

Cornell University Cooperative Extension

Eastern NY Commercial Horticulture Program

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Berry News

Regional Updates: North Country—Clinton, Essex, northern Warren and Washington counties Most growers will continue picking strawberries through this weekend despite extremely soggy soil situation. Blueberries are swelling with just a hint of color on early varieties. Green fruit in raspberries, although color could be appearing next week. <u>Pest focus</u>—make note to put slug control down in September. Watch for mummyberry on blueberries and cane/foliar diseases on raspberries.

Capital District—Albany, Fulton, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, southern Warren and Washington counties

June strawberries mostly over—a few sites may still be picking Ovation and AC Valley Sunset this weekend. Hot, wet weather put a bit of a pall on an otherwise strong, albeit short season. Blueberries look excellent with coloring just beginning. Fertilize new strawberry plantings if it didn't get done in early June. 30#N/acre now and in early September. Keep abreast of SWD catches.

Mid-Hudson Valley—Columbia, Dutchess, Greene, Orange, Sullivan & Ulster counties JB Strawberries finished for this year. Currants and gooseberries just beginning; Blackberries are coloring nicely; floricane raspberries coloring, early blueberries should begin picking this weekend in southern locations.

Monitor for other Blueberry pest like cherry and cranberry fruit worm. Weed control in new strawberry plantings may be mostly tillage or hand weeding as herbicide control may be leached due to heavy rains.

Update on Blueberry Crop Locally, Regionally and Nationally

As I visit farms this year, I am astounded by how good the blueberry crop looks. Fruit set is excellent and individual fruit size is definitely above average. Early varieties are beginning to

turn and from my early sampling I would say that the relatively cloudy weather has done nothing to slow sugar production. Growers should be prepared to do everything they can to keep SWD out of the patch and if they are able to do that, I think 2013 will be a banner year in Eastern New York, and from reports in other industry publications it appears to be the same elsewhere.

In the June 6th edition of Fruit Growers News an estimate of western hemisphere



production was put at about 1.3 billion pounds in 2013, up 1.1 billion pounds in 2012. North American production will be close to 950 million pounds, up from an estimate of 836 million pounds in 2012. Michigan

remains the largest U.S. producer with an estimated yield of 104 million pounds.

The Produce News reports that the Oregon crop looks bigger than ever. Oregon is projected to harvest 70 million pounds of blueberries this year on 7800 acres. Washington also projects an excellent crop, only slightly smaller than Oregon.

The June 18^{th} Produce News reports that New Jersey's 10 week harvest season has begun and they are expecting a large flavorful crop. *-LGM*

Serving the educational and research needs of the commercial small fruit, vegetable and tree fruit industries in Albany, Clinton, Columbia, Dutchess, Essex, Fulton, Greene, Montgomery, Orange, Rensselaer, Saratoga, Schoharie, Schenectady, Sullivan, Ulster, Warren and Washington Counties

By Peter Jentsch, Cornell University, Hudson Valley Lab. As published in Scaffolds #14 June, 2013

Spotted wing drosophila was first observed this year on June 10 along a wooded edge in western Massachusetts. It was captured in apple cider vinegar (ACV) traps baited with a yeast solution, in the southern and mid-Hudson Valley on June 17 and 21, respectively. The fly was observed on the border of a small fruit block in southern Orange County in raspberry (var. Prelude). In Mid-Ulster County, the SWD was captured along the wooded edge and within a row of early maturing blackberry within 1 week of harvest. Trap captures of SWD are at least three weeks earlier than last year. In 2012, which was our earliest year on record for bloom of apple, SWD was first captured in the Hudson Valley in Mid-July. We have not yet observed egg laying in fruit during inspection of raspberry, blackberry, blueberry, strawberry and cherry fruit. We are recommending that growers intensively monitor fruit for egg laying. If small pin-sized holes are observed in pre-harvested fruit, programs to manage the SWD should begin.

Click <u>http://ipmguidelines.org/BerryCrops/</u> for Management Options for brambles, blueberries.

Monitoring Berries for SWD Larvae

Source: Small Fruit Update, June 25, 2013, Peerbolt Crop Management, Oregon For scouts/field checking (video located at: <u>http://www.berriesnw.com/videos/baggieTest/SaltBagTest.html</u>):

- 1. Collect a sample of fruit to be tested (Caneberries/blueberries: 50 per sample)
- 2. Put fruit in a gallon size sealable plastic bag.
- 3. Pour in enough of the salt water solution to allow the fruit to float (solution is: 1 cup of salt per gallon of water).
- 4. Mark bag with field code/date.
- 5. For a quick check in the field after a designated period of time (at least 15 minutes), hold the baggie up to light. This helps to see the larvae in the solution.
- 6. For a more thorough examination, after a designated period of time (at least 15 minutes), pour the fruit and salt solution out into a shallow tray and use a piece of wire mesh screen to hold the fruit down making it easier to separate the larvae from the fruit.

SWD Risk Factors

It's becoming clearer which field characteristics increase the chances of having SWD infestations. This is still a work in progress but observations over the last three seasons indicate the following:

Increased Risk:

- Borders of field have wild blackberries, wild cherries or other favored habitat.
- Field is relatively small in size and is part of a mixed crop farm with other susceptible crops adjacent (Example: 1-3 acre plantings of strawberries, raspberries, blueberries with 5 acre cherry and peach orchards).
- Caneberries appear to be preferred over blueberries and strawberries.
- The later the harvest season the more the risk with late season caneberries the most susceptible. U Pick/ Fresh market fields that are difficult to treat with insecticides on a regular schedule.

Decreased Risk:

- Field is bordered by grass seed fields or other non host plantings.
- Field is relatively large and doesn't border other fields of SWD susceptible crops.
- Harvest season is earlier (Example: Duke is lower risk than Liberty in blueberries.
- In general, caneberries are higher risk than blueberries. But the late season blueberries are under a very high risk due to the higher insect populations.

Source: Small Fruit Update, June 25, 2013, Peerbolt Crop Management, Oregon



Managing Raspberry Cane Diseases

Written by Cathy Heidenreich, Cornell University

As most growers could tell you, the stock-in-trade solution for controlling cane diseases of brambles has always been a "delayed dormant" application of lime sulfur or copper based products. While this practice is an important part of your early season arsenal for cane disease management, it is by no means a single cure. An integrated approach to disease management is usually the most successful and begins at planting, with cultural practices and production methods which minimize disease introduction and development. After plantings are established, frequent scouting, and continued used of cultural and chemical methods come into play to keep cane disease development in plantings to a minimum.

A Review of Cane Diseases

Anthracnose (Elsinoe veneta) This disease is much more severe on black and purple raspberries than on red



Anthracnose foliar symptoms often appear as shotholes, but cane lesions are sunken and often purplish.

raspberries. Severe losses may occur from defoliation, wilting of lateral shoots, death of fruiting canes, and fruit infections. Symptoms appear in spring as small, purple spots scattered over young canes. These spots enlarge to about 1/8 inch in diameter, become sunken in the center, and turn gray with a purple border. Many spots can run together to form large sunken diseased





Anthracnose infection on fruit can look similar to sunburn – except that the drupelets are sunken and pitted.

areas on the cane. Infected drupelets remain small, are pitted, and slow to ripen. Leaves may also be infected and develop a "shot hole" appearance. Early spring wetting periods favor development of this disease.

Spur Blight (*Didymella applanata*) Spur blight is more of a problem on red raspberries than on black raspberries. Yield losses occur most frequently in overgrown, excessively vigorous plantings- avoid excessive nitrogen.



Spur blight in raspberries.

In mid to late summer, chocolate brown to purple blotches appear centered around individual buds on canes. Buds within the discolored areas either fail to grow or produce weak shoots the following year. Wet conditions during early spring (April-May) favor disease development, so despite all the recent rains, this disease may not be a problem this summer as it was quite dry earlier. It is important to note with this disease that infections occur in early spring but do not become visible until mid to late summer.

Cane Blight (*Leptosphaeria coniothyrium*) It is interesting to note this disease first described at Geneva Experiment Station in Geneva, New York in 1902 by F.C. Stewart, whole later went on to become a very famous plant pathologist...All species of Rubus are susceptible to cane blight, bu it is most common in black and purple raspberries due to tipping practices. Red raspberries appear equally susceptible. Damage caused by this disease may include bud failure, lateral shoot wilt, and cane death. Dark brown to purple cankers appear on main canes or branches below wilted foliage, and may extend several inches along the cane. Cane blight is more likely to involve whole stems than spur blight as it is not as confined to areas surrounding buds. Infection sites are often associated with pruning wounds or injuries, which may not be obvious. Cane blight infections most often occur from late April to early May.

<u>Cultural control</u> - Start with disease free plants. If you are propagating your own materials, be sure to select only disease free stock plants. Always check to see if disease resistant cultivars are available and use them if feasible. That said resistant cultivars have not vet been identified for any of the 3 cane diseases. Cultivars less susceptible to spur blight include 'Brandywine', 'Killarney', 'Latham',

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and 'Newburgh'. Particularly susceptible cultivars are 'Royalty', 'Titan', 'Canby', "Skeena', 'Willamette', 'Reveille', and 'Sentry'.

Select sites that allow for maximizing air and water drainage. Promote good air circulation by keeping fruiting rows narrow, spacing canes adequately, and controlling weeds. In terms of cane blight management, time pruning and tipping operations to allow 4 or 5 days of healing before a rain. A fungicide application is advised after pruning in heavily infected plantings. Avoiding or minimizing the use of overhead irrigation will help limit cane disease development and spread, especially anthracnose.

Managing cane diseases in your planting continues after establishment by reducing/limiting any overwintering inoculum. This means pruning out old diseased canes before new canes emerge in the spring. Remove and destroy debris from pruning operations immediately.

<u>Chemical control</u> - A dormant application of lime sulfur or copper is critical where cane diseases are problematic. A note of caution- this spray may be phytotoxic if applied after ½ inch green, particularly on a warm day. Alternatively, several copper products are also labeled for use as a delayed dormant spray for raspberry cane diseases. Consult labels for application rates and timings for specific products. Delayed dormant spray is not necessary on fall bearing red raspberries if the previous year's canes are mowed and removed from the planting or thoroughly shredded.



Cane blight, photos courtesy of W. Wilcox, Cornell

Captevate 68WDG is also labeled for control of anthracnose and spur blight on raspberries, starting at 8-10" shoot growth. Only 2 sequential applications of this product may be used before switching to a different group of fungicide chemistry.

Another group of fungicides labeled for control of cane diseases in NY state are the strobilurins, which include Abound, Cabrio EG and Pristine WG. These products should be used at disease onset. Check product labels for specific information on rates and timings of applications. Pay careful attention to label restrictions for these products. Like Captevate, no more than 2 sequential applications of these products may be made before switching to an alternate chemistry.

Cicada's are making their mark in the Hudson Valley!

The 17 year cicada's Brood II has been making themselves known in the southern part of our region. Brood II consists of red-eyed magicicadas which are seen only in the eastern half of the United States. There are 15 U.S. cicada broods that emerge every 13 or 17 years, so that nearly every year, some place is treated to the strange cacophony that they produce. Last year a brood emerged from near the Blue Ridge Mountains of Virginia, West Virginia and Ten-



nessee. Next year there will be two emergence sites: Iowa into Illinois and Missouri; and Louisiana and Mississippi.

The insect has been so prolific that they have created more than a gastronomic novelty and a tremendous noise – they've also been doing some damage to agricultural plants. The cicada will deposit their eggs in the stems of woody plants and blueberries seem to be hosting more than their fair share of these scars. The heavy egg laying is causing disruption to the vascular system of the plant resulting in flagging, leaf browning and some shoot death. There are some

Clockwise from top left: Magicicada (courtesy University of CT); blueberry leaf damage (courtesy of Emily Cook) as a result of egg laying (courtesy Rockland County CCE) insecticides labeled for cicada, but sprays should have been applied before now to prevent the damage seen in these photos. -LGM

Day Neutral Strawberry Fertility Management

Written by Cathy Heidenreich, Cornell University and Laura McDermott, CCE ENYCHP

This article is written from a discussion with Kevin Schooley. Mr. Schooley is the Executive Director of the North American Strawberry Growers Association, the Ontario Berry Growers Association and is also a berry crop consultant in the Ontario and Quebec provinces. Kevin deals with mainly smaller growers that average between 1 and 2 acres with his largest grower having 7-8 acres planted to day neutral (DN) strawberries.

There are two opportunities for planting DN strawberries – spring planting of fall-dug dormant plants, or late summer planting of plugs. Spring planting remains a priority for many Canadian growers as it allows them to take advantage of spring soil moisture. Canadian growers

prioritize DN plants over June bearing (JB) varieties so that they get early production out of them – this helps close the gap between when JB strawberries end and DN begin.

Pre-plant soil test and amendments focus on Phosphorus levels. Additionally, growers apply 50 lb actual N/acre pre-plant during bed formation usually as a granular blend along with the required P and K.

Some growers are prepping fields in the fall to help them get access to fields as soon as possible in the spring. This would mean that some compensation for pre-plant N might be needed. Deer and other critters can also do a number on the plastic mulch, but in many areas it might be worth doing this early especially as they predominately plant the berries by hand. All DN strawberries are planted on plastic mulch covered raised beds.

In the spring, flower trusses are removed until the plant reaches a reasonable plant size - 6-8 healthy leaves per crown – which usually translates into sending a crew



through twice.

Beginning at heavy bloom to green fruit, soluble fertilizers are fed through the drip irrigation system at a rate of 3-5 lb actual N/acre/week. Initially the rate starts at 3#, and then it gradually increases until harvest begins. When harvest kicks in, the weekly N rate may actually go up to 7# N/ acre/week, or 1# each day.

Growers are alternating weekly between calcium nitrate (CaNO3) and a greenhouse grade potassium nitrate (KNO3, 13-0-44) to provide necessary calcium and potassium along with nitrogen. Recommended K rate is 15 lb/week. CaNO3 a safe Ca source from a root perspective. Urea can also be used as a N source and later in the season it might be more important as it is less expensive.

> Boron is not specifically used, despite the fact that the literature indicates it is very important and most soils in the east are deficient. Many growers are very interested in using foliar nutrients, but the return on investment remains unclear.

> DN plantings are mostly annual crops but some growers are holding over the planting for a second season with mixed results. Seascape overwinters well but Albion is quite tricky under SW Ontario conditions. The typical overwintering

method is one layer of heavy weight row cover (40 to 50 ml vs. standard 19 ml) with no straw. The heavy cover is more durable, and it lasts at least two years.

Most DN fruit in Canada is being sold at Retail farm stands so yield is important but not as critical as it is for wholesalers as retail growers are receiving a premium price and also need very high quality. The most popular variety is Albion, with some Seascape as well. Some growers are producing San Andreas which may overwinter better than Albion and is reported to have good fruit size, but the first picking may be later than Albion.

Now Available! Are you looking to purchase new equipment, contact an agricultural organization, or visit a new farmers' market? Save some yourself some time - Check out our new directories!

<u>The Farmers' Market Directory</u> is a list of current markets in the Capital District, along with their hours of operation and contact information.

<u>The Growers' Business Directory</u> provides information on local and national businesses that cater to the needs of vegetable and fruit growers. Includes seed companies, irrigation suppliers, packaging suppliers, machinery dealers, government offices ...and more.

Visit the former Capital District website – soon to be transitioned to serve the entire Eastern NY Commercial Horticulture programs 17 counties: <u>http://cdvsfp.cce.cornell.edu/</u>

Eastern NY Commercial Horticulture Program Sponsoring:





The Best Berry Plants since 1932

Tour of Nourse Farms - Tuesday, July 23, 2013

Tour the premier Berry Plant Nursery in the Northeast–Nourse Farms in Whately, Massachusetts. Nate Nourse will be conducting a tour of the raspberry plantings where we will be focusing on methods for pruning and trellising these plants. To see more of the nursery, visit <u>http://noursefarms.com/</u>.

Departure: 8:00 am Clifton Commons Mall

(second pick up point to the south will be determined; pick-up locations will depend on attendees location/preferences).

\$20 per person includes transportation, box lunch and tour. \$12 each additional attendees from farm.

For more information contact Laura McDermott 518-791-5038. Registration information below.

Please register by **July 17 using form** below. Checks should be made out to CDVP. Mail to: Marcie Vohnoutka, CCE Rensselaer Co., 61 State St., Troy, NY 12180.

Name (s): _____

Phone # (where you can be reached that morning):

Address:_____

Dietary requirements for box lunch:

Weekly and Seasonal Weather Information						
Site	Growing Degree Information Base 50^O F			Rainfall Accumulations		
	2013 Weekly Total 6/26—6/30	2013 Season Total 3/1 - 6/30	2012 Total 3/1—6/30	2013 Weekly Rainfall 6/19—6/30 (inches)	2013 Season Rainfall 3/1—6/30 (inches)	2012 Total Rainfall 3/1—6/30 (inches)
Albany	126.8	911.8	1098.1	2.51	17.40	12.79
Castleton	121.4	889.6	1100.4	2.74	14.09	12.76
Chazy	90.1	775.7	1122.1	2.47	16.11	9.94
Clifton Park	118.8	843.8	1039.8	4.81	17.67	16.95
Clintondale	122.4	992.4	781.5	NA	NA	10.68
Glens Falls	110.1	779.3	909.5	2.17	13.98	12.32
Granville	NA	NA	863.5	0.03	NA	15.27
Guilderland	116.5	826.5	1016.1	0.43	4.13	5.14
Highland	121.1	986.0	1166.4	3.08	11.09	14.39
Lake Placid	76.4	478.3	NA	1.98	16.14	NA
Montgomery	120.5	925.2	1057.0	2.59	12.71	NA
Monticello	100.8	713.2	880.0	0.01	0.17	0.70
Redhook	122.9	899.0	1059.5	0.98	11.68	11.36

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