

The Tender Fruit Grape Vine

VOLUME 13, ISSUE 6

JULY/AUGUST 2009

Grape Tailgate Tour

Come find out what's new in grape research



August 11, 2009

12:30 – 5:30 p.m.
Free BBQ to follow



12:30 - 1:30 p.m.

Sour rot and MALB research

Wendy McFadden-Smith, OMAFRA
Erik Glemser, University of Guelph
- *Across from 2201 Robbins Rd., south of King St. off 11th St.*

2:00 - 3:00 p.m.

Composting project

Helen Fisher, University of Guelph
- *Vineland Research and Innovation Centre*

3:00 - 4:00 p.m.

Fungicide efficacy trials

Kathryn Hoshkiw
- *Vineland Research and Innovation Centre, vineyard north of Agriculture and Agri-Food Canada*

4:30-5:30 p.m.

GIS/Remote Sensing

Andy Reynolds, Brock University
Ralph Brown, University of Guelph
- *Thirty Bench Winery, 4281 Mountainview Road, Beamsville*

5:30 p.m.

Sponsored BBQ

- *Thirty Bench Winery, 4281 Mountainview Road, Beamsville*

Signs will be posted

To RSVP for the BBQ please call 905-562-1631 by August 7



IN THIS ISSUE...

- Niagara Regional Monitoring
- Wanted—grape growers
- Reading the leaves
- Orchard weed management strategies
- Pesticides and pH

COMING EVENTS

THE Tender Fruit Grape Vine is brought to you by the following staff of the Ontario Ministry of Agriculture, Food and Rural Affairs:

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ALL QUERIES, COMMENTS, QUESTIONS AND REQUESTS CAN BE DIRECTED TO THE ABOVE.

For a complete list of Crop Technology Staff visit the OMAFRA web site at:
www.ontario.ca/crops

August 14-16, **Prince Edward County Wine Growers Association Tradeshow and AGM.** For more information visit <http://www.omafra.gov.on.ca/english/crops/conferences/20090814.htm> or email Bonnie Evans at cwhevans@bellnet.ca

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

Subscribe on-line to view the full coloured newsletter (in pdf format) or to receive notice by email when a new issue of the Tender Fruit Grape Vine is posted. All you need to do is submit your email address at <http://www.omafra.gov.on.ca/english/subscribe/index.html>

Weather Information

Location	Maximum °C		Minimum °C		Precipitation (mm)	
	May	June	May	June	May	June
Vineland (85 yr ave)	23.8 8 th	30.7 24 th	1.5 11 th	6.0 4 th	34.9	122.7
Harrow	27.7 21 st	31.8 25 th	0.1 13 th	4.2 4 th	14.2	106.9
Simcoe	26.4 22 nd	30.8 25 th	0.4 19 th	5.4 1 st	87.6	80.2

*We would like to thank the University of Guelph at Simcoe, Weather INnovations Incorporated, and AAFC Harrow for the weather data

Niagara Regional Monitoring (Throwing in the towel and getting out the raincoat)

This is the second year of monitoring soil moisture at grape and tender fruit sites in Niagara – and this is the second consecutive wet year in a row. Murphy's Law: start an irrigation project and you will get rain! On the other hand, the industry has saved a ton of money through labour and equipment savings.

Starting from June 1 at Vineland Station, we have had a total of 184.6 mm of rain on 17 rain days (greater than 1.0 mm) up to the end of July 26. In 2008, we had 227.1 mm of rain on 17 rain days up to the end of July. The 85 year average is 144.2 mm of rain on 15 rain days. So, it has been wetter and cooler compared to the average but dryer than 2008.

I would predict at this time that grapes would not need an irrigation for the remainder of the season. However, irrigation could still be necessary for mid and late season peaches and pears as well. In 2006, we received 193.8 mm of rain in June and July but only 36.0 mm in August. Many of the late peaches and pears required irrigation that year.

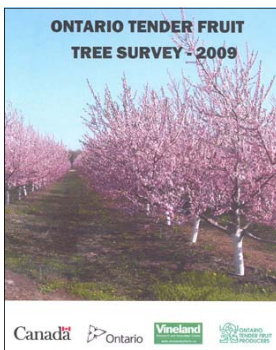
So, don't put the irrigation equipment away just yet. Continue to check the website www.weatherinnovations.com for updates.

Wanted – Growers with time on their hands

We are currently contacting and interviewing growers for the 2009 Cost of Production and Establishment for Grapes in Ontario. To make this a comprehensive report, we would gladly accept additional growers to complete the survey, which takes 1-2 hours. Karen Van Weerden has been contracted by the Grape Growers of Ontario to work with me to send out the survey questions and interview growers at their convenience. Surveys will end August 31 and the report will be completed in October.

Please contact Ken at 905-562-1639 or Slingerland.ken@ontario.ca if you are interested in participating.

Ontario Tender Fruit Tree Survey – 2009



This report contains highlights of the report, a history of tender fruit production in Ontario, the number of trees in Ontario by crop, age and district and new for this report is a bar chart of the number of trees during the growing season. The report is intended to assist the industry in the marketing of tender fruits and also to allow the growers to plan for the future for their own farms.

All tender fruit growers have been mailed a copy. Free copies for industry representatives can be obtained by contacting the Vineland OMAFRA Resource Centre at 905-562-4147 (press 2 for OMAFRA).

Food Safety and Traceability Information on the OMAFRA website

There is new Food Safety and Traceability information on the OMAFRA website for Ontario's farmers.

Please visit www.ontario.ca/foodsafety to learn about:

- funding programs available such as the new Food Safety and Traceability Initiative
- the *Advantage Good Agricultural Practices* food safety program
- food safety for the agriculture sector
- traceability in the agri-food industry

For questions on the content posted in this web area, please email advantage@ontario.ca or call our toll-free food safety and traceability help line at 1-866-641-3663.

Reading the Leaves

Christoph Kessel, Horticulture Crop Nutrition – Program Lead, OMAFRA

For perennial crops, leaf analysis is an important complement to soil testing. Over the long term, it can tell you whether your soil fertility program is supplying adequate nutrients for optimum growth. It is also a useful tool for trouble shooting problems. If your soil tests show adequate nutrient levels, deficiencies indicated by a leaf test may give clues to other problems restricting nutrient uptake.

Your leaf analysis is particularly useful to evaluate phosphorus, potassium, magnesium and manganese. Soil tests for boron, copper, iron, and molybdenum have limited usefulness, so leaf analysis is an important tool to assess these micronutrients.

Your leaf analysis results are compared to established normal ranges for the crop. This indicates whether a specific nutrient is deficient or sufficient. Sample collection timing and the crop's growth stage have a major impact on the reported results. Some nutrient levels can vary considerably with the age and date of the sampled tissue. Results can be difficult to interpret if sampled at other times than those suggested. The reported results may also be affected by weather and crop management practices.

Sampling times and tips for sample collection are outlined in the table below.

Crop	Sampling time	Sample collection
Cherry, Montmorency	Last 2 weeks of July	<ul style="list-style-type: none">• Mature mid-shoot leaves of current season's growth at shoulder height• 10 leaves from 10 representative trees
Grape	Early September	<ul style="list-style-type: none">• Petioles from mature leaves of fruiting canes• Remove leaf blade immediately• 75-200 leaves depending on variety size
Peach	Last 2 weeks July	<ul style="list-style-type: none">• Mature mid-shoot leaves of current season's growth at shoulder height• 10 leaves from 10 representative trees
Pear	Last 2 weeks July	<ul style="list-style-type: none">• Mature mid-shoot leaves of current season's growth at shoulder height• 10 leaves from 10 representative trees

Before you start sampling, here are a few points to review:

- Sample varieties or blocks separately that require different management practices.
- If variable areas are large enough to fertilize separately, they should be sampled separately. Match your leaf sampling to your soil sampling program.
- Avoid collecting damaged leaves or leaves from plants that appear abnormal.
- Collect tissue samples in clearly labelled paper bags. Plant tissues will rot if stored in plastic bags.
- Avoid contamination of the sample with soil. Even a small amount of soil will cause the results to be invalid, especially for micronutrients.
- Plants suspected of a nutrient deficiency should be sampled as soon as a problem appears. Take tissue samples from problem areas and submit them separately. Also collect and submit a non-affected plant from adjacent areas. Collect and submit soil samples from both areas as well.
- Fresh samples should be delivered to the laboratory directly. If they cannot be sent immediately, they should be dried to prevent spoilage. Samples may be air dried as long as they are not contaminated by and dust or debris while drying. They can also be dried in an oven at 65°C or less.

Where to send your samples:

Several Ontario commercial soil testing laboratories can provide you with leaf analysis. Their contact information can be found at: www.omafra.gov.on.ca/english/crops/resource/leaf.htm

Orchard Weed Management Strategies

Kristen Callow, Weed Management Program Lead - Horticulture, OMAFRA

Pest management in long-term perennial systems is extremely complicated by pest carry-over from one season to the next. As we are approaching harvest or presently harvesting, it is very important to plan your orchard sanitation and weed management strategies. Weeds directly impact pest abundance in orchards because they act as hosts for insects and diseases.

Orchard Floor Management (OFM) or weed control has become predominately herbicide-based because cultivation damages feeder roots. Cultivation also promotes soil compaction, erosion and the mechanical injuries associated with operator error.

Apply post-emergence herbicides to clean up your orchards after harvest or a minimum of two weeks prior to harvest (watch pre-harvest intervals). When preparing for a post-emergent herbicide application in your orchard, you should scout to determine what weeds are present, their growth stage and whether or not they are actively growing. To obtain the best weed control, apply herbicides to only actively growing weeds. Applications to large weeds or weeds that are not in susceptible growth stages will result in poor control. Make sure you read the label carefully. Avoid applying herbicides to stressed weeds.

Mowed weeds should be allowed to re-grow before herbicide application. If weeds have been under drought stress, wait several days after rainfall until weeds are no longer wilted and are actively growing.

Pesticides and pH

Wendy McFadden-Smith, Tender Fruit and Grape IPM Specialist, OMAFRA

Entering “water pH pesticides” into Google, yields 592,000 hits. Many of these are government or university web sites that include versions of the same table that lists the half-life (the time it takes for 50% of the pesticide to be inactivated) of pesticides at different pH's. For example, captan is listed as being most stable at pH 4 (acidic – 32.4 hr half-life), moderately stable at pH 7 (neutral – 8.3 hr half-life) and unstable at pH 10 (alkaline – 2-10 min half-life). However, none of the labels of captan products indicate the necessity to adjust pH. A search of the literature yielded a paper from 1976 that described alkaline hydrolysis of **technical grade** captan (pure, unformulated active ingredient) at pH10 in 10 minutes. However, formulated captan products (Maestro, Supra Captan, etc.) contain buffers, among the “inert” ingredients that make up the other part of the product that isn't active ingredient captan. Buffers work to maintain pH at a specific level, regardless of the pH of the water. To confirm this, a scientist from Arysta LifeScience recently ran an experiment. Maestro was put into solutions of pH 2-10.5 and samples were collected and analyzed for the concentration of active captan 0-48 hr after mixing. At all pH's, the concentration of captan remained 98-100% of what was originally added, even after 48 hr.

Granted, this information is only one pesticide from one company, but if pH adjustment is necessary to optimize activity of a pesticide, the manufacturers typically will include it on the label -- after all, it's in their own economic interest to assure that their products work properly. Also be aware of potential interactions when tank-mixing multiple products. If a particular combination isn't on the label, it is worth it to ask your dealer or company rep for more information.

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

E-mail: ag.info.omafra@ontario.ca

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

www.ontario.ca/omafra