



22nd Annual Conference Drones & Pests: Aerial Strategies for IPM

October 24, 2025

Royal Botanical Gardens - Rock Garden, 1185 York Blvd., Hamilton

Full Program: <https://www.ontariopmc.ca/program>

The 2025 Ontario Pest Management Conference will be held in conjunction with the Entomological Society of Ontario (ESO) Annual General Meeting, from October 24-26, 2025.

OPMC Organizing Committee

Ontario Ministry of Agriculture, Food and Agribusiness (OMAFRA): Kristy Grigg-McGuffin (Chair), Melanie Filotas, Sean Westerveld, Cesar Cappa; **University of Guelph (U of G):** Rachel Riddle, Jocelyn Smith; **Agriculture and Agri-Food Canada (AAFC):** Justin Renkema; **Valent Canada:** Julie Schipper; **Ontario Fruit and Vegetable Growers Association (OFVGA):** Chris Duyvelshoff

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University of Guelph – School of
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The OPMC would also like to gratefully acknowledge additional support from the Ontario Ministry of Agriculture, Food and Agribusiness.

AGENDA

8:30 a.m – 9:00 a.m Registration and Refreshments, Poster Set Up

MORNING SESSION

Chair: Cesar Cappa, OMAFA

- 9:00 am **Welcome and opening remarks: Kristy Grigg-McGuffin**, Chair, OPMC
- 9:05 am Overexpression of BnWRKY40 confers enhanced resistance in *Brassica napus* against *Verticillium longisporum* and *Sclerotinia sclerotiorum*. **Tetiana Borysenko**, Wilfrid Laurier University. (Student Competition)
- 9:20 am Recipe for resilience: Optimizing the artificial diet of western bean cutworm, *Striacosta albicosta*, for laboratory rearing and *Bacillus thuringiensis* susceptibility monitoring. **Natasha Weppler**, University of Guelph-Ridgetown. (Student Competition)
- 9:35 am Endophytic colonization of *Beauveria bassiana* for management of clubroot on cabbage. **Kelly Ruigrok**, University of Guelph. (Student Competition)
- 9:50 am **Plenary Presentation 1**

Preliminary insights into drone-based pest management and monitoring in greenhouse crops

Matt Korpan, Executive Director of R&D Operations, Biophi

10:30 am – 11:00 am Refreshment Break and Poster Viewing

- 11:00 am Exploring genetic resistance to Sclerotinia stem rot in canola through VQ gene expression profiling. **Sashini Samarakone**, Wilfrid Laurier University. (Student Competition)
- 11:15 am Agricultural robots for weed management in beets and carrots on two types of soil. **Ifesinachi Ezeh**, University of Guelph. (Student Competition)
- 11:30 am Phenology and yield impact of the switchgrass gall midge (*Chilophaga virgati* Gagné) in Ontario. **Clarissa Capko**, University of Guelph. (Student Competition)
- 11:45 am Double trouble in canola: Understanding the interaction between *Verticillium longisporum* and *Leptosphaeria maculans*. **Vidushika Madduma Bandara**, Wilfrid Laurier University. (Student Competition)

12:00 pm - 1:00 pm **Lunch and Poster Viewing**

AFTERNOON SESSION

Chair: Isabelle Aicklen, University of Guelph-Ridgetown

1:00 pm **Plenary Presentation 2**

Application drones, a new tool for modern pest management strategies
Dr. Michael Reinke, Viticulture Specialist, Michigan State University

1:40 pm Garlon XRT ~ Canada's first herbicide with drone application: Challenges and successes. **Angela Fawcett**, Corteva Agriscience (Invited Speaker)

2:10 pm **Presentation of Student Competition Award Winners & OPMC Closing Remarks:**
Kristy Grigg-McGuffin, OPMC Chair

2:15 pm - 2:30 pm **Refreshment Break and Poster Viewing**

BIOLOGICAL CONTROL SYMPOSIUM (co-hosted by OPMC & ESO)

Chair: Preetpal Singh, Vineland Research and Innovation Centre

2:30 pm **Opening remarks: Justin Renkema**, Agriculture and Agri-Food Canada

2:35 pm Too pretty for biocontrol? How ornamental growers in Ontario overcame pest management stereotypes. **Dr. Sarah Jandricic**, Ontario Ministry of Agriculture, Food and Agribusiness

3:05 pm Mitigating the challenges to greenhouse crop protection in Ontario: Past, present and future. **Dr. Rose Labbe**, Agriculture and Agri-Food Canada

3:35 pm Ebbs and flows of biological control in Canadian forests. **Dr. Sandy Smith**, University of Toronto

4:05 pm Heart of gold - Biological control of invasive plants in Canada. **Dr. Rob Bouchier**, University of Toronto / Agriculture and Agri-Food Canada

4:35 pm Reining in microbes: Can microbial biocontrol catch up with entomological biocontrol?
Dr. Andrew C. Wylie

5:05 pm **Closing remarks: Justin Renkema**, Agriculture and Agri-Food Canada

5:15 pm - 8:00 pm **SOCIAL MIXER (co-hosted by OPMC & ESO)**

POSTER PRESENTATIONS

** Students must be present at their poster during the morning and afternoon breaks.*

-Graduate Student Poster Presentations-

- GP1** Enhancing greenhouse crop resilience: Sustainable strategies for aphid control using integrated pest management. **Azimove Sulthana**, University of Windsor
- GP2** Rhizosphere microbiome responses to clubroot infection in canola. **McKenna Campbell**, University of Guelph
- GP3** Quantifying the effect of the herbivory-induced plant volatile, (Z)-3-hexenyl propanoate, on *Thrips parvispinus* host plant-seeking behaviours in Canadian greenhouse crops. **Avery Johnson**, University of Guelph / Agriculture and Agri-Food Canada
- GP4** Stemphylium leaf blight severity and onion yield in relation to nitrogen-fixing bacteria and nitrogen fertilization. **Domenic Blass**, University of Guelph
- GP5** Strawberry growing conditions and beneficial insects: The impact of low nighttime temperatures and LED lighting on aphid predators. **Karli Barton**, University of Guelph
- GP6** Canola verticillium stripe disease: Pathogenicity variations, co-existence with *Leptosphaeria maculans*, and transcriptome profile at adult plant stage. **Samantha Reis**, Wilfrid Laurier University
- GP7** Determining the preferred host plant for oviposition of three Canadian *Dicyphus* species and the adventive *Nesidicoris tenuis* (Hemiptera: Miridae). **Carly Demers**, University of Guelph / Agriculture and Agri-Food Canada

-Undergraduate Student Poster Presentations-

- UP1** Yellow sticks! Comparing spotted wing drosophila monitoring tools. **Matteo Girardo**, University of Guelph
- UP2** The habits and life cycle of *Herpetogramma thestealis* on American ginseng. **Amber Witley**, Ontario Ministry of Agriculture, Food and Agribusiness
- UP3** Evaluation of fungicides for *Alternaria* control on broccoli. **McKenzie Susil**, Ontario Ministry of Agriculture, Food and Agribusiness

-Regular Poster Presentations-

- RP1** Impact of cultural practices on hop diseases and yield. **Melanie Filotas**, Ontario Ministry of Agriculture, Food and Agribusiness
- RP2** Twenty years of Bt corn in Canada: Understanding adoption, compliance, and challenges from growers' surveys conducted by the Canadian Corn Pest Coalition. **Josée Kelly**, University of Guelph - Ridgetown
- RP3** Evidence for latent infections of American ginseng (*Panax quinquefolius* L.) by *Ilyonectria mors-panacis* under field conditions. **Amy Fang Shi**, Ontario Ginseng Growers Association

- RP4** Identification of native entomopathogenic nematodes from Ontario fruit tree orchards and their potential for pest management. **Ana Borrego-Benjumea**, Agriculture and Agri-Food Canada
- RP5** Box tree moth mating disruption in Canadian nurseries. **McKenzie Susil**, Ontario Ministry of Agriculture, Food and Agribusiness
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CropLife Student Competition Judging Panel

The OPMC wishes to thank the members of the judging panel for generously volunteering their time to help make this competition happen.

Oral Judges:

Hannah Fraser, Ontario Ministry of Agriculture, Food and Agribusiness
Katie Goldenhar, Ontario Ministry of Agriculture, Food and Agribusiness
John Purdy, Abacus Consulting Services
Lynn Van Maanen, University of Guelph

Poster Judges:

Travis Cranmer, Ontario Ministry of Agriculture, Food and Agribusiness
Sophie Krolkowski, Agriculture and Agri-Food Canada
Amanda Tracey, Ontario Ministry of Agriculture, Food and Agribusiness
Cheryl Trueman, Syngenta Canada

Post Conference Survey

Thank you for attending the 2025 OPMC. Please take a few minutes to complete a post-event survey. Your feedback is important in organizing future events. To complete the survey, visit <https://forms.gle/WjHSsaz2yJgCcvzR7> or scan the QR code

