



# HORT MATTERS

OMAFRA Specialists in Horticulture and Specialty Crops.

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## White Mould in Carrots Jennifer Allen, Vegetable Crop Specialist

Albert Tenuta, Field Crops Plant Pathologist with OMAFRA recently reported the presence of white mould in soybeans. Unlike other diseases that have the same name but are caused by different organisms, white mould of soybeans is caused by the same fungus that causes white mould in carrots, *Sclerotinia sclerotiorum*.

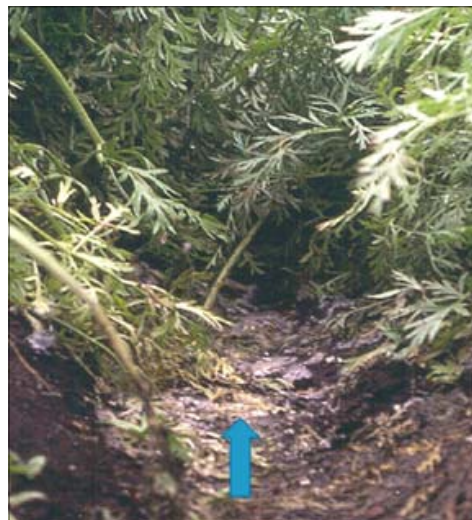
Conditions that favour white mould development include rain and moist soil conditions, cool temperatures (<29°C) and high relative humidity. Conditions exactly like we are experiencing in southern Ontario. *Sclerotinia sclerotiorum* can infect many field and horticulture crops including soybeans, carrots, dry beans, canola and cabbage (just to name a few).

Key management strategies include: crop rotation to non-host crops for 2-3 years in fields where white mould has been an issue; planting on raised beds and wider row spacing to encourage air movement among plants; weed control to reduce potential hosts; removal and destruction of infected plant material from the field; rapid cooling prior to storage; and sanitation of all storage components before the carrots are harvested.

While there are no products registered for control of white mould in the field, the emergency use registration of Scholar 50 WP as a post-harvest dip or drench will be a useful tool for the 2009 growing season (see full registration details on page 3 in Hort Matters, Issue 19, August 19, 2009). It is important to note that this registration is solely **for the use on domestic product only**. If you intend to export your carrots, this product can not be used.

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Mycelia growth on soil between rows (blue arrow)



Mycelia and sclerotia on carrots taken from storage (red arrow)

## OMAFRA STAFF working for you

### Horticulture Technology

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Hannah Fraser	Entomologist	905-562-1674
Kristen Callow	Weed Management	519-674-1335
Christoph Kessel	Nutrition	519-824-4120, x52480
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Wendy McFadden-Smith	Tender Fruit & Grape IPM Spec.	905-562-3833
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Jennifer Allen	Vegetable Crop Specialist	519-826-4963

### Greenhouse, Agroforestry & Specialty Crops

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Melanie Filotas	Specialty Crops IPM Specialist	519-426-4434
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<http://www.ontario.ca/crops>

## COMING EVENTS

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](mailto: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](http://www.omafra.gov.on.ca/english/engineer/facts/pttw_course.htm)

September 12, **Centennial Open House, Greenhouse and Processing Crops Research Centre, Harrow, 10:00 a.m.—4:00 p.m.** For more information call 519-738-1219

September 16, **Ontario Berry Growers' Association season wrap-up and farm tour, Whittamores Farm, Markham.** Contact Kevin Schooley, [kconsult@allstream.net](mailto:kconsult@allstream.net), 613-238-4587

October 15, **Raspberry and Blackberry High Tunnel Open House, Cornell University, East Ithaca farm, 1 to 4 p.m.** For more information contact Cathy Heidenreich at 315-787-2367 or [mcm4@cornell.edu](mailto:mcm4@cornell.edu)

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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.

### Edited by:

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### Prepared by:

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## Suggestions?

We'd like to hear from you

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## Ontario tomato producers receive urgently needed emergency use registration for LATE BLIGHT

J. Chaput, Minor Use Coordinator

The Pest Management Regulatory Agency (PMRA) recently announced the approval of an emergency use registration for **CONFINE Fungicide** (potassium salts of phosphorous acid) for suppression of **late blight on field tomatoes** in Ontario. Confine Fungicide was already labeled in Canada for control of this disease as a post-harvest use on potatoes. Because of the severe late blight outbreak in eastern North America combined with a low supply of registered late blight fungicides an emergency use for the in-field, foliar use of CONFINE was submitted by OMAFRA and the Ontario Processing Vegetable Growers (OPVG).

Ontario tomato producers have continued to identify late blight as a top disease priority for several years. Although there are a number of registered late blight fungicides, the supplies of the key late blight control materials were used up very quickly in 2009. Canadian field tomato producers do not have access to as many products to manage this devastating disease including products like Confine Fungicide. This represents a significant area of concern in the current pest control product technology gap as identified by the North American Free Trade Agreement (NAFTA) technical working group on pesticides.

Without access to Confine Fungicide, the Ontario tomato industry faced the risk of very serious losses to late blight in 2009 and in fact the risk of serious losses remains critical.

The emergency use registration of Confine Fungicide will help in the interim to manage the current late blight outbreak; however management of late blight requires a comprehensive IPM and resistance management program with access to all available tools and strategies. The following is provided as general information only. Users should consult the complete label before using Confine Fungicide.

Confine Fungicide can be used for suppression of late blight on field tomatoes in Ontario until October 31, 2009 only. Confine can be applied at a rate of 5.8 – 11.7 L product per hectare in a minimum of 100 L water per hectare. A maximum of two (2) applications per year can be made and a 1 day pre-harvest interval is permitted. Do not apply at less than 3 day intervals.

Follow all other precautions and directions for use on the Confine Fungicide label carefully.

Confine Fungicide should be used in an IPM program and in rotation with other management strategies to adequately manage resistance.

We wish to thank Janice LeBoeuf, OMAFRA, Ridgetown and the OPVG for helping to prepare the submission and the rationale documents on behalf of Ontario tomato producers. We also wish to thank the **Ontario Ministry of the Environment**, Winfield Solutions LLC and **Agronomy Company of Canada** for their support of this registration and the personnel of the **Pest Management Regulatory Agency** for evaluating and approving this important pest management tool.

For copies of the emergency use label contact Janice LeBoeuf, OMAFRA Vegetable Crop Specialist at Ridgetown (519) 674-1699, Jim Chaput, OMAFRA, Guelph (519) 826-3539 or contact Agronomy Company of Canada (519) 461-9057.

### Late blight situation in Ontario

Late blight has been spreading in tomatoes in Southern Ontario. Growers should include targeted late blight fungicides in their spray program (Tanos 50 DF, Revus, Confine) as disease risk is high. During wet cool periods, a fungicide should be applied every 5 - 7 days to protect against late blight. The disease is present throughout the area, so all fields are at risk.

See the July 27, 28, and 29 Vegetable Crop Updates (Tomato & Pepper) for more information on managing late blight. They can be found online at <http://www.omafra.gov.on.ca/english/crops/updates/vegetable/index.html>.

# Eastern Canada potato producers receive urgently needed Emergency Use Registration for LATE BLIGHT

J. Chaput, Minor Use Coordinator

The Pest Management Regulatory Agency (PMRA) recently announced the approval of an emergency use registration for **CONFINE Fungicide** (potassium salts of phosphorous acid) for suppression of **late blight and pink rot on potatoes** in Ontario, Quebec, Nova Scotia, New Brunswick and Prince Edward Island. Confine Fungicide was already labeled in Canada for control of these diseases as a post-harvest use on potatoes. Because of the severe late blight outbreak in eastern North America combined with a low supply of registered potato late blight fungicides an emergency use for the in-field, foliar use of CONFINE was submitted by several provinces.

Canadian potato producers have continued to identify late blight as a top disease priority for several years. Although there are a number of registered late blight fungicides, the supplies of the key late blight control materials were used up very quickly in 2009. Canadian potato producers do not have access to as many products to manage this devastating disease including products like Confine Fungicide. This represents a significant area of concern in the current pest control product technology gap as identified by the North American Free Trade Agreement (NAFTA) technical working group on pesticides.

Without access to Confine Fungicide, the Ontario and Eastern Canadian potato industry faced the risk of very serious losses to late blight in 2009 and in fact the risk of serious losses remains critical.

The emergency use registration of Confine Fungicide will help in the interim to manage the current late blight outbreak; however management of late blight requires a comprehensive IPM and resistance management program with access to all available tools and strategies. The following is provided as general information only. Users should consult the complete label before using Confine Fungicide.

Confine Fungicide can be used for suppression of late blight and pink rot in Ontario, Quebec, New Brunswick, Nova Scotia and PEI until December 31, 2009 only. Confine can be applied at a rate of 5.8 – 11.7 L product per hectare in a minimum of 100 L water per hectare. A maximum of two (2) applications per year can be made and a 1 day pre-harvest interval is permitted.

Follow all other precautions and directions for use on the Confine Fungicide label carefully.

Confine Fungicide should be used in an IPM program and in rotation with other management strategies to adequately manage resistance.

We wish to thank Shauna Mellish, PEI Dept. of Agriculture, personnel of the respective provincial Ministries of Agriculture, Dr. Eugenia Banks and the Ontario Potato Board for helping to prepare the submission and the rationale documents on behalf of Eastern Canadian potato producers. We also wish to thank the respective provincial **Ministries of the Environment**, Winfield Solutions LLC and **Agronomy Company of Canada** for their support of this registration and the personnel of the **Pest Management Regulatory Agency** for evaluating and approving this important pest management tool.

For copies of the emergency use label contact Eugenia Banks, OMAFRA Potato specialist at Guelph (519) 826-3678, Jim Chaput, OMAFRA, Guelph (519) 826-3539 or contact Agronomy Company of Canada (519) 461-9057.

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