

Bio-control Matters

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President's Corner:

By Richard Ward, President, ANBP

It is the beginning of fall again and the leaves are changing colour here in Canada. This serves to remind us that another ANBP conference is just around the corner.

This year's conference will be held in Montreal Canada in conjunction with the IOBC's Arthropod Mass Rearing and Quality Control working group, The ASTM subcommittee E35.30 on Natural Multi-cellular Biological Control Organisms and The International Bio-control Manufacturers Association and will be hosted by The Biocontrol Network.

This is the first time our various organizations will be holding a joint meeting and it is promising to be very interesting and informative. Montreal is a cornucopia of culture and should provide something of interest for everyone attending. For further information on the meeting, please read the conference section of this letter, or go to our website www.anbp.org.

This has been an interesting year for biological control. One of the major companies in the industry was sold and is in the process of undergoing positive changes and expansions and other companies have come up with new and innovative rearing techniques for exi

Montreal, Canada
International
Conference 2007
October 28-November 1
Participants include ANBP, IBMA, IOBC,
ASTM, Biocontrol Network
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ANBP's Mission is to address key issues of the biological control industry through advocacy, education, and quality assurance.

ANBP Board of Directors:

- Richard Ward, President (Biobest Canada Ltd)
- Kimberly Gallagher, Vice President (Sterling Insectary)
 - Eda Reinot, Secretary (Becker Underwood)
 - Dan Cahn Treasurer (Syngenta Bio-line, Inc.)
 - Carol Glenister (IPM Laboratories)
 - Angela Hale (The Bug Factory Ltd)
 - Tom MacDonald (MGS Horticultural Inc.)
- Rene Ruitter (Koppert Biological Systems, Inc)
- Brian Spencer (Applied Bio-nomics Ltd)



The ANBP Board at it's Spring, 2007 meeting in Napa, California. Front row L to R are Brian Spencer, Eda Reinot, Rene Ruitter, Richard Ward, Dan Cahn, Tom MacDonald. Rear row L to R are Kimberly Gallagher, Carol Glenister, Angela Hale, ASTM Guest Anna Luczynski,

“Bio-Control Matters” is published by the Association of Natural Bio-control Producers four times per year to provide members with information, thought and opinion on biological control affairs. ***Bio-Control Matters*** advocates the interests of commercial biological control and the public interest of quality agricultural production and environmental protection. ***Bio-Control Matters*** welcomes contributions of comment and opinion, as well as articles of general interest. All contributions must be signed by the contributor. Send contributions for consideration to Maclay Burt, ANBP Executive Director, 2230 Martin Drive, Tustin Ranch CA 92782. Phone/fax (714) 544-8295. (E-mail execdir@anbp.org). Published contributions may not necessarily reflect the views or policy of ANBP.

ANBP was formed in 1990 by commercial insectaries to provide a united voice in regulatory issues facing the industry. ***ANBP*** is also dedicated to quality standards and educating the agricultural and academic communities about the importance of biological pest controls for pest management. ***ANBP*** membership exceeds 100, including 46 producers and/or suppliers. Through its efforts, ***ANBP*** is recognized as ***THE*** spokesman for the commercial biological control industry.

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sting biocontrol agents. We have also seen the introduction of *Amblyseius swirskii* on a very large scale and this has opened the industry to markets that were otherwise marginal, or at best, very difficult to service. This is a good sign for the industry as it shows that companies are still viable and always looking for new and better ways to produce and distribute biocontrol agents.

Border crossing and air entry of biological control agents continue to be an issue that requires constant attention, but thanks to the relationships built by our organization with the USDA and the CFIA, most problems have been quickly resolved. I would like to take this opportunity to thank Joseph Vorgetts from USDA for his invaluable help over the years and to wish him every success and enjoyment in his new role in charge of producing insects instead of regulating them. I am sure all of my colleagues in ANBP join me in wishing you Good Luck and Happiness Always Joe!!! As of October 1st, Robert (Bob) Flanders, Chief of Permitting and Pest Evaluations stepped down from this position to take on a roll in Policy and Regulations. He has been replaced by Robert (Sam) Johnson. I would also like to take this opportunity thank Bob for his past help on many matters of permitting, to wish him all the very best in his new position and hope that we will be still able to have input into Policy and Regulation decisions. I would like to welcome Sam to our organization and assure him of our continued need to work closely with his department.

I would like to thank the many organizers of our upcoming joint meeting without who's help and dedication it would not be possible to stage such an ambitious event.

Looking forward to seeing everyone at the meeting and wishing you all a happy and healthy fall and winter. See you in Montreal!!!

Contributing Members:

ANBP is pleased to recognize the following members for their interest in biocontrol and their generous support of ANBP's programs and goals.

- **California Avocado Commission**
 - **Donald L. Flaherty**
- **The Morning Star Packing Company**

ANBP Committees:

- **Regulatory:** Cahn (chair), Ruitter, Warner, Spencer, Ward
- **Research:** Hale (Chair), Cahn, MacDonald, Reinot, Spencer, Luczynski
- **Liaison and Education:** Gallagher (Chair), Luczynski, Currie, Nyrop, Spencer, Leppla
 - **Nominating:** Hale (Chair), all Board members to participate
 - **Audit:** Spencer (Chair), all Board members to participate
- **2007 Conference: Leppla to lead,** Glenister, Hale, Ward, Reinot
 - **QC:** Glenister (Chair), all ASTM members to participate
 - **Membership:** Ward (Chair), Penn, MacDonald, Diaz, Currie
 - **Marketing and Public Relations:** Reinot (Coordinator)



INTERNATIONAL MEETING: JOINT CONFERENCE

"MAINTAINING WORLDWIDE CONNECTIONS FOR QUALITY ASSURANCE IN ARTHROPOD AND NEMATODE REARING"

DoubleTree Plaza Hotel
Montreal

28 October - 1 November, 2007

(Reported by Co-chair Carol Glenister)

11TH WORKSHOP OF THE IOBC GLOBAL WORKING GROUP ON ARTHROPOD
MASS REARING AND QUALITY CONTROL

Joint Meeting With:

- Association of Natural Bio-control Producers
- ASTM subcommittee E35.30 on Natural Multi-Cellular Biological Control Organisms
- International Biocontrol Manufacturers Association Invertebrate Biocontrols Group

Hosted by: Biocontrol Network of Canada

An ambitious program, the conference includes more than 50 presentations and posters on many topics important to mass production and to the industry. Keynote speakers Norm Leppla, director of the Florida IPM Program and Karel Bolckmans, production, research, and development manager at Koppert will lead off the program with inspiring views of what it takes to be successful in developing and supplying quality products for augmentative biological control. Conference topics include

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- Building dynamic partnerships in biological control
- Quality Assurance: Concept to Product to Customer,
- State of the biological control industry-, with speakers from Asia, South America, Europe and North America
- Rearing and quality assurance methods for arthropods and nematodes, including digital imaging and counting
- Artificial diets
- Production of sterile insects and their quality assurance.
- Future concepts for mass production of phytoseiid mites
- Education and training in arthropod rearing and quality control with speakers from Canada, Brazil, and the US
- Effects of cold storage
- Diets and fitness
- How well do laboratory quality assurance tests correlate to field performance?
- Microorganisms, Genomics, and Insect Quality
- A round table on industry needs for research
- An excursion to see biological controls in action in local greenhouses.
- A workshop entitled Sterile Insect Production and Quality Control will follow the conference on November 1 and 2.

For registration, payment, the Program Agenda and hotel information, go to www.anbp.org.

ASTM Happenings

(Carol S. Glenister reports)

This fall, ASTM subcommittee E35.30 is cooperating with ANBP, IOBC AMRQC and the Biocontrol Network of Canada to create the conference, *Maintaining Worldwide Connections for Quality Assurance in Arthropod and Nematode Rearing*, October 28 - November 1. The ASTM business meeting will be held from 2 - 5 PM on Sunday October 28 at the Doubletree Hotel in Montreal immediately preceding *Maintaining Worldwide Connections* conference. For full details on the conference and the hotel, check the newsletter entry and/or go to http://www.anbp.org/joint_meeting.htm.

This October many of the standards that our task groups have been working on will go to ballot. These include *Aphidoletes aphidimyza*, *Eretmocerus* spp., *Delphastus catalinae*, *Feltiella acarisuga*, *Neoseiulus cucumeris*, *Hyposaspis/Stratiolaelaps*, *Podisus maculiventris*. Also, there are revisions ballots for *Encarsia formosa* and *Phytoseiulus persimilis*. Paid ASTM members should watch for the email ballot notifications and vote. If you would like to vote on these ballots, please join ASTM as soon as possible at astm.org.

Canada Update *((Brian Spencer reports))*

Things are slowing down, real fast up here. All of our geese are now down in the USA, fertilizing the golf courses.

NAPPO has signed the Biological Control Panels' position paper on Taxonomical resources. The panel felt that it was imperative to improve the 3 governments commitment to hiring and maintain the experts needed to identify insects and mites properly. The paper can be read on the NAPPO website.

Don't forget the woolies when you come to Montreal!

Research Needs *(Angelea Hale reports)*

Round Table on Industry Needs

On Thursday, November 1, 2007, I have the privilege of moderating a session on industry research needs at the upcoming joint meeting in Montreal, Canada. There will be a panel of three speakers: Myself, Karel Bolckmans and a representative from USDA/ARS. We will each give approx 20 min presentations followed by open discussion. I anticipate the round table discussion will be lively and constructive. The desired outcome is to get industry, researchers and users on the same page in regards to relevant research topics and to make a plan to continue networking opportunities.

The Role of Trade Associations and Commodity Groups in Identifying Research Projects

Angela Hale and Amandeep Bal

ARS Biological Task Team to Improve Liaison with Industry

Douglas Street, Guadalupe Rojas and Juan Morales

Main Research Needs in Mass rearing and Quality Control: A European perspective.

Karel Bolckmans

If you are interested in contributing to this topic and are unable to attend this meeting, please send your comments and ideas to Angela at ahale@thebugfactory.ca.

Website Notes (Kim Gallagher reports)

The ANBP website has the most current information about our upcoming joint conference entitled "Maintaining Worldwide Connections for Quality Assurance in Arthropod and Nematode Rearing". Carol Glenister and the rest of the organizing committee have been working hard to put together a great conference and post new information and schedules on the website as soon as it is available. In addition, you can register and pay (using PayPal and your credit card) for the conference on-line

Be sure to keep your website listing current, and please email revisions to maclayb2@aol.com.

North American Production Survey

(Carol Glenister reports)

A Survey of the North American Industry Producing Beneficial Insects and Mites and the Influence of Competition and Public Funding on that Industry

Carol S. Glenister, Maclay Burt, and Sinthya L. Penn

Abstract: ANBP conducted a survey in summer 2007 in order to learn whether the industry was increasing, subsiding, or stagnating, to elucidate some of the underlying influences on the development of biological controls in North America, and to create a baseline for future surveys. In reality, this industry is extremely difficult to generalize about, because it serves many unique markets. Furthermore, producers do not want to disclose any information on successful markets because they do not want to expose the markets that they have opened to potential competitors. The survey compares U.S. and Canadian responses. Overall, the industry is expanding or holding even. It considers some competition harmful and some helpful. The influence of public funding has had more impact in Canada than in the U.S.

Methods: The survey was carefully designed to assure potential respondents that if they answered the survey, they would not disclose information about their markets. ANBP executive director, Maclay Burt sent the survey request via email in early July to all known producers in North America regardless of their ANBP membership status and repeated the email 3 times to non-respondents. Confidential responses were received during July and August of 2007. To avoid disclosing the exact responses to each question, ranges and averages are reported.

Results: There were 14 respondents of approximately 28 North American producers. Only current ANBP members answered, and representing 64% of 22 ANBP producers. Not all questions were answered, especially percentages for revenues and employees. These cases are recorded as N/A.

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North American companies produce from 1 to 14 species, but only 1 to 4 species account for the majority of a given company's income from production (see Table 1). These are sold in up to 20 markets, the markets delineated by crop type and animal type. More than half the species produced in the United States are for use in outdoor situations, where as more than half the species produced in Canada are produced for use in indoor situations.

Table 2 shows that the majority of companies grew or held income steady from 2002 to 2007. Fewer company revenues grew in Canada than in the United States. There is not enough information in the survey to know how much the strong Canadian dollar has reduced revenues by returning approximately 1.10 Canadian dollar per American dollar in 2007 as compared to more than 1.50 Canadian dollars per American dollar in 2006.

The employee hours data show mixed results. We assume that increased employee hours are due to increased product sales. However, we do not know if hour declines are related to reduced sales, or to increased efficiencies in production.

Table 3 shows that competition can be helpful as well as harmful. Canadian producers feel pressure in more markets than the U.S. producers do. A future survey question could elucidate if the majority of the pressure was for indoor markets. It is interesting to note that Canadian producers report strikingly more benefits from competition than the U.S. producers.

Table 4 suggests that Canadian researchers have contributed to the development of production knowledge for most of the Canadian products and to the field development of 2/3 of the products. Production procedures in the United States have benefited from public research in less than half the species produced. U.S. field development efforts have been a driving force for about 1 in 10 species produced.

Discussion: Relative impact of public funding on commercial biological control in Canada and the United States needs further research. One way or another, there is clearly a lack of public-private cooperation and communication in many of the United States biological control markets. In the United States, it would be very helpful if a researcher would directly compare public-private research and development models of various nations to give the United States some guidance on how to improve public support and collaboration on the development of commercial biological control products. Overall, the industry in both Canada and the U.S. could use more support in the field development of commercial biological controls in individual markets.

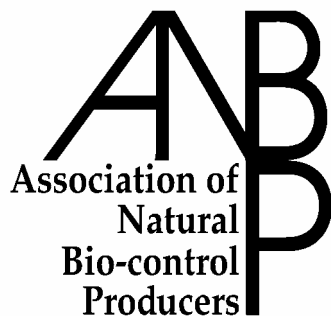
Readers please note. Unfortunately, the 4 tables will not fit in this publication format and are being emailed as a separate document titled "Production Survey Tables." Sorry for the inconvenience!

Upcoming Meetings, Workshops and Events

(Revised October 5, 2007)

Don't forget to visit www.anbp.org/events for direct links

Date	Title	Location	Contact info
Oct 9-12, 2007	Horti-Fair	Amsterdam, NL	www.hortifair.com
Oct 22- 23,2007	ABIM-Lucerne 07: Annual Biocontrol Industry Meeting	Lucerne Switzerland	www.abim-lucerne.ch
Oct 28-Nov 1, 2007	"Maintaining Worldwide Con- nections for Quality Assurance in Arthropod and Nematode Rearing" Joint Meeting IOBC/AMRQC, IBMA and ANBP Conference and AGM	Montreal, Canada	www.anbp.org
Nov 11- 15,2007	National Congress on Biological Control	Yucatan, Mexico	www.controlbiologico.org.mx
Dec 9-13, 2007	ESA Annual Meeting	San Diego, CA	www.entsoc.org
Dec 11, 2007	Advances in Nematology	London, UK	www.aab.org.uk
Feb 8-13 2009	3 rd Int'l Symposium on Biological Control of Arthropods (ISBCA)	Christchurch, New Zealand	www.isbca09.com



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