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- Admission to the Annual General meeting and a copy of the proceedings. The AGM has gained a reputation for strong agendas and interesting speakers
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- Your copy of *Pesticulars* the popular PPMA newsletter, published twice a year, including the AGM proceedings
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- A venue for students to talk about their research
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Professional Pest Management Association of British Columbia

**Call for submission of oral presentations
2012 Symposium**

"Pest Management in Riparian Areas"

Tuesday, February 28th, 2012
Simon Fraser University, Burnaby

Student Awards Presented

Submit title, authors, abstract (50 words),
and contact information by Feb.10th, 2012

ppmabc@sfu.ca

www.sfu.ca/~ppmabc/

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PPMABC 1st Annual Photo Contest

The photo contest was awarded to two recipients this year. They will be rewarded with large framed prints of their photographs at the next annual general meeting, as well as have their pictures immortalized forever in this issue of Pesticulars.

Photographer: Chelsea Eby
MPM Candidate, SFU

Subject: Apple clearwing moth
Synanthedon myopaeformis



The Apple Clearwing Moth (*Synanthedon myopaeformis*) is a Sesiid moth native to Europe, where up until recently it has been considered a secondary pest of apple and other rosaceous trees. However, with a switch to higher density plantings these moths are becoming of increasing concern to fruit growers. The larvae are wood-borers, feeding under the bark for two years, resulting in a weakened tree that will have a decreased fruit yield.

Apple Clearwing Moth was found in the Similkameen Valley of British Columbia, a primarily organic apple-growing region, in 2005. Since their accidental introduction, moth populations have exploded causing economic concern for the apple farming community. Being a new pest in Canada, control options are limited, even more so for organic growers, making research on this pest critical.

Photographer: Erfan Vafaie
MPM Candidate, SFU

Subject: *Praon unicum* aphid mummy



Ericaphis fimbriata is one of the common aphids of highbush blueberries in BC. Like most aphids, they reduce plant growth, fruit yields, and can also vector a virus which is fatal to the blueberry plant; an issue that is not taken lightly in BC, seeing as how it's the second biggest producer of blueberries in the world.

This photo shows the result of a series of events that occurs after an aphid is parasitized by an endoparasitoid occurring naturally in BC, *Praon unicum*. After *P. unicum* oviposits an egg inside the aphid, the egg develops into a larva, which then feeds on the haemolymph of the aphid, as the aphid continues to feed. Eventually, the larva consumes everything inside the aphid, leaving nothing but the carcass to protect the larva as it undergoes metamorphosis in the pupa below. This photograph depicts the final stage of the larva's growth; a part of the parasitoid cycle referred to as an "aphid mummy".

Summary of ESBC 2011 AGM

Written by Markus Clodius, Membership Director

This year's annual meeting of the ESBC was a two-day affair. On Friday, October 14th, the Society met at the Abbotsford campus of the University of the Fraser Valley for student presentations and other speakers, and the business meeting of the ESBC. A detailed agenda, and the results of this year's elections, can be found at the following link: <http://blogs.sfu.ca/groups/esbc/>.

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The student competition prizes were won by Tanya Stemberger, Erfan Vafaie, and Ikkei Shikano, and Chandra Moffat was awarded the ESBC Grad Student Scholarship. Congratulations, all! Major items that arose at the business meeting were:

- Updates on revisions to the ESBC Web site and Journal;
- The formation of a Student Engagement Committee;
- Discussion of a proposal that the ESC and the ESBC jointly seek to host the next International Congress of Entomology in Vancouver in 2016. [This was met with cautious interest, though also skepticism that the ICE would be awarded to Vancouver again so soon after hosting it in 1988].

On Saturday, October 15th, the ESBC hosted a symposium at Douglas College in New Westminster on the theme of "Invasion Biology". The speakers were David Gillespie (AAFC), Haley Catton (UBC), Lee Humble (CFS), Gabriella Zilahi-Balogh (CFIA), Rob Higgins (TRU), Tracy Hueppelsheuser and Susanna Acheampong (BCMAG). This meeting coincided with an impressive exhibit of insect art by Tiko Kerr and Ivan Droujini in the Amelia Douglas Gallery, and for myself, it was all well worth the trip. Thanks to everyone who did so much work in setting up these events.

2011 AGM

This year's PPMABC Annual General Meeting was held at Simon Fraser University, Burnaby campus.

Awards



This year's recipient of the **ConTech Award** was Shane Sela, and accepted by Troy Kimoto, presented by John Borden of Contech (above).

Rob McGregor of Douglas College presented this year's **Honorary Lifetime Achievement Award** to Dr. David Gillespie (below).



AGM Sponsors

Thank you to our sponsors for the 2011 AGM:

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E.S. Crop Consult**

The PPMABC is looking for companies who would be interested in sponsoring or co-sponsoring a coffee break or lunch at next year's AGM in return for advertising space at the AGM. Morning coffee with muffins costs \$300, mid-morning and afternoon coffee costs \$200 and lunch costs \$1000. If interested, please contact Tammy McMullan (ppmabc@sfu.ca).

Research Greenhouses – Up and Running! **The Institute for Sustainable Horticulture** *Written by Jim Matteoni, PPMABC President*



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This summer the new ISH research greenhouses were finally completed. The Dutch Venlo structure is 4.5 m high from the floor to the gutter, utilizes geothermal heating, and one day will be capable of geothermal cooling. It is equipped with a single element dosing system for nutrition studies, one of only four such systems in North America. The greenhouse is composed of 4 compartments of approximately 125 m² each and is currently set up with a hanging trough growing system with 6 rows/compartment. The compartments have bumble bee-exclusion screening now, but could be changed to thrips exclusion screens when required. The new geothermal greenhouses (in the distance) are housed on the Kwantlen's School of Horticulture Field Lab site in Langley.

The Institute is following three major foci for research in the facilities: Microbial biocontrol production and use, cropping systems for new crops in conjunction with geothermal cooling, and alternate greenhouse energy systems. Some specific projects already underway include examination of a naturally based bacterial metabolite (Terra BioGen) that reduces the need for fertilizer in tomatoes, an organic strawberry trial with three varieties to help evaluate the climate control systems in the new greenhouse, and a study by Rob McGregor of Douglas College to examine the effect of aphid parasitoid hyperparasitism on aphid pest management systems.

The research at ISH demonstrates its mandate to work with small and medium sized companies in the region to help on developing their innovative products and processes. TerraBioGen Technologies Inc. of North Vancouver is an innovative environmental technology company providing organically-based soil fertility products from superior organic waste management processes. For questions or more information about the ISH greenhouses, please contact Deb Henderson, Director and LEEF Chair, Institute for Sustainable Horticulture.

Deborah.Henderson@kwantlen.ca, 604.599.3460.

Election

Also at this year's AGM, candidates for positions on our executive were elected or appointed. A big 'thank you' to our outgoing executives as we welcome our new executive committee.

President: Jim Matteoni

In 1993, Jim was invited to Chair the Greenhouse Production Department at the new Kwantlen Polytechnic University School of Horticulture, and served an instrumental role in the development of the

Institute for Sustainable Horticulture at Kwantlen. Research interests include the development of bumble bees for commercial pollination in greenhouse vegetables, distribution of imidacloprid in greenhouse peppers, and conservation biocontrol in field nurseries. Jim maintains an active contact with the horticulture sector through IPM focus groups that include students and IPM practitioners on site to examine a specific pest situation. Jim looks forward to working with the pest management community in BC for the next few years!



Vice President: Tracy Hueppelsheuser



Tracy Hueppelsheuser is a provincial entomologist for the British Columbia Ministry of Agriculture, based in Abbotsford. Her work focuses on biology and pest management of established and invasive insect species that impact BC agriculture. Her work includes identification of insects, outreach and extension activities, policy and regulation development, and some surveillance. The Ministry works closely with other organizations with similar mandates and goals, including Canadian Food Inspection Agency, Pest Management Regulatory Agency, other provincial Ministries, and industry and grower organizations.

Past President: Deborah Henderson

Currently the Director and Leading Edge Endowment Fund Innovation Chair at the Institute for Sustainable Horticulture at Kwantlen Polytechnic University, Deb started her career in agriculture in BC in 1988 when she founded E.S. Cropconsult Ltd. to offer IPM and research services



to vegetable and berry growers in SW BC. She developed an active research program at the company involving biological and non-chemical management strategies for pests and diseases. Building on this background, she is developing, at the Institute, a research program in microbial biocontrol products, and cropping systems that utilize them.

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Treasurer: Tammy McMullan



Currently a Senior Lecturer at SFU: since 1988, Tammy has taught a wide range of courses, including graduate-level field courses in pest management. Tammy has held numerous Research Assistant positions and been involved in several research projects on a wide variety of insect pests, served

as Director of the BC Entomological Society, and has previously held the positions of Secretary and Student Representative.

Secretary: Erin Adams

She completed BSc. at UVic during which worked for BCMAL's Plant Diagnostic Lab and at AAFC in Agassiz.

She is currently at SFU completing her MPM under the supervision of Dr. Bernie Roitberg and Dr. Bob Vernon.



Membership Director: Markus Clodius



Markus studied botany at UVic, and was converted to entomology while earning an MPM degree at SFU. After monitoring mosquito populations for the City of Port Coquitlam, he joined the Agriculture and Agri-Food Canada research centre in

Summerland, as a technician in codling moth and cherry fruit fly research. He later joined Bob Vernon's lab at Agassiz, studying wireworms and cabbage root maggot, and now part of AAFC's Minor Use Pesticide Program. He also keeps honey bees, but just for the fun of it.

Student Representative: Carolyn Teasdale

Carolyn completed her BSc in Global Resource Systems at UBC in 2003 and has worked as a Berry Integrated Pest Management Specialist for E.S. Cropconsult Ltd. in the Fraser Valley ever since. She is currently enrolled in the Masters of Pest Management program at SFU evaluating pheromone-based monitoring



and management strategies for the Raspberry Crown Borer, a sporadic but serious pest of caneberries.

Pesticulars Editor: Erfan Vafaie



Completed his BSc (Hons) at the University of Western Ontario, and currently working towards his MPM under the supervision of Dr. Jenny Cory (SFU) on biological control of aphids using parasitoids. Erfan hopes to incorporate his grassroots level community development experience with

his education in biological control of pests to aid in the movement towards more sustainable agricultural practices.

Endnotes

Upcoming Meetings and Events

- Canadian Pest Management Association
March 8 – 12, 2012, Vancouver, BC
<http://www.pestworldcanada.net/cpma/events/>
- 57th Annual Soil Fungus Conference
March 20 - 22, 2012, San Marino, CA
<http://soilfungus.ars.usda.gov/>
- Canadian Phytopathological Society
TBA, 2012, Niagara Falls, ON
<http://www.cps-scp.ca/meetings.shtml>
- Canadian Weed Science Society Annual Meeting
November 21 – 24, 2012, Niagara Falls, ON
<http://www.weedscience.ca/annual-meeting>

Electronic Publishing

Pesticulars is now an electronic publication. To ensure that you receive your copy, please send us an updated email address. Email addresses and mailing information (for ballots and voting information) can be sent to Tammy McMullan (ppmabc@sfu.ca).

Website

Our new website address is www.sfu.ca/~ppmabc/. Check it out for information on our association, contact details, copies of *Pesticulars*, and upcoming events.

Webmaster: Erfan Vafaie (evafaie@sfu.ca).

Pesticulars Submissions

We are always looking for pest management topics to publish. If you or know of others who have information to relay, exciting research to share, or upcoming events that you would like posted in one of our issues, please contact Erfan Vafaie (evafaie@sfu.ca).
