Northern Corn Leaf Blight

The last several years we have seen an increase in the occurrence and amount of Northern Corn Leaf Blight in the region and this year is no exception. With the cooler nights and heavy dews, it is becoming easy to find in most sweet corn plantings. Northern Corn Leaf Blight affects both sweet corn and field corn and is a disease that should not be taken lightly as it can both affect ear quality (discolors the husk leaves) and can essentially defoliate a plant. Look for long, grayish cigar shaped lesions on the lower leaves first.

The first line of defense for sweet corn is selecting varieties that have known NCLB tolerance or resistance. This information is generally noted in the seed catalogs, or you can ask your seed salesman.

The second line of defense is a fungicide. There are several recommended materials that can be used, including those in Group 11 FRAC fungicides: Headline and Quadris, or those in Group 3: PropiMax and Tilt. Quilt or Quilt Excel are premixes of both the active ingredients in Quadris and PropiMax and Tilt. The recommendation is to alternate between Headline and PropiMax or Tilt plus a protective material like Bravo or mancozeb (Dithane). However, pay attention to the pre-harvest interval of these materials as they range from 7 days to 14 days.

Once corn is harvested, corn residue should be destroyed as soon as possible in order to reduce the amount of inoculum and further infection of later plantings. You should also try to rotate out of those fields infected with corn for at least one year or better yet two years, if possible. -CDB

Late Blight Update

This week we found Late Blight in tomatoes on two more farms; one in Columbia County and one in Rensselaer County. The growers have taken appropriate actions to reduce the likelihood of spreading the pathogen. Recent cooler temperatures and heavy morning dews are nearly perfect conditions for Late Blight to spread across a field. In addition to protecting tomatoes, if you still have potatoes with green vines you should protect them as well. -CDB

“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”
Pumpkin harvesting is underway and so far the crop looks pretty good, albeit size might be slightly smaller and some fields might have fewer pumpkins because of the drought and heat stress which hindered fruit set. Powdery Mildew continues to move throughout most fields and several calls this week have growers wondering when they should stop spraying.

I wish I had a magic formula to tell you, but the best I can do is offer this advice: if you are still a couple weeks away from harvesting, even parts of a field, I would continue on a spray program. The reason why is to make sure your handles on the fruit don’t whither up. You need to remember that those handles are nothing more than modified leaves and when the vine starts to really collapse, the plant continues to try and grow and will pull moisture back out of that stem leaving you with a poor handle. Likewise if you have a pick your own field and want to have some vines left so your u-pickers know that the fruit were grown there, I would continue a fungicide program.

With the cooler temperatures, now might be a good time to try some sulfur. But remember when you order it, ask for a sulfur that is able to go into solution nicely—you don’t want one that is a granular that is meant for acidifying your soils or one that is used as a dust. The two most common ones that I know of are Microthiol and Yellow Jacket. Of the two, Microthiol goes into suspension very nicely and is not as dusty when filling your tank.

And with the heavy dews and cooler temperatures, this will really favor Cucurbit Downy Mildew to continue to spread, especially as the number of cucumbers alive continues to decline and the pathogen asserts itself on other cucurbits. We have detected CDM in at least four of our counties and it is more then likely it is everywhere.

Presidio, Previcur Flex, Ramman, Tanos and Curzate are all good materials on CDM and should be added to your Powdery Mildew sprays along with a protectant like Bravo or copper. Although CDM does not directly effect the fruit, like powdery mildew it will take down the plant and leave you with poor handles. -CDB


The peaches at the farm stand, the pears in the supermarket: they’re still alive—still kicking, as it were. Yet because many organic fruit and vegetable farmers sell their produce shortly after harvest, best practices for long-term storage haven't been a looming concern.

Now, with organic produce reaping a growing marketplace share, farmers who can keep their crops fresh longer will benefit from more marketing options. But it takes knowing how—which is where the 2012 Production Guide for Storage of Organic Fruits and Vegetables, comes into play. It is free and newly posted online by the New York State Integrated Pest Management Program (NYS IPM). Visit: http://www.nysipm.cornell.edu/organic_guide/default.asp to download.

Authors Christopher Watkins and Jacqueline Nock's clear, exhaustive (but not exhausting) manual provides the information and advice farmers need to store their crops with the same care they put into growing them.

Growers will learn, for example, that some fruits or vegetables change sugars into starches as they age. Others do the reverse. Some emit ethylene, a natural gas essential for ripening. Others don't. Among those that don't, some might start decaying, yellowing, or sprouting at the merest whiff of ethylene from a nearby display—yet others pay it no heed.

Of course, some crops naturally lose freshness far more quickly than others. Yet even among these, how they are cared for after harvest (and even as they grow) has a huge effect on how well they hold up in the storage bin or on the grocer's shelf.

Watkins, a Cornell horticulture professor specializing in postharvest science, and Nock, a horticulture research specialist at Cornell, have written this free guide to complement NYS IPM's updated 2012 organic grower guides. NYS IPM promotes least-toxic solutions to pest problems. Learn more at nysipm.cornell.edu.

The guide was funded in part by a New York Specialty Crop grant via the New York State Department of Agriculture and Markets.

Mary Woodsen, NYS IPM program
I know that the following article has nothing to do with vegetable or small fruit crops. However, I know that many of you enrolled in the CDVSFP grow or sell impatiens and I have had several growers inquire about what is going to happen next year with impatiens, not to mention that all my wife’s impatiens have succumbed to what I suspect is Impatiens Downy Mildew. So, that is why I thought we should include the following article in case you have customers that might be bringing impatiens back or you are looking ahead at what to grow instead of impatiens next year! I am sure that you will hear more about this throughout the winter meeting season. -CDB

Impatiens Downy Mildew Confirmed in Massachusetts:
Impatiens downy mildew was diagnosed on Impatiens (walleriana) in landscapes in Massachusetts for the first time in 2011 and has been diagnosed again in 2012. All Impatiens walleriana are susceptible. New Guinea Impatiens (I. hawkeri) and SunPatiens® are not affected.

Symptoms vary from slightly off color foliage (slight yellowing) and slight wilting/curling down of foliage to nearly total leaf loss. If the disease continues to progress, eventually the leaves and flowers will drop, resulting in bare stems with only a few tiny, yellow leaves remaining. Downy mildew can be spread long distances by wind currents, water splash (overhead irrigation included) or by the movement of infected plants.

Infected plants should be pulled, roots soil and all, bagged and disposed of. The area should not be replanted with susceptible impatiens species. Fungicide treatments are not recommended for plants in the landscape since they are not always effective at eliminating the disease. Allowing infected plants to remain in the landscape may allow the pathogen to overwinter as resting structures (called oospores), which may infect impatiens planted next year or longer. New Guinea impatiens, coleus, begonia, or other available bedding plants are safe to reset in the affected area. Send samples for confirmation to the UMass Extension Plant Diagnostic Lab.

Pictures of Impatiens Downy Mildew can be found at: [http://ccesuffolk.org/assets/Floriculture/DM-homelandscape2-2.pdf](http://ccesuffolk.org/assets/Floriculture/DM-homelandscape2-2.pdf)

Tips for Storing Onions for Maximum Quality
By Christy Hoepting, CVP. Published in the Veg Edge Weekly, Vol 8, Issue 25

Optimum conditions for storing onions are 32°F and relative humidity of 65–70%. Keeping quality after December is directly dependent upon having the onion bulb around 32°F by mid-December. Under northern climate conditions, it is suggested to aim for 70°F by the end of September, 50°F by the end of October, 40°F by the end of November, and 32°F by mid-December. Onions will freeze at 31°F. The effects of freezing are cumulative. That is, several short periods below 31°F are just as damaging as a single longer period. Onions that have frozen become soft and decay quickly. Onions that are held at temps above 50°F are subject to sprouting.

Air circulation - once the holding temperature is reached, inside air should be re-circulated at least twice a day to maintain a uniform storage condition. Airflow should be 0.25 to 0.5 cubic feet per minute (cfm) per cubic foot of product. Avoid condensation from forming on the onions because it is favorable for sprouting, and disease development and spread in storage: 1) Do not place cool onions in storage early in the morning (storage air temp warmer than onions) and 2) Do not circulate warm air over cold onions, open the storage doors when the air outside is cool and dry to exhaust warm moist air. Remember, humid air contains more moisture and will condensate at warmer temperatures than dryer air. Also, smaller bulbs pack tight-er and may need more air circulation.

Monitor storage conditions - check and test equipment and all controls frequently for proper function during the storage season.
Online Course De-Mystifies Organic Certification

While many small farmers use "all-natural" or "sustainable" practices, going the distance to certify your farm as organic -- with the paperwork, annual inspection, and expense required -- often feels like an overwhelming step. But for many farmers, the price premium received would increase profits. What do you need to do to become certified organic? Is it worth it for your farm? Do your practices qualify, or would you need to make changes?

A new online course will help you answer these questions and more. BF 106: Organic Certification - What, How, and Why (or Why Not) is offered by the Cornell University Small Farms Program and Cooperative Extension, in partnership with Northeast Organic Farming Association, LLC (the certification branch of NOFA). The course will run through the month of October, Oct 2-30. Tuesday evening webinars will provide the opportunity to hear directly from certified organic farmers about the requirements they have to meet, why certification works for them and how they manage the paperwork. This course will also introduce you to resources to help you navigate the certification process. It is designed both for new and experienced crop and livestock farmers who are contemplating organic certification.

Registration closes Sept. 24, so sign up now to be sure you don't miss this once-a-year opportunity. View more details and registration information at http://nebeginningfarmers.org/online-courses/all-courses/bf-106-organic-certification/

Get Help Writing Your Business Plan this Fall

It is rare for a farm to be an accidental success; having a written document laying out the farm's goals, marketing strategies, financial projections, and operation is essential to demonstrate the feasibility of the farmer's plans. A business plan is also a must-have for anyone seeking loans or grants to help fund their farm's development.

This Fall, you can get personal guidance in writing your farm business plan by taking an online course offered by the Cornell Small Farms Program. BF 202: Planning for Sustainability - Writing Your Business Plan is a fast-paced course covering one section of the business plan each week. Through weekly webinars, you'll hear from farmers, business management educators, and bankers about what makes a good business plan. You'll get personal feedback on each section of your business plan as you complete the weekly homework. The course begins Thurs. Oct 4 and runs for 6 weeks through Nov. 8, with evening webinars every Thursday. The cost is $200. Registration closes when the course fills up or by Sept 26, whichever happens first, so don't delay or you might miss this opportunity.

Students who took the course last Fall have used their completed business plans to obtain farm mortgages, equipment purchase loans, and operating loans. One student said, "I basically knew very little prior to taking this course. But now I feel confident about how to write a business plan, how to research the areas that are projections/pro-forma statements, and the components of each section."

If you've felt intimidated by the process of writing a business plan, or if you plan to seek outside funding for your farm, sign up now for this unique opportunity to join a virtual community that will help you write your farm business plan this Fall. For more details visit http://nebeginningfarmers.org/online-courses/all-courses/bf-202-planning-for-sustainability/

This course is only one of many offered over the Fall, Winter and Spring by the Cornell Small Farms Program and Cornell Cooperative Extension. For the full course menu, visit http://nebeginningfarmers.org/online-courses.
Grower Classifieds

FOR SALE: Certified organic Spanish Roja seed garlic. $10 per pound plus shipping (or arrange to pick up at farm in Montgomery County). Minimum order of 10 pounds. Contact by e-mail: freebirdfarm@frontiernet.net
This garlic has been grown for 13 years without the introduction of outside seed sources.

Sweet Corn Trap Counts: Week of September 12

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<th>Location</th>
<th>ECB-E</th>
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<th>Corn Earworm</th>
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Weekly and Seasonal Weather Information

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<tr>
<th>Location</th>
<th>Growing Degree Information Base 50°F</th>
<th>Rainfall Accumulations</th>
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<td>Albany</td>
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<td>Hudson</td>
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</table>

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

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—constant 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.