



PEI WILD BLUEBERRY GROWERS ASSOCIATION

Summer Newsletter

July 2015

Prince Edward Island Blueberry Workshops

The Board of the PEI Wild Blueberry Growers Association is pleased to be able to offer a series of short information workshops this summer. The goal is to provide information and opportunities to discuss production challenges with industry experts in-field, close to the growers own. The three topics chosen were determined by grower surveys (as reported at the April 2015 annual meeting) and feed back from individual growers.

Presenters will discuss key topics that have been identified through recent PEI blueberry crop management programs. There will be time during and after the workshop to talk with Presenters, Specialists and other growers. Topics and presenters include:

- (1) **Blueberry Fertility** – evaluate fields for nutrient deficiencies, how different soils affect nutrients & growth, new fertilizer technologies, soil/tissue sampling and what are good level in the reports, etc.
Lise LeBlanc, LP Consulting – developed BB crop & NMP management programs for Maritime blueberry growers. She's developed over 1800 plans for agriculture.
- (2) **Pest ID and Pesticide Application/Timing** – which pests can't be eradicated but can be managed, key times for ID, how does canopy affect microclimate and disease control, contact vs. systemic, water source quality, etc.
Amanda Eisses, LP Consulting – developed BB custom scouting programs to help BB growers make better and financially viable BB management decisions.
- (3) **Pollination** – what are its limiting factors, what is a good degree of pollination per flower, costs/benefits, which is the best pollinator for you, how can you evaluate your fruit set, etc.
Gaetan Chiasson – has over 37 years working with NB and Quebec blueberry producers, leader in extension & research for Wild Blueberry Industry

PEIWBGGA has received funding from Growing Forward 2, and would like to thank the Federal government and the PEI Department of Agriculture and Fisheries for their contributions and support. We also thank the growers who are allowing the workshops to be held on their property; Paul Gallant, Gerry Hackett, David MacNearney, and Jasper Wyman's of Canada.

DATES & LOCATION CHOICES:

July 29: Tignish 2:00-4:00 Gerry Hackett – 357 Ascension Rd fields

July 30: West St.Peters 10:00-12:00 David MacNearney – 117 Dundee Rd Building

July 30: Rollo Bay 3:00-5:00 Paul Gallant -1052, Rte 2, North of Hwy fields

July 31: Mt. Vernon 10:00-12:00 Wymans – Meet at Mt. Vernon Facility

Contact JoAnn Pineau to register by July 24 for your preferred location (902) 368-7289

We're Going Digital!!

In an effort to lower costs and remain environmentally friendly, we will be transitioning to email distribution for the PEIWBGGA newsletter this fall. Paper copies will still be available, however anyone who would like to be added to our mailing list must let us know before September 1st. In addition to this, if you are not currently receiving the PEIWBGGA newsletter by email and would like to, please let us know.

Contact the PEIWBGGA at:

In Person: 420 University Avenue, Suite 110, Charlottetown

Phone: (902) 368-7289

Fax: (902)368-7204

Email: peiwildblueberries@peifa.ca

Are you looking for employees?

We have several resumes on file from potential employees who are interested in working in blueberry production! To learn more please contact JoAnn at 368-7289 or pei-wildblueberries@peifa.ca

Your Board of Directors

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JoAnn Pineau

902.368.7289

Activities of the Association

- Renewed for a three year term the contract with the PEI Federation of Agriculture to provide the services of an Executive Assistant, two days per week.
- Continued to meet with the Maritime and Quebec Associations to discuss opportunities for co-operation
- Reviewed research proposals
- Participated in the PEI Agriculture Fun and Forestry Day
- Participated in the PEI Agriculture Media Tour
- Reviewed by-laws governing board travel and conflict of interest policy.
- Passed a motion to support financially the Local Honey-bee Research Tech Transfer Team, in support of the local honey bee industry

Highlights of July 15, 2015 Maine Field Day

Summary of crop reports presented at July 15, 2015 Maine field day

Million lbs (estimates only)

- 90 Scattered winter injury reported. Large bloom counts were present, with good to excellent weather conditions and fruit set, with 70,000 hives present. Dry conditions extended from May 15th in most areas, rain amounts 4 inches below normal.
- 40 High winter injury reduced potential crop 50%. Good pollination, with little disease or insect damage reported. Dry conditions persist in most areas.
- 41 Little winter injury or monlinia infection reported, but development delayed by two weeks because of high snow falls. Over 20,000 hives used, plus bumblebees, and good to very good fruit set achieved. Crop will be reduced from 2014 amounts.
- 50 Little winter injury or monlinia infection reported, but development delayed by two weeks because of high snow falls. Over 35,000 hives used plus bumblebees, and bloom was good. Conditions dry, and crop development continues to be delayed.
- 20 Little winter injury or monlinia infection reported, but development delayed by one week because of high snow falls. 11,500 hives used, plus bumblebees, and pollination weather was good. Crop is expected to be below 2014. 22.7 M lbs.

241

320 million lbs, a decrease of 25%

Climate change in Maine

Ivan Fernandez, Soil Scientist - Climate Change Institute, University of Maine

- Carbon dioxide is significantly above 800,000 year average, 91% attributed to fossil fuels; 44% is taken up in the air, 29% in the land and 28% in the oceans (resulting in acidification).
- Greater temperature variability is being observed and temperature averages are increasing significantly
- Warming in Maine is greater in the winters, season of second greatest warming is mid summer.
- Maine is wetter, with higher peak flows, lower month long drought events, but short intense dry periods may occur more frequently.
- High risk of soil drying in the top levels of soils

Observed and predicted results of climate change in Maine:

	<u>Over last 100 years</u>	<u>By 2050</u>
Temperature	+2 F	+ 1 to 2 F
Growing Season	+2 weeks	+ 2 Weeks
Precipitation	+ 13%	+ 5 to 10 %
Snowfall	-7.00%	-20 to 40%
Sea level rise	+0.6 feet	+.5 to 2 feet

Studies in Monolinia

Tyler Case, University of Maine Grad student

- Goal to investigate the environmental factors influencing the disease
- The number of chill hours (0-7 C) (between November and January) is suspected to affect the viable spores by up to 2.5 times
- There has been identified another fungus which may be parasitic to monolinia
- A species of insect was found that may feed on the developing cups

Growing Season Effects of climate change in Maine

Frank Drummond - University of Maine

- Maine has experienced a 30 day increase in growing season
- Delayed hardening off: risk for abrupt cooling
- Greater CO₂ = greater productivity of plants
- New growing areas available because of less risk of killing frost (northern NB, Quebec)
- Thrip and tip midge infestation increasing as springs are warmer
- Septoria increases with warm winters and less burning

Disease Reporting

Seanna Annis, University of Maine

- 2015 research looking into better timing of forecasting models
- Valdensinia
- Decreasing occurrences in Maine since 2009
- Viable spores remaining in fields without symptoms
- Spores are greater than 1 mm and relatively very heavy, will not travel well by wind, spores only travel about 1 m without assistance
- Pathogens found near roads so it is assumed the disease is being human-assisted in its spread
- Low DNA diversity found in Maine
- Study of Maine, NS and PEI found 4 common genetic specimens of the disease (possibly transported by equipment and or boxes?).

2015 Crop Year Outlook

Frank Drummond University of Maine

- 2015 was the best year in years for native pollinators
- Massive number of fruit flies found; put out traps immediately
- Tip midge infects small patches intensely and can result in 50% bud reduction
- Tip midge damage (curling of leaves) can be distinguished from thrip damage as the leaves turn red as well as being curled and elongated when damaged by thrips.
- Entrust, Success, Assail and Mustang Max found to give good control
- 2014 tests all gave good control to give good control of Tip midge at first sign of leaf curl (early June in Maine)

Highlights of July 15, 2015 Maine Field Day-cont.

Control of the Winter Moth, A New Pest

Lee Beers

- First seen, in 2012, can cause severe defoliation as the caterpillar feeds on the flower and leaf
- The brown moth is seen to fly between November and January at temperatures above 0 C
- Found in apples, high bush blueberries and wild blueberries
- The larvae feeds inside buds in the early life stages, feeds heavily at peak bloom
- Intrepid, Dipel had good control of pest for 3-4 day period
- for more information see <http://whatcom.wsu.edu/ipm/manual/blue/wintermoth.html>
- <http://extension.umass.edu/fruitadvisor/sites/fruitadvisor/files/fact-sheets/pdf/Winter%20Moth%20Recommendations%20in%20Blueberry.pdf>

Non-intrusive Hive Strength Evaluation – Abby Sennett

- The two common methods of hive evaluation (frame and cluster) require opening the hive
- Strong hives would have 70% of frames covered by bees

Modified cluster method of hive evaluation:

- Bees cluster when the temperature is below 57 F (14 C)
- On strong hives the clusters will extend to the base of the frames
- With the bottom entrance to the hive fully open, shine a flashlight into the hive when the temperature is below 14 C, after dark
- Count the number of clusters of bees seen hanging from individual frames
- Strong hives will show 6-8 frames with clusters, full strength hives will show 20 clustered frames

Second non-intrusive method:

- On warm sunny day, count the number of bees entering and leaving hive

Update on SWD

Frank Drummond, University of Maine

- It is believed that there is a very low rate of overwintering survival in Maine
- 50-80% of the pest are seen as being controlled by natural predation
- A yeast has been identified as a possible control method
- An Asian predator is being evaluated for control and environmental impact
- The introduction of sterile males may be evaluated as a control method
- Yeast based bait is 10 times more effective than apple cider bait
- Follow IPM for maggot control
- First male capture indicates need for control if the harvest is a long time off as it takes 4-12 days for maggots to form
- It has found that 10 males must be found in traps before a maggot is found in fruit
- Blanket sprays are required as wind pushes the small fly into the field quickly

Evaluating Infestation:

- Gather 1 Litre of fruit throughout the field to be tested
- Place in ziplock bag with 1 cup of water and 1/2 cup of salt, seal bag and crush berries
- Allow to rest for 30 minutes, maggots will float to top of bag

Notes from Nova Scotia Field Day

2014 Crop Report – Peter Rideout WBPANS

- 2014 crop is marketing well especially during the first 3 months of 2015
- German and Japanese purchases have increased 30% vs same period in 2014
- Expecting a carry over of crop into the 2015 crop year
- BC high bush crop is 3 weeks early and suffering from dry conditions estimated crop 130-140 million pounds

WBANA Update – Neri Vautour Executive Director WBANA

- WBANA is working to have the 30% tariff in China reduced or eliminated
- WBANA will be hosting a group of Japanese businessmen in August and a group of German writers and bloggers the following week
- 2016 WBANA Symposium will be October 22 & 23

Nova Scotia Low Bush Blueberry Development Program

- Announced is a new plan to improve the competitiveness of the NS wild blueberry industry by increasing capacity and the adoption of more efficient production practices
- The new program is funded under Growing Forward 2 and cost-shared 60-40 between the federal and provincial governments
- Funding is provided at 30% of eligible costs, not to exceed a total of \$7500
- The program has 2 categories
 1. Low bush blueberry expansion – to provide funds for the clearing of land. Eligible assistance cannot exceed \$150 per acre.
 2. Low bush blueberry levelling and improvement of field productivity. Eligible assistance cannot exceed \$450 per acre

Prices Paid to Growers as of June 24, 2015 for 2014 Wild Blueberry Crop

As published in WBPANS July 2015 Newsletter

Maritimes	\$0.55/lb
Maine	\$0.60 US/lb
Quebec	\$0.55 – 0.65/lb

*includes a \$0.10/lb additional payment to a significant percentage of Quebec growers who are members of co-operative receiving stations or make large volume deliveries direct to factories.

Spotlight on Septoria Leaf Spot

By Jim Anderson, Agronomic Service Representative, Syngenta Canada
and Leigh Jenkins, Blueberry Farmer

This article has been prepared by a Syngenta representative to give growers information on Septoria Leaf Spot, and first appeared in *Bleuets NB Blueberries' Newsletter* in June 2015

A known yield-robber, Septoria leaf spot is a disease that blueberry producers with a goal of achieving high yields at harvest should keep an eye on. Prevalent in all blueberry growing regions in Atlantic Canada, Septoria leaf spot (*Septoria* sp.) is one of the major leaf diseases that impacts lowbush blueberry production in both the sprout and fruiting year.

Disease Cycle

When Septoria takes hold, the disease has the potential to reduce yields by limiting the number of flowers a plant produces, impacting fruit growth and development, and yield. In the sprout year, spore release from over-wintered and diseased fallen leaves begins in late May in response to rain. Minute water-soaked spots begin to appear on infected leaves 10–14 days after infection, but are not visible to the naked eye until approximately four weeks later. Lesions spread and expand, and by mid-to-late July, severely diseased leaves begin to drop. The fungi can infect the stems as well, but stem cankers will not develop until spring of the fruiting year.

In the fruiting year, spore release from over-wintered leaves mostly occurs during the bloom period. Release of spores from small, black fruiting bodies of the fungus – known as pycnidia – in infected leaves and stem cankers occurs when it rains, and spores are splashed onto the foliage.

In general, prolonged wet weather in June promotes spore release and infection; subsequent prolonged hot, dry weather during July and August promotes the drop of infected leaves and fruit.

Septoria leaf spot usually appears in combination with other leaf diseases such as rust and powdery mildew, but implementing the following strategies will help keep most major leaf diseases in check.

Early detection is key!

- 1. Scout blueberry stands during the month of June, especially after rainy weather.** The first signs of Septoria will appear on the underside of the leaves, so it's important to get up close and personal with the crop. In the sprout year, leaf lesions occur mostly on the lower leaves. During the crop year, you will see symptoms throughout the canopy. Remember, at first the symptoms won't be visible to the naked eye, so when the tiny spots become visible, the infection will already be about four weeks into the disease cycle. As the disease progresses, the lesions will worsen and expand to cover the leaves. Defoliation will likely occur, but the severity is largely dependent on the weather, as hot, dry conditions put added pressure on the crop, causing leaves and fruit infected with Septoria to drop at a higher rate.
- 2. Consider crop protection products to stay ahead of leaf disease.** Because blueberries are typically infected by more than one leaf disease, consider developing a spray program that includes a broad-spectrum, protectant fungicide. Maintaining plant health in the sprout year is crucial. As such, applying a fungicide with activity against Septoria in early June is a good way to manage the development of the disease. To get the most effective suppression of Septoria in the fruiting year, apply a fungicide at early bloom.
- 3. Burn prune after the fruit year to reduce the pervasiveness of the disease.** In order for burning to be effective, it must be done intensively and uniformly throughout a field to destroy all infected leaf and stem litter. Keeping leaf disease at bay is one of the most effective ways to maintain healthy, productive stands all season long.

NEW REGISTRATIONS

Ultim herbicide has received label approval for a broadcast application, for the control of quack grass, annual grasses, redroot pigweed. Also for suppression of poverty oat grass, ticklegrass and black bulrush. Apply in the non-bearing year, 14 months before harvest, minimum. Damage may result if applied to blueberry plants, for best results apply preeminence. Can be tank mixed with Velpar or Simbar. For more information see www.hc-sc.gc.ca/cps-spc/pest/registrant-titulaire/tools-outils/label-etiq-eng.php

BNBB Field Day!

July 25th, Lameque, New Brunswick., for a full agenda please see http://nbwildblue.ca/wp-content/uploads/2015/06/News_June_15_en.pdf

Submissions & contributions to the newsletter are welcome additions! Please forward ideas/articles/photos/events to peiwildblueberries@peifa.ca

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