

A scenic view of a golf course. In the foreground, there is a stream flowing through a lush green landscape. The stream is bordered by large, dark rocks and dense green vegetation. In the middle ground, there are several large, mature trees with green foliage. In the background, a white clubhouse with a red roof is visible, surrounded by more trees and a well-maintained golf course. The sky is clear and blue.

Pomology Research on Tender Fruit at the University of Guelph

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University of Guelph
Vineland**

Present Funding Acknowledgements:

- Univ. of Guelph/OMAFRA Sustainable Production systems competitive research program
- NPF&VGA



Current Research Focus

- Orchard management practices to improve production efficiency, profitability, and fruit quality
 - Fruit thinning
 - Fruit quality
 - Harvest Management
- Beneficial use of organic and inorganic amendments for improving fruit quality, tree growth and health



Current Research Focus

- Fruit tree water relations, crop response to micro irrigation, and water conservation measures physiology



Tender Fruit Program Impact

Research Initiated in 2002/2003

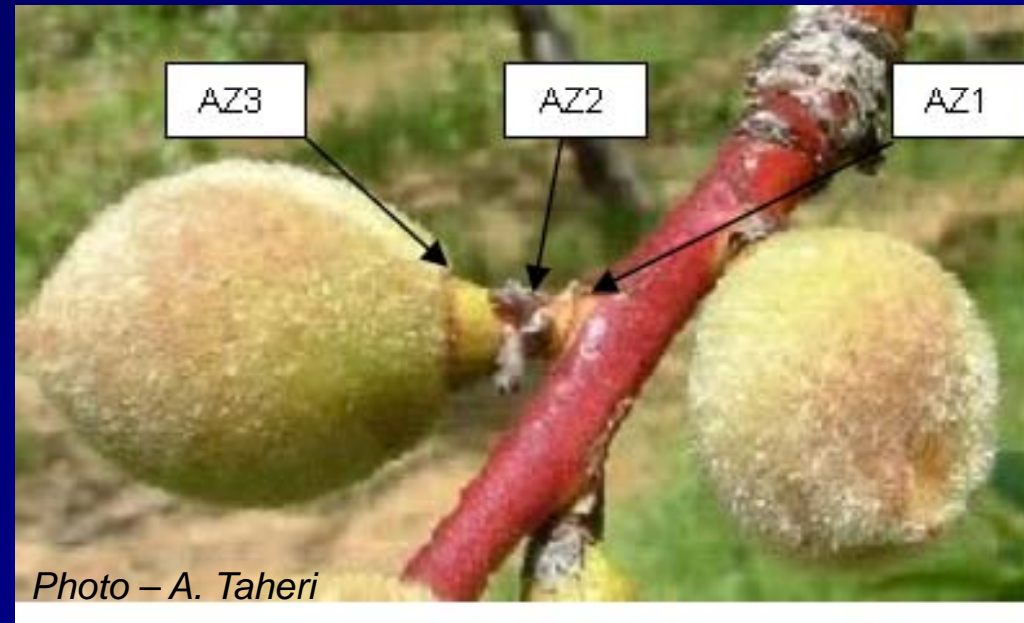
Peaches

- developed new methods to manage crop load and reduce hand thinning
- Efficacy of AVG (ReTain) on processing and fresh market peach cultivars
- New size-controlling rootstocks for peaches and nectarines
- Performance of columnar peaches in Canada
- Quantified nitrate and tile drainage losses from peach orchards

Tender Fruit Program Impact

Peaches (continued)

- A 6-YR peach/nectarine research plot in Simcoe has demonstrated that high quality peaches that can be produce in Norfolk
- Investigated the genes involved in fruit abscission of peach (A. Taheri and J. Subramanian).



www.plant.uoguelph.ca/treefruit

The screenshot shows a Windows Internet Explorer browser window displaying the website <http://www.plant.uoguelph.ca/treefruit/>. The browser's address bar and menu bar are visible at the top. The website itself has a green and yellow color scheme. At the top, it features the University of Guelph logo and the text "Pomology THE SCIENCE OF GROWING FRUIT". Below this is a navigation menu with links for Home, About Us, Research, Teaching, Public Outreach, Publications, Employment Link, and Contact Us. A "Weather" section is also present, listing locations like Vineland, Simcoe, and Guelph. The main content area includes a "POMOLOGY Welcome to Our Site" section with a paragraph of text about research interests. On the right side, there is a "What's New" section with a "Welcome to our new website!" message and a list of resources like Curriculum Vitae, Publications, and Graduate Students. The browser's status bar at the bottom shows "Internet" and "100%" zoom.

Pomology | Department of Plant Agriculture | University of Guelph - Windows Internet Explorer

http://www.plant.uoguelph.ca/treefruit/

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Google Custom Search Search

UNIVERSITY OF GUELPH Pomology THE SCIENCE OF GROWING FRUIT

CHANGING LIVES IMPROVING LIFE

UNIVERSITY OF GUELPH Pomology Plant Agriculture

Department of Plant Agriculture

What's New

Pomology at the University of Guelph

Welcome to our new website!

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Dr. John Cline
Debbie Norton
Simcoe Campus
Vineland Campus
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Factsheets

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POMOLOGY

Welcome to Our Site

Research interests of this programme are aimed at enhancing our understanding of the physiological processing influencing tree growth, flowering, and fruit productivity. Studies focus on the performance of new advanced and named cultivars for suitability in Ontario. New germplasm that displays resistance to pests and disease are beneficial to reduce our reliance on agrochemicals and pesticide residues. Studies also focus on utilizing dwarfing *Malus* and *Prunus* rootstocks and their influence on precocity, cropping efficiency, fruit quality, tree vigour, and the performance of various cultivar/rootstock combinations in intensive orchard production systems.

Internet 100%

OTFP

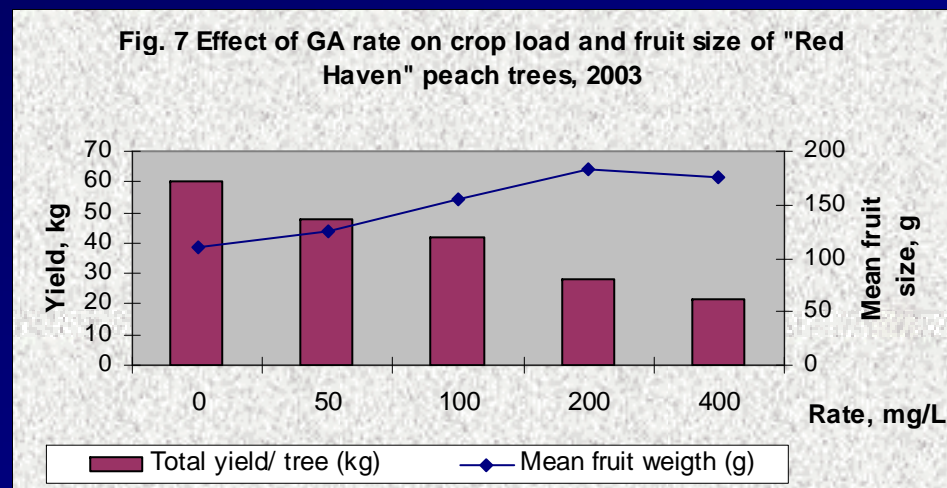


One of 4 new methods to Thin Peaches

To use plant bioregulators to regulate the crop load of peaches and cherries

Method:

◆ Use flower inhibitors (GA_3) for partial inhibition of flowering of peaches and cherries





Untreated
control

OTFPMB Meeting – April 14, 2009





GA at
100 ppm

Tender Fruit Program Impact

Sweet and Tart Cherries

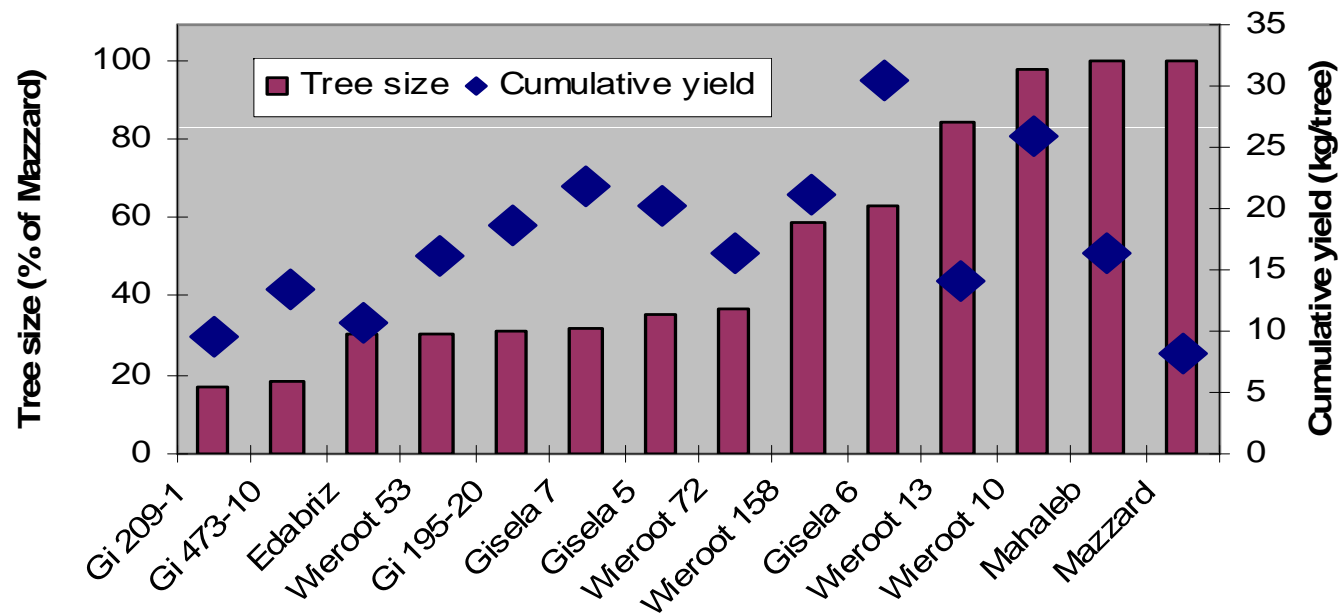
- Reported on the long-term performance on new size controlling rootstocks
- Efficacy of gibberellic acid on fruit quality
- Quantified influence of tree covers for reducing rain-induced fruit cracking of sweet cherries
- Have demonstrated a 40% reduction in vegetative growth through the use of prohexidione calcium (Apogee)
- That fruit size cannot be readily increased through reductions in crop load (thinning).



Cherry Rootstocks



Fig. 1 Tree size and cumulative yield of Hedelfingen in relation to rootstock



Barriers limiting Research Capability

- Eroding resources
 - Technical assistance
 - Financial support through OMAFRA
- Access to funding
- Partnering with Industry

Most important Issue Facing the OTFPMB that my research can Impact

Labour Saving Technology for Improving Fruit Quality and Increasing Market Share of Ontario Tender Crops

Ontario Agricultural Services Coordinating Committee (OASCC)

- Most competitive OMAFRA research projects require some linkage to the Ontario Hort Crops Research and Services Annual Reports
- New competitive funding will be provided through one of 7 themes:

Agricultural and Rural Policy

Emergency Management

Food for Health

Product Development and Enhancement through Value Chains

Bioeconomy - Industrial Uses

Environmental Sustainability

Production Systems



