The Tender Fruit Grape Vine
A Newsletter for Commercial Fruit Growers

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Irrigation in 2008 – HELP! (Part 2)
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Issue:
• 2007 - Growers had extreme dry weather challenges.
• 2008 – Growers are facing extreme wet conditions in July up to the 29th - 95.8 mm at Vineland, 167.8 mm at Grimsby (68.1 mm is the 85 year average for July).

NEW – Irrigation monitoring Demonstration Project for 2008
(Funded by OMAFRA and NPF&VGA and assisted by Weather Innovations Inc.)
• 2 grape and 2 peach sites located in Niagara-on-the-Lake and Vineland areas are being monitored in 2008 using C-Probe soil moisture sensors.

Objectives:
1. To identify gaps of irrigation information for growers;
   • when to irrigate, how much to irrigate, follow up scheduling
   • identify if the application is sufficient or surplus
   • introduce growers to new irrigation monitoring technology through on site demonstrations, newsletter articles and presentations
2. To provide site-specific information at 4 different grower locations in the Niagara Peninsula that would act as hub sites; and
3. To provide information to all growers through the Weather INnovations Incorporated (WIN) website available at www.weatherinnovations.com, newsletter articles and code-a-phones on the timing and how much water to use based on the hub site in their area.

Murphy’s Law!
As is often the case, if you start an irrigation project, you are guaranteed plenty of rain for that season. What appeared to be another dry season is now turning out to be one of the wettest in some areas, especially west of St. Catharines.

Stay Tuned
It appears at this point in the season the grape growers will not likely need to irrigate for the remainder of the season. Most of the tender fruits should be ok too, but continue to monitor your own fields if we do not get adequate rainfall. Irrigation can still be beneficial at fruit swell for the late season peaches and pears. Growers will need to stay tuned by connecting to the WIN website, code-a-phone and reading updates in the “Tender Fruit Grape Vine” newsletter. 2008 will be a learning year but it should provide some useful information.
Leaf Analysis—Tree Fruit & Grapes

Tree fruit leaf analysis samples should be taken in late July. Results and recommendations are only as good as the sample. One sample must contain 100 leaves. Take 5 leaves from each of 20 trees from each major variety. Do not mix leaves from different varieties or leaves from healthy or problem trees. The more leaves in a sample, e.g. 120-150, the better the sample.

Grape samples should be collected by August 30 and sent to the lab of your choice from a list of accredited labs. With grapes, only the stems of the leaves are selected from mature leaves or bearing grapes. Do not collect young or over-mature leaves. Collect 100 stems for each sample. A good random sample usually requires sampling several rows of grapes in the block.

Samples should be placed in paper bags marked with sample number, name, address, variety and age of tree or grape vine. A list of “Accredited” soil testing labs is in Chapter 10 of the 2008-09 OMAFRA Fruit Production Recommendations, Publication 360 or visit the OMAFRA website at http://www.omafra.gov.on.ca/english/crops/resource/leaf.htm

Aluminum soil test foils growers

Christoph Kessel, Horticulture Crop Nutrition – Program lead, OMAFRA

Occasionally, on some soil reports, you may find aluminum reported. Each season there are questions about whether or not there should be any concern about the levels reported.

It is true that available aluminum (Al³⁺) can be toxic to plants. But aluminum is found in several different forms in the soil, depending on the soil’s pH. These other aluminum forms are not considered to be toxic to plant growth. To tell if aluminum could be a problem, check the reported soil pH.

At a soil pH 4.0 - 5.0 Aluminum (Al³⁺) may be a problem in a soil with a pH below 5.0, especially for aluminum sensitive plants. This available aluminum inhibits plant root growth.

At a soil pH 5.5 - 6.0 When the soil pH is between 5.5 and 6.0, aluminum (Al³⁺) is not likely to be a problem. The aluminum is primarily in a hydroxyl form (OH⁻) and is not toxic to plants.

At a soil pH 6.0 - 7.0 At this soil pH, the soil does not contain any exchangeable aluminum (Al³⁺). When the soil pH is above 6.0, Al³⁺ is almost certainly not a problem.

If your soil pH is low enough to indicate possible aluminum toxicity problems, lime your soils as indicated by your soil test report. For most soils in Ontario, the reported aluminum level may be interesting, but it contributes little to improving your management of your crops.
Innovative ideas grown by Ontario farmers are contributing to the local economy, boosting the agri-food industry and offering more choices for the consumer. Those ideas were celebrated today at a ceremony honouring local winners of the province's regional awards for innovation excellence.

The Premier's Agri-Food Innovation Excellence awards are part of a $2.5-million, five-year program (now in its second year) established to recognize innovators who contribute to the success of Ontario’s agri-food sector. Winners of the $100,000 Premier's Award and the $50,000 Minister's Award were presented at the Premier's Summit on Agri-Food in April.

Local events have been taking place across the province to recognize 55 regional award winners, who will receive $5,000 each for their innovation. Area winners presented with awards on June 18, 2008 in Vineland were:

**J.B. Puddicombe & Sons - Winona**

All aboard! Visitors to the Puddicombe farm get a special treat now that the owners have added an 'agricultural' train to enhance their tours. The fruit farm uses the train to entertain and educate students and the public about agriculture and the importance of buying local produce. Adding this new feature has increased interest in the farm, attracting school and wine tours. Young and old, who come to check out the ride, leave with a smile on their face and a greater appreciation for Ontario agriculture.

**Featherstone Vineyard and Winery - Vineland**

You could say he "herd" it through the grapevine. David Johnson of Featherstone Vineyard and Winery takes a novel, environmentally gentle approach to an old routine. He "employs" a small flock of lambs to eat the leaves around the fruiting zone of his grape vines. Growers with standards of excellence remove leaves to produce premium grapes for winemaking. The exposed grape clusters dry faster in the morning, reducing their susceptibility to mildew and the need for spraying with chemicals. Traditionally, growers would remove leaves by hand or by using expensive, specialized machinery imported from Europe. Using the lambs provides an alternative, green approach to vineyard management.

**Grape Growers of Ontario - Vineland Station**

Technology is helping grow better vineyards in Ontario’s Niagara region. The VITIS Vine Management System is a grower-driven, farm management resource that intertwines several tools, including geographical information and global positioning systems. VITIS helps producers match the correct viticulture practices in a given location to maximize quality and determine where varieties perform the best. What started as a web-based farming tool has evolved into a robust crop traceability system. Ontario’s grape industry moved into a leadership role in Canada as the first commodity organization to offer growers a web-based vine management system tool that can also address information needs of other value chain participants.

**Tree and Twig Heirloom Vegetable Farm - Wellandport**

Linda Crago believes in good old-fashioned gardening with a modern twist. Her Tree and Twig Heirloom Vegetable Farm markets heirloom vegetables produced organically for local markets, restaurants and community agricultural shareholders. This grower’s passion for unique plants, horticulture and a ‘chemical free’ lifestyle resonates with today’s consumer trends. Sometimes innovation is about breathing new life into old traditions.

**Gilbrea Farm & AgriServices - Hillsburgh**

Chronic Obstructive Pulmonary Disease in horses can be caused by dust, pollen and fungal spores in hay, but thanks to Bob Wilson's innovative thinking, horses can now breathe easier. He designed and constructed an automated hay bale soaking machine that helps to reduce these air-borne irritants. Bob's time-controlled "Hay-draytor" pneumatically soaks and drains two square hay bales at a time. That means less water consumption, less manual work and better hay for the horse.