ACORN Berry Network Newsletter Issue 3 – April 2010

Welcome to the third edition of the ACORN Organic Berry Network e-newsletter!

The Organic Berry Network is a three-year project that was started in the Fall of 2008, thanks to funding from the New Brunswick Agricultural Council, PEI ADAPT Council, and Agriculture & Agri-Food Canada. The goal of the Network is to assist the organic industry in Atlantic Canada to access information on organic marketing, production and research, as well as new market opportunities. Past presentations and berry network news are posted on the Organic Berry Network website: http://www.acornorganic.org/berry.html.

In this issue:

- **Research, Innovation & New Markets:** ACORN berry symposium a success; PEI blackcurrants revisited; CANPOLIN network and the importance of pollinators
- *Events*: mark your calendars for upcoming events, including a 2-day value-added workshop to be held in Cornwall, PEI at the end of April
- *Classifieds*: looking for planting stock; blueberries and certified soil amendments for sale
- *Online Resources*: berry-related websites that may be of interest to you

Research, Innovation & New Markets:

1st ACORN Organic Berry Symposium a Success!

Preceding this year's annual ACORN conference, held in Charlottetown, PEI, a one-day Organic Berry Symposium took place on March 4th.

Nearly 80 people convened to hear presentations on highbush and lowbush blueberries, raspberries, blackberries, black currants and a variety of novel berries like seaberry and haskap. Ken Taylor, of the Green Barn Nursery in Montreal, QC, even slipped seedless grapes into his talk, arguing that although they aren't berries, hardy varieties have huge market potential in Canada. He also had several other suggestions in his 'Berries and Beyond' session.

Blueberries, a Maritime stable, were well-covered at the Symposium by two experts from the University of Maine: Dr. David Yarborough gave a talk on pests and weed management of lowbush blueberries, which had an encore presentation later in the day, and Dr. David Handley gave an informative talk on organic highbush blueberry production, followed by a presentation on raspberries and blackberries.

Karen Nelson of the Organic Agriculture Centre of Canada presented results from their first year of black currant research on PEI, which is also featured as the next news item. To read the notes from all of these great presentations, see the Conference Proceedings section below or go to http://www.acornorganic.org/berry.html.

PEI Blackcurrants Revisited...

In the first ACORN Berry Network Newsletter (September 2009), we featured a new research and market development on PEI involving blackcurrant production.

The Organic Agriculture Centre of Canada had partnered with four organic growers to determine the best nutrient and weed management practices and cultivar selection for organic blackcurrant production.

Interim results are now available for their 2009 trials and have been compiled in the following 2-page report. It provides an overview of seasonal plant growth as impacted by fertility and weed treatments:

www.organicagcentre.ca/DOCS/TechnicalBulletins2010/TechnicalBulletin55web.pdf

Below is a summary of the report:

Organic Blackcurrant Production: Fertility Amendments and Weed Control Karen L. Nelson, Joanna L. MacKenzie and Andrew M. Hammermeister Organic Agriculture Centre of Canada/Nova Scotia Agricultural College Truro, NS

Organic producers in Prince Edward Island are utilizing blackcurrants (*Ribes nigrum* L.) to diversify their operations and supply the market demand in Japan. The OACC is currently evaluating organic weed control and fertility management practices for establishing bushes suitable for mechanical harvesting.

Trials were established in 2009 to evaluate the treatment effects on bush size and leaf tissue N on bushes planted in 2008 (Second Year) or 2009 (First Year). Where applied, soil amendments consisted of a 50:50 mixture (based on estimated available N) of crab meal and pelletized poultry manure; weed control was provided by a 90-cm wide strip of landscape fabric. For the Second Year (2008 plantings) trial bushes at two locations included: (i) no fertility and no weed control, (ii) weed control only, (iii) weed control+fertility (100 kg N_{avail} ha⁻¹), and (iv) weed control+ fish fertilizer as a soil drench.

For the First Year (2009 plantings) all plots received weed control; fertility treatments included: 0 (Control), 50, 100 or 150 kg N_{avail} ha⁻¹. For Second Year plantings, bush size and tissue N content in the control were significantly lower than in the other treatments, however the weed control+fertility treatment only increased plant size and tissue N over the mulch only treatment at one site; fish fertilizer as a soil drench significantly increased tissue N over the weed control and weed control+fertility treatments at one site, but did not significantly increase bush size. On First Year plantings, bush size and tissue N were

increased by all fertility amendments compared with the control, however, differences among fertility levels were variable. Weed management is very important for early black currant development and fertility amendments are moderately important.

Also, the following is an article from a few years ago, featured in Fruit and Vegetable Magazine, which describes the emerging business partnership between PEI organic farmers and Japanese entrepreneurs:

http://www.fruitandveggie.com/content/view/1158/38/

Adding Value to Agriculture with Pollination Research

By Susan Linkletter

One third of all human crops and 90% of all flowering plants require insect pollinators. Insect pollination is directly responsible for \$400 billion of agriculture in Canada, but there are only a few people studying pollinators and the role they play in both natural ecosystems and agricultural systems across Canada. Dr. Peter Kevan would like to change that. He is the Scientific Director of the Canadian Pollen Initiative (CANPOLIN) – a new five-year strategic network funded by NSERC to study pollinators and pollinator decline in Canada.

Through this initiative, more than 40 researchers from universities and government agencies across Canada will come together to develop expertise in all areas of pollination biology. At an open forum held in Moncton, New Brunswick on March 19, industry stakeholders were also invited to participate in this extensive research project.

The CANPOLIN network has four research themes:

Pollinators – the biodiversity, taxonomy, conservation and health of both managed pollinators and wild pollinators.

Plants – reproduction and gene flow on plant species that are dependent upon pollination in Canada.

Ecosystems – investigating the links between flora, fauna and pollinators, this includes the exploration of the ecological relationships in pollination, the impacts of invasive species for both pollinators and plants, competition between plants for pollinators, and how pollination impacts ecosystem sustainability.

Economics – an ecological approach to the economics of beekeeping and the value of pollination services.

Some of the researchers working on these four themes presented the outline of their projects during the forum in Moncton. What was truly unique about this forum was the opportunity given to farmers, beekeepers and other stakeholders to shape the direction of future research in this field of study.

The CANPOLIN network has already established a strong alliance with Canadian blueberry and cranberry producers. Blueberries are an intensively pollinated crop and

there is a direct correlation between the availability of pollinators and blueberry harvest yields. Blueberries also benefit from "buzz pollination" – pollination that is better accomplished through our wild species of pollinators such as bumblebees. Research has already shown that managed honeybees are better at pollinating crops during periods of inclement weather and are capable of travelling further than wild pollinators, but native species of pollinators are more efficient than the managed pollinators. Learning to make the best use of both types of pollinators is especially important for optimizing harvest yields in crops of fields with large acreages, as is often the case with blueberries.

The preference for managed honeybee populations over wild pollinators by blueberry producers has made recent heavy losses in honeybee populations a primary concern. Heavy losses in honeybee populations have been attributed to a number of factors including pesticides, parasitic infestations, even interference from cellular phone signals. The CANPOLIN network hopes to provide beekeepers with information on best management practices that will help them successfully manage pollinator populations and ultimately increase crop pollination.

During the Moncton forum, commercial and hobby beekeepers indicated that they were looking for better chemical treatments and training for common management problems, including the control of varroa mites – parasitic mites that feed off the bodily fluids of adult, pupa and larval honey bees, and carry viruses that are particularly damaging to the bees. The varroa mite often develops resistance to chemical control products faster than new treatments can be marketed and approved for use. Beekeepers are also looking for guidance on management methods that will naturally enhance honeybee health, they understand that building natural immunity and resistance to common disease vectors in their colonies is essential for the economic viability of their industry. The Canadian beekeeping industry has had to buffer huge economic losses in the last decade. There has been some help from provincial governments, mostly in the form of subsidies designed to mitigate losses associated with colony collapse disorder and help keep beekeepers in business, but it is especially frustrating for beekeepers, that the causes of colony collapse are still not well understood.

Beekeepers and farmers are hoping that the NSERC and CANPOLIN partnership will provide them with new resources that they can use to keep beekeeping and farming profitable. Keeping costs at a manageable level is essential since low profit margins on pollinated crops are limiting the farmers' ability to pay for beekeeping services at the same time that chemical treatments for the management of pestilence and competition from foreign honey suppliers are making the harvesting of honey for sale on the commercial domestic market nearly impossible.

The NSERC-CANPOLIN partnership aims to benefit all Canadians by making a major contribution to our knowledge base of pollinators and their ecosystems. The network also plans to develop a model for predicting future management needs in view of expected changes in climate and land use. Farmers with pollinated crops that are willing to be part of this study are encouraged to contact Dr. Peter Kevan, the Scientific Director of the CANPOLIN network or Sara Bates the Network Manager. They can be reached by e-mail at canpolin@uoguelph.ca or by mailing inquiries to:

C/O Department of Environmental Biology
Ontario Agricultural College
University of Guelph
Guelph Ontario
N1G 2W1

Upcoming Events:

April 18 & 19 *Source Local Marketplace at the ApEx show,* Exhibition Park, Halifax ACORN will be setting up a booth at the 2nd Annual Source Local Marketplace at the Canadian Restaurant and Foodservices Association (CRFA) ApEx trade show. ApEx is the hospitality industry's trade show for Atlantic Canada, attracting thousands of restaurants and food service professionals. The Source Local Marketplace will be an interactive meeting space for producers and chefs, where producers will showcase their products and speak directly with foodservice buyers.

April 21-23 *SIAL Canada Agrifood Trade Show*. North American Food Marketplace. Palais de Congres in Montreal, QC. More information: http://www.sialcanada.com/sial/en/index.sn

April 22 & 23 *The Atlantic Agricultural Forum* (formerly the Atlantic Agriculture Science and Communications Workshop) at the Holiday Inn Truro Conference Centre and on the NSAC Campus. This is one of the few times professionals in agriculture education, research, policy and extension come together to discuss innovations, research, outreach, and communications. It is a great learning and networking opportunity, and a great environment to reconnect and form partnerships. For details please visit the conference website is www.nsac.ca/aaf.

April 26-27 ACORN's 2-day Intensive Value-Added Workshop, Dutch Inn, Cornwall, PEI. Learn how to add value to your business by attending this one-of-a-kind organic value-added workshop. Working with your own ideas, this hands-on workshop GUARANTEES you will leave with the skills and knowledge necessary to run a successful value-added operation. Gary Morton, an emerging authority, author and speaker in the value-adding field, will take you step-by-step through the process - from idea generation to financial and market considerations. With special emphasis on organic production, this is an essential learning opportunity for anyone interested in adding value to their products. The cost for the workshop is \$60, and it includes lunch on both days. To register email admin@acornorganic or call 1-866-32-ACORN(22676).

June 25-27 *Natural Beekeeping, Organic Approaches to Modern Apiculture,* 2 full days of instruction and hands-on practice with Ross Conrad and local, organic, seasonal meals. Windhorse Farm. Workshop Cost: \$235.00+tax. For more information or to register contact jim@windhorsefarm.org, www.windhorsefarm.org

July 25-28 *North American Blueberry Extension Workers Conference*. Kalamazoo, Michigan. A key educational forum for blueberry researchers, extension educators and industry leaders. More information available at http://nabrew.anr.msu.edu/

Past Events:

Conference Proceedings: March is always a busy time for agricultural conferences and workshops. The following links allow you to access notes from several conference sessions in case you missed them:

ACORN 2010 Organic Berry Symposium

Click on the links to read the workshop notes:

Wild Blueberries: Battling Pests and Weeds with David Yarborough

Highbush Blueberries and growers discussion with Dr. David Handley

Weed Fertility and Management with Karen Nelson

Blackberries and Raspberries with Dr. David Handley

Berries & Beyond with Ken Taylor

An Atlantic Cranberry Management Course was held in Halifax on March 10-12th. Speaker presentations are available as PDFs on the following website http://www.atlanticcranberry.ca/speakers.html, including a presentation on Quebec Organic Cranberry Production by Jacques Painchaud: http://www.atlanticcranberry.ca/Presentations/PAINCHAUD%20Organic%20Cranberry%20Production%20in%20Ouebec.pdf

Classifieds:

To send in announcements, items for sale, wanted items, etc. for the next newsletter, please e-mail Nicole at burkhard.n@gmail.com.

Current Listings:

For Sale: frozen highbush blueberries sold in 15 lb. plastic tubs at \$30 each (\$2/lb). Contact Lazy Brook Farm at 902-538-1626 or lazybrook@eastlink.ca

For Sale: Organic registration certificates Products (OMRI, ACIA &FOG) for your commercial farms and turf applications:

- Super Hume (Humic Acid 17%) Direct effect on root growth, stronger stem calipers, soil moisture retention, and buffer pH problems in the soil
- Super Hume & Seaweed seaweed loaded with nutrients, reduces stress on plants and turf
- Micro Boost a blend of sugar chelated micro-nutrients, alfaketo and amino acids

• Azakaranj – an oil-based formulation that relives the pest population by triple action activities of feed deterrence oviposition inhibition

Provide fertility programs for blueberry, cranberry, strawberry, black current, flowers, turf and assorted vegetables crops. For further product inquiries or pre-season orders, please contact: Julius Patkai @ 962-3613 or e-mail <u>Julius.patkai@pei.sympatico.ca</u>

Wanted: I am from Ontario and looking for a source of certified organic raspberry plants in any form (cane, bare root, sprouts) within Canada. I am hoping for Everlasting or similar, 100 plants to start. Please contact Gerry Stephenson of Drumlin Farm at drumlinfarm@xplornet.ca

Online Resources:

The following is an excellent article on organic strawberry production written by MOFGA (Maine Organic Farmers and Gardeners Association) resident 'extension agent', Eric Sideman. It provides an overview ranging from site selection to common pests and diseases in New England:

http://www.mofga.org/LinkClick.aspx?fileticket=1zM7eSUUtxk%3d&tabid=133

University of Maine Cooperative Extension Wild Blueberry Factsheets: includes a thorough offering of production information as well as factsheets on bees and pollinators http://www.wildblueberries.maine.edu/factsheets.html#organic

To join the Norwest Berry & Grape discussion group on Northwest Hardy Kiwi, sign-up here: http://berrygrape.org/northwest-hardy-kiwifruit-discussion/

A list of Internet resources from the North American Pollinator Protection Campaign: http://www.nappc.org/curriculum/resources.php

Culture biologique – une varieté d'informations en français: http://www.agrireseau.qc.ca/agriculturebiologique/

If anyone you know would like to sign up for future issues of ACORN's Organic Berry Network e-newsletter, please have them send an e-mail to admin@acornorganic.org.