

Wild Blueberry Summer Field Day & Meeting

Wild Blueberry Research & Extension Facility, Blueberry Hill Farm
Jonesboro, Maine

Wednesday July 18, 2018

Organized by David E. Yarborough, Blueberry Specialist, University of Maine Cooperative Extension

2018 Wild Blueberry Summer Field Day Agenda

9:00-4:00 PM	Trade Show		
9:00 AM	<u>Trade Show Sponsors</u> Farm Credit East Downeast Wind NovaSource Nutrien Therault Equipment	<u>Trade Show Vendors</u> Arysta LifeScience Doug Bragg Enterprises Ltd. Farm Credit East FMC Gowan Company	<u>Trade Show Vendors</u> USDA Farm Service Agency USDA Natural Resources Conservation Service UMCE – Crop Insurance Education
10:00-10:15 AM	Open Crop Discussion (<i>Light blue metal building</i>)		
10:15-10:30 AM	Field Visit Observations – <i>Dr. Lily Calderwood, University of Maine Cooperative Extension</i>		
10:30-10:45 AM	Wild Blueberry Commission of Maine Update – <i>Nancy McBrady, Wild Blueberry Commission of Maine</i>		
10:45-11:15 AM	Agricultural Wild Blueberry Heritage Center and Virtual Museum Update – <i>Marie Emerson, Wescogas Wild Blueberries</i>		
11:15-11:45 PM	Towards Integrated Disease Management and Sustainable Production – <i>Dr. David Percival, Dalhousie University, Truro, NS</i>		
1:30 - 3:30 PM	<p>Research Talks & Field Demonstrations (<i>UMaine unless otherwise stated</i>) (<i>presenter not in order of presentation, begin in light blue metal building and continue outside to upper field</i>)</p> <ul style="list-style-type: none"> • Update on Blueberry disease forecast - <i>Seanna Annis, Rachel Martin</i> • Detecting blueberry rust with new molecular method to improve disease forecasting – <i>Nghi Nguyen</i> • Assessing Genetic Variance of the Fungus Responsible for Mummy Berry - <i>Katie Ashley</i> • Climate change effects on wild blueberries - <i>Yongjiang Zhang</i> • A portable honey bee health monitoring device - <i>Dr. Nuri Emanetoglu, Ana Eliza Souza Cuhna, Jason Rose, Frank Drummond</i> • IPM tactics for minimizing pesticide exposure to bees - <i>Frank Drummond</i> • Overwintering survival of spotted wing drosophila - <i>Elissa Ballman</i> • Insecticide control of spotted wing drosophila - <i>Judith Collins</i> • Establishing Pollinator Habitat - <i>Jeremy Markuson - USDA-NRCS</i> • 2018 weed management research plots and low input demonstration plot - <i>Dave Yarborough</i> <p style="text-align: center;">Three recertification credits offered for Maine certified pesticide applicators</p>		
4:00 PM	Trade Show Vendors (Close)		

Wild Blueberry Crop Prospects 2018

Maine - David Yarborough, *University of Maine*

We had a mild fall and winter and so had a very large bloom, the pollination weather was excellent as it was an extended cool season with little rain during bloom which extended the viability of the blossoms and allowed native pollinators more time to pollinate. Fruit set was good and it appeared we could have a better than average crop at this time. These conditions also resulted in very little damage from mummy berry disease but for growers who did not apply fungicides had disease symptoms and a reduction in their crop. There was a freeze on June 4 that caused extensive damage to the northern and low lying fields around Route 9 and some damage to fields further south as well. Fields along the coast and Union area were not affected and still have the potential for a better than average crop. Jennifer Lund, State Apiculturist, reports that we had 37.2 thousand bee hives used in Maine this year; this is up from the 27.7 thousand have we had the year before. Only 17,000 acres were harvested in 2017, this is down from the 21,300 acres harvested in 2016. Some of the fields still may not be harvested because the companies are not accepting their fruit. In Jonesboro, we received 5.88, 1.22 and 4.56 inches of rain in April, May and June respectively and with temperatures cooler than normal there was little stress on the plants. With the exception of an unusually dry May we have had good growing conditions with cool temperatures and ample rainfall. The crop in Maine was over 100 million pounds in 2014-2016 but was only 67.8 million pound in 2017. Because of the conditions stated, I expect the crop may be reduced by 25% or more, so it could be about 75 million pounds or less.

Nova Scotia - Peter Burgess, *Perennia*

Nova Scotia had a very mild winter with very little snow cover through most of the winter in most places. Spring development was very sporadic throughout the province. By early May, crop development was still slightly ahead of a normal year in central NS, but behind in other areas. Some mid-winter cold/sleet damage was seen in several fields in eastern NS, but most areas showed no sign of winter damage. We had a significant year for *Monilinia* infections, with several infections periods. Infections were seen in multiple places, especially those who tried to skip the treatment. There were multiple separate frost events, with the major one occurring on June the 4th. This event caused wide spread and devastating damage across the province. In many places the temperatures were well below -3C for more than 6 hours. The level of damaged varied from a few fields with very little damage to significant acreage that was essentially wiped out. The timing of the frost was at a critical period as many areas were approaching peak bloom and most hives had been placed in the fields. Domestically Nova Scotia used just domestic honeybees and bumble bees this year and many growers had tried to increase stocking rates due to the exceptional looking bloom. *Botrytis* issues did show up after the frost in some areas, but due to the heavy damage many growers simply didn't treat. It is still very difficult to estimate a crop as many high yielding acres have already been taken out of production and many are waiting to see if what ripens will be enough to justify the cost of picking. There also appears to be two crops, early season pollinated and very late season pollinated, often on the same plant (flowers opened 4 weeks apart). This will create some real challenges when it comes to harvest timing. We are expecting the lowest crop in 20 years, likely less than half of last year's crop of 50 million pounds.

New Brunswick- Michel Melanson, *NB Dept. Agriculture, Aquaculture & Fisheries*

Little to no winter injury was observed in most fields in the early spring. Generally, most fields were 7 to 10 days later in development than in previous years. However, at bloom, most fields in Southern New Brunswick only a few days later than "normal", while field in Northeastern NB were closer to average. A frost occurred on June 4th when temperatures dipped below the freezing point for several hours. The most severely damaged fields were in Southeastern NB, with some fields having 50-75% of the bloom damage. Fields located in the Northeast were not damaged as severely, as the fruit buds were not open. *Monilinia* blight was also present and visible on the flowers clusters, making it difficult to assess frost damage or flower diseases (*Monilinia* and *Botrytis*). As the season progresses, as expected, fields with frost injury have a little crop compared to previous years. Most growers are assessing the potential crop and evaluating their harvesting options. In Northeastern NB, where the 60% of the crop is harvested, frost was not as severe and fields will be near normal, likely 15-20% below average. The Southern part of NB will harvest fewer berries because of the frost and fields being set aside to help improve field density and coverage. It is expected that the crop will be less than the 53 M lbs harvested in 2017, likely in the range of 40-45 M lbs. However there is still a month before harvest.

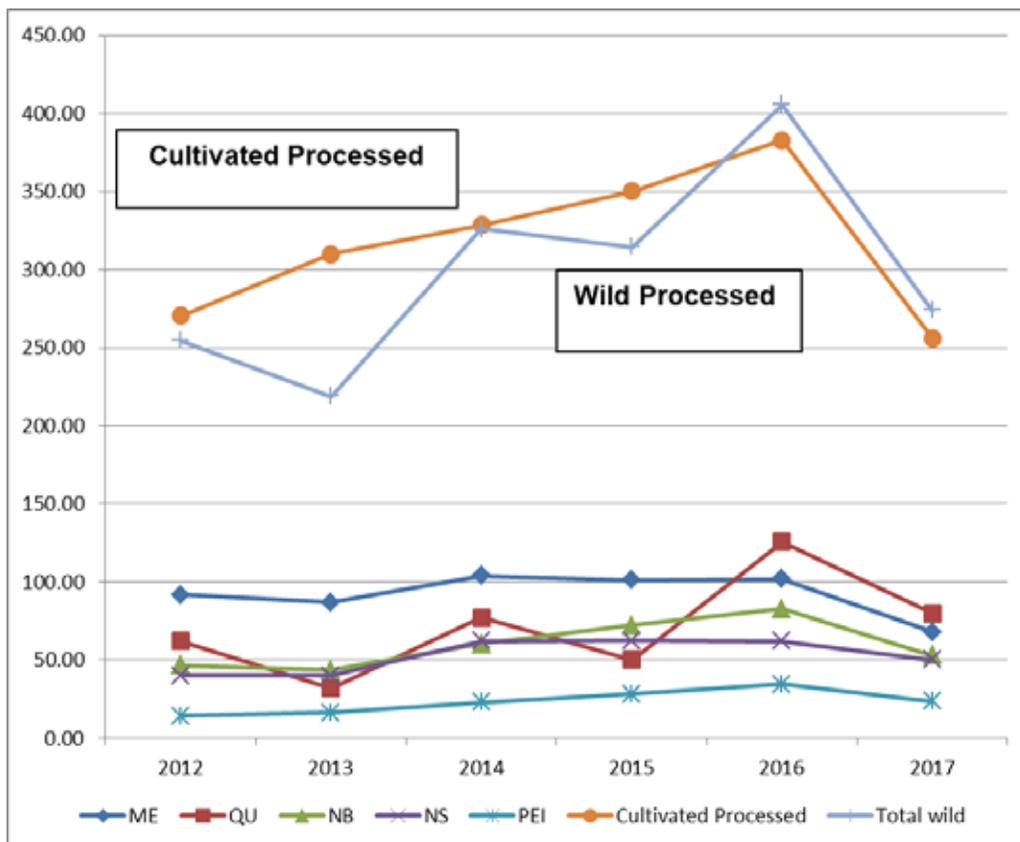
PEI-Cameron Menzies *PEI Berry Crop Development Officer*

Less than average snowfall occurred over the 2017 – 2018 winter. Consequently, the tips of overwintering sprout stems exposed to damaging winds received winter kill. Many flower buds failed to develop near the terminal ends of stems in 2018 crop fields. Spring flower bud development progressed at normal rates throughout the province but fields near the most westerly and easterly tips of the island opened later than did fields further inland. Pressure from *Monilina* blight was moderate as two infections periods were measured in Eastern PEI in May. Pollination began in late May and lasted throughout most of June. The first half of June was relatively cool and brief windows of adequate pollination weather for honey bees occurred, if at all, during the day. Several cold weather events occurred in early June, the most severe of which took place on the early morning of June 4 during which temperatures reached -3°C or less for several hours in all three counties. Widespread cold weather injury was observed on many flower buds the following week, especially in low-lying areas of fields where frost tends to pool. Most flower buds however, particularly those lower down on the stem, remained viable. Warm pollination weather arrived in the second half of June despite intermittent periods of rain. Hives were kept in some fields later than normal to pollinate late blooming clones. Harvest will likely be lower in 2018 particularly due to the cold weather events during the overwinter period and bloom.

Quebec - Pierre-Olivier Martel, *Agriculture Horticulture Specialist, Quebec Ministry of Agriculture*

The vegetative fields going into the fall of 2017 looked good. Overall, the number of fruit buds per plant was high in many fields. Snow covered the fields late in the winter, so we observed localized winter damage in some fields in the spring. Mid-May, frost occurred during the bud break. It created localized damages especially in the lower parts of the fields. There were cold nights in June but generally speaking, temperature did not drop below -2 Celsius and only for short period at once, so we didn't notice major flower damage. Winter has been difficult for many honeybee colonies as producers received less pollinators than expected. We had a very large bloom with some good periods for pollinator flight. Since mid-June, drought has been a concern for many producers. At the moment, precipitations are lower than normal in all of the production area. We are starting to notice effects of the drought in some fields. The crop will probably be near average with an estimate of 70 M lbs.

North American Processed Blueberry Crop 2012-2017



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AND FOR DONATIONS

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- University of Maine Cooperative Extension
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