



Cornell University
Cooperative Extension

Capital District Vegetable & Small Fruit Program

Weekly Update

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Frost Protection Considerations for This Weekend

This weekend is forecasted to be very cold – into the lower 30's in some spots. Many growers have already experienced some loss on fruit crops, and our hope is to minimize continued loss.

Unfortunately, as the flowers progress in development they become more, not less, susceptible to frost and freeze injury. Some FAQ's for you to consider as you develop your frost control plan:

Q: If snow is predicted, should growers irrigate to protect the blossoms as long as its temperature is above 30°F? If wind is also forecast, what do I do then?

A: For strawberries, irrigation is not warranted as snow provides insulation. If temperatures fall to the mid-20s, then plants with open blossoms in snow would still be at risk. In situations where the temps fall below 25°F, and there is little wind but still snow, growers might consider irrigating for frost protection. Even irrigation, if temps are very low at the right blossom development, will not insure against freeze damage. If winds are much over 7-8 mph just don't bother frost protecting, although some growers with small acreage have been getting additional protection using heavy weight row cover and then applying irrigation over the top.

Q: Does copper sulfate affect the way the frost forms on the flowers in a way that helps blooms get through the cold?

A: Copper sulfate inhibits growth of ice-nucleating bacteria, but in studies done years back, it didn't do much, and in the above weather scenario it probably wouldn't stick and then wouldn't offer much protection at all.



Q: Does an anti-transpirant like Desikote work to protect against frost damage?

A: According to the label, this product reduces the effects of cold desiccation, but will not prevent damage from freezing temperatures. Applications should be at least 24 hours before frost conditions.

Q: Is it important to monitor dew point during frost events?

A: Monitoring dew point is really important in terms of deciding when to irrigate. The dew point temperature is defined as the temperature at which the air becomes saturated with water vapor as air cools. When the air temperature is at the dew point, the number of water molecules evaporating from water surface is equal to the number condensing on the surface of that water. The dew point temperature is often used to predict the next morning's minimum temperature making it extremely important for freeze protection of crops.

To determine dew point adequately, growers should put out 2 or 3 data loggers (digital thermometers) directly in their own plantings. Use probes or thermocouple wires that may be put directly into flower receptacles to monitor temperatures right at fruit level. Omega Engineering Inc., located in Connecticut is a full service company specializing in this type of product. <http://www.omega.com/>, 1-888-826-6342. Systems are not terribly expensive, possibly \$200-\$500. Other resources include a video from NCSU titled: [Using a Digital Thermometer to Guide Your Decisions in Frost and Freeze Events](#). -LGM

"Serving the research and educational needs of vegetable and small fruit growers in Albany, Columbia, Fulton, Greene, Montgomery, Rensselaer, Saratoga, Schenectady, Schoharie, Warren, & Washington Counties"

Garlic Update

So far the garlic crop is looking pretty good throughout the Capital District. There is some cold and wind damage showing as browning or yellowing of the earliest leaf tips in many areas, but this is entirely cosmetic. New growth should be coming in nice and green with this cooler weather, especially if you were able to get some nitrogen on or had a good slow release form of nitrogen present.



The real test of the garlic crop will come as the weather warms in May. At that point the seed clove will be fully absorbed if it isn't already, and the garlic plant will be living entirely off its own roots and leaves. This is when fusarium or garlic bloat nematode will cause symptoms as well. The stress of bringing enough water into actively growing plants on warm days is often too much for the compromised root systems of plants with fusarium or GBN, and affected plants may quickly begin to yellow and die. If you see plants like this, don't just pull them and toss them. Try to dig some of them up, keeping as many roots intact as possible. Look for brown and decaying roots—that is a sign of fusarium. If the base of the plant is missing roots entirely in some sections even though you removed it carefully, that may be a sign of GBN. This

is especially true if the remaining roots are still white and healthy.

The best way to determine which issue you are dealing with is to have your garlic tested. The certification program is not up and running, but Cornell is doing more testing for GBN (Dr. Abawi has been alerting growers to fusarium infections at the same time, though this is not included on the form). For \$20 per sample, residents of New York are able to test as many samples as they need. You can test each variety, each field, etc. This is not the same as

a certification, but it is at least one step that you can take in the right direction. If you live outside of New York, you can send in samples for \$40 each. The difference in price is due to a grant from the Specialty Crop Block Grant Association, which is funding Dr. Abawi's work in diagnosing and managing this nematode.

If you want to test your garlic, please let me know and I can send you the form. If you are getting the newsletter by email, the form is also attached today. If you receive the newsletter by mail, I can mail the form. If you see anything unusual as the weather warms, don't hesitate to call! The more quickly we can address any issues you are seeing, the better off we'll be at harvest time. —CLS

Websites of Interest

Diagnose pest and disease problems using color pictures: <http://vegetablemdonline.ppath.cornell.edu/>

Cornell *Guidelines* for fruit and vegetables: <http://www.nysaes.cals.cornell.edu/recommends/>

Cucurbit Downy Mildew forecast: <http://www.ces.ncsu.edu/depts/pp/cucurbit/>

USDA Fruit and Vegetable Market News: www.marketnews.usda.gov/portal/fv

Organic Prices: <http://rodaleinstitute.org/Organic-Price-Report> or <http://www.ers.usda.gov/Data/OrganicPrices/dd>

Organic Control of Basil Downy Mildew

By Joan Allen, University of Connecticut Cooperative Extension. Basil growers in the northeast have been battling downy mildew since it was first reported in the region in 2008. While the pathogen, *Peronospora belbahrii*, does not overwinter in our area, wind-borne spores move in from the south over the course of the growing season with infection typically being confirmed by late July to early August in Connecticut. Symptoms include chlorosis or yellowing delimited by the veins followed by death of the leaves. Spores (sporangia) are produced on the undersides of the leaves in association with the chlorosis, giving it a dirty appearance and reducing the marketability of the basil for fresh market sale.

Sweet basil (*Ocimum basilicum*) varieties tend to be the most susceptible as shown in a trial done at Rutgers University (Wyenandt et. al., 2010). The citrus and spice basil varieties tended to be less susceptible.

In a study at two locations in Connecticut in 2011, five organic control products were evaluated for control of basil downy mildew. Sweet basil 'Genovese' and lemon basil were grown in plots at one site and only 'Genovese' at the other. Based on first detection dates for disease in previous seasons, products were applied preventively beginning in late July. Disease was first detected in all 'Genovese' plots at both locations by early August. Products tested included Milstop, OxiDate, Trilogy, Serenade MAX, and Actinovate AG. Treatments were applied weekly at recommended rates using a CO₂ pressurized

Plants treated with OxiDate and Milstop had significantly lower disease ratings than the control at both sites. Actinovate, Serenade MAX and Trilogy resulted in a lower average disease rating at one site but not both.

backpack sprayer. The boom was equipped with three nozzles to facilitate thorough coverage of both upper and lower leaf surfaces. After disease was confirmed in the field, OxiDate was applied twice weekly (weather permitting) and the spray volume was doubled by going over each plot twice per the request of the manufacture. Disease was confirmed during the third week of treatments.

Treatments were applied for five weeks. Disease was evaluated during the sixth week by rating the plants as follows: 0 = no symptoms or sporulation, 1 = symptoms with 0 -10% leaf area with sporulation, 2 = 10-50% leaf area with sporulation, and 3 = >50% leaf area with sporulation. Weather was favorable for sporulation and spread of the pathogen with regular rain events at both locations. Results varied between the two sites.

Plants treated with OxiDate and Milstop had significantly lower disease ratings than the control at both sites. Actinovate, Serenade MAX and Trilogy resulted in a lower average disease rating at one site but not both. Only 'Genovese' plots were evaluated because the lemon basil showed very few symptoms and no sporulation was observed, demonstrating its resistance to downy mildew. This study was conducted by Joan Allen, Department of Plant Science and Landscape Architecture at UConn, and was funded by a NE SARE Partnership Grant.

Reprinted from the Commercial Vegetable and Fruit Crops Newsletter, Volume 9 No. 1 March 2012



Basil Downy Mildew Symptoms. The top of the leaf becomes yellow between veins, and the bottom contains downy purple-grey spores. Images: VegMD

Beginning Farmer Learning Group Forming

Are you a beginning farmer and looking for a way to connect with other beginning farmers? Cornell Cooperative Extension Capital Area Agricultural and Horticultural Program is going to host a meeting on Thursday, May 3 at Julie and Brian Seacord's farm located at 32 Old Cambridge Road, Greenwich, NY. The meeting will start at 7:30 P.M. There is no charge for the meeting.

Asked what the purpose of the meeting is, Extension Educator Steve Hadcock explained that this is a chance for farmers who have been farming less than 10 years to get together and talk about issues that they face in starting and operating a farm. "Some beginning farmers may feel unsure of where to turn for assistance and Cooperative

Extension is attempting to form a group of farmers interested in working together and to learn from each other."

Hadcock noted that it is his hope that a group of new farmers in the area will form a learning group and meet regularly to share ideas and develop a strong support network for themselves. He noted that Cooperative Extension is committed to facilitating the start of this learning group and to assist sustaining it as well.

For more information about the learning group, contact Steve Hadcock at 518-380-1497 or by email at seh11@cornell.edu.

FarmHack Program Hosting Events around Lake Champlain April 28-29

FarmHack is a collaborative program of The Greenhorns and The National Young Farmers' Coalition that offers farmers opportunities to work together on tools and innovations to make their farms more sustainable. FarmHack seeks to bring together farmers with engineers, designers, architects and other non-farmer allies to help strengthen sustainable agriculture.

The next opportunity to get involved with this fledgling project is on April 28-29. The Intervale/Essex FarmHack will span both shores of Lake Champlain, with events held at the Intervale in Burlington, VT, and at Essex Farm, Pedal Power, and Whallonsburg Grange in New York. The focus for the weekend is appropriate tillage, CAD design, workshopping, and working with FarmHack's new beta site. There will even be a workshop on converting old silos into productive, liveable spaces.

The FarmHack community revolves around weekend-long events such as this all over the country, which bring together inspired farmers, engineers, and innovators to work on specific problems and solutions for their farms. Outside of these events, FarmHack exists as an online forum, blog, and wiki where folks from across the nation collaborate to open source their designs, ideas, and fixes.

"Mainstream agricultural research and development tries to solve farmers' problems with top-down, chemical and energy-intensive inventions. FarmHack seeks to solve problems by helping our community of farmers to be better inventors, developing tools that fit the scale and their ethics of our sustainable family farms." Says Greenhorns founder Severine von Tscharner Fleming.

Of course, farmers for generations have developed their own tools and solutions in farm shops and in the field, and shared them with neighbors: tillage, transport, power generation, processing, seeding, and spinning. What's new here is that FarmHack makes it possible to share these innovations with the entire community of farmers, and gives farmers the opportunity to support and improve upon one another's ideas, across geographic boundaries. Farm Hack is yet another vital piece of the new agricultural system that is being built in this country, from the soil up.

For more information, visit: <http://www.youngfarmers.org/practical/farm-hack/intervale/>.

FARMHACK
INTERVALE / ESSEX

farmhack, a community for farm innovation
farmhack invites farmers, engineers, tinkers+ designers to join together, in person and online, on the invention and re-invention of farm tools.

the focus of this farmhack is on appropriate tillage, workshopping, CAD, design, working with our new beta site

APRIL 28-29, 2012

WHERE? BOTH SIDES OF LAKE CHAMPLAIN INTERVALE, BURLINGTON, VT + ESSEX FARM, WHALLONSBURG GRANGE, PEDAL-POWER, ESSEX NY

EVENT SPONSORS:
 GREENHORNS, NATIONAL YOUNG FARMERS COALITION, INTERVALE, WHALLONSBURG GRANGE, GREENSTART NH, ESSEX FARM, HIGH MOWING SEEDS, NEW BELGIUM BREWING COMPANY + CENTER FOR AGRICULTURAL ECONOMY

By Ron Goldy, Michigan State University Extension.
Published February 23, 2012

Michigan is not known for okra production; however, it does well in a plasticulture system, so I plant it if I have extra space at the end of my trials. Several years ago I had two adjacent okra rows. Three weeks after germination one row was shorter than the other. Investigating why, I reached under the plastic and found no water in the drip tape. Following the tape I found a stake in the tomato trial in the same row had stopped water flow. I moved the tape and restored the flow. After another three weeks the previously short okra had outgrown the other row. What happened?

This sounds like an essay question for a vegetable production exam, but nevertheless, if repeatable and consistent it may present a yield advantage for other vegetables. The working theory we came up with was that since a main root function is looking for water, if they find it easily, root growth slows, and the plant shifts energy elsewhere. While lack of water limited above ground growth, it encouraged root growth. Then, when water was applied, there was greater root area to utilize water and accompanying nutrients, resulting in increased growth.

To test this theory, MSU horticulturalist [Mathieu Ngouajio](#) and I designed a trial using peppers and tomatoes. The trial divided plant growth into five stages: Stage 0 (irrigation

starting at transplanting), Stage 1 (irrigation starting two weeks after planting), Stage 2 (irrigation starting when vegetative growth began), Stage 3 (irrigation starting at flowering), Stage 4 (irrigation starting at fruit set), and irrigated only to apply weekly nutrients. Beds were shaped and plastic laid when the soil was moist and all treatments were initially irrigated to seal the soil around the roots.

Vegetables grown in a plasticulture system generally require water applied through a drip system. When this water is applied can have significant effect on plant growth and eventual fruit yield and quality.

Results of the trial indicated growers could improve tomato yield 15 percent and reduce water use 40 percent by limiting water for three to five weeks after transplanting (Figure 1). We also found an increase in rooting depth for the fertigated-only plots compared to those irrigated since transplanting (47 compared to 35 inches, respectively). Pepper plants in the drier treatments were also noticeably darker green and did have measurably higher chlorophyll levels, suggesting the higher water treatments leached nutrients from the soil or the drier treatments concentrated chlorophyll. Results of the trial can be found in "[Irrigation Management for Fresh Market Vegetable Production Using Plasticulture and Drip Systems.](#)"

Crazy Weather?

We finally saw some much need rain this week, but with the rain came much cooler temperatures and even worse, it looks like we will be seeing more freezing this weekend with temperatures predicted to drop into the mid-twenties. Last week I saw and talked to a couple of growers irrigating onions and some greens they had set out on black plastic and irrigating some perennial crops like asparagus. Most of them commented on how they never remember having to irrigate in April before!

This week I saw some peas that looked excellent with the exception of a few weeds which I think is a good reminder—part of me is a little worried that some of our pre-emergent herbicides we like to use for early sweet corn, asparagus and some of our other early crops may not work as well due to the lack of moisture to activate them. Which makes me think you might want to have a plan for applying some post-emergent materials, especially after this rain and if/when we get a shop of warmth! A few potatoes have gone in the ground in the past several weeks with a lot going in next week. I've been in several high tunnels lately and crops look excellent, with the exception of some greens and mustards bolting quicker than normal due to the unusual heat the last couple of weeks. It's crazy because you can't keep up with venting one day and the next you're

having to put heat in there to keep cold sensitive plants like tomatoes from getting frozen!

With that said, if you are heating your greenhouses or any agricultural buildings on your farm with propane, you might want to look into a program called Propane4Farms based out of Saratoga Springs, NY. They are a company that has combined the purchasing power of agricultural businesses throughout New York, New Jersey, Pennsylvania, and Maryland that has negotiated for its members the best pricing on propane. They have negotiated with Ferrellgas, the nation's second largest propane company, to supply members with the price of thirty five cents over the cost of propane (based on Selkirk N.Y. posting price). Currently the price of propane from them is \$1.79 per gallon! The program is available to all agricultural businesses to join including farms, greenhouses, farm markets and agricultural supply stores. I have also included the "Frequently Asked Questions" section from their website as it answers many of the questions I think you might have. If you are interested, you do have to send in an application which can also be found on the website. For more information, go to <http://www.propane4farms.com> or call 315-729-3710 or email: info@propane4farms.com—CDB

FREE Spotted Winged Drosophila Webinar this Friday!

“Getting Ready for Spotted Wing Drosophila: Understanding Risks for Small Fruit Crops and Current Management Options”

Dr. Greg Loeb, Professor
Department of Entomology

Cornell University, Geneva, NY 14456

Friday April 27, 2012, 1 PM – 2 PM EDT

Join Dr. Greg Loeb, Cornell University grape and small fruit entomologist, as he discusses the new invasive species spotted wing drosophila (*Drosophila suzukii*) that arrived in the Northeast in 2011. Originally from Asia, this fruit pest was first discovered in California in 2008 and has now spread to 20+ states, including the Northeast. Where it has become established it has caused major damage to

soft-skinned fruit with blueberries, raspberries, and cherries being particularly vulnerable, although day-neutral strawberries in the late summer are also likely to be seriously impacted. The reason this species of fruit fly is such a threat to berry crops is that the female is able to lay her eggs in ripe or ripening fruit as compared to other fruit fly species that wait until fruit is overripe or decaying, hence of less economic value.

In this webinar, Dr. Loeb will first review the basic biology of spotted wing drosophila (SWD), identification, history of invasion, and crops at greatest risk, and then go on to discuss management strategies including monitoring and possible control options. **To register e-mail Cathy Heidenreich, mcm4@cornell.edu.**

Spotted Winged Drosophila Update and Advice

Spotted Winged Drosophila larvae have been observed in June bearing strawberries in North Carolina. No adults trapped yet from field where the larvae were observed, but SWD adults have been trapped in other areas of North Carolina and as far north as Long Island this season, but no other fruit infestations have been reported. It is not unusual to observe larvae before any adults are trapped, and experts are still optimistic that small early populations will not blossom into a problem for June bearing strawberries.

Still trapping is ongoing in our region, and growers are encouraged to set out traps in their own plantings. Dr. Greg Loeb is using a homemade trap of a 16 oz clear plastic cup with 4mm holes (12 equally spaced) drilled with Dremel tool just below the rim. Apple cider vinegar used as bait. Kathy Demchak from Penn State is using plastic deli containers as they may be more durable here is an on-line source for them: <http://www.mrtakeoutbags.com/store/delitainer.html>. Maine and Massachusetts experts are recommending Hefty Style Clear Colors Cups, red, 18 fl. oz. Made by Pactiv Corporation, Lake Forest IL. SKU 1370011612.



<http://heftybrands.pactiv.com/products/plates-bowls-cups-and-cutlery/hefty-designer-plates-bowls-platters-and-cups.aspx>.

More SWD trapping information:

- [Making a Spotted Wing Drosophila Trap – Hannah Burack, NCSU \(video\)](#)
 - [Checking a Spotted Wing Drosophila Trap – Shawn Banks, NCSU \(video\)](#)
- Contributed by LGM

Spotted Winged Drosophila Advice

Vermont Vegetable and Berry News – March 13, 2012 by Vern Grubinger, UVM Extension

I attended a meeting about this pest with researchers and extension at the CT Agricultural

Experiment Station last week, where Dr. Richard Cowles has a variety of lab studies underway to better understand SWD behavior. There is much we do not yet know about this pest and how to manage it. With that in mind, here is some advice:

1. Familiarize yourself with this pest sooner rather than later. It arrived in New England last year, it attacks many

(Continued from page 6)

types of firm ripe fruit, is winter hardy, and it can build up very, very fast as it lays a lot of eggs and has a short lifecycle. Visit the web sites listed below. SWD is not hard to identify but you must be able to tell it apart from other fruit flies.

2. Set up some traps to monitor for arrival of SWD. Traps with various baits including apple cider vinegar are easy to make (see sites below) but they will be much more effective when not competing with ripe fruit, so set them up before fruit crops start to turn color. Other regions of the country found SWD populations did not build up until early summer, and then it was abundant into fall. Fall raspberries, day-neutral strawberries, grapes and blueberries may be our most vulnerable crops. I think it is worth monitoring in June bearing strawberries, too.

3. Know what and when to spray. If SWD arrives and you need to spray for it, materials with best efficacy appear to be: spinosad (Entrust), spinetoram (Delegate), malathion, advanced generation pyrethroids (Warrior II) and Lannate. There will be considerable selection for resistance if materials like Entrust (OMRI approved) are used too often, so organic growers take note. Surround WP is both insecticidal (it acts as a desiccant) and a deterrent to SWD. It may be suitable for use on blueberries and wine grapes. It will be important to time the first application of any insecticide to when SWD are known to be present and fruits are just starting to ripen. Work is underway to reduce insecticide

rates or improve their efficacy by adding sugar and/or salt to the spray mix to stimulate SWD feeding. Stay tuned for experimental results.

4. Consider netting. On small scale, high value, high risk plantings (e.g. fall raspberries) it may be possible to exclude SWD with netting that has a mesh opening less than 1 mm. The only one I can find is ProtekNet Standard Plus which has a 1.0 x .85 mm mesh, weighs 80 g/m² has 80% porosity, 83% light transmission and lifespan of 7 years. Cost is \$287 for 6.5' x 328' or \$575 for 13' x 328' from Dubois Agrinovation. <http://www.duboisag.com> or 800-463-9999.

5. Use post-harvest practices to reduce overwintering populations. Clean up and remove as much unharvested fruit from the field as possible. It may also be possible to 'trap out' a lot of SWD once all fruit has been harvested, since the flies are active into very late fall. Use a lot of monitoring traps or try buckets with an inch of cider vinegar in the bottom, changed frequently.

For more information:

Penn State: <http://extension.psu.edu/ipm/agriculture/fruits/spotted-wing-driscophila>

Michigan State: <http://www.ipm.msu.edu/swd.htm>

Oregon State: <http://groups.hort.oregonstate.edu/group/>

Free Gardener Late Blight Brochure To Distribute At Farm Stands and Markets

At the suggestion of growers, a trifold has been made about late blight for gardeners. Growers commented that their customers often ask questions about growing vegetables in their garden, thus marketing locations are good sites for distributing this information. And considering that gardens are known or thought to be where late blight outbreaks started the past 3 seasons, extending information to gardeners is critical. The trifold covers the importance of managing and reporting late blight outbreaks, and provides details on how to do this, plus has images to assist with diagnosis. If you want some brochures, provide your address and number wanted to Meg McGrath <mtm3@cornell.edu>. Funds to produce, print and distribute this brochure are part of a federally-funded national project - your tax dollars at work for you! (MTM)

Editors note: we are ordering 100 brochures per county, so if you would like to have some of these at your farm stand, contact us first unless you would like to receive a large number of brochures. We will also have information available at county fairs throughout the Capital District.

Grower Classifieds

Do you need to buy or sell something that vegetable and small fruit growers in the Capital District might be interested in? Let us know, and we will post it here in the weekly grower classifieds. Try to keep information short, just like with a newspaper classified. We will include up to 50 words and a small (2 inch by 2 inch) picture. This service will be free to all enrolled growers. The deadline for submission each week is Wednesday at 12 noon. If you have any questions, please contact Crystal at 775-0018 or at cls263@cornell.edu.

Upcoming meetings and notices

April 28 and 29: FarmHack Event at Intervale: For more information, visit: <http://www.youngfarmers.org/practical/farm-hack/intervale/>. See page 4 for more information.

Thursday, May 3: Beginning Farmer Learning Group. Location: Julie and Brian Seacord’s farm, 32 Old Cambridge Road, Greenwich, NY. The meeting will start at 7:30 P.M. See page 4 for more information.

Friday, May 18: Recipe to Market workshop- 9:30 am. to 3:30 pm at Proudfit Hall on Route 22 in Salem, NY. For more information about the workshops and the Battenkill Kitchen, Inc. visit www.battenkillkitchen.org or call Trish Kozal at 518-854-3032 or Steve Hadcock, Cornell University Cooperative Extension at 518-380-1497.

Saturday, May 19: Good Manufacturing Practices for the Production of Acidified (Pickled) Foods- 8:30 am to 4:00 pm at the Battenkill Kitchen, Inc., 58 East Broadway, Salem, NY. For more information about the workshops and the Battenkill Kitchen, Inc. visit www.battenkillkitchen.org or call Trish Kozal at 518-854-3032 or Steve Hadcock, Cornell University Cooperative Extension at 518-380-1497.

Weekly and Seasonal Weather Information						
Site	Growing Degree Information Base 50 ^o F			Rainfall Accumulations		
	Weekly Total 4/18—4/24/12	Season Total 3/1 - 4/24/2012	2011 Total 3/1—4/24/2011	2012 Weekly Rainfall 4/18—4/24/12 (inches)	2012 Season Rainfall 3/1—4/24 (inches)	2011 Total Rainfall 3/1—4/24 (inches)
Albany	26.5	172.1	38.5	2.52	4.18	7.54
Bennington, VT	22.0	136.4	28.5	1.53	3.53	5.18
Clifton Park	22.5	164.0	25.0	3.74	5.50	5.22
Glens Falls	17.6	105.2	23.5	2.25	5.31	5.89
Guilderland	18.5	145.0	30.5	2.02	3.59	6.94
Granville	18.0	124.6	24.5	3.36	5.56	2.01
Hudson	29.8	217.0	37.0	2.38	4.44	9.37

Cornell Cooperative Extension and the staff assume no liability for the effectiveness of results of any chemicals for pesticide use. No endorsement of any products is made or implied. Every effort has been made to provide correct, complete, and current pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly and human errors are still possible. These recommendations are not substitutes for pesticide labeling. Please read the label before applying any pesticide. Where trade names are used, no discrimination is intended and no endorsement is implied by Cornell Cooperative Extension.

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