



INTERNATIONAL ORGANIZATION FOR BIOLOGICAL CONTROL
OF NOXIOUS ANIMALS AND PLANTS (IOBC)

IOBC NEWSLETTER 89

WWW.IOBC-GLOBAL.ORG

IOBC is affiliated with the International Council of Scientific Unions (ICSU)
as the Section of Biological Control of the International Union of Biological Sciences (IUBS)

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Available on online first of our journal BioControl: more than 30 articles that will be published in future issues. Examples:

- *The state of commercial augmentative biological control: plenty of natural enemies, but a frustrating lack of uptake (free download)*
- *Risks of biological control for conservation purposes*
- *Biological control of invasive aquatic and wetland plants by arthropods: a meta-analysis of data from the last three decades*

Go to:

<http://www.springer.com/life+sciences/entomology/journal/10526>
and click on online first articles in the upper right corner

See also item 6 of this newsletter

1. MESSAGE FROM THE PRESIDENT: THE BEAT GOES ON

I take the opportunity of the present editorial to inform you about ongoing issues and new developments at IOBC Global.

As part of our constant commitment to facilitate communication among our members and promote biological control, the Executive Committee is planning to refresh both our website and newsletter. The goal is to make the website more attractive to IOBC colleagues and non-members. Similarly, we would like to include more factual information about biological control in the Newsletter Global. For example, in the following issues, presidents of Regional sections and Chairman of Working Groups will be invited to contribute an article about new developments in their regions or actual scientific problematic. We also wish to invite colleagues/organizations to discuss important biocontrol issues. If you have thoughts about these initiatives or would like to suggest other original ways to improve the IOBC Global website and Newsletter, please let us know.

BioControl is healthy and continues to be among the best journals that publish papers in entomology, plant pathology, weed science and, of course, biological control. Submission rates have risen the past years and publication backlog has been mostly eliminated. What is also important is the Impact Factor that has reached 2.2 in 2010. *Biocontrol* has moved up to number 10 out of 83 journals in the Entomology category. Let's keep the same pace for 2011! I wish to acknowledge the efforts of the Editor-in-Chief, Eric Wajnberg, and his team of associate editors who work hard and effectively to move our journal forward. Their dedication to *BioControl* contributes to IOBC glaring. Please do not hesitate to submit your best research contributions to *Biocontrol*.

The end of this year will see the achievement of a large amount of work by Matthew Cock and his colleagues from CABI as they updated and revised BIOCAT, a global database on classical biological control that contains key information for practitioners, regulators, taxonomists and ecologists. The BIOCAT database consists of records for each introduction of biocontrol agents based on the published literature. The database will be available for free to everyone. IOBC Global has provided funds to assist CABI in updating BIOCAT. We have also secured funds for the coming years to help our partner to collect data on groups other than insects to expand the database, and to regularly update the database. More information about BIOCAT is available from the June 2010 IOBC Global Newsletter.

We have started to organize the next General Assembly in South Korea, in August 2012 during the XXIV International Congress of Entomology (ICE). Plans for the content of the meeting have been discussed and agreed upon by the Executive Committee. It will concentrate on business affairs, including the installment of the new Executive Committee of IOBC Global 2012-2016, but will also include a lecture of general interest by one of our distinguished members. Following a request by IOBC Global, the ICE Council has agreed to create a new section entirely devoted to Insect Biological Control. Furthermore, the organizing committee of the XXIV ICE has accepted our suggestions for six symposia sponsored by IOBC Global (see item 5 of this newsletter). I invite all of you to mark your agenda and plan to attend the General Assembly. Please check the website of the XXIV ICE (www.ice2012.org) and start planning your travel to Korea.

I cannot end up this editorial without providing some information about the ongoing issue of Access and Benefit Sharing (ABS) of biological control agents (see previous IOBC Global Newsletters for essentials about ABS and biological control). Following the adoption in October 2010 of the *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits Arising from their Utilization*, the international debate on how to implement the ABS provisions of the Convention on Biodiversity is becoming more relevant to each of us. We now have a protocol, unfortunately lacking of clarity in many places, but it remains uncertain how and by whom it will be put into operation in each country. From now on the international community is engaged in a long and harsh dialogue to develop options for implementing ABS in all sectors of activities, including food, agriculture and biological control. It will take many years before an agreement can be reached. Lawyers, legal representatives of the parties and stakeholders are now more and more involved in the discussions. However, we, as scientists should remain vigilant to help regulators to identifying guiding principles and possible solutions. A number of initiatives for the food and agriculture sector have been

organized recently and are planned in the coming months. For example, on behalf of the IOBC Commission on ABS and biological control, I contributed to the *Multi-stakeholder expert dialogue on access and benefit-sharing for genetic resources for food and agriculture* organized by the Université Catholique de Louvain, Belgium, and sponsored by FAO. The major objectives were to 1) identify the commonalities and differences among genetic resources of the food and agriculture sectors (seeds, germplasts, microbials, ...), 2) assess the potential impact of ABS measures on the use and exchange of genetic resources, including biocontrol agents, and 3) identify guiding principles and approaches (scenarios) for addressing ABS. This initiative was very fruitful and, for one thing, highlighted all the complexity of the task. For those of you who would like to learn more about the multi-stakeholder dialogue, the report is available on line at <http://www.fao.org/docrep/meeting/023/mb720e.pdf>. From now on, coordinated actions from the stakeholders and international organizations are needed to design ABS measures to fulfill the principles of the Nagoya Protocol. In that context, an important decision will soon be taken by FAO during the thirteenth regular session of its Commission on Genetic Resources for Food and Agriculture as members have to decide if they further invest time, energy and, most critical, money to the development of any policy, law or instrument to solve the ABS issue. FAO and its Commission have been dealing with this problematic since the beginning and they have greatly supported our IOBC Commission on ABS and biological control. I sincerely hope that FAO will decide to continue to play a leadership role.

Jacques Brodeur
President IOBC Global
Université de Montréal
Québec, Canada

2. CANDIDATES FOR THE EXECUTIVE COMMITTEE OF IOBG GLOBAL 2012 - 2016

In 2012, a new Executive Committee for IOBC Global will be elected during the General Assembly in South Korea. We now have candidates for most of the functions (President, vice-presidents and treasurer). **We are still looking for a candidates for the position of Secretary General.** Nominations supported by 10 regular members may be sent with the written consent of the nominee to the Secretary General at least 1 month before the dispatch of the voting documents, i.e. 5 months before the General Assembly. Nominations should include a short biography, and a motivation why the person qualifies for a specific function in the Executive Committee member.

3. WHY IS IT IMPORTANT TO BE MEMBER OF IOBC?

- IOBC coordinates biological control activities worldwide and has 6 regional sections (Africa, Asia, East Europe, North America, South America, and West Europe) and many working groups.
- IOBC is the only truly worldwide organization representing research in biological control in various global, regional and national organizations (e.g. IUBS, FAO, EC, ICE) for more than 50 years
- IOBC developed practically applied biological control and integrated pest management programs
- IOBC was the first to develop IPM guidelines for all major crops in Europe and has since continued to contribute to the development of principles of sustainable agriculture, e.g. guidelines on Integrated Production.
- IOBC initiated and co-developed Guidelines for the export, shipment, import and release of biological control agents and other beneficial organisms (International Standard for

Phytosanitary Measures Number 3, 32 pages, 2005; Secretariat of the International Plant Protection Convention; available at www.FAO.org)

- IOBC initiated and co-developed methods to test side effects of pesticides on natural enemies, which are now the official standard for testing side effects in the European Union pesticide registration procedure and published as the EPPO standard for Environmental Risk Assessment Scheme for Plant Protection Products, Chapter 9, PP 3/9, EPPO Bulletin 33, 99-131; available at [http://archives.eppo.org/EPPOStandards/PP3_ERA/pp3-09\(2\).pdf](http://archives.eppo.org/EPPOStandards/PP3_ERA/pp3-09(2).pdf).
- IOBC initiated and co-developed with the natural enemy producers guidelines for mass production and quality control of beneficial organisms (see: <http://www.amrqc.org>).
- IOBC co-developed with OECD a document on Guidance for Information Requirements for Regulation of Invertebrates as Biological Control Agents (IBCA) (OECD Series on Pesticides Number 21, Environment Directorate; Organisation for Economic Co-Operation and Development, Paris 2003, 22 pages; Available at <http://www.oecd.org/dataoecd/6/20/28725175.pdf>).
- IOBC Global and WPRS co-developed a tiered method for environmental risk assessment of natural enemies (Lenteren, J.C. van, Bale, J., Bigler, F, Hokkanen, H.M.T., Loomans, A.J.M., 2006. Assessing risks of releasing exotic biological control agents of arthropod pests. Annual Review of Entomology, 51: 609-634. + supplemental material)
- IOBC contributed information on biological control and biodiversity to the FAO report “Genetic resources of importance to agriculture” (FAO, 2007).
- IOBC reviewed and made important contributions to paragraphs on sustainable agriculture and pest management in the UN-coordinated International Assessment of Agricultural Science and Technology for Development (UN, 2008).
- IOBC provided information to several organizations about natural enemies as quality indicators for biodiversity, and natural enemies as test organisms for side effects of pollutants and for pesticides as indicator of in and off field non-target effects.
- IOBC wrote, on request of FAO, a report on The use and exchange of biological control agents for food and agriculture (Cock, M.J.W., J. C. van Lenteren, J. Brodeur, B.I.P. Barratt, F. Bigler, K. Bolckmans, F.L. Côtoli, F. Haas, P.G. Mason, J.R.P. Parra, 2009. The use and exchange of biological control agents for food and agriculture. Report prepared for the FAO Genetic Resources Commission by the IOBC Global Commission on Biological Control and Access and Benefit Sharing. IOBC, Bern, Switzerland: 88 pp.; <ftp://ftp.fao.org/docrep/fao/meeting/017/ak569e.pdf>). The full text of the FAO report can be downloaded from: http://www.fao.org/nr/cgrfa/cgrfa-back/en/?no_cache=1
- IOBC wrote a vision paper on the issue of Access and Benefit Sharing for the journal BioControl, entitled “Do new Access and Benefit Sharing procedures under the Convention on Biological Diversity threaten the future of Biological Control?” (Cock, M.J.W., J. C. van Lenteren, J. Brodeur, B.I.P. Barratt, F. Bigler, K. Bolckmans, F.L. Côtoli, F. Haas, P.G. Mason, J.R.P. Parra, 2009. Do new Access and Benefit Sharing procedures under the Convention on Biological Diversity threaten the future of Biological Control? BioControl; www.springer.com/life+sci/entomology/journal/10526).

4. EXECUTIVE COMMITTEE MEETING MAY 2011

The Executive Committee has met in May 2011 in Havana, Cuba. Below, a selection of topics discussed at this meeting is presented.

- The financial situation of Global is healthy.
- Most Regional Sections function well, but we still have problems to find candidates for the Executive Committee of the African Regional Section of IOBC. We are currently in contact with Kenyan and South African biological control researchers to find a solution.

- The majority of the Working Groups of IOBC Global function well. Most of the WG have organized meetings in 2010 and 2011. The good financial situation of Global makes it possible to support participation of young IOBC members in these working group meetings.
- Statutes and By-Laws of IOBC Global. Several sections will be added to the By-Laws: new election procedure, procedure for selection of honorary members, procedure for establishment of new working groups. As soon as these sections are added, the new version of the By-Laws will be put in the website of IOBC Global.
- The Council and Executive Committee have selected six interesting topics and will contact potential speakers proposed for symposia to be organized during the next International Congress of Entomology in South Korea. The selected topics are presented elsewhere in this newsletter.
- The programme for the General Assembly of IOBC Global to be held in 2012 in South Korea was discussed.
- ABS commission IOBC: see editorial (item 1 of this newsletter): the current ABS protocol is an empty shell, a second round of negotiations is needed to develop specific protocols, for example for scientific research, for biocontrol etc. It will take many many years before reaching an agreement. Therefore, IOBC Global will maintain the ABS commission.
- ***The current Executive Committee will propose to the General Assembly in 2012 to simplify the name of IOBC (now: International Organization of Biological Control of Noxious Animals and Plants). The reasons are that in the current name biological control of plant pathogens is not included, and that the current name is cumbersome and always needs to be explained to the press and general public. We will propose the new name for IOBC GLOBAL to be: International Organization of Biological Control.***
- At the end of the Executive Committee meeting, the current and past president of IOBC NTRS joined and topics concerning the functioning of NTRS were discussed. It is clear that this regional section has been very active for the past 5 years. Quite a number of NTRS meetings were organized, partly in collaboration with entomological meetings held in Latin America and together with NRS. A problem remains the regular payment of membership fees due to difficult banking systems in Latin America.

5. GLOBAL ORGANIZES 6 SYMPOSIA DURING THE 2012 ENTOMOLOGY CONGRESS

IOBC Global is proud to announce that the South Korea Entomology Congress will host 6 symposia that will be organized by us. Convenors have already been identified for these symposia and we will soon start to invite speakers. The symposia titles are:

1. *Effects of climate change on biological control and adaptation of natural enemies to new environments*
2. *Generalist predators, molecular biology and biological control: tracking predation with new technologies*
3. *Can we better select and manipulate biological control agents when we know their genomics?*
4. *International Exchange and Risk Assessment of Biological Control Agents*
5. *Will new Access and Benefit Sharing procedures impede biological control of invasive insects?*
6. *Environmental benefits and risks of Biological Control*

More news about the symposia in our next newsletter and at www.ice2012.org

6. PUBLISH IN OUR OWN JOURNAL BIOCONTROL: A MESSAGE FROM THE EDITOR-IN-CHIEF



Over the years, BioControl has established a leading role in publishing the finest and most exciting work in all aspects of biological control of invertebrate, vertebrate and weed pests, and plant diseases. The journal continuously delivers top-quality science output contributing to a sound development of efficient biological control programmes worldwide.

The journal's impact factor has steadily increased, demonstrating its recognized impact on the international scientific community. The 2011 IF is 2.191!! Recent changes now include a colourful and illustrative cover, an improved submission and a double-blind review procedure through Editorial Manager, and rapid turnaround times from manuscript evaluation and production to ensure their timely publication. Special issues are also published on a regular basis.

As one of the leading journals in biological control, we anticipate that BioControl will continue to be an exceptional media over many years to come for scientists from all over the world to publish their most innovative, stimulating and top-level results on biological control.

We look forward to receiving your manuscript for publication in BioControl. Details on online submission can be found on the journal homepage: <http://www.springer.com/10526>

Eric Wajnberg, Editor-in-Chief BioControl

7. IOBC INTERNET BOOK ON BIOLOGICAL CONTROL

The **FIFTH EDITION** of the **IOBC INTERNET BOOK OF BIOCONTROL IS AVAILABLE ON IOBC-Global.org**



Aim: to present the history, the current state of affairs and the future of biological control in order to show that this control method is sound, safe and sustainable

The fifth edition of the book (2008) contains more than 130 pages with information about biocontrol is available for free on our website. We ask you to support the preparation of this book. The first priority is to receive summaries of the actual application of biological control in each country or region. The second priority is to document the history of biological control in each country, including some key references, so that it will be easier for all biocontrol workers worldwide to know what has been done and what is going on at this moment. This will help us to make clear **how important biological control is**. We have received several very good contributions during the past months, which will be included in the sixth edition. **THANK YOU !!!!**

8. CLASSICAL BIOLOGICAL CONTROL OF WEEDS IN EUROPE? YES!

News from the biological control of Japanese knotweed in England and Wales

Japanese knotweed, *Fallopia japonica*, is a perennial weed that causes significant economic and ecological damage throughout the UK, but also in other parts of the World where it was intentionally introduced. Renowned for its size and powerful growth, it displaces native flora and fauna and damages buildings and infrastructure when it can disrupt concrete and drainage and grow through asphalt. A

recent estimate suggested that the cost of Japanese knotweed in Great Britain is in excess of £150M per year, mainly in structural damage and control costs. Since 2003, a consortium of sponsors has supported a research programme to develop biological control of this species in the UK and North America.



The research prioritised the Japanese sap-sucking psyllid, *Aphalara itadori* Shinji. The specificity of the potential biological control agent was tested in quarantine on 89 plant species, which established that the release of this species would pose minimal risk to native plant species. In 2009, a public consultation process was carried out as one of the last stages in the application process necessary for release in the UK. This involved two public events and much press attention. In March 2010, ministerial approval was granted allowing the first release of an insect as a biological control agent against an exotic environmental weed in Europe.

In April 2010, the first releases of the psyllid were made at two sites in England. After reviewing the evidence of the first twelve weeks of intensive monitoring of those releases, which focussed on potential unwanted impacts of the psyllid, another release at a third site was sanctioned. Additional studies in field cages were undertaken that confirmed the limited risk to native plant species in the same genus in semi-natural conditions.

The release of *A. itadori* is accompanied by an intensive, five-year monitoring programme at replicated pairs of release and control sites that aims to record the establishment and spread of the psyllid and its impact on Japanese knotweed throughout England and Wales. The monitoring programme is one of the most detailed of its kind and it was also designed to detect the impact on the native vegetation and invertebrate community, if any. Based on the combined evidence from the monitoring of the first open-field releases of the psyllid and the additional caged studies, release at further sites was authorised. In spring 2011, psyllids were released at five additional sites across England and Wales. It is hoped that the psyllid will become established and that population sizes will grow and that its impact on JK will soon become apparent.



There is continuous interest in *A. itadori* as a potential biological control agent from North America, and host specificity testing is continuing with North American plants, both in North America and in the UK. Other European countries are also interested in the project since invasive species are increasingly a problem in Europe and the use of pesticides is more and more restricted by law, especially near water. Demand for biological control for this and other environmental weeds, such as *Ambrosia artemisiifolia*, *Hydrocotyle ranunculoides* or *Impatiens glandulifera*, is soon

expected to increase in more European countries.

René Eschen^{1,2} and Dick Shaw¹; ¹CABI, Bakeham Lane, Egham TW20 9TY United Kingdom and ²CABI, Rue des Grillons 1, CH-2800 Delémont, Switzerland
(picture *Aphalara itadori* c. telegraph.co.uk; picture Japanese knotweed overgrowing a locomotive c. Wikipedia)

9. PUBLICATIONS

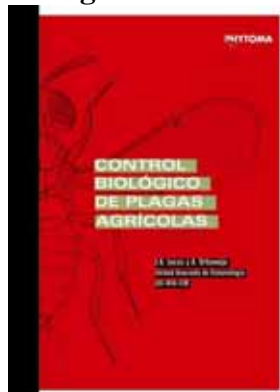
USDA Agricultural Glossary and Thesaurus

The U.S. Dept. of Agriculture's National Agricultural Library (NAL) has published 2008 editions of the NAL **AGRICULTURAL THESAURUS** and **GLOSSARY OF AGRICULTURAL TERMS** in English and the **TESAURO AGRICOLA** and **GLOSARIO** in Spanish. The new versions add about 70 definitions, terminology associated with fuels, chocolate manufacture, bodies of water, the U.S. National Forest System, and acronyms used in the taxonomic classification of viruses. Both versions can be downloaded from <http://agclass.nal.usda.gov/agt/agt.shtml>. The website features a new format

presenting parallel English and Spanish language interfaces, enabling users to search and read all background materials in either language, plus a "Download Files" page enabling users to download the thesaurus and glossary files.

(From IPMnet News at: http://www.ipmnet.org/IPMNews/main_page.html)

Biological control of agricultural pests



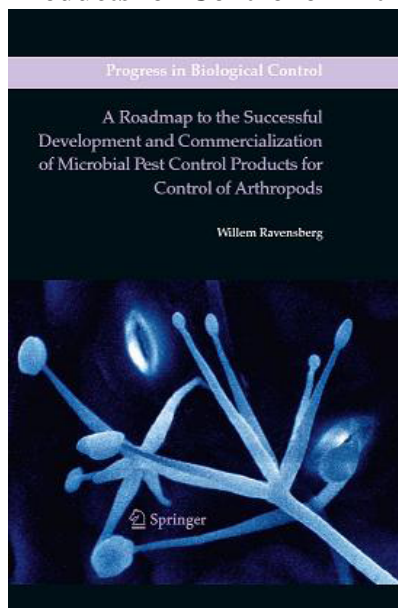
Josep Jacas and Alberto Urbaneja have done an admirable and great job by editing the book **“Biological Control of Agricultural Pests”**. Admirable, because during these days of continuously changing pest and disease spectra as a result of intensified world trade, it is not easy to provide a full spectrum picture of biological control possibilities. Great, because they were able to involve a large number of specialists who discussed all major pests occurring in Spain, as well as many biological control agents and a large number of important issues related to the science of biological control in a relatively short time span.

In the first section of their book, Jacas and Urbaneja first discuss how pests develop and describe the history of biological control. Next, the types of biological control and the kinds of natural enemies are explained. The book then provides information on the theoretical background of biological control. Section 2 deals with the biology of predatory arthropods, of insect parasitoids, entomopathogenic bacteria, fungi, viruses and nematodes. In section 3, biological control of specific groups of arthropods is described in detail, and section 4 gives an overview of the use of biological control in various crops. In the final section, a number of topics related to the future of biological control is discussed, including molecular biological techniques which might be used to support the development and application of biological control, the risks of biological control, the increased rate of invasions of exotic pests due to increased world trade, the regulations which are developed for import and release of exotic natural enemies, and mass production and quality control of natural enemies.

The book is abundantly illustrated, both with hundreds of beautiful colour pictures of pests and diseases, as well as with many clear drawings, schemes and tables. All authors and the editors can be congratulated with this important contribution to biological control.

JACAS, J.A. y A. URBANEJA [Eds]. 2008. Control biológico de plagas agrícolas. Publisher: Phytoma España. Valencia. ISBN: 978-84-935247-0-8, 496 pp
More info at: http://phytoma.com/libros_detalle.php?referer=libros&ref=E0044

A Roadmap to the Successful Development and Commercialization of Microbial Pest Control Products for Control of Arthropods

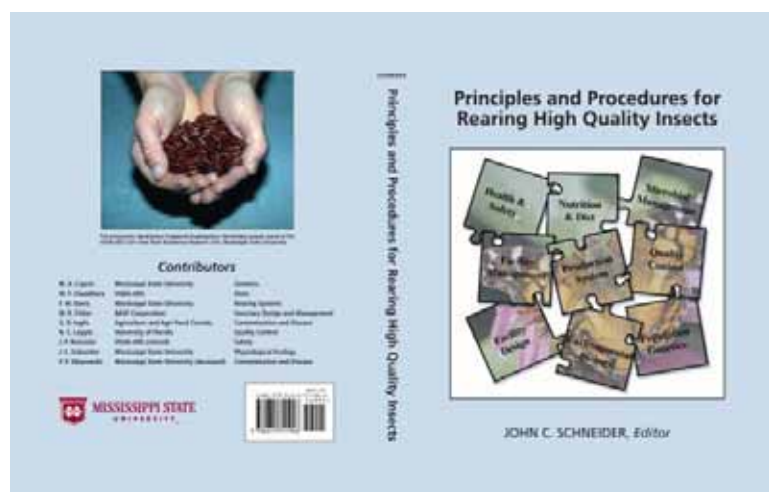


Willem Ravensberg, who is working for many years in the field of microbial pest control, recently published the book **“A Roadmap to the Successful Development and Commercialization of Microbial Pest Control Products for Control of Arthropods”**. Biocontrol is among the most promising methods for a safe, environmentally benign and sustainable pest control. Microbial pesticides offer a great potential, and it is anticipated that they will become a substantial part of the use of all crop protection products. Their development and commercialization, however, has been difficult and with many failures. In this book a rational and structured roadmap has been designed for the development and commercialization of microbial pest control products for the control of arthropod pests. The building blocks of the entire process are identified and essential aspects highlighted. Biopesticides based on entomopathogenic bacteria, fungi, viruses and nematodes are elaborately discussed. This systematic roadmap with a strong focus on economics and market introduction will assist academic researchers and industrial developers of biopesticides in

accomplishing their goal: the development of successful cost-effective biopesticides.

Ravensberg, W., 2011. A Roadmap to the Successful Development and Commercialization of Microbial Pest Control Products for Control of Arthropods. Springer, Dordrecht, 330 p. ISBN: 978-94-007-0436-7

Principles and Procedures for Rearing High Quality Insects



The Insect Rearing Center in the Department of Entomology & Plant Pathology at Mississippi State University is proud to announce the publication of the book **“Principles and Procedures for Rearing High Quality Insects”** written by the instructors for the highly successful, annual insect rearing workshop of the same name. The book covers all of the major topics necessary for developing a successful insect rearing program or for improving an existing program: 1. Insectary Design and Construction, 2. Insectary Management,

3. Insectary Health and Safety, 4. Genetics, 5. Environmental Biology, 6. Nutrition, Feeding, and, 7. Artificial Diets, 8. Microbial Contamination, 9. Entomopathogens, 10. Quality Control, and 11. Production Systems.

Schneider, J.C., 2009. Principles and Procedures for Rearing High Quality Insects. Department of Entomology and Plant Pathology, Mississippi State University. 370 pp. ISBN: 978-0-615-31190-6 For more information: <http://www.irc.entomology.msstate.edu>.

The use and regulation of microbial pesticides in representative jurisdictions worldwide

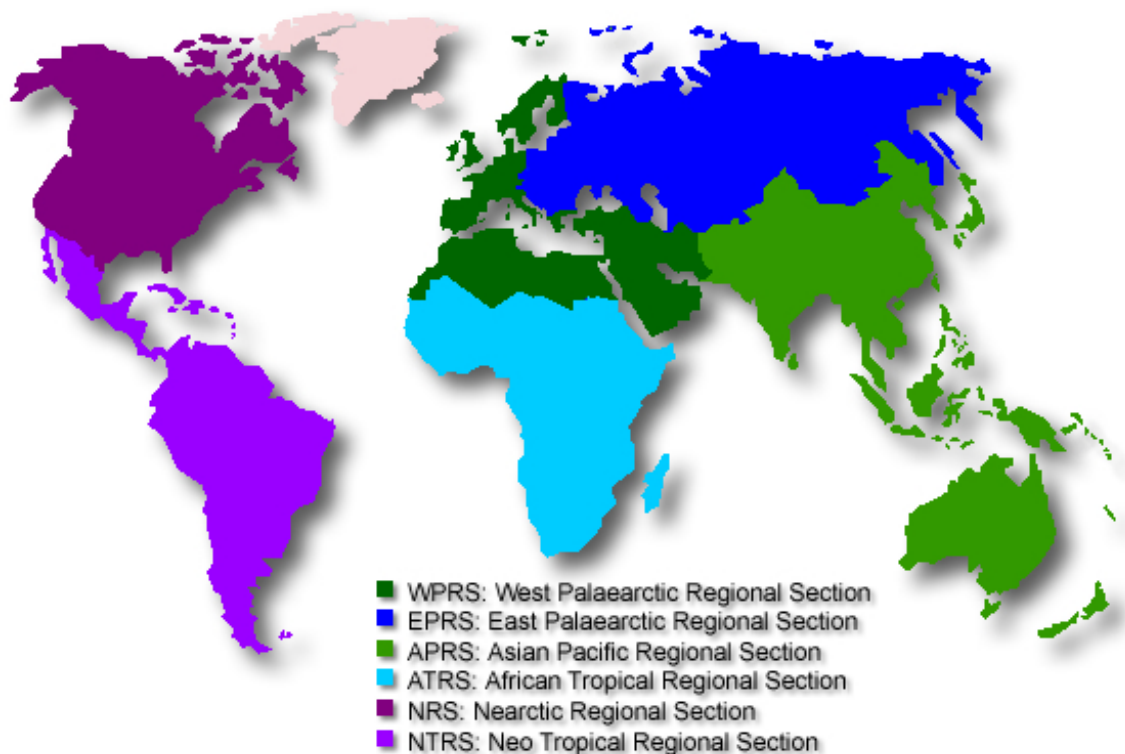


The book **“The use and regulation of microbial pesticides in representative jurisdictions worldwide”** edited by J.T. Kabaluk, *et al.* assesses the current state of regulatory processes across a global swath of nations concerned with the risks of introducing and monitoring microbial materials used in pest management. The editors have turned to recognized researchers or regulatory experts as authors of chapters describing regulation and its effectiveness in 14 nations and the European Union across Asia, Europe, Latin and North America. The bulk of the volume offers narrative descriptions and diagrams of regulatory processes, tabular information for registered micro-organisms and associated products and target pests, as well as support systems within the various jurisdictions aimed at advancing research, registration, and adoption of microbial pesticides. The book concludes with an incisive

chapter presenting a "vision of an idealized regulatory system that would best enable microbial pesticide registration in the context of acceptable risk to humans and the environment," according to the authors.

Kabaluk, J. Todd, Antonet M. Svircev, Mark. S. Goettel, and Stephanie G. Woo, 2010. The use and regulation of microbial pesticides in representative jurisdictions worldwide. IOBC Global, Bern, 99 pp. The book can be downloaded for free on the IOBC-Global website: See: www.iobc-global.org/index1.html (click on "publications," and scroll down).

10. REGIONAL SECTIONS OF IOBC



Short information of all the Regional Sections, with a link to their websites, can be found on www.IOBC-Global.org.

ASIA AND THE PACIFIC REGIONAL SECTION (APRS)

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Vice Presidents: Prof. Shu-Sheng Liu (Zhejiang University, China), Institute of Insect Sciences, Zhejiang University, 268 Kai Xuan Road, Hangzhou 310029, People's Republic of China, Tel. (86-571) 86971505, Fax (86-571) 86049815, E-Mail: shshliu@zju.edu.cn

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Secretary General: Dr. Barbara Barratt, Programme leader for Biosecurity at AgResearch in New Zealand. Private Bag 50034 Mosgiel New Zealand, Email: barbara.barratt@agresearch.co.nz.

Treasurer: Gary Leason BSc, Organic Crop Protectants Pty Ltd, 42 Halloran St, NSW 2040 AUSTRALIA, garyl@ocp.com.au

Past President: Prof.dr. Eizi Yano



Website with all relevant information about APRS: <http://iobc-aprs.org>

AFROTROPICAL REGIONAL SECTION (ATRS)

We are still looking for candidates who are willing to organize and run this section. It is disappointing that after a lot of correspondence and exchange of ideas, we have not been able to form an Executive Committee in this region where so much biological control is applied.



EAST PALEARCTIC REGIONAL SECTION (EPRS)

President: Dr. Danuta Sosnowska. Institute of Plant Protection, Department of Biocontrol and Quarantine, 60-138 Poznan, Mieczurina Str. 20, Poland.

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Vice-President: Prof. Milka Glavendekic, University of Belgrade, Faculty of Forestry, Belgrade, Serbia; e-mail: milka.glavendekic@nadlanu.com

Vice-President: Prof. V. Dolzenko, All-Russian Plant Protection Institute, St. Petersburg, Russia

General Secretary: Dr. Yuriy Gninenko, All-Russian Research Institute for Sylviculture and Mechanization of Forestry, e-mail: gninenko-yuri@mail.ru

Executive secretary: Dr. Edvard Sodomov, Moscow, Russia

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NRS recently revamped its website: take a look at the beautiful and informative site www.iobcnrs.com,

And read the NRS Spring 2011 Newsletter: <http://www.iobcnrs.com/index.php/newsletter>

NEOTROPICAL REGIONAL SECTION (NTRS)

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Past President: Prof.dr. Vanda .H.P. Bueno, Department of Entomology/UFLA, P.O.Box 3037, 37200-000 Lavras, MG, Brazil. Email: vhpbueno@ufla.br





**Exchange of Experiences in the Mass Production and Use of Biological Control Agents.
IOBC/NTRS Joint Meeting with
the International Seminar on Animal and Plant Health (SISA 2011)**

An IOBC-NTRS Conference was held from 3 to 6 May 2011 in the Palace Convention Center, Havana, Cuba, hosted by The National Center for Animal and Plant Health (CENSA). The objective of the meeting was to address the challenge of moving from scientific research to industrial production and the use of natural enemies by farmers. The meeting was focussed on all issues related to mass production of biological control agent and their release methods, following the principles and practices of quality assurance, integrated with other sustainable agricultural practices. The scientific program started with a keynote address “*Worldwide Situation of Augmentative Biological Control: a bright future*”, by Joop van Lenteren (Wageningen University, The Netherlands) followed by 6 sessions with 30 invited oral presentations and 79 papers submitted as posters.

The session topics were: (1) Biodiversity in Latina America and the Provision of Natural Enemies: what are the possibilities or options? Moderators: Maria Manzano, Universidad Nacional de Colombia sede Palmira & Héctor Rodríguez, CENSA, (2) Advances and Challenges for Mass Production, Quality Control and Release Methods of Natural Enemies. Moderators: Vanda Bueno, Universidad Federal de Lavras, Brasil & Maria Elena Márquez, INISAV, Cuba, (3) Registration of Natural Enemies and Access Benefit Sharing in Biological Control. Moderators: Jacques Brodeur, University of Montreal, Canada & Margarita Ceballos, CENSA, Cuba, (4) Recent Advances in Biological Control of the Tomato Leafminer *Tuta absoluta* and other Emergent Pests for the Region. Moderators: Norma Sánchez, CEPAVE, Argentina & Maria de los A. Martínez, CENSA, Cuba, (5) Biological Control and GMO's: what are the opportunities for combining these two approaches? Moderators: Franz Bigler, Agroscope Reckenholz Research Station ART, Switzerland & Leopoldo Hidalgo, CENSA, Cuba, (6) Impact of Educational and Extension Programs in the Use of Biological Control for Local Farmers in the Region. Moderators: Orietta Fernandez Larrea & Fermin Fuentes Sandoval, Cuba.

In total, 90 persons from 20 countries participated: Argentina (7), Belgium (2), Bolivia (2), Brazil (13), Canada (4), Colombia (5), Costa Rica (1), Cuba (24), Ecuador (1), Honduras (1), Italy (2), Japan (1), Mexico (4), Nicaragua (1), Nigeria (1), The Netherlands (1), Peru (16), United Kindon (1), United States of America (1), and Switzerland (1). Three members of the Executive Committee of IOBC Global attended the conference. The participants, including the IOBC Global and NTRS Executive Committee members visited several research institutes such as INISAV, GIGB, the CENSA Bt Production Plant in Mayabeque Province and an organic urban farm in Havana to learn about the Cuban expertise in mass production and use of natural enemies. During the conference and at the end at the NTRS meeting, the necessity to stimulate research collaboration in the field of biological control among Latin American countries was stressed. In this order to reach this goal, several new IOBC-NTRS Working Groups were proposed:

WG on Entomopathogenic Nematodes: proposed coordinator, Ana Milena Caicedo, ICA, Colombia,
WG on Biodiversity and Biological Control: proposed coordinators Yaril Matienzo, INSA, Cuba and Leopoldo Hidalgo, CENSA, Cuba,

WG Technology transfer to semi-industrail producers: proposed coordinator Rogelio Trabanino, El Zamorano, Honduras.

The good atmosphere and the important discussion during the conference resulted in 22 new enthusiastic members of IOBC-NTRS: Cuba (4), Ecuador (1), Mexico (2), Nicaragua (1) and Peru (14). Dalmert Cano is the new NTRS representative member in Peru.

On behalf of IOBC Global, Leopoldo Hidalgo, Vanda Bueno and Maria Manzano are thanked for organizing an excellent meeting.



Website with all relevant information about NTRS: <http://ntrs.iobc.info/>

WEST PALEARCTIC REGIONAL SECTION (WPRS)

President: Dr. F. Bigler, Federal Department of Economic Affairs DEA
Agroscope Reckenholz-Tänikon Research Station ART, Biosafety Group
Reckenholzstrasse 191, CH-8046 Zürich, SWITZERLAND, email:
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Vice Presidents: **Dr. Lene SIGSGAARD**, Sweden, les@life.ku.dk; **Dr. Heidrun VOGT**, Germany,
www.jki.bund.de; **Dr. Phyllis G. WEINTRAUB**, Israel, phyllisw@volcani.agri.gov.il

Secretary General: Dr. Philippe Nicot, INRA, Unité de Pathologie Végétale, Domaine St Maurice -
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Treasurer: Dr. Sylvia Blümel, Austrian Agency for Health and Food Safety (AGES), Institute of Plant
Health (PGH), Spargelfeldstr. 191, A-1220 Wien, AUSTRIA, email: sylvia.bluemel@ages.at



Website with all relevant information about WPRS: www.iobc-wprs.org

11. WORKING GROUPS OF IOBC GLOBAL

Below, we only present limited information about the Working Groups, most information is regularly updated on the websites of the working groups or the website of IOBC Global.

WG ARTHROPOD MASS-REARING AND QUALITY CONTROL

Dr. P. De Clercq, Laboratory of Agrozoology, Department of Crop Protection, Faculty of Bioscience Engineering, Gent University, Belgium. Email: Patrick.DeClercq@ugent.be; **Dr. T. Coudron**, USDA-ARS, Columbia, Missouri, USA. Email: coudront@missouri.edu

Proceedings of the 4th – 10th workshops (1988-2003) are now available online on the website as pdf-files

Latest activity: A workshop of the AMRQC group was held in October 2010 in Vienna (Austria) in co-organisation with the International Atomic Energy Agency. The next meeting will be held in India in 2013.

See website for details on future activities and for proceedings of meetings: www.amrqc.org

WG ECOLOGY OF APHIDOPHAGA

Convenor: IOBC Contact: **Dr. J.P. Michaud** (USA) Associate Professor of Entomology, Kansas State University Agricultural Research Center-Hays 1232 240th Ave. Hays, KS, 67601. Email: jpmi@ksu.edu. Co-convenors: Kris Giles, Nick Kavallieratos, Carlo Ricci, Wolfgang Weisser.

Latest activity: A working group meeting was held in September 2010 in Perugia (Italy), the next meeting is planned in 2013

See website for future activities: www.aphidophaga.org

WG BIOLOGICAL CONTROL OF CHROMOLAENA ODORATA (SIAM WEED)

Convenor: Dr. Costas Zachariades, ARC-PPRI, Private Bag X6006, Hilton, 3245 South Africa; Tel 033-3559418, cell 0833152100, fax 033-3559423. Email: ZachariadesC@arc.agric.za

Latest activity: the 8th International Workshop on Biological Control and Management of *Chromolaena odorata* and Other Eupatorieae was held in October 2010, Niarobi, Kenya

Newsletter: the *Chromolaena odorata* Newsletter is available on the website of the WG

Please visit the upgraded webpage of the IOBC Working Group on Biological Control of *Chromolaena odorata* at <http://www.arc.agric.za> (<http://www.arc.agric.za/>) 'Quick Links' or <http://www.arc.agric.za/home.asp?pid=5229>

WG BIOLOGICAL CONTROL OF PLUTELLA

Convenors: **Dr. A.M. Shelton**, Department of Entomology, Cornell University, New York State Agricultural Experimenta Station, 416 Barton Lab Geneva, NY 14456, USA. Tel: +1-315-787-2352. Fax: +1-315-787-2326. Email: ams5@cornell.edu. **Dr. A. Sivapragasam**, Strategic, Environment and Natural Resources Centre, MARDI, Kuala Lumpur, Malaysia. Email: sivasam@mardi.my. **Dr. D.J. Wright**, Department of Biology, Imperial College at Silwood Park, Ascot, Berkshire, UK. Email: d.wright@ic.ac.uk

Latetst Activity: Working Group meeting in Thailand, March 2011.

The Sixth International Workshop on Management of the Diamondback Moth and Other Crucifer Insect (also known as IOBC Global WG Biological Control of *Plutella*) was held in Kasetsart University, Thailand during March 21-25, 2011. About 120 participants from 22 countries have participated in the workshop. In his inaugural address, Dr. Sombat Chinawong, Vice-President, Kamphaeng Saen campus, Kasetsart University highlighted the overuse of agrochemicals and its environmental consequences in the vegetable production systems in Thailand. He emphasized the need for integrated pest management approaches. Dr. Jackie Hughes, Deputy Director General for Research, AVRDC – The World Vegetable Center delivered the keynote address in which she detailed the integrated pest management programs promoted by the Center in South- and Southeast Asia to manage the diamondback moth and other brassica pests. 48 oral presentations and 19 poster presentations were made in seven scientific sessions, *viz.*, Diamondback moth & other crucifer insect pests - global challenges in the 21st century, Biology, ecology and behavior of diamondback moth & other crucifer pests, Insect - plant interactions, chemical ecology and plant resistance, Biological and non-chemical management of crucifer insects, Insecticides and insecticide resistance, Overcoming barriers to development and implementation of IPM systems for crucifers and Genomic and other novel approaches to crucifer pest management, during the workshop. (Shortened version of report by Srinivasan Ramasamy sent to J.C. van Lenteren)



A South African participant in this meeting reported “Once again, it was shown that chemical control of diamondback moth is unsustainable, since the insect has developed resistance to new chemicals in the market. Now, more than ever, there is a great need to find alternative control methods for the effective management of diamondback moth and associated pests. One approach, widely acknowledged for good suppression of diamondback moth population, is biological control using parasitic wasps. However, the benefits of biological control are being corroded by indiscriminate use of insecticides throughout the world. Despite the decades of investment in biological control in southeast Asia, where parasitoids were introduced to provide a lasting solution to management of diamondback moth, the indiscriminate use of insecticides is undermining all efforts to control this pest. This has serious implications for recent introductions of parasitoids for biological control of diamondback moth in east Africa.”

See website for future activities: <http://www.nysaes.cornell.edu/ent/dbm/>

WG BIOLOGICAL CONTROL OF WATER HYACINTH

Chairman: Dr Martin Hill, Department of Zoology and Entomology, Rhodes University, P.O. Box 94, Grahamstown, 6140, South Africa. Email: m.p.hill@ru.ac.za

Website: www.waterhyacinth.org

WG EGG PARASITIDS

Future activities: This global working group will be terminated. The activities of the egg parasitoid working group might be continued by NTRS.

Newsletter: the Egg Parasitoid Newsletter is available on the website of the WG

Website: <http://www.lef.esalq.usp.br/iobc-epwg>

WG BENEFITS AND RISKS ASSOCIATED WITH EXOTIC BIOLOGICAL CONTROL AGENTS

Convenors: Dr. P. Mason & Dr. G. Heimpel. Contact: Dr. Peter Mason, Agriculture and Agri-food Canada, Neatby Building Central Experimental Farm, 960 Carling Avenue, Ottawa, Ontario, K1A 0C6 Canada. Email: masonp@agr.gc.ca

A first meeting of this new WG was held in May 2010 in Canada.

WG IWGO – OSTRINIA AND OTHER MAIZE PESTS

Convenors: **Dr. U. Kuhlmann**; CABI-BioScience; Head Agricultural Pest Research CABI Bioscience Switzerland Centre, Delémont; Switzerland, Email: u.kuhlmann@cabi.org. **Dr. C. R. Edwards**; Purdue University; Dep. of Entomology; Indiana; USA; Email: richedwards@entm.purdue.edu. **Prof. Dr. Wang Zhenying**; Institute of Plant Protection of the Chinese Academy of Agricultural Sciences, Beijing, P.R. China, Email: zywang@ippcaas.cn

Future activities

- Starting to develop a General IPM Technical Guideline for maize production for Europe in order to define the minimum agronomic requirements.
- IWGO members will be contributing to the establishment of a new version of an EU Directive for managing *Diabrotica*.
- The next IWGO Conference will be held from 23-26 October 2011 in Freiburg (i. Breisgau), Germany

Newsletter: the IWGO Newsletter is published on the website of the WG.

All relevant data, reports and future meetings are published on the IWGO website:
<http://www.iwgo.org>

GLOBAL WG ON BIOLOGICAL CONTROL AND MANAGEMENT OF PARTHENIUM WEED

Convenor: **Kunjithapatham Dhileepan**, Kunjithapatham.Dhileepan@deedi.qld.gov.au

Activities: The first WG meeting was held in October 2010 in Kenya (see newsletter 88 for report).

GLOBAL WG ON TRANSGENIC ORGANISMS IN IPM AND BIOCONTROL

Convenors: **Dr. Angelika Hilbeck**, Swiss Fed. Inst. of Technology, Geobotanical Institute, Zurichbergstr. 38, CH-8044, Zurich. Tel: +41 (0) 1 632 4322. Fax: +41 (0) 1 632 1215. Email: angelika.hilbeck@env.ethz.ch. **Dr. Salvatore Arpaia**, Italy. Email: arpaia@trisaia.enea.it. **Dr. Nick Birch**, UK. Email: n.birch@sari.sari.ac.uk. **Dr Gabor Lovei**, Denmark. Email: gabor.lovei@agrsci.dk;

Proposed activities 2008 – 2012: see website via www.IOBC-Global.org

Newsletter: E-newsletters are sent out periodically by the WG co-convenors to members of the projects linked to the WG.

12. LATEST NEWS

Congratulations to ERIC WAJNBERG and his team of Associate Editors: The 2010 IF for Biocontrol is **2.191** (number 10 out of 83 Entomology journals).

Phyllis Weintraub has done something really great: as a result of quite a bit of lobbying she has been able to get IOBC on WIKIPEDIA. Thank you Phyllis!

http://en.wikipedia.org/wiki/International_Organization_for_Biological_Control

The European and Mediterranean Plant Protection Organization (EPPO) now offers its free **Plant Protection Thesaurus** (EPPT) covering organisms important in agriculture and crop protection. Data includes: preferred (and other) scientific nomenclature; common names in many languages; taxonomic position; as well as other classifications. EPPO notes that, at present, about 28,000 plant species (wild plants, cultivated plants, and "weeds"), 19,200 animal species (especially insects, mites, and nematodes), and 4,300 microorganisms (including viruses) are listed in EPPT at <http://eppt.epppo.org>.

Two useful sites with information about **invasive species**

1. Global Invasive Species Database, <http://www.issg.org/database>
2. Cabi invasive species database including biological control options (beta version): www.cabi.org/isc/

Information about Congresses and Meetings in the field of biological control and integrated pest management can be found at:

- (1) www.IOBC-WPRS.org and
- (2) IPMnet News at: http://www.ipmnet.org/IPMNews/main_page.html



The Seventh International IPM Symposium, "IPM on the World Stage," will be held in Memphis Tennessee on March 27-29, 2012 at the Memphis Cook Convention Center. Symposium sessions will address IPM across disciplines, internationally, in the market place, urban settings, greenhouses and more. The Sixth IPM Symposium, held in 2009, attracted more than 700 research, education, government, industry and environmental and health professionals from 29 countries for three days of presentations, networking and organizational meetings on key pest management issues. For up-to-date information on the Symposium, visit: <http://www.ipmcenters.org/IPMsymposium12/> To receive future notices about the Symposium, send your e-mail address to ipmsymposium@ad.uiuc.edu.

Material for website of IOBC Global: if you would like to mention an IOBC or biological control related activity on the website of IOBC Global, please send your message to Joop.vanLenteren@wur.nl and I will contact our website manager.

Next newsletter (issue 90) will be published in December 2011.

Editor: Joop C. van Lenteren, August 2011