboratory circumstances. Apart from killing mosquitoes, it was found that infection of the fungus has an effect on blood feeding: infected females displayed reduced feeding propensity. Moreover, infected females had reduced fecundity. These findings have implications for epidemiological considerations, since reduced life-spans and reduced feeding have a considerable impact on malaria transmission. This was confirmed by the predictions of a malaria transmission model based on the findings of a field study in which this 'fungus vector control method' was tested. These results of these studies are very encouraging, and may form the basis of an entirely new, environmentally safe methodology to control malaria mosquitoes in Africa.

A pdf version of this thesis can be obtained from: ErnstJan.Scholte@wur.nl

HAYE, T. (2004): Biological control of plant bugs, *Lygus* spp. – PhD thesis, Department of Zoology, Christian-Albrechts University, Kiel, Germany

Information of the host specificity of *Lygus* parasitoids belonging to the genus *Pteristenus* is provided is presented in this study, in an effort to assess potential risks for introducing these European parasitoids as biological control agents of native *Lygus* species in Canada. First, the distribution, seasonal abundance and synchronization of *Lygus* spp. and their associated nymphal parasitoids was studied in the field. Next, the physiological host range of the parasitoids was defined in the laboratory. The lab results were compared with the ecological host range of the parasitoids. Finally, host specificity, fecundity and cold hardiness of parasitoids was discussed in the context of biological control of *Lygus* populations native to Canada.

The full version of this thesis can be obtained at:
http://e-diss.uni-kiel.de/diss_1133

IOBC Global

New website of IOBC-Global: www.IOBC-Global.org

In collaboration with MADELEINE BÜHLER (Switzerland), we have developed a new website. Madeleine earlier developed the WPRS site, and we have attempted to make the Global site similar to the WPRS site. The site allows you on each page to move to any Regional Section or Working Group. The site provides, among others, information about:

- IOBC-Global (statutes, membership, regions and working groups)
- The new membership fee system
- Recent newsletters
- The writing partnership
- The internet biocontrol book with regular updates
- Links to meetings

Try the site and tell us what we should do to improve it!

J.C. van Lenteren, President IOBC-Global

ICIPE Marks New Era: Insect Science Research Institute Appoints New Director General

The International Centre of Insect Physiology and Ecology (ICIPE) today marked a new era with the appointment of its third Director General.

Prof CHRISTIAN BORGEMEISTER, up to now a full-time professor at Hannover University, Germany, takes over from Dr HANS HERREN who, after 10 years at ICIPE's helm, is becoming the President elect of the Washington DC-based Millennium Institute. Dr HERREN succeeded ICIPE's founding father Prof THOMAS R ODHIAMBO. Prof BORGEMEISTER will assume the directorship from June 2005.



Prof PETER ESBJERG, Chairman of the International Centre of Insect Physiology and Ecology (ICIPE) Governing Council, goes through a document with the Centre's new director general, Prof CHRISTIAN BORGEMEISTER (right), and Dr HANS HERREN (left), who, after 10 years at ICIPE's helm to become President elect of the Washington DC-based Millennium Institute.

Prof BORGEMEISTER, who takes up the ICIPE directorship in June 2005, becomes the institute's third chief executive officer. Dr HERREN succeeded ICIPE's founding father, Prof THOMAS ODHIAMBO.

Announcing the appointment, ICIPE Governing Council Chairman, Professor Peter ESBJERG said: "We are confident that Prof BORGEMEISTER's professional interests, which include biological control and Integrated Pest Management (IPM) in tropical environments, biodiversity conservation and international cooperation, will build on the foundation laid by his two predecessors."

Prof BORGEMEISTER's career highlights include a seven-year tenure at the International Institute of Tropical Agriculture (IITA), in Benin, West Africa. He has researched widely on maize pests, including stemborers and the larger grain borer and their natural enemies. Prof BORGEMEISTER has also helped develop technologies for market-oriented small-scale vegetable production systems aimed at increasing productivity and profitability while sustaining the environment.

At the same time, Professor ESBJERG hailed Dr HERREN as a world-renowned scientist, whose work in improving the livelihood of the poor in the tropics has earned him several awards, among which are the prestigious *World Food Prize* in 1995; the *Kilby Award* (1995) for extraordinary contribution to society through science, technology, innovation, invention and education; the *Brandenberger Prize* in 2002, for contributions to food security and environmental protection in Africa; and the *Tyler Prize* in 2003, for outstanding contribution to environmental health.

His legacy at ICIPE includes establishment of major Research and Development (R&D) divisions in environmental and biodiversity conservation, commercial insects for rural enterprises, and horticultural crops development. He also formulated the 4Hs concept that integrates R&D in the areas of human, animal, plant and environmental health.

Dr HERREN is also the President of the International Association for the Plant Protection Sciences since 1999, and of BioVision, a private foundation he created to promote the implementation of sustainable and holistic science-led development projects in Kenya and Ethiopia.

The Millennium Institute he will now head has the vision of a sustainable and more peaceful and equitable future for Earth by developing and providing advanced analytical tools for national and global development. The Institute also formulates values-related questions and analysis of the consequences of alternative development strategies.

(http://www.icipe.org/news_and_events/pr009.html) March 16, 2005

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>

- 1 - 3 September, 2005: Workshop "Pests and Weeds Control in Sustainable Fruit Production", Skierniewice (Poland). – Dr. Darek Gajek: dgajek@insad.pl; <http://www.pomocentre.insad.pl>
- 5 - 9 September, 2005: IX European Workshop on Insect Parasitoids, Cardiff (Wales, UK). – Dr J.S. Noyes, e-mail: jsn@nhm.ac.uk, www.royensoc.co.uk/meet.html (<http://www.royensoc.co.uk/ewiplInfo.doc>).
- 12 - 16 September, 2005: 2nd International Symposium on Biological Control of Arthropods, Davos, Switzerland. – ISBCA-Sekretariat: e-mail: ISBCA@bluewin.ch, further informations: www.cabi-bioscience.ch/ ISBCA-DAVOS-2005/; Dr. Mark Hoddle, University of California mark.hoddle@ucr.edu and Dr. U. Kuhlmann, CABI Bioscience Switzerland U.Kuhlmann@cabi-bioscience.ch

17 - 21 September, 2005: **IOBC/wprs General Assembly** “Fifty Years of IOBC in Western Europe and the Mediterranean”, Dijon (France). – Dr. Claude Alabouvette, UMR INRA Université de Bourgogne, Microbiologie, Géochimie des Sols (MGS), 17 rue Sully, BP 86510, F-21065 DIJON CEDEX, tel: +33 (0) 380693041, fax: +33 (0) 380693224, e-mail: ala@dijon.inra.fr, Web: <http://www.iobc-wprs.org>

- 19 - 21 September, 2005: XXXI CIOSTA - CIGR V Congress “Increasing Work Efficiency in Agriculture, Horticulture and Forestry”, Stuttgart-Hohenheim (Germany). – Dr. Monika Krause: ciosta@uni-hohenheim.de, <http://www.uni-hohenheim.de/ciosta-cigr>
- 20 - 23 September, 2005: IOBC/wprs Working Group "Integrated Protection of Stored Products", Prague, Czech Republic. – **Convenor:** Dr. Shlomo Navarro, Department of Food Science, The Agricultural Research Organization, Bet Dagan, Israel, tel: +972-3-9683587; fax: +972-3-9683585; e-mail: snavarro@volcani.agri.gov.il. **Local Organizing Committee:** Dr. Vaclav Stejskal, Department of Stored Product Pests, Research Institute of Crop Production, Prague, Czech Republic., tel: +420-233-022-217, fax: +420-233-022-217, e-mail: stejskal@hb.vurv.cz
- 26 - 27 September, 2005: IOBC/wprs WG “Integrated Control in Citrus Fruit Crops”, Lisbon (Portugal). – José Carlos Franco (Local organiser, iobc2005@isa.utl.pt), Ferran Garcia-Mari (Convenor, fgarciam@eaf.upv.es), <http://www.isa.utl.pt/dppf/iobc/>
- 27 - 30 September, 2005: WG „Pesticides and Beneficial Organisms“, Dębe near Warsaw (Poland). – Dr. Heidrun Vogt: H.Vogt@bba.de; Prof. Remigiusz W. Olszak: rolszak@insad.pl, Dr. Dariusz Gajek: dgajek@insad.pl
- 01 - 03 November 2005: International Workshop on „Implementation of Biological Control in Practice in Temperate Regions – Present and Near Future“, Slagelse, Denmark. – Lise Stengård Hansen, e-mail: lises.hansen@agrsci.dk, http://www.centre-biological-control.dk/activities_uk.htm
- 11 - 12 October, 2005: IOBC/wprs WG “Integrated Protection in Oilseed Crops”, Poznan (Poland). – Dr. Birger Koopmann, Institute of Plant Pathology and Plant Protection, University of Göttingen, Grisebachstr. 6, D-37077 Göttingen (Germany), Phone: +49 (0)551 393776, Fax: +49 (0)551 394187, e-mail: bkoopma@gwdg.de, http://www.iobc-wprs.org/wg_sg/04_wg_oilseed_crops.html; Announcement Meeting 2005 / Report Biannual Meeting 2004: <http://wwwuser.gwdg.de/~instphyt/app/koopmann/eng-dateien/iobc2004-bulletin.htm>
- 23 - 26 October, 2005: 1st International Symposium on Biological Control of Bacterial Plant Diseases, Darmstadt/Seeheim (Germany). – Federal Biological Research Centre for Agriculture and Forestry (BBA), Institute for Biological Control, Heinrichstr. 243, 64287 Darmstadt, Germany, Tel. +49-6151-407-242 Fax +49-6151-407-290, E-Mail: symposium2005@bba.de, Homepage: http://www.bba.de/veranst/bcbpd_2005/bcbpd.htm

- 26 - 28 October, 2005: IOBC/wprs WG “Integrated Protection of Olive Crops”, Florence (Italy). – Dr. Antonio Belcari, Department of Agricultural Biotechnologies, University of Florence. Phone +39 055 3445014, Fax +39 055 3445035, e-mail: iobc.olivecrops@unifi.it, <http://www3.unifi.it/ipoc>
- 26 - 29 November, 2005: Third International Conference on IPM Role in Integrated Crop Management and Impacts on Environment & Agricultural Products, Giza (Egypt). – Prof. Dr. Ahmed Abdu Hamed: plant_protection@hotmail.com; plantprotection5@yahoo.com

2006

- 03 - 05 April, 2006: Integrated Pest Management in Oilseed Rape, Göttingen (Germany). – Dr. Bernd Ulber, Institut für Pflanzenpathologie und Pflanzenschutz, University of Göttingen, bulber@gwdg.de, <http://www.paulinerkirche-goettingen.de>
- 27 - 30 April, 2006: Joint Meeting of the WGs „Breeding for resistance against insects and diseases“ and „Induced resistance in plants against insects and diseases“, Heraklio (Crete, Greece). – Nicos Malathrakis (Local Organizer: nmal@steg.teiher.gr); Convenors: Annegret Schmitt (a.schmitt@bba.de) or Nick Birch (N.Birch@scri.sari.ac.uk)
- 14 - 18 May, 2006: IOBC/wprs WG “Protected Crops, Mediterranean Climate”, Murcia (Spain). – Dr. Juan Antonio Sánchez, Instituto Murciano de Investigación y Desarrollo Agrario (IMIDA). e-mail: Juana.Sánchez23@carm.es, http://wsiam.carm.es/imida/congresos_jornadas/oilb.htm
- 13 - 17 September, 2006: IOBC/wprs WG “Integrated Control of Fungal and Bacterial Plant Pathogens”: “Fundamental and Practical Approaches to Increase Biocontrol Efficacy”, Spa (Belgium). – Monica Höfte (monica.hofte@UGent.be) and Haïssam Jijakli (jijakli.h@fsagx.ac.be).
- 17 - 22 September, 2006: 8th European Congress of Entomology, Izmir (Turkey). – Prof.Dr. Seniz Kismali, Ege University, Agriculture Faculty, Dept. of Plant Protection, Bornova 35100 Izmir, Turkey, e-mail: kismali@ziraat.ege.edu.tr, www.ece2006.org
- 02 - 04 October, 2006: Meeting of the IOBC/WPRS Working Group "Integrated Plant Protection in Fruit Crops – Sub-Group Stone Fruits", "Workshop on Integrated Stone Fruit Production", Bellegarde (France) Centre Ctifl Balandran. – Local organiser: Jean Lichou, Ctifl, Centre de Balandran, BP 32 - 30127 Bellegarde (France). e-mail: Lichou@ctifl.fr; Convenor Sub-group: Fabio Molinari, Istituto di Entomologia e Patologia vegetale, Facoltà di Agraria U.C.S.C., Via Emilia Parmense 84, 29100 Piacenza (Italy), e-mail: fabio.molinari@unicatt.it

16 - 18 October, 2006: 5th meeting of the sub-group "Soil Insect Pests" (previously: Sub-Group "Melolontha") of the IOBC/WPRS Working Group "Entomopathogens and entomoparasitic Nematodes", Research Centre for Agriculture and Forestry, Laimburg, 39040 Auer/Ora Italy. - Local organiser: Dr. Wolfgang Schweigkofler, Department of Plant Protection, Research Centre for Agriculture and Forestry, Laimburg, 39040 Auer/Ora Italy. Convenor Sub-group: Dr. Jürg Enkerli, Molecular Ecology, Agroscope FAL Reckenholz, Reckenholzstrasse 191, 8046 Zürich, Switzerland, Phone +41(0)1 377 7206, Fax +41(0)1 377 7201, e-mail: juerg.enkerli@fal.admin.ch, www.reckenholz.ch

2007

2007 WG "Insect Pathogens and Entomoparasitic Nematodes", Alès (France). – Local Organizer: Dr. Miguel Lopez-Ferber

2008

2008 WG "Integrated Control in Protected Crops, Temperate Climate", Bleiswijk (The Netherlands). – Local organiser: Pierre Ramakers

Next Issue of Profile

The winter-issue of *Profile* (number 40) will be edited in January 2006. Please send your contributions for this issue of *Profile* to me at the latest:

15 December, 2005

but don't hesitate to contact me long before this deadline! Please send your contributions by e-mail (preferably), mail or fax to:

Dr. Horst Bathon
Institute for Biological Control
Heinrichstrasse 243
D-64287 Darmstadt (Germany)
e-mail: h.bathon@bba.de
Tel ++49-6151-407-225, Fax ++49-6151-407290

