



# HORT MATTERS

OMAFRA Specialists in Horticulture and Specialty Crops.

VOLUME NO. 11, ISSUE NO. 28

NOVEMBER 2, 2011

## Managing apple scab this fall

Margaret Appleby, IPM Systems Specialist



As the harvest wraps up apple scab is not something you normally think about, but there is an opportunity to manage this disease now.

Research has shown that reducing overwintering apple scab inoculum in orchards by 90% will reduce the number of apple scab lesions by 90% the next year. Many have asked what can be done to reduce this source of apple scab. Do fungicides, microbial agents or burning the leaves work? Research has found that there are several methods to reduce inoculum in orchards.

The first method is to apply urea to the orchard floor: Apply 45 kg of agricultural urea per 1000 L of water/ha to the orchard floor after 95% leaf drop (November) or in the spring (April) before bud break to reduce the number of ascospores. The urea works in two ways: it directly inhibits the development of ascospores, and it stimulates the growth of naturally occurring organisms that are antagonistic against the scab fungus. In most years, the spring treatment is more effective and results in fewer leaf and fruit infections; unless, snow cover remains until bud break, reducing the time for the urea to work, and reducing the effectiveness of the treatment. Keep this application of urea in mind when calculating your nitrogen budget. In orchards requiring lower rates of nitrogen, a fall application may be preferred, to reduce the impact of the nitrogen. Research has determined that the fall application of urea does not have a negative impact on winter hardiness or on fruitfulness for subsequent years.

The second method is to shred overwintering leaves: Rake or blow leaves from under trees and shred them using a flail mower to encourage leaf decay. Spring mowing may also re-orient the leaves to prevent the fungus from effectively discharging spores.

Cutting up the leaves will also reduce spotted tentiform leafminer pupae that overwinter in the leaves.

Spending some time before next year's scab season can help tremendously to keep apple scab to a minimum.



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

## COMING EVENTS

Nov. 22-23, **Essex County Associated Growers Convention**, Leamington, ON. For more information visit: <http://bountyofthecounty.ca/>

Dec. 6-8, **Great Lakes Fruit, Vegetable and Farm Market Expo**, Grand Rapids, MI. For more information visit [www.glexpo.com](http://www.glexpo.com) or contact Roger Brook, at 517-281-9370 [brookr@glexpo.com](mailto:brookr@glexpo.com)

Jan. 8-22, 2012, **International Fruit Tree Association** Santiago, Chile. For more information visit <http://ifruittree.org/>

Jan. 9-11, **Ontario Fruit & Vegetable Growers Association Convention**, Niagara Falls. For more information visit [www.ofvga.org](http://www.ofvga.org) or contact Deanna Hutton 519-763-6160-ext 116

January 9, **Ontario Apple Growers Annual Meeting**, Niagara Falls. For more information visit [www.onapples.ca](http://www.onapples.ca) or contact Kelly Ciceran 905-688-0990

Jan. 16-18, **Ohio Produce Growers & Marketers Congress**, Sandusky, OH. For more information visit [www.ohiofruit.org](http://www.ohiofruit.org) or contact [opgma@ofa.org](mailto:opgma@ofa.org), 614-487-1117

Jan. 26-29, **Guelph Organic Conference**, Guelph, ON. Visit [www.guelphorganicconf.ca](http://www.guelphorganicconf.ca) or contact [organix@georgian.net](mailto:organix@georgian.net) or (705) 444-0923

Feb 10-16, **N.A.Farm Direct Marketing Conference**, Williamsburg, VA Visit [www.nafdma.com](http://www.nafdma.com) or contact Charlie Touchette 413-529-0386 for more info.

February 22, 23, 2012, **Ontario Fruit & Vegetable Convention, Niagara Falls** Visit <http://www.ofvc.ca> or contact Glenna Carnie 905-688-0990 for more info.

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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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# Spotted wing drosophila (SWD) update for Ontario growers

Pam Fisher, Hannah Fraser, Denise Beaton, OMAFRA

In recent weeks, spotted wing drosophila (SWD) populations have increased throughout Ontario. In late September, SWD was found at 8 new locations, including the first detections east of Toronto. As of October 12, 2011, SWD has been found at 27 agricultural sites in total, representing approximately 50% of currently monitored sites. SWD has been found in traps near peaches, apricots, raspberries, day-neutral strawberries, blueberries, grapes and blackberries. At a few sites where SWD has been present since early August, trap catches have increased dramatically in late September.

We have collected fruit from some unsprayed sites and reared SWD flies from this fruit, indicating that this pest does indeed infest fruit in Ontario. Fortunately, there have been no reports of problems with infested fruit on a commercial scale.

Harvesting is now complete in most fruit crops in Ontario; however, growers with fall fruiting raspberries, especially raspberries in high tunnels, should be on the lookout for a late season build-up of this pest.

**Why is SWD a problem?** SWD are like other vinegar flies; they lay eggs in fruit, where larvae develop and pupate. The difference is that normal vinegar flies, like the annoying ones you find in your fruit basket in late summer, are attracted to OVERRIPE or DAMAGED fruit, that is about to spoil anyway. By the time the larvae develop, the fruit is usually spoiled or mouldy. SWD is different in that it lays eggs in fruit that is RIPENING, or NEARLY MATURE. This means that SWD eggs or larvae may be present in fruit when it is harvested. Infested fruit breaks down very quickly, and is especially leaky, reducing the expected shelf life substantially. Consumers are likely to notice infested fruit because the larvae will try to escape from the fruit as it is cooked or frozen.

**What crops are most affected?** Information from other regions suggests blackberries and raspberries are preferred hosts, followed by blueberries, strawberries and other soft-skinned fruit. Tender fruit, such as apricots, peaches, plums, and possibly tomatoes and some types of grapes are also potential hosts for this invasive pest.

**Will SWD overwinter in Ontario?** We expect a small percentage of SWD adults will overwinter in southern Ontario in most years. We expect they will overwinter in sheltered locations, such as around building foundations and wild hosts. We don't know how quickly populations will build up each year. Also, we have more to learn about alternative and wild hosts for SWD in the spring and early summer. We expect that wild raspberries, wild blackberries and possibly other wild fruit such as elderberries will provide reservoirs for this pest.

**What can I do to prepare for next year?** Learn as much as you can about the pest. Think about how you can manage field culls and unharvested fruit to reduce build up during harvest. Investigate options for custom spray application during harvest. Plan to attend some meetings where you can learn about experience in other regions. For example, Dr. Rufus Isaacs from Michigan State University will be speaking about this pest at the Ontario Berry Growers Association Annual Meeting in February.

**Is there any good news?** We are learning a lot about SWD from our colleagues in British Columbia, the Pacific Northwest, Michigan and Florida. The Ontario Berry Growers Association has secured some funding for us to expand our monitoring project next year. We will continue to monitor for this pest and provide the latest news and information in 2012. The other good news is that SWD is manageable. An effective IPM program will include monitoring, sanitation and pesticides applied when necessary.

**More information:** Do you have questions about SWD? More information is posted at the following sites:

- Identification of SWD: <http://www.omafra.gov.on.ca/english/crops/facts/pest-alert-swd.htm#id>
- Monitoring program and weekly trap catches for Ontario: <http://www.omafra.gov.on.ca/english/crops/facts/swd-catches.htm>
- Management of SWD in Ontario: <http://www.omafra.gov.on.ca/english/crops/facts/swd-management.htm>
- Registered products for SWD in Ontario 2011: <http://www.omafra.gov.on.ca/english/crops/facts/swd-registrations.htm>
- Links to more information about SWD: <http://www.omafra.gov.on.ca/english/crops/facts/swd-links.htm>

**Still didn't find the info you are looking for?** Send us your question and OMAFRA's SWD team will do their best to address it. [pam.fisher@ontario.ca](mailto:pam.fisher@ontario.ca), or [hannah.fraser@ontario.ca](mailto:hannah.fraser@ontario.ca)

## Sweet potato chilling injury

Melanie Filotas, Specialty Crops IPM Specialist

It's fall, temperatures are dropping and Ontario's sweet potato harvest is underway. At this time of year, growers are often concerned about the potential impact of heavy frosts on roots still in the ground. However, it is important to remember that temperatures above freezing can also negatively affect sweet potatoes.

Sweet potatoes are highly susceptible to chilling injury, which can be defined as damage to fruits and vegetables when exposed to temperatures above their freezing point but below some minimum temperature. In the case of sweet potatoes, that's below 10-12°C. Chilling injury is relatively common in plants originating from tropical or subtropical regions, but the effects differ from that of freeze damage. When plants are frozen, damage is due to ice crystals forming in the tissues and is immediately obvious. With chilling injury, exposure to low temperatures can damage cell membranes or affect the normal metabolism of plant tissues, resulting in a cascade of other reactions. Unlike freezing damage, chilling injury is not always immediately visible. A sweet potato root with chilling injury may appear fine when dug, but may decay quickly during curing. In other cases, symptoms of chilling injury may not even become evident until several weeks after roots are placed into storage.

Symptoms of chilling injury in sweet potatoes can be hard to diagnose, but can include surface pitting, loss of dry matter, internal breakdown, discolouration or changes to the texture and taste of the root. Chilling greatly increases susceptibility of roots to decay organisms, leading to higher incidences of storage rots. Chilling can also lead to hardcore, in which areas of the root remain hard even after cooking.

Chilling injury is more commonly observed post harvest, if storage temperatures become too low, but can be a problem in the field later in the harvest season. Remember that it is the soil temperatures around the root, rather than the ambient air temperature, that is important, so it is a good idea to monitor soil temperatures directly when determining if there is potential for chilling injury to roots. In southwestern Ontario, the risk of injury from exposure to chilling temperatures increases greatly as we move from late September into October.

Chilling injury is a function of both the temperature and the length of exposure, so one or two hours at 4°C may cause the same amount of damage as several hours at 8°C. The effects are also cumulative – one brief period of exposure to soil temperatures below 10°C may not result in any damage, while several days where soil temperatures dip below 10°C for short periods could cause extensive injury.

All of these factors combine to make avoiding chilling injury a challenge. Monitor soil temperatures frequently, preferably early in the morning when they are likely to be lowest, and try to finish harvest before soil temperatures are consistently dropping below 10°C. If you are forced to harvest later in the season, consider separating these roots from earlier harvested roots, as these will be more likely to develop fungal rots in storage. Ensure harvested roots are moved out of the field as quickly as possible if air temperatures during harvesting operations are dropping below 12°C.

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## Dirty money!

Don Blakely, On-Farm Food Safety Specialist, OMAFRA

When we think of dirty money we conjure up thoughts of ill-begotten dollars through illegal activities such as the drug trade or fraudulent activities. When it comes to food safety, dirty money is pathogen, fecal covered coins and bills. Just think of the number of hands money comes in contact with, which may or may not be clean. Plus money never gets washed so that contamination stays around for a long time. It is refreshing to go into a sub shop and watch your order prepared by staff with gloves on which are then removed when they take your cash payment. The same cannot be said about stopping at a farmer's roadside produce stand and watching an attendant handle your purchase with dirty hands, collect your cash then proceed to serve the next customer without any attention to washing their hands. If you have a roadside stand or sell at a farmer's market you can increase your customer's confidence in food safety by keeping your hands clean by washing them if running water and soap are readily available, using plastic gloves to handle produce then removing to handle cash or keeping a ready supply of disinfectant wipes and hand gel available which are used after handling cash. The Canadian Government will soon be introducing new plastic bills, which in addition to being difficult to counterfeit could be laundered to clean them. Maybe then we can look forward to cleaner money but for now we are stuck with dirty money!

**Minor use label expansion granted for Scholar® 230SC fungicide for control of post-harvest rhizopus rot on sweet potatoes in Canada**

The Pest Management Regulatory Agency (PMRA) recently approved a minor use label expansion for **SCHOLAR 230SC (fludioxonil)** fungicide for control of rhizopus rot (*Rhizopus stolonifer*) on sweet potatoes in Canada. Scholar 230SC was already labeled in Canada for control of post-harvest diseases on pome fruit, stone fruit and carrots.

Rhizopus rot is a serious post-harvest disease of sweet potatoes and many other crops around the world. This minor use submission was sponsored by the minor use office of OMAFRA in response to minor use priorities identified by sweet potato producers.

The minor use registration of Scholar 230SC Fungicide will help to manage rhizopus rot on stored sweet potatoes, however management of rhizopus rot still 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 Scholar 230SC.

Scholar 230SC Fungicide can be used for control of rhizopus rot on sweet potatoes post-harvest using one of two methods.

**Post-harvest drench/dip:**

Mix 473 mL of Scholar 230SC in 378 L water, wax/emulsion or aqueous dilution of wax/oil emulsion. Dip sweet potatoes for approximately 30 seconds and allow to drain. After each 18,750 kg (750 bushels of cured sweet potatoes) is treated, drain and flush the tank. Refill with fresh dip suspension. Maximum one application.

**In-line aqueous or tuber coating spray:**

Mix 473 mL of Scholar 230SC in 378 L water, wax/emulsion or aqueous dilution of wax/oil emulsion (300 ppm). Use T-jet, CDA or similar application. Maximum one application.

Treated sweet potatoes should not be stored in direct sunlight.

Follow all other precautions and directions for use on the Scholar 230SC Fungicide label carefully.

Scholar 230SC Fungicide should be used in an IPM program and in rotation with other management strategies to adequately manage resistance.

For copies of the new minor use label contact Melanie Filotas, OMAFRA Specialty Crops IPM specialist at Simcoe (519) 426-4434, Jim Chaput, OMAFRA, Guelph (519) 826-3539 or visit Syngenta Crop Protection Canada at [www.syngenta.ca](http://www.syngenta.ca)

**Minor use label expansion granted for Compass™ fungicide for control of additional diseases on greenhouse and outdoor ornamentals and tar spot of maple trees**

The Pest Management Regulatory Agency (PMRA) has recently approved a minor use label expansion for **COMPASS™ 50WG** fungicide (trifloxystrobin) for control and/or suppression of additional diseases on greenhouse and outdoor ornamentals and tar spot of ornamental maple trees. Compass fungicide was already labeled for use on turf and some ornamentals and has a proven record of efficacy and safety.

These minor use submissions were sponsored by Flowers Canada (for additional diseases of greenhouse and outdoor ornamentals) and Agriculture and Agri-Food Canada, Pest Management Centre (for tar spot) in 2008 in response to minor use priorities identified by ornamental producers in Canada.

Disease management has been a high priority for both greenhouse and outdoor ornamental producers for many years and the label expansion registration of Compass fungicide will provide producers with an effective and useful disease management and resistance management tool.

The following is provided as a general outline only. Users should consult the complete label for specific crop and disease recommendations before using Compass fungicide.

**Greenhouse & Outdoor Ornamentals:**

Compass fungicide can now be used to control or suppress a number of additional diseases including powdery mildew on beebalm, phlox, zinnia, azalea, Rosaceae and gerbera; rust on Malvaceae family (hollyhock); Botrytis blight

and gray mold on geranium, hosta and poinsettia and blackspot on roses. Rates vary from 7.5 – 30 grams product per 100 L and 3 – 4 applications with a 7 – 14 day interval. Consult the new label for details.

### **Ornamental Maple Trees:**

Compass fungicide can be used to suppress tar spot of ornamental maple trees at a rate of 14 – 21 grams product per 100 L. Apply as a foliar spray before disease is detected or when conditions are favourable for disease development. Consult the new label for details.

Compass™ fungicide should be used in an integrated disease management program and in rotation with other management strategies. Follow all other precautions and directions for use on the Compass fungicide label.

We wish to thank the personnel of **Bayer** Environmental Science Inc. for their support of these registrations and the personnel of the **Pest Management** Regulatory Agency for evaluating and approving this important pest management tool.

For copies of the new minor use label contact Cary Gates, Flowers Canada, Guelph (519) 836-5495 ext. 228, Graeme Murphy, OMAFRA, Vineland (905) 562-4141 ext. 106 [GH ornamentals], Jennifer Llewellyn, OMAFRA, Guelph (519) 824-4120 ext. 52671 [outdoor ornamentals] or visit [www.bayeres.ca](http://www.bayeres.ca)

## **New OMAFRA staff**

### **Welcome (back) to Helen Fisher**

Dr. K Helen Fisher has joined OMAFRA's Agriculture Development Branch as Tender Fruit and Grape Specialist in Vineland. She will be working with tender fruit and grape growers, researchers and industry to provide them with information and best management practices for these Ontario crops.

Many will remember Helen as the Fruit Crop Specialist at Harrow in the early 1970's, working with orchardists and the fledging grape industry at the time. Helen received her MSc from the University of Guelph and her PhD from Cornell. She joined the Horticultural Research Institute of Ontario (HRIO) at Vineland in 1978 and has had a long and distinguished career as a plant physiologist and grape breeder. With the transition of HRIO to the University of Guelph Helen assumed teaching responsibilities in addition to her research activities. She has also taught at Brock University and Niagara College.

Helen is widely known and highly respected in the Niagara region, across Ontario and internationally. She is located at the ministry office in Vineland and may be contacted at 905-562-1639 or [helen.fisher@ontario.ca](mailto:helen.fisher@ontario.ca).

### **Welcome new Pome Fruit IPM Specialist**

Kristy Grigg-McGuffin has been appointed as acting Pome Fruit IPM Specialist for OMAFRA in Simcoe, who is replacing Kathryn Carter presently on leave.

Kristy will be working with apple growers, researchers and industry to provide them with information on managing insects and diseases in Ontario orchards. Her research will involve the following projects:

1. National apple scab and powdery mildew resistance survey
2. Management of apple leaf curling midge and San Jose scale
3. GF-120 in conventional orchards for apple maggot control
4. Status of brown marmorated stink bug in Ontario orchards, and
5. Insecticide resistance testing of codling moth and mites.

Kristy received her MSc in Environmental Biology and Toxicology from University of Guelph, where she studied the susceptibility of codling moth in southwestern Ontario apple orchards to currently recommended insecticides. Prior to her MSc, Kristy worked with OMAFRA in 2008 as the acting vegetable crop specialist for cole crops, root, bulb and leafy vegetables.

### **New OMAFRA Nutrient Management Horticulture Crops Program Lead**

Deanna Nemeth recently joined the ministry as the Horticulture Technology Unit's Nutrient Management Horticulture Crops Program Lead.

Deanna holds a Dip. (Horticulture Production) from Olds College, Alberta, and a B. Sc. (Agriculture Honours) and a M.Sc. (Soil Ecology and Climate Change) from the University of Guelph. Deanna has previously worked as a Special Project Coordinator with the Ontario Soil and Crop Improvement Association. Deanna is pleased to work with of the horticulture industry and will be working out of the OMAFRA Vineland Resource Centre.

## Bitter rot of apples

Michael Celetti, Plant Pathologist - Horticulture Crops Program Lead

The hot weather during the summer of 2011 may have resulted in the development of diseases of apples that are more common in the Southern regions of North America than in the temperate regions such as Ontario. Recently I was brought samples of Macintosh fruit that had developed an uncommon rot. Close inspection of the spores and development of the rot under the microscope confirmed that the rot was caused by the fungus *Colletotrichum gloeosporioides*. Several *Colletotrichum* spp. can infect apples and cause the disease known as Bitter Rot (Figure 1). This disease is more common in the hot regions of the Southern US where it can cause significant damage to fruit if not kept under control.



Figure 1. Sunken lesions on Macintosh apples caused by the Bitter Rot fungus *Colletotrichum gloeosporioides*.

The Bitter rot pathogen can be found almost anywhere apples are grown in the world. It can also cause diseases in strawberries, pears, peaches, grapes and a few other fruits and vegetables under the right conditions. In apples, the pathogen can cause cankers on limbs and leaf spots but these are very rare. The fungus over-winters in infected mummified fruit left in trees from chemical thinning or that had dropped to the orchard floor. It has also been found to over-winter in cracks and crevasses in bark or in cankers caused by the pathogen itself or other pathogens. Spores are disseminated by rain splashing almost all season long. Although fruit can become infected anytime during the growing season starting at petal fall, most severe infections occur between midseason and harvest. Early infections appear as tiny grey or brown spots that do not enlarge until much later in the summer when the fruit begins to mature. Later infections appear as small circular sunken brown spots that become larger as the season progresses. The optimum conditions for infection and rot development include wet, humid weather during temperatures around 26°C. The spores require free water to germinate and can infect through the skin of the apple directly or through a wound. A red halo may develop around the small circular spots particularly on yellow skin varieties. When lesions become about 25 mm (1 inch) in diameter, pin head size black fruiting bodies often arranged in concentric rings may appear in the center giving the lesion a “target spot” appearance. During wet or extreme humid conditions, masses of orange, pink to salmon coloured spores are produced on the surface of the lesions (Figure 2). Epidemics of this disease occur when warm to hot weather occurs early in the growing season together with rainy periods that extend into the later part of the season. As the fruit lesions enlarge, a diagnostic V-shaped rot progresses towards the core (Figure 3). Bitter rot is often more severe on early than late maturing varieties and can show up in the orchard or in storage.



Figure 2. Orange, pink to salmon coloured spores are produced on the surface of the sunken Bitter rot lesions.



Figure 3. Bitter rot lesions develop a diagnostic V-shaped rot that progresses towards the core.

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Other common fruit rots such as White rot caused by *Botryosphaeria dothidia* and black rot caused by *B. obtusa* do not cause sunken lesions with orange, pink to salmon coloured spore masses and do not develop a V-shaped rot towards the core which distinguishes them from Bitter rot. Blue mold caused by *Penicillium expansum* and Grey mold caused by *Botrytis cinerea* are common post harvest storage rots that develop in wounds and do not usually cause sunken lesions and produce either bluish or grey spore masses.

Most apple cultivars are susceptible to Bitter rot however; Empire, Freedom, Golden Delicious, Fuji, and Granny Smith are particularly susceptible. Management of Bitter rot is through good orchard sanitation. Removing old cankers of other disease such as Fire blight and Black rot cankers as well as mummified fruit left in the trees from chemical thinning will remove the primary inoculum from the orchards. Mulching or removing fruit on the orchard floor will also reduce inoculum and the potential of infection. Some fungicides registered for the management of apple scab and summer diseases may provide some protection against infection from the Bitter rot fungus if used later in the season.

## The apple file

Leslie Huffman, Apple Specialist

### Apple Harvest – Enough Rain for You?

Whew! Most growers are finishing up apple harvest and no one can remember slogging through as much rain and mud as this year. There was lots of mud in 1992, but likely not this bad. Fortunately, many growers report large fruit size and better yields than expected. Some crop was downgraded due to scab, and a bit of russeting, but not as bad as expected.

Fruit quality seems quite good, with good flavour and firmness, and hopefully few storage issues. Those really hot days in July and August were hard on farmers and workers, but the trees took advantage and made sugars and filled cells.

Take a good look at the health of your trees, your soil and your crop to observe and think about what season-long water can do for apple growers. As long as drainage was adequate, tree growth and health in general is very good (hopefully with good fruit buds for next year). Many growers harvested more crop than expected, but many have work to do to repair ruts and improve drainage. I've been wondering about the role of irrigation in achieving high yields, and perhaps we should be targeting irrigation earlier in the year. Many apple growers (and researchers) don't think irrigation is necessary, but as we move to more intensive orchards, higher costs and the drive for higher yields, maybe it's time to reconsider the need for irrigation. Love to hear your thoughts!

### Is the Spray Season Done? Not Yet!

How many hours did you or your workers spend on a sprayer this year? Lots, but not quite done yet – there are few sprayer jobs that need to be taken care of before winterizing your sprayer.

First is to apply urea to either the leaves still on the trees (within a week of leaf fall) or to the leaf litter under the trees. Apply 45 kg of agricultural urea per 1000 L of water/ha after about 95% leaf drop (November) or in the spring (April) before bud break to reduce the number of ascospores. The urea works in two ways: it directly inhibits the development of ascospores, and it stimulates the growth of naturally occurring organisms that are antagonistic against *V. inaequalis*.

If you are installing trellis or stakes, either in a new orchard, or to repair wind damage, a water lance powered by the sprayers may be useful as an efficient way to get this task done. Since soils are generally saturated, it will be important to do this with as little water as possible. Some growers are pounding stakes, but this is less safe and may compromise the integrity of the stakes.

If the weather remains mild, November may be a good time to apply 2,4-D or Lontrel to control perennial weeds like dandelions or thistles. These can be applied after useable fruit is removed from the orchard ie. Juice apples, and can be very effective. Although glyphosate can still be very effective on weeds this time of year, it is too dangerous for your tree's health, and not recommended at this time.

### Fall Clean-up – Important for Rodent and Deer Control

Orchard sod has been really happy for rains all summer, and is continuing to grow. After harvest is done and what juice apples worth picking up is done, it is very important that orchard grass is mowed short. In some cases, this may take two passes. This will expose rodent populations to natural predators, including migrating birds (raptors), and discourage them from setting up housekeeping in your orchard.

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This mowing will also encourage drops or rotten fruit to completely break down. This is important to shred dropped apples so they are less inviting to browsing deer. In recent winters, deer have been quite attracted to new orchards, and can do a great deal of damage to small trees. Deer are especially attracted to Honeycrisp trees, and will browse on them in preference to other cultivars. So for those with Honeycrisp plantings, a more intensive deer management program may be needed, including repellents, inviting hunters in season, and possibly deer fencing.

### **Records – Are Yours Adequate?**

Congratulations to the many growers who completed a food safety audit this harvest season. For many it was the first time, with much preparation required, but it does become part of your daily management task. For many it was the first year to run a mock recall scenario. This experience likely highlighted whether your records are adequate to allow access to the information that others might require.

No one likes doing paperwork, well, mostly no one except maybe those in accounting or other such careers. But generally growers do not like paperwork. But hopefully you can see the benefits of keeping records that can provide the information you need.

Make sure that your record system provides you the information you need to make good management decisions. Can you tell which blocks produce the most yields, and which cost the most to produce? Good records should help pinpoint blocks that are no longer profitable and should be removed. If you have to keep records for others, be sure to also make them work for you.

### **Invasive Insect Survey – SWD and BMSB**

OMAFRA has been monitoring for these two new invasive insects across Ontario, including sites in Essex and Kent counties. For apples, we were most concerned about the brown marmorated stink bug, especially after the control challenges experienced in Pennsylvania and Maryland. Fortunately, we did not trap any BMSB in the field this year though two specimens were found in the Hamilton area.

Spotted wing drosophila (SWD), however, was a different case. We were trapping at 6 farms in Essex and 4 in Kent all summer and added a few sites this fall. The first catch on an Ontario farm was in early August, but starting in late August through to October, trap catches increased each week, including postharvest in many fields. All sites in Essex and Kent reported trap catches.

Although there were no reports of crop loss, this level of pest activity will require close monitoring next season, especially in berries, tender fruit and possibly grapes. Luckily SWD is not usually a pest in apples. We will have more information at the Fruit Session at the Essex County Association Growers convention on Wed. November 23.

Follow new information and status updates for these two pests:

- [www.omafra.gov.on.ca/english/crops/insects/drosophila.html](http://www.omafra.gov.on.ca/english/crops/insects/drosophila.html)
- [www.omafra.gov.on.ca/english/crops/insects/bmsb-resources.html](http://www.omafra.gov.on.ca/english/crops/insects/bmsb-resources.html)



### **Did you know...**

**15.5% of all Ontarians have a disability?  
That's roughly 1 in 7 Ontarians.**

As part of the Accessibility for Ontarians with Disabilities Act (AODA), the Accessibility Standard for Customer Service came into effect in 2008. Private and non-profit organizations will be required to comply with the standard by January 1, 2012.

Find out more at: [ontario.ca/accessON](http://ontario.ca/accessON)



**NEW - Online Food Safety Workshops—Register Today!**

Reduce your risk of food contamination and expand your customer base by putting in place a food safety program. OMAFRA is here to help you keep up to date on the latest food safety practices! Join these online workshops from the comfort of your home or business. All you need is an internet and phone connection.

- **Hygiene and Sanitation** – November 25, 10:30 am -12:00 noon. Learn how to implement a worker hygiene program and a building and equipment sanitation program, with good agricultural practices that you can customize for your farm operation.
- **Pre and Post Harvest Water Use** – February 14, 10:30 am – 12:00 noon. A pre and post harvest water use program is an important step in reducing risks of produce contamination. Evaluate your risks and learn how to construct and monitor a water sanitizing program.

Register today! Call 1-877-424-1300 or register online at <http://omafra.webex.com> .

**UNIVERSITY  
of GUELPH**  
RIDGETOWN CAMPUS



## **Cover Crop Open House**

*For commercial growers and agribusinesses*

**Wednesday, 9<sup>th</sup> November 2011**

**Near Chatham and Ridgetown, Ontario**

### **Two locations – Different things to see at both sites:**

- **9:30 a.m.** at OSCIA demonstration site – 400m west of 911# **10708 Northwood Rd.** between the Mull and Harwich Roads –Look for solar panel.
- **11:00 a.m.** across the road of 911# **20701 Victoria Rd** (formally 21 Hwy), north of Gosnell Line (Near Ridgetown).

### **Lunch provided after the tour**

- No cost. No preregistration required. CCA credits have been applied for
- Missed last year's Open House – Come see cover crop growth this year
- Worth the extra cost? – Compare oilseed radish common vs. named varieties
- Cover crops were planted after tomatoes, snap beans, sweet corn and seed corn
- Many different cover crops (alfalfa, red clover, vetch, crimson clover, forage pea, oilseed radish, mustard, ryegrass, as well as mixtures)
- Funding provided by OSCIA Nutrient Management BMP Demonstration Grant, Seed Corn Growers of Ontario and OMAFRA.

For more information, contact Prof. Laura Van Eerd at University of Guelph Ridgetown Campus at 519 674-1500 x63644 [lvaneerd@ridgetownc.uoguelph.ca](mailto:lvaneerd@ridgetownc.uoguelph.ca) .

**Agricultural Information Contact Centre: 1-877-424-1300**

**E-mail: [ag.info.omafra@ontario.ca](mailto:ag.info.omafra@ontario.ca)**

**Northern Ontario Regional Office: 1-800-461-6132**

**[www.ontario.ca/omafra](http://www.ontario.ca/omafra)**