

The Ontario Berry Grower

NOVEMBER 2008

Highlights of the NASGA Summer Tour— August 2008

Approx 75 growers from across North America attended the NASGA summer tour in Ohio. Tour participants enjoyed networking and learning from each other, and visiting the 9 diverse businesses on the tour.

Champaign Berry Farm

The bramble plantings at Champaign Berry Farm, near Mutual Urbana, Ohio, include 25 acres of raspberries (Jewel, Mac Black, Titan) an acre of blueberries and an acre of blackberries. Eighty percent of the berries are sold as pick-your-own. With all those brambles, Mike Pullins has focussed on labour saving production practices. Raspberries are planted in beds 2' wide, 8" high, and 10' apart. The plants are set 30" apart in the row. Drip irrigation is used to apply most nutrients, and is electronically controlled. Winter pruning is accomplished mechanically and is 80-90% effective. One-third of one side of each row is mowed, removing 80% of old canes each year, and alternating sides from year to year. Rows bear fruit primarily on one side. Some hand pruning is done in summer. For the black raspberries, Mike adopted equipment used in the grape industry in California: a hydraulically operated sickle bar mower that trims both vertically and horizontally, trimming the sides and tops of the primocanes. He chose a slow growing "hard fescue" for the row middles to reduce mowing. Tillage, using specialized equipment along the edge of the raspberry row, helps to reduce weeds.



Figure 1: Brambles at Champaign Berry Farm



Figure 2: Host Mike Pullins discusses one of his many labour saving devices: an over the row herbicide sprayer for brambles.

Photo credits: Anthony Mintenko, Manitoba Agriculture, Food and Rural Initiatives

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Berry variety trial results from Manitoba

Anthony Mintenko, Provincial Fruit Crops Specialist, Manitoba Agriculture, Food and Rural Initiatives, has published recent raspberry and trial results.

For detailed reports, see :

- i) Manitoba Raspberry Cultivar Evaluation 2005-2007 Final Results at <http://www.gov.mb.ca/agriculture/crops/fruit/pdf/blc01s01.pdf>
- ii) Manitoba Strawberry Variety Trials Final Results and Recommendations 2005-2007 <http://www.gov.mb.ca/agriculture/crops/fruit/pdf/blb01s19.pdf>

Report highlights:

Summer Raspberries: Top yield performers from the floricanes cultivars were , Boyne, Nova, Killarney and Red Mammoth. Highest berry weights were K81-6 (4-5 grams), K93-9 and K93-9 (3.5-4 grams), compared to Boyne (standard) at 2.1 grams. Red Mammoth had very uneven berry weights depending on year and location, ranging from very small 1.92 grams to medium 2.95 grams. Royalty had medium-low yields, a unique purple colour, moderate hardiness and medium- large berry size. K81-6 had a very large berry size, fair winter hardiness and medium yields. Red Mammoth, Boyne, Souris and Killarney are extremely winter hardy in Manitoba, while Nova would be classified as having good winter hardiness, susceptible to tip kill.

Fall-bearing Raspberries: In Manitoba, the most successful fall-bearing cultivars have to be early maturing types with the bulk of the harvesting completed before September 1 as kill frosts can occur after that date. Good yields are very dependant on perfect weather conditions. Autumn Britten and Double Delight had the highest yields consistently over 3 years, all have very good winter hardiness. The yellow raspberry cultivars, Anne and Fall Gold had uneven yield results with moderate-good winter hardiness, unique yellow colour and very sweet flavour. These are worthy of trial but not general planting.

Strawberries: Top performers in the 2005 strawberry trial were the varieties that combined high yield, fruit quality, winter hardiness and runner production, which were: **Sapphire, Serenity, Kent, L'Amour, Honeoye and Annapolis**. Due to poor transplant stock, Jewel did not make this list, but has been grown in Manitoba successfully for many years. Kent, Jewel, Honeoye and Annapolis have been used in Manitoba for many years by growers and should be considered industry standards. The two new varieties from Ontario, Sapphire and Serenity performed quite well in the evaluation and can be recommended for larger plantings. Sapphire has a classic strawberry shape, great flavour, Sinbar tolerance and high yields (long harvest period). Serenity is high yielding, uneven shape however with large to very large berries (25 gram average), ideal for upicks only. L'Amour is a new release from Cornell University in NY state, and should be considered for trial only at this time (test small scale first on your own farm). It showed good hardiness yields similar to Kent, good firmness, flavour and overall fruit quality, is susceptible to angular leaf spot (according to Ontario trials). Quebec varieties had poor winter hardiness and should only be considered for trial purposes only. They are all late season producers with very firm fruit, a good trait for pre-picked and retail sales.

Post-harvest Quality Initiatives and Resources

Pam Fisher, Berry Crop Specialist, OMAFRA

I recently attended a webinar sponsored by the University of California and the California Strawberry Commission. The webinar included 6 presentations from specialists in the industry on food safety and post harvest quality. The target audience for this initiative was buyers of California strawberries. However, there was some useful information and reminders for growers as well. Here are some of the take home messages from the Webinar. You can view the presentations and read more at <http://postharvest.ucdavis.edu>.

1. An exceptional Food Safety and Security program is currently the top priority of the California Strawberry Commission, They have hired 6 Food Safety Communication Specialists for each production area in California. These specialists will be visiting growers to help with the implementation of food safety programs.
2. The pros and cons of testing produce for pathogens and harmful microbes as part of an on-farm food safety program were discussed by Dr. Trevor Suslow at UC Davis. He explained that pathogen testing is not a regulatory requirement or HACCP requirement although it may be requested by some buyers. Practical tests are not currently available for viruses and parasites and tests for other pathogens are too costly relative to value they provide. Also without scientifically developed sampling plans, pathogen testing is unlikely to detect pathogens. He went on to discuss the currently available tools for pathogen testing, which work well for research and for developing base-line data.
3. Shipping strawberries was identified as a weak link in the chain. The reefer thermostat must be set to 32 or 33F. Berries should not be shipped with tomatoes, green beans, citrus or other tropical fruits because these require warmer temperatures for shipping. Berries should be cooled before shipping. The produce should be loaded in a centerline pattern, and load spacers should be used to ensure the pallets are not stacked against the inside walls of the trailer. Most vibration occurs at the rear and top of the load, so these flats can be used as indicators.

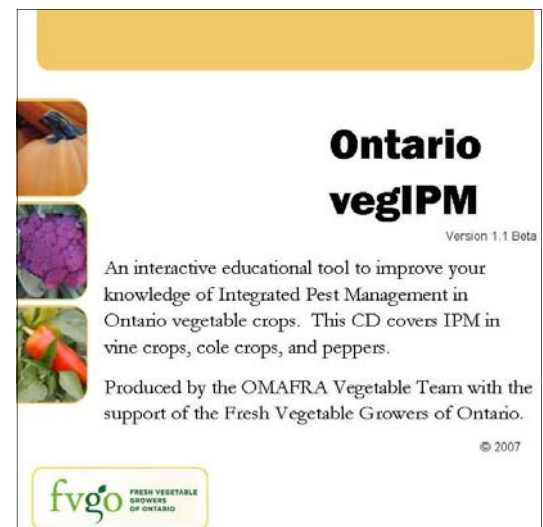
Ontario Vegetable IPM (ONveg IPM)

In 2007 the OMAFRA Vegetable Team with Ontario Fresh Vegetable Growers created a comprehensive interactive CD to help vegetable growers and consultants improve their pest management knowledge.

The CD covers cucurbits (vine crops), brassicas (cole crops), and peppers. Text and photos take you through weeds, insects, diseases, and disorders. Distinguishing look alike problems and diagnosing soil disorders are also covered. Scouting calendars, identification keys, and glossaries are additional resources provided on the CD. You can use *Test Your Knowledge* to see what you've learned and find out what you need to review.

Copies were distributed in Ontario and the United States at vegetable events including conferences and scout training. Due to its popularity it is now being expanded to include strawberries, sweet corn and tomatoes, with a new section on herbicide injuries.

To get a copy of the 2007 version contact Janice LeBoeuf at janice.leboeuf@ontario.ca. The strawberry module is expected to be available in the spring of 2009.



MARK YOUR CALENDARS.....

- November 18-19, **Essex County Associated Growers - Bounty of the County**, Leamington More info: Lynda Baird ecag@bellnet.ca
- November 6- 8, **Southeast Strawberry Expo**, North Carolina More info: Debby Wechsler <http://www.ncstrawberry.org/> Phone: 919-542-4037 Fax: 866-511-6660 (toll-free in North America)
- December 8-10, **North American Raspberry and Blackberry Growers Association Annual Conference**, Grand Rapids, Michigan More info: Debby Wechsler info@raspberrylblackberry.com Phone: 919-542-4037 Fax: 866-511-6660 (toll-free in North America) <http://www.raspberrylblackberry.com/>
- December 9-11, **Great Lakes Expo**, Grand Rapids, Michigan. More info: <http://www.glexpo.com/index.php>
- January 19-21, 2009, **North American Strawberry Growers Association Annual Meeting and tour**: New Orleans, Louisiana. Contact Kevin Schooley, 613-258-4587 or kconsult@allstream.net
- February 17, **Ontario Berry Growers Association Conference and Annual Meeting**. St. Catharines, Ontario Contact Kevin Schooley, 613-258-4587 kconsult@allstream.net
- February 18-19, **Ontario Fruit and Vegetable Convention**, St. Catharines, Ontario. <http://www.ofvc.ca/>

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