



HORT MATTERS

OMAFRA Specialists in Horticulture and Specialty Crops.

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Irrigation Plot Tour 2009

Thursday, July 30—11:30 a.m.

Farm of Wayne Palichuk, Road 5, Leamington

A three-year project entitled “**Increasing water use efficiency and improved nutrient management for processing tomatoes**” is underway at Palichuk Farm, Leamington, Ontario. The project is being managed by McGill University’s Brace Centre for Water Resources Management in collaboration with Palichuk Farm, OMAFRA, Hortau, Plant Products and Agriculture and Agri-Food Canada. Funding for this 3-year project was received through the Environmental Sustainability component of OMAFRA's 2008 New Directions Research Program.

Join the research team and Wayne as they share the results from the first years of the project. Tour the plots, see equipment demonstrations and discuss current findings over a barbecue lunch. The tour will address key irrigation management questions:

- What factors should I consider to make informed irrigation scheduling decisions?
- How can I identify my field’s optimum soil moisture threshold for initiating and terminating irrigation?
- In what ways can technological innovations be applied to the agricultural sector to enhance yields?
- How can my local knowledge be complemented by an irrigation scheduling decision support system?
- How have wireless communications and the internet technologies empowered real-time irrigation scheduling systems?
- What are the economic benefits and cost savings potential from the adoption of such technologies?

For further information, please contact Apurva Gollamudi, (apurva.gollamudi@mcgill.ca), Brace Centre for Water Resources Management, McGill University.

To confirm your attendance call the Ridgeway OMAFRA Resource Center 519-674-1690.

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- **Pest Alert: Hairy Nightshade susceptible to potato late blight**
- **Best management practices to prevent bee poisoning in sweet corn fields**



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<http://www.ontario.ca/crops>

COMING EVENTS

August 18, **Simcoe Vegetable and Alternative Crop Open House**, 1:30 p.m., Simcoe Research Station. Please RSVP by Aug 14 to 519-426-7127, ext 323. For more info visit:

<http://www.omafra.gov.on.ca/english/crops/conferences/20090818.htm>

Triggs International Premium Vinifera Lecture Series:

Sept 2—Vineyard Visits/ Technical Workshops
Sept 3—Public Lecture

2009 Speaker: Mark Greenspan, manager and Viticulturist, Advanced Viticulture, LLC. For more information visit: www.brocku.ca/ccovi/

September 23, 24, **Handle with Care Symposium, Guelph Food Technology Centre, Guelph.** Connect with innovation and global experts in gentle processing. For more information about registration, contact Denise Horseman 519-821-1246 ext. 5068 or dhorseman@gftc.ca

Permit to Take Water Workshop—9:00 a.m. or 1:00 p.m., Simcoe OMAFRA office.

• October 15, November 19, December 17
For more information call 519-426-4920 or visit http://www.omafra.gov.on.ca/english/engineer/facts/pttw_course.htm

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To receive a fax version of Hort Matters, send your fax number to: OMAFRA, Vineland Resource Centre, Box 8000, 4890 Victoria Avenue N, Vineland Station, ON L0R 2E0 or fax to 905-562-5933.

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Suggestions?

We'd like to hear from you

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PEST ALERT!

Hairy Nightshade, a weed susceptible to potato late blight

Eugenia Banks, Potato Specialist

Late blight, caused by the fungus *Phytophthora infestans*, is a devastating disease of potatoes. If left uncontrolled under cool, wet weather, it can destroy a potato field in a few days. The primary hosts of the late blight fungus are potatoes and tomatoes, but hairy nightshade, a weed belonging to the same family as potatoes and tomatoes (Solanacea), is also infected by the late blight fungus.

Hairy nightshade is an annual weed that germinates in early summer. Mature plants are about 60 cm tall. The foliage is spreading and covered with fine hairs. Plants feel clammy or sticky when handled. The flowers are white with yellow centers and look like potato flowers, but are only one fourth the size. The seed balls that form look like the green seed balls that form on potatoes, but they are also smaller. Seed balls turn yellowish-brown to brown at maturity.

This season, hairy nightshade has been observed growing along the edges of many potato fields and in hedgerows across the province. Potato scouts should look for this weed and destroy it wherever they find it. Otherwise, hairy nightshade infected with late blight could serve as a source of inoculum all season.

The herbicide Chateau (Flumioxazin) controls hairy nightshade. The label also includes bare ground non-crop areas of farms where hairy nightshade may grow.



Hairy nightshade flower



Hairy nightshade seed balls



Hairy nightshade plant

Best Management Practices to Prevent Bee Poisoning in Sweet Corn Fields

Elaine Roddy, Vegetable Crops Specialist

It is important to protect bees when spraying insecticides. Honeybees, as well as other bees and insects, are important crop pollinators. Bees often visit sweet corn fields to collect water and pollen. This is especially common during dry weather conditions, when wild sources of pollen become less available.

Most organophosphate and carbamate insecticides are highly toxic to bees.

Wherever possible, avoid spraying sweet corn while the tassels are producing pollen. Optimal control of the European corn borer occurs when an insecticide is applied as the tassel emerges from the whorl. Late spray timing is a common cause of control failures. Monitor corn fields regularly for egg masses and pin-hole feeding. The economic control threshold is 5 percent of the plants with eggs or pin-hole feeding damage. Larvae must be controlled before they begin to bore into the leaf veins and stalks. Insecticide applications after boring has occurred will do little to control the population.

Be aware of any bee hives within a 2-3 km radius of any sweet corn fields, especially if neighbouring crops require bee pollination. Cucumber, melon and squash growers commonly use honey bee colonies as pollinators. A list of local beekeepers can be obtained by contacting the Provincial Apiarist at 1-888-466-2372.

Spraying after 7 pm when the bees are not foraging is a good management practice. This will give the spray residue ample time to dry before the bees enter the field the next day. If possible, choose a product or a formulation that is less hazardous to bees. Prevent drift. **Do not** apply pesticides on windy days.

Communication between sweet corn growers and beekeepers is vital to help prevent bee poisonings associated with sweet corn.

Bee Keepers should take the following steps to protect their bees:

- Register all hives and hive locations with the Provincial Apiarist.
- Be aware of the crops within the forage range of each colony. Determine if sweet corn or other crops dependant on insecticide treatments are being grown in the vicinity and notify neighbouring growers as to the location of the hives. Where hives are rented out for pollination purposes, ensure that neighbouring growers are aware of their presence.
- If a natural water source is not available, provide supplemental water to the colonies. This will discourage them from entering corn fields to collect water from the leaf axils. A shallow tub of water with floating sticks allows bees to land without drowning.



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www.ontario.ca/omafra