



FALL 2002

IOBC - NRS Newsletter

*International Organization for Biological Control
Nearctic Regional Section*

Volume 24
Number 3

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University of Wisconsin

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Thanks, Challenges, and Other Parting Shots From The President

Don't blame our hard working Corresponding Secretary that this newsletter is a bit late. It's not by coincidence that we share last names, and I can't escape when my contributions to the newsletter are due, then past due, then "way late." The fall wasn't suppose to be this hectic. But one of our faculty suddenly left the department in late summer to become a Dean (I'm sorry, but I've never been able to understand the lure of higher administration), and a week before the semester started I was asked to teach his course. My nose has barely been above water since, and I'm still treading. Anyway, things like newsletter articles have tended to filter down the pile. [*Editor's note: The newsletter was delayed until mid-October by the run-off election; after that it was the Prez.*]

As this is my last opportunity to write a President's column, I suppose I should try to think of something presidential to say. Don't get your hopes too high!

But I most certainly need to thank some people. If you ever contemplate running for office in this organization (and I truly hope you do – we need you), the office to run for is President. The hard jobs are Secretary/Treasurer (you wouldn't imagine the types of correspondence Rob has received these past years), Corresponding Secretary (designing the newsletter is the easy part – getting articles is the challenge (look out Molly!)), and Vice-President (putting the annual conference together should be enough of a task, but convincing hotel caterers that we really should be getting more than a dozen carrot sticks and a half pound of peanuts for our \$500 mixer allotment is work not normally experienced during graduate training). So thanks to Rob Wiedenmann, Susan Mahr, and John Ruberson, for doing the real work these past two years. Thanks also go to Molly Hunter for heading up the Graduate Student Award Committee, and Jacques Brodeur, Stefan Jaronski, and Peter Mason for various committee work and thoughtful insights whenever the Prez couldn't make up his mind on important issues. Only three of our current Board

will be departing. Larry Charlet is finishing his 6-year term in the presidential cycle (as well as previous service as corresponding secretary); John Ruberson, Vice-President, has dedicated countless hours to developing two outstanding symposia and coordinating the logistics of the annual meetings and mixers; and Peter Mason, a Member-At-Large, has spent many hours on Board activities. Thanks to all of you for making my job easy.

Congratulations to the winners of the election (below). It is obvious that incoming President Hunter has a top-notch group of energetic folks to work with for the next two years. The Board also wishes to thank all who agreed to be nominated for office – from the number of willing candidates it seems clear that we continue to have a very vital organization.

And, sometimes in spite of ourselves, we continue to represent a very vital discipline. Biological control is a discipline that continues to evolve as our knowledge progresses and as society continues to look more closely at what we are doing. Justifiably or not, *Rhynocyllus* and *Cactoblastis* and *Harmonia*, all of which are outstanding biological control agents, have tarnished our image a bit. (According to my barber, who knows what I do for a living, "We don't need any more of them damn ladybugs." I haven't been able to convince him otherwise.) We certainly must carefully consider

Continued on page 2

Election Results

President - elect – Rob Wiedenmann

Vice-president – Nick Mills

Secretary/Treasurer – Stefan Jaronski

Corresponding Secretary – Susan Mahr

Members-at-Large – Jacques Brodeur

George Heimpel

Sujaya Rao

Congratulations to our new officers. And a sincere "Thank you!" to all who agreed to be nominated and serve our organization.



NEWS

nuisance and non-target impacts prior to making new exotic species releases. An angry barber holding a pair of scissors is not a comforting sight.

I still find it difficult to accept that the vast benefits of biological control are not more widely recognized in the agricultural community, by the general public, or even in our pest science disciplines. I am, primarily, an extension entomologist. And, almost 23 years ago, I was hired in that capacity in spite of having a biological control background. That was possibly unique at that time in the Midwest, and nearly so nationwide. Several years later my department decided that a portion of my extension responsibilities should be formally in the area of biological control education. Things have changed a lot in the past 15 years and it is encouraging to see many young extension specialists around the country with biological control backgrounds and biological control programs. I am currently chairing a departmental search committee for a new field crops extension entomologist. The candidate pool is good, and many fine applicants have biological control training that includes extension experience. This suggests that biological control will continue to be developed as a component of pest management programs, will become increasingly familiar to farmers and other pest managers, and hopefully also become a term commonly understood and accepted by the general public.

So my departing challenges aren't too earthshaking. First, conduct good science. Second, conduct good science that will likely actually make a difference in pest management. Third, carefully consider potentially unwanted impacts and be certain that benefits far exceed risks. Fourth, be proud of your successes – shout them from the rooftops; this will help assure the continuation of our discipline.

— Dan Mahr

If you move, please send your new address to the Secretary/Treasurer or Corresponding Secretary so this newsletter will continue to reach you.

Weed Bio-Control Short-Course: A Complete Success

The University of Florida in cooperation with the Universidad Nacional Agraria of Nicaragua, the USDA-ARS South American Biological Control Laboratory in Argentina, and the INIA-Carillanca, Chile, conducted the 'First Latin-American Short-Course on Biologi-

cal Control of Weeds'. This intensive course was held at the hotel Barcelo in Montelimar, Nicaragua during 24 to 28 June, 2002. This course was organized by Dr. Julio Medal (University of Florida), and had the participation of 78 trainees from 17 Latin-American countries, and 15 speakers with widely recognized in-

ternational experience on all aspects of weed control using insects and/or pathogens. A written evaluation of the course was made by the participants during the last day of the event. All the participants rated the course good to excellent, and almost all the participants (96%) except

three, indicated that they can apply what they learned during this intensive short-course. A second course is in preparation and it will be conducted in 2004 in Brazil.

— Contributed by Julio Medal, University of Florida, Entomology and Nematology Department, Gainesville, FL.



cal Control of Weeds'. This intensive course was held at the hotel Barcelo in Montelimar, Nicaragua during 24 to 28 June, 2002. This course was organized by Dr. Julio Medal (University of Florida), and had the participation of 78 trainees from 17 Latin-American countries, and 15 speakers with widely recognized in-

Midwest Institute for Biological Control Shortcourse Held In June

The 12th annual Midwest Institute for Biological Control shortcourse, held June 23-26 at the Illinois Natural History Survey and the University of Illinois, was organized by Marianne Alleyne and Rob Weidenmann (Illinois Natural History Survey). The topic of this year's shortcourse was "Parasitoid Biology: Implications for Biological Control."

Other instructors included George Heimpel from the University of Minnesota, David Voegtlin, Gernot Hoch, Jim Nardi, Larry Hanks, Jim Whitfield and John Tooker from Illinois, and Jian Duan from Monsanto.

Twelve students from 5 Midwest Universities attended the Institute.

— Contributed by Rob Weidenmann

NEW MEMBERS

Welcome to...

Denny J. Bruck
USDA-ARS
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Sharlene E. Sing
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Sujaya Rao
Dept of Entomology
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Corvallis, OR 9733



RESEARCH BRIEFS

Biological Control of Tropical Soda Apple

Tropical soda apple (also known as: 'The plant from hell'), *Solanum viarum* (Solanaceae) is an invasive exotic weed of pastures and woody areas in the southeastern and south-central United States that has been spreading at an alarming rate since it was discovered in Glades County, south Florida in 1988. Currently, the infested area is estimated at over 1 million acres. A biological control project on this invasive weed was initiated in January 1997 by Dr. Julio Medal (University of Florida), in collaboration with Dr. Robinson Pitelli (Universidade Estadual Paulista, Jaboticabal campus, Sao Paulo state, Brazil), Daniel Gandolfo (USDA-ARS South American Biological Control Laboratory, Argentina), and Dr. James Cuda (University of Florida). The Florida Department of Agriculture & Consumer Services-Division of Plant Industry, and the USDA-APHIS has

been funding this project.

From exploratory surveys conducted in South America, several insects were identified as potential biocontrol agents of tropical soda apple. Two leaf-beetles, *Gratiana boliviana* and *Metriona elatior* (Chrysomelidae) were initially selected and screened for host-range determination because of the tremendous defoliation in the plant's native range. Host-specificity tests and field surveys conducted with these two beetles indicated that they are highly specific and safe for release in the USA. The request for field release of *G. boliviana* was approved by the Technical Advisory Group (TAG) for Biological Control Agents of Weeds in April 2002. An environmental assessment (EA) was prepared and submitted to the USDA-APHIS-PPQ for review, and it will be submitted to the U.S. Fish and Wild-

life Service for their final approval. We expect to release this beetle in Florida during the spring 2003.

Two other promising candidates that are currently tested in the Florida-quarantine are the leaf-beetle *Platyphora* sp. (Chrysomelidae), and the flower-bud feeder *Anthonomus tenebrosus* (Curculionidae). We expect to conclude the host-range tests with these two candidates during 2003, and a petition for field release will be submitted if the additional tests corroborate the specificity and safety of these agents for biocontrol of tropical soda apple.

— Submitted by Julio Medal, University of Florida, Entomology and Nematology Department, Gainesville, FL.

Fungus Baits to Suppress Red Fire Ant

The red imported fire ant, *Solenopsis invicta* Buren, often dominates its environment by out-foraging other ground-dwelling insects. Bait-formulated controls can specifically target *S. invicta* in areas where they dominate ground-level fauna, since this system makes the bait most accessible to the most efficient forager. This study evaluated the efficacy of *Beauveria bassiana* mycelia encapsulated in alginate pellets in reducing the activity of fire ant colonies in heavily infested sites in Texas. The encapsulation of mycelia with nutrients, as opposed to application of conidia, may increase chances of successful biological

control because vegetative growth of the fungus is promoted, and immediate contact with ants is not necessary.

Foraging ants quickly gathered pellets coated with peanut oil and delivered them into foraging tunnels, while uncoated pellets were recognized as foreign objects and were removed from the mounds. *B. bassiana* pellets transported into brood chambers and throughout the colony may cause significant mortality and reduce colony vitality. Activity of mounds treated with fungal pellets continued to decline throughout the trial, and after two months over half of these mounds were inactive.

Eradication of red fire ant populations will be nearly impossible; however, population suppression will reduce their economic impact and effects on humans, as well as possibly promoting reestablishment of native ants. Alginate pellets in a bait formulation promises to be an effective tool for transporting infectious agents into red fire ant mounds.

— Bextine, B. R. and H. G. Thorvilson. 2002. *Field Applications of Bait-Formulated Beauveria bassiana Alginate Pellets for Biological Control of the Red Imported Fire Ant (Hymenoptera: Formicidae)*. *Environ. Entomol.* 31(4): 746-752.

A Better Filth Fly Parasitoid?

Several species of parasitic wasps — such as *Muscidifurax raptor*, *Spalangia endius*, and *S. cameroni* — are available from commercial insectaries to control houseflies and stable flies, but all of these attack only the pupae. The Brazilian wasp *Tachinaephagus zealandicus*, that attacks larval flies, is being evaluated by

USDA-ARS in Gainesville, FL.

These wasps do not host feed (unlike the other wasps which need to in order to mature their eggs), but do have a full complement of eggs ready to lay when they eclose.

T. zealandicus does not perform as well as other wasps when the temperature gets in the mid or upper 90s. But

they could be used in cooler months in the South or all summer in northern states.

— Adapted from ARS News & Information, *Honey Boosts Effectiveness of Parasitic Wasps*, August 19, 2002 by Jim Core; for the complete article see <<http://www.ars.usda.gov/is/pr/2002/>

MEETING CALENDAR

Biological Control of Tropical Weeds

March 16-28, 2003

Brisbane, Australia

This international short course, being offered by CSIRO Entomology, Queensland Dept. of Natural Resources and Mines, and The University of Queensland, aims to give participants a sound understanding of the theory of weed biological control and practical training in the procedures involved in implementing a weed biological control program. Fee for each participant is \$AUD3900, which includes tuition, lab work, field trips, course notes, meals, accommodation and transport within Queensland associated with the course.

To receive a circular about the course send a request to:

Sally Brown Conference Connections
PO Box 108
Kenmore QLD 4069
AUSTRALIA
Ph: 61 7 3201 2808
Fax 61 7 3201 2809
email <sally.brown@uq.net.au>

4th National Integrated Pest Management Symposium

April 8-10, 2003

Indianapolis, IN

One of the many symposium topics is Biological Control and Bio-based IPM for management of weeds, diseases and arthropods. For BC session content information, contact Neal VanAlfen at <nkvanalfen@ucdavis.edu>, (530) 753-1605; or Bob Nowierski at <rnowierski@reeusda.gov>, (202) 401-4900

For registration information contact Elaine Wolff at (217) 333-2881; fax (217) 333-9561; eEmail: <wolff1@uiuc.edu> or visit the symposium website at <<http://nautilus.outreach.uiuc.edu/conted/conference.asp?ID=244>>

NEWSLETTER INFO

Improve This Newsletter by Submitting Articles

Submission of news items from the membership is what makes this newsletter of value to all.

Do you have a student finishing a M.S. or Ph.D.? Send in their abstract to publicize the work they've done.

Know of some biocontrol work done by your local county, state, or provincial government that will probably never be published? Submit excerpts from their report so others can hear about these success stories (or cautionary tales of biocontrol gone bad).

Although a deadline is set for the editor's sake, please submit at any time for future newsletters (my address is on the back page). Some suggested topics are:

- Items in the news affecting biological control
- Taxonomy (revisions or studies impacting biocontrol)
- Reports of Working Groups
- Announcements
- New research projects

- Thesis or dissertation topics
- Open Forum type letters
- Biocontrol position announcements
- New appointments or people moving around
- Awards or honors received by members
- Meetings or workshops related to biological control
- New publications

Items for the Winter Newsletter are due by 15 January 2003

11th Symposium on Biological Control of Weeds

April 27 - May 02, 2003

Canberra, Australia

For more information contact:

Sharon Corey

Phone: 61-02-6246-4136

Fax: 61-02-6246-4177

E-mail: sharon.corey@ento.csiro.au

Or visit the conference website at <<http://www.ento.csiro.au/weeds2003/index.html>>.

Biocontrol 2003: Bringing Science to Practice

April 28 - 30, 2003

Beziers, France

For more information contact S. Chatham, IBMA Secretariat at <Schatham@calliope-sa.com> or visit the conference website at <<http://www.ibma.ch/pdf/biocontrol2003.pdf>>.

XIII International Entomophagous Insects Workshop

July 27-31, 2003

Tucson, Arizona

Attendance for these meetings generally runs from about 100-150 participants, and consists of a single session of talks with posters in the evening, all designed for maximum interaction. Details related to travel arrangements, accommodations and registration fees will be supplied in the second announcement.

To receive more information contact:

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**International Organization for Biological Control of Noxious Animals and Plants
Nearctic Regional Section**

**Organisation Internationale De Lutte Biologique Contre Les Animaux Et Les Plantes Nuisibles
Section De La Region Nearctic**

<http://www.entomology.wisc.edu/iobc/nrs.htm>

IOBC website: <www.iobc.agropolis.fr>

**Send items for the
Winter 2003 IOBC-NRS Newsletter
by 15 January to:**

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The International Organization for Biological Control - Nearctic Regional Section Newsletter is published 3 times a year in February, June, and October to provide information and further communication among members of the Region (Bermuda, Canada, and the United States).

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