Rainfall varied in the past week from hard, heavy rain to moderate rainfall. This increases the risk of Sclerotinia white mold (WM) infection. When the top inch of soil remains constantly moist for 10+ days small, hard, black sclerotia in the soil, the dormant stage of WM, begin producing tiny, tan mushroom-like apothecia that shoot spores into the plant canopy.

If WM spores fall on blossoms when there’s leaf wetness for at least 12 hours from rain or dew, infection can occur. Susceptible crops with a dense canopy are at more risk. WM can then spread up the flower branch to the main stem, and to any bean pods/leaves/branches in contact with infected tissue. Infected stems become dry and bleached. WM growth is white and fluffy. This growth later hardens to produce black sclerotia, increasing risk for future crops.

Risk of WM is dependent on the population of sclerotia in the soil, as well as on weather conditions. If there’s a history of WM in the field (overall, or in wet spots, areas near trees, etc) in previous crops of soybeans, clover, potatoes, other vegetables, many broadleaf weeds, the risk of WM is increased. Sclerotia can survive in the soil for several years.

On dry beans the main site of initial infection is blossoms, though damaged plant parts can also be infected. Later, when pods touch the soil direct infection can occur. Bean seeds may be replaced by WM sclerotia in infected pods. Topsin is among the best fungicides for WM on dry beans. If one spray will be applied then the moderate to high label rate should be used when 80 – 100% of plants have their first open blossom. Endura is another fungicide choice. Late applications provide less control. Waiting until you see WM on the plant is too late.

On potatoes infection can occur on blossoms or damaged plant parts, but direct infection often occurs at the soil line or where plant parts touch the soil. Excess nitrogen application
and excess irrigation contribute to infection. Vines collapse and wilt. Quash, Topsin M, Endura and Rovral are labeled for WM control on potatoes. Tank mix for early/late blight control. Complete coverage is necessary. Waiting until you see WM on the plants is too late.

For info on snap beans see the 6/27 Veg Edge Weekly article on Managing Molds in Snap Beans for more info including details on specific fungicides.

For information about WM on other crops, other fungicide choices, timing and rates, see the 2012 Cornell Vegetable Guidelines at: http://www.nysaes.cals.cornell.edu/recommends/

Regarding fungicide application, Helene Dillard, Cornell, recommends using 50 gals/acre and high pressure on beans, with drop nozzles directed towards the blossoms if high disease pressure is anticipated. From Mike Stanton, Michigan State U Extension: Maintain nozzle pressure ~40 psi (measures higher at the pump); select flat fan nozzles (110 degree) that produce moderately fine to medium droplets; and, set the boom height to hit the target, such as blossoms, not the top of the foliage.

Direct WM infection from the soil is a difficult problem. Long rotation away from susceptible crops is recommended. Small grains and corn are good rotational crops. The regular use of Contans, a biological fungicide that feeds on and kills WM sclerotia in the soil, can significantly reduce WM risk. Contans needs to be applied immediately after harvest of a WM infested crop and incorporated 2 inches deep. It takes moderate temperatures for 3 months to give the Contans organism time to feed on the WM sclerotia before a susceptible crop is planted. Don’t turn over the soil (moldboard plow) in the spring or healthy WM sclerotia will be brought to the surface where they can develop. Since Contans is a live organism store in the refrigerator or freezer.

**Tipburn of Cabbage**

*C. Hoepting, CVP:* Alternating dry and abundant moisture cycles as we have been having recently may aggravate tipburn. There are no external symptoms. Margins of inner leaves turn brown and later desiccate to become papery (Fig. 1 & 2). This may cover a large portion of the leaf and be invaded by secondary bacterial organisms. Chinese cabbage is particularly prone to this disorder, which also affects cabbage, cauliflower and Brussels sprouts. It is most likely to show up in vigorous varieties and those that are not tipburn tolerant. Tipburn is caused by inadequate transport of calcium to rapidly growing tissues. Low levels of calcium at the leaf margin result in tissue collapse. Conditions that favor rapid growth also favor tipburn – 1) excess nitrogen results in large outer leaves that accumulate calcium at the expense of young expanding leaves within the head; 2) excess moisture reduces soil oxygen levels, which in turn reduces calcium uptake and movement. Crucifers grown on sandy soils are more prone to tipburn. To alleviate tipburn, grow tolerant varieties, maintain optimum fertility (i.e. a 1:1 ratio of phosphorous to potassium) and soil moisture (i.e. irrigate in between natural rainfall events), and harvest promptly once plants have reached maturity. The addition of calcium to the soil or as a foliar feed does not alleviate the problem.
Staying Cool is Key to Avoid Bitter Broccoli

Thomas Bjorkman, Plant Physiologist, NYSAES, Cornell

Some growers have reported that the broccoli they’re harvesting has a more bitter flavor than they were expecting. Broccoli can produce bitter compounds and it’s not unusual to see variation in the amount. The research that has been done on this topic points to temperature management post-harvest as being one of the most important things for growers to pay attention to. Most of the compounds that have been identified as contributing to the bitter flavor in broccoli are produced by myrosinase, an enzymatic reaction. To prevent this enzymatic reaction from occurring, get the broccoli cold as quickly as possible after harvest, and then keep it cold until it is ready to be cooked. The cold temperature keeps the enzyme activity low, and the cooking stops it altogether. Temperatures in between cold storage and cooking allow the enzymatic production of bitter compounds to continue.

There are differences among broccoli varieties in the amount of bitterness they produce, but if the crop is handled properly, even the modern varieties with the highest bitterness potential should taste fine. Growing conditions undoubtedly make a difference, but systematic studies have not yet been conducted to identify which growing conditions are most problematic. The Eastern broccoli team is making measurements over the next several years that should be helpful in answering that question.

One of the advantages of local broccoli is that with the right handling it can be sweeter and less bitter than broccoli that is several days or more in transit. The postharvest handling of shipped broccoli is usually excellent, so the local benefit can only be obtained with rapid and thorough removal of field heat.
**CROPS**  
**Tidbits & Insights**

**BEETS**
The crop has perked up in areas where recent rain was received. Harvest of the processing crop is underway. Keeping tops in good condition is the priority at this point. drought stressed plants are likely to have turned purple or even brown, but new leaves may now grow if adequate moisture is available. Hot weather can cause zoning (alternating color) in beet roots. Furthermore, temperatures greater than 77° F can result in lighter colored roots. Dark red, uniform color will return with cooler temperatures as we approach fall.

Rain and hailstorms in the coming weeks will lead to increased risk for leaf spots. *Cercospora leaf spot* (CLS) is the most common leaf disease of table beets. Lesions appear as small circular spots that are light tan to brown with a distinct dark brown to purple halo. Injury from post-emergence herbicides can be confused with CLS. Note that herbicide injury will not spread, whereas CLS may continue to spread to new foliage. *Phoma leaf spots* appear as lesions of various sizes with concentric ring pattern and fruiting bodies of the pathogen. When the lesions of both pathogens mature, the centers become gray and brittle and fall out giving a shot-hole appearance. When an average of one lesion per leaf is found, a fungicide treatment should be applied if the field still has a long time before harvest. Quadris, Cabrio, Gem and copper are labeled for this disease. See page 106 of the 2012 Cornell Vegetable Guidelines.

**CABBAGE & COLE CROPS**
These cabbages enjoyed the widespread rainfall over the past week after a long dry spell. There have been some reports of *sunscald*, *head splitting* and even *bitter broccoli* (see article, pg 3). Resumed rainfall after a dry spell can lead to **tipburn** (see article, pg 2).

**CARROTS**
Weekly scouting is recommended for *Cercospora* (CLB), *Alternaria* (ALB), and *Bacterial leaf blights* (BLB). First fungicide applications should go on when 25% of leaves are infected with CLB or ALB. CLB produces small, circular, creamy to gray spots with dark borders. On stems the lesions are more elliptical in shape. ALB is usually more prevalent in late August and Sept. and produces dark brown to black irregular spots on the leaf margins. See pg 143-145 of the 2012 Cornell Veg. Guidelines for fungicide options. The treatment threshold for BLB is reached as soon as the disease is observed in the field because it can spread so fast. This disease produces dark lesions surrounded by yellow tissue. Copper sprays may help to reduce spread. Strong thunderstorms and hail can damage leaves, creating wounds for fungal and bacterial blights. Fields should be scouted and treated if this damage occurs. For photos and more information see the fact sheet at [http://www.nysipm.cornell.edu/factsheets/vegetables/misc/clb.pdf](http://www.nysipm.cornell.edu/factsheets/vegetables/misc/clb.pdf)

**DRY BEANS**
Beans range from the beginning of flowering to plants with beans in pods beginning to color. *Mexican bean beetle* populations are high in spots. The *Western bean cutworm* (WBC) moth catches are dropping, indicating that the peak catch was around 7/24. The cumulative moth catch near Attica dry bean fields is 258, well over the 150 that triggers scouting nearby corn fields for WBC prevalence in the area. Corn is more easily scouted for eggs on upper leaves and larvae on ears. Dry beans are scouted for damage since WBC eggs and larvae are very difficult to find. Pod feeding in dry beans (small pods cut off, pod feeding, round holes in pods) is predicted 10 – 20 days after the peak. Since WBC infestations tend to be spotty up to ten spots in each field should be scouted. If any damage is seen a single spray of a long-lasting pyrethroid is recommended for WBC control. Scouting of corn and dry beans has been conducted in the Attica area in recent weeks. Some small larvae which may be WBC were seen in corn 8/7 but definite identification is pending. WBC eggs and larvae have been seen in corn in counties bordering the St. Lawrence where moth counts are by far the highest in the state. Cumulative WBC moth catches are 105 in Eden (Erie Co.), and 107 in Kennedy (Chautauqua Co.). In the main dry bean growing area cumulative catches range from 7 to 52, well below the point of concern.

**GREENS**
Summer lettuce has been a struggle with heat and the need for nearly constant irrigation. The new threat seen has been leaf hoppers and to a lesser degree aphids. The hoppers are high in number and are not only feeding (by sucking creating “hopper burn”) but also are carrying virus in some cases that is causing malformed heads and twisting leaves.

High humidity and the heat has also caused more problems with rots in lettuce. Wider spacing and trickle irrigation rather than tight plantings and overhead will help with future issues.

Flea beetles are still hanging on in many areas and seemingly large numbers are causing pin-hole damage to brassicas and mustard greens.

**ONIONS**
Many fields will be getting sprout inhibitor this week, as a lot of onions went down over the past week. Sprout inhibitor is usually applied when 50% of the tops are down and the onions have 5-8 green leaves. See last week’s issue of VEW for more info on using *maleic hydrazide* (MH). The rule of thumb is that onions should dry down naturally, not from diseases or insects. In most fields, thrips and leaf diseases are under control and are not going to increase to any extent that would affect yield at this point, so it is practical to apply MH alone without any fungicides or insecticides.

For fields that are still green and standing, the forecasted cooler night time temperatures will be more favorable for *downy mildew* (DM). Mancozeb (Pennczeob, Dithane, Manazate) should be included as a protectant in all tank mixes at this time. Quadris Top also suppresses DM and can be used in rotation with Purple Blotch fungicides. Once DM is detected then Ridomil needs to be used. Above-ground plant symptoms of bacterial diseases remain very low for this time of year; an indication that the quality of the crop will be very good. *Iris yellow spot virus* (IYSV) was more readily found this week. This disease is vectored by onion thrips and best control is achieved by effectively managing onion thrips. Hopefully,

![Image of white elongated IYSV lesions on middle-aged leaves.](http://www.nysipm.cornell.edu/factsheets/vegetables/misc/clb.pdf)
CROPS  Tidbits & Insights (continued)

with thrips control being so good this year, this disease will not have much effect on yield. IYSV lesions are white and elongated, oriented along the long axis of the leaf with multiple lesions often offset from each other (Fig. 1 & 2).

With the early harvest, another thing to consider is brassica cover crops such as forage radish for improved drainage (optimal planting date is August 10th - see article, pg 9) and oilseed radish or yellow mustard for improved stand and yield in the next year’s onion crop (see article, pg 7). See “Late Summer Cover Crops” in July 25 issue of VEW for variety and planting recommendations. Thank you to the 40 onion growers and allied industry representatives who participated in the Annual Elba Muck Onion Twilight Meeting last Thursday – as always, it is our pleasure to educate!

Muck Donut Hour Closed for the Season: Thank you to all who participated in this unique outreach activity!

POTATOES
Many growers are starting to vine kill earlier fields. More early blight (EB) is showing up. Maturing foliage is more susceptible to the disease. Adult Colorado potato beetles (CPB) have emerged. If there are an average of 23 adult CPB/25 vines (not hills) then they’re causing economic damage and an insecticide should be applied. Be sure to use a material in a different Chemical Class from what you used earlier this season to slow the development of CPB resistance. See the 2012 Cornell Vegetable Guidelines Potato section at: http://www.nysaes.cals.cornell.edu/recommends/24frameset.html and click on Insect Management in the top menu. The first item is an Insecticide Resistance Management table with potato insecticides listed in their Chemical Class.

Severe ozone injury was seen in a field of Marcy’s, causing symptoms on both the upper and lower leaf surfaces near the leaf margins. The tiny dark spots on the underside of the leaves were most distinct. Andover and Norland are particularly susceptible (see the article, pg 9).

For potatoes you intend to store, consider applying a sprout inhibitor in the field. Besides slowing sprout development you should have fewer volunteers in the field next year, less risk of carrying over late blight (LB). Maleic hydrazide sprout inhibitors should be applied to green vines when the smallest tubers are 1 ½ inches in diameter. Use a volume of 30 gals/acre for even distribution, and don’t spray unless temperatures are well below 85 degrees. A 24 hour rain-free period is needed after application. Allow at least two weeks before vine-killing so the MH is fully translocated to the tubers. Caution: Do not apply to stressed plants due to drought or excess soil moisture. Read the product label carefully regarding mixing with pesticides or adjuvants.

SNAP BEANS
Continue to scout for molds (see article in the June 27 edition of Veg Edge Weekly) and other diseases. Dr. Dillard’s lab would like to be notified of fields with serious white mold infection or any suspicious Phytophthora blight locations – let Julie Kikkert know and we will come look at the field if possible. White mold tends to be more cottony and moist, whereas Phytophthora blight is more dry and leathery with pods shriveling up. Both may occur in the same field.

SWEET CORN
Two Spotted Spider Mite has become a problem in several fields of sweet corn. These pests can come out in force with the hot dry weather. The real issue is finding them right at harvest time. Pre-harvest spray intervals may be too long for treatment when the ears are ready to pick. Looking at the ears closely you will find grayish drab green flag leaves and in worse cases, the husks are very dull-pale. People with sharp eyes might see the hundreds of mites on the ears or even webbing around the ear tips. Scout the fields early enough before harvest to deal with the situation. High pressure spray applications will be necessary to reach the ears in tall corn. Tundra (Bifenthrin) is one product labeled but pay close attention to label instructions.

VINE CROPS
The hot dry weather has reduced fruit set on everything from melons to pumpkins this season. Hot temperatures can negatively affect pollen as well as bee activity. It takes numerous visits by bees to completely pollinate vine crop fruit. Incomplete pollination will lead to misshapen pumpkins, curved zucchini and cucumbers, but most commonly, fruit will never complete develop and rot off. Quite often, you will have fruit that seems ready to harvest but then the tips are soft and yellowing which quickly rots (zucchini, summer squash varieties, cucumbers).

Downy mildew was confirmed in Seneca County this week. The rain showers will have diluted sprays made prior to the storms and the winds have been blowing spores all over the region. All growers should be in full protection mode for their vine crops against this disease.

Powdery mildew has also taken off. Beautiful fields of pumpkins and winter squash that have been free from disease all season that now have huge leaves and vines loaded with fruit will need strong thorough coverage in order to keep the leaves and up and healthy. The leaves are also protecting fruit from sun burn.

Spider mites in melons are still a problem despite some heavy rains that have knocked back populations. High pressure is needed to reach under leaves and several applications will be needed to keep these pests in check.
Leaf Diseases in Sweet Corn are Beginning to Appear

J. Kikkert, CVP: August is the time that leaf diseases in corn may arise. Northern Corn Leaf Blight has already been reported in field corn. Sweet corn can be susceptible to this disease as well as numerous others. Dr. Zitter, Cornell outlines 13 diseases that can infect sweet corn in New York http://vegetablemdonline.ppath.cornell.edu/NewsArticles/CornDiseases_News.htm (contact our office if you can’t access the article on line).

The presence and severity of disease in a sweet corn field depends on the following:

- Disease resistance genes in a given sweet corn variety
- The presence of disease causing pathogens
- Weather conditions

Below is a description of three of the fungal diseases that are most likely to be found in WNY. Resistant varieties are available for most of the commonly seen diseases, and should be planted if a particular disease is severe in your area.

Contact your seed supplier for disease resistance information for their varieties. A list of the relative tolerance to common rust and northern corn leaf blight (as well as Stewart’s wilt and common smut) can be found on page 319 of the 2012 Cornell Vegetable Crops Guidelines.

Common Corn Rust (Puccinia sorghi)
Appears as oval to elongate cinnamon brown (rusty) pustules scattered over the upper and lower surfaces of the leaves. Dusty red spores are spread by the wind and can infect nearby leaves. Partial resistance is expressed as chlorotic or necrotic hypersensitive flecks with little or no sporulation. Favored by heavy dew, moderate temperatures, and high nitrogen; this disease spreads to the northeast yearly from spores blowing in from southern regions. Some sweet corn varieties are more tolerant than others, and should be planted if possible. Staggered plantings should be separated if feasible so that fungal spores from earlier plantings are less likely to infect later plantings.

Damage Caused: Early infections (whorl up to tassel stage) can weaken plants and result in smaller ears with dehydrated kernels. Later infections typically do not affect yield, but the brown pustules on the husks render ears unsalable for fresh market.

Northern Corn Leaf Blight (Setosphaeria turcica)
Produces long, elliptical lesions that are typically cigar-shaped. Generally starts on lower leaves and moves up the plant. Favoring by moderate temperatures, high humidity and heavy dews. Infection during early growth may cause heavy loss in ear fill. When severe, plants are killed prematurely. Overwinters in corn debris, so use good crop sanitation and rotation.

Gray Leaf Spot (Cercospora zeae-maydis)
Rectangular lesions that start on the bottom leaves of the plant. The sharp parallel edges and opacity of mature lesions are diagnostic. Can severely impact yield. Susceptibility varies among hybrids. Infection is favored by prolonged periods of dew, fog and cloudy weather. Overwinters on crop debris.

For additional management information see the 2012 Cornell Vegetable Guidelines.
WNY Pheromone Trap Network Report, 8/7/12

Abby Seaman, NYS IPM Program

European corn borer numbers remain low again this week. Corn earworm numbers are up at a few locations, with numbers high enough to indicate the need for a 4-5 day spray schedule (see the chart below). Fall armyworm were caught at only a few locations, and in low numbers, this week. Western bean cutworm numbers are generally down, indicating that peak flight has occurred at most locations. Robert Hadad scouted fields in Eden, Lockport, and Spencerport for western bean cutworm eggs, and found one egg mass in a field in Eden, where numbers were the highest last week. WBC is unlikely to be a problem in other areas where trap catches were lower. He found very little damage or infestation of any other worm pest in the fields he scouted, a reflection of the low trap catches. But not a good idea to decide not to scout your fields because the trap catches are low!

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ECB - European corn borer  
CEW - corn earworm  
FAW - fall armyworm  
WBC - western bean cutworm  
NA - not available

Fall Mustard Cover Crops to Improve Productivity of Onions Grown on Muck

C. Hoepting, CVP: Last year at the onion session at the Empire Expo, Dr. Mathieu Ngouajio, from the Department of Horticulture at Michigan State University reported that in his studies, onion stand establishment and yield responded positively to brassica cover crops including yellow mustard and oilseed radish (Fig. 1) under muck soil conditions. Overall, onion stand was about 13% to 40% greater in the cover crop plots compared with the control without cover crop. With such increase in stand, the impact of the cover crops was either negative or minimal because the higher onion density in the cover crop plots resulted in too many small bulbs. However, as onion plant density decreased, the benefit of using the cover crops became more evident. The largest benefit of using the mustard cover crops was found at onion density of 172,000 plants per acre. At that density the impact of the cover crops was a 15% yield increase. Given the fact that many growers are currently using densities close to 220,000 plants per acre or more, it is evident that the cover crops could help reduce onion seed cost. Suggested reasons for improved stand establishment following a fall mustard cover crop include increased nutrient cycling, especially of nitrogen, weed suppression and increased beneficial soil microorganisms. See “Late Summer Cover Crops” in July 25 issue of VEW for variety and planting recommendations for mustard and forage radish cover crops.

Attention Onion Grower Cooperators of Research Trials

All on-farm research trials underway will be going to yield this year. This includes large small-plot trials, as well as several mini plots that are set up in several fields. During Christy’s absence in the next 2 weeks, please contact Katie Klotzbach (585-732-2545) or Elizabeth Buck (607-425-3494) for estimated harvest dates, as it is critical that we get our final data prior to onion pulling. Your cooperation is much appreciated!
Why Aren’t My Tomatoes Ripening?

Steve Reiners, Cornell

With all of the hot weather we’ve experienced this summer, growers were expecting their tomatoes to ripen very quickly. Unfortunately, just the opposite is happening. Ripening seems very slow, almost like what we see in the autumn when temperatures are much cooler. So what’s happening?

It takes six to eight weeks from the time of pollination until tomato fruit reach full maturity. The length of time depends on the variety grown and of course, the weather conditions. The optimum temperature for ripening tomatoes is 70 to 75°F. When temperatures exceed 85 to 90°F, the ripening process slows significantly or even stops. At these temperatures, lycopene and carotene, pigments responsible for giving the fruit their typical orange to red appearance cannot be produced. As a result, the fruit can stay in a mature green phase for quite some time.

Light conditions have very little to do with ripening. Tomatoes do not require light to ripen and in fact, fruit exposed to direct sunlight will heat to levels that inhibit pigment synthesis. Direct sun can also lead to sunscald of fruit.

Do not remove leaves in an effort to ripen fruit. Also, soil fertility doesn’t play much of a role. We do know that high levels of magnesium and low levels of potassium can lead to conditions like blotchy or uneven ripening or yellow shoulder disorder. But the slowness to ripen is not likely due to soil conditions and adding additional fertilizer will do nothing to quicken ripening.

If you absolutely cannot wait, some growers will remove fruit that are showing the first color changes. These fruit, in the “mature green” or later phase, could be stored at room temperature (70-75°F) in the dark. A more enclosed environment would be best as ethylene gas, released from fruit as they ripen, will stimulate other fruit to ripen. If temperatures remain high outdoors, these picked fruit will ripen more quickly, perhaps by as much as five days. As far as flavor, the greener fruit should develop flavor and color similar to what you would get if field ripened. The key is picking them when they are showing the first signs of ripening (no earlier) and keeping them at room temperature. Do not refrigerate, as this will absolutely destroy their flavor.

Late Blight Risk

C. MacNeil, CVP: Late blight (LB) continues to pop up in new counties (primarily in Eastern NY) in potatoes and tomatoes. Warning: Don’t judge the LB risk based on the need for more rain! Foliage can easily remain wet long enough from dew this time of year to result in LB sporulation and spread. If you think you may have LB contact Carol MacNeil at 585-313-8796 or crm6@cornell.edu or one of your other Cornell Veg Program Specialists.

Simcast Blight Units (BUs) during the past week across the CVP area varied, with a few stations accumulating enough BUs to trigger a spray in only moderately susceptible or moderately resistant varieties. This chart assumes the last spray was chlorothalonil (Bravo, OLF) applied at the high rate. The threshold for applying the next spray on a LB susceptible variety is 30 BUs; for a moderately susceptible variety - 35 BUs; a moderately resistant variety - 40 BUs. There are different thresholds when other fungicides are used.

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1 Weather stations. For more sites: [http://newa.cornell.edu/](http://newa.cornell.edu/)
2 Simcast Blight Units (BUs)
Watch Out for Ozone Injury on Vegetables

Steve Reiners, Cornell

Recent hot, humid weather with stagnant air masses may lead to ozone damage on crops. Ozone warnings were recently issued for much of New York. These warnings are intended for people with respiratory problems and let them know they should limit their outdoor activity and try to stay as much as possible in air-conditioned locations. These warning are also a good indicator that ozone damage may occur in plants.

Common ozone symptoms are small, irregular, shaped spots that range in color from dark brown to black (stipple like) or light tan to white (fleck like). These spots are found only on the upper surface of the leaf. Very young and old leaves are less susceptible to ozone while newly mature leaves are the most susceptible. With severe damage, symptoms may extend to the lower leaf surface.

Insect feeding (red spider mite and some leafhoppers) produce flecks on the upper surface of leaves, much like ozone injury. Flecks from insect feeding are usually spread uniformly over the leaf surface while ozone flecks are concentrated in specific areas, usually most pronounced at the leaf tip and along the margins.

Now is the Time to Establish Radish Cover Crops

Thomas Bjorkman, Plant Physiologist, NYSAES, Cornell

As New York vegetable growers gain more experience using radish cover crops, there is consensus developing around the right planting date. That date is now.

Our recent work investigating planting dates for crucifer cover crops has shown that the biomass production declines rapidly during August. A location that would produce 3 tons per acre planted August 10, will only produce one and 1/2 tons if planted August 20, and not enough to make a difference if planted in September.

Most of the time, the different crucifer cover crops produce a similar amount of biomass. The exception is radishes that are sown in the first half of August on fertile ground. Then they can produce twice the biomass of the other crucifers by fall. In short, if you are planning to use a radish cover crop this fall, plant right now, and plant where there is good residual fertility.

The radish roots will grow quite large, and they will consistently die in the winter. Even in the very warm winter we just had, when the radishes looked well preserved through the winter, their waterlogged texture revealed that they had already died (Fig. 1).
CROPS Tidbits & Insights (continued)

Bacterial wilt (photo, pg 5) is still showing up in cucumbers, melons, and now in winter squash fields. This problem is a result of cucumber beetles feeding on plants and passing the disease. Even systemically treated plants are affected because the insects have to feed in order to get the chemical into them. They may die but the bacteria may have been passed. Symptoms include wilting of vines starting with the tip back towards the crown with leaf stems erect and leaf veins rigid but the leaves drooping.

This disease is discouraging because even with the best cucumber beetle control, the problem still can occur. Without beetle control, the disease would be much worse. It is important to keep down the populations to prevent wide-spread damage.

Phytophthora has been kicking up as well. Dry conditions have helped keep this problem from affecting more plants and spreading to new areas in the field. Heavy irrigation has allowed from the disease to hit plants within rows. Now that some heavy rains have deluged a few areas, the disease is expanding taking down more plants. Keep up the regiment of fungal applications.

To keep this disease from showing up on your farm or from moving from one field to another, keep equipment clean or dedicate one set especially for affected fields. Keep trucks or equipment from an affected farm out of fields that don’t have the disease. Don’t have cull piles.

Dates...

AUGUST 10 - PEST MANAGEMENT IN FRESH MARKET VEGETABLES MEETING (SENeca COUNTY)
7:00 pm, Jonas Peachey Farm, 5641 Rt 414, Romulus 14541. 2 DEC pesticide recertification credits available. This course will demonstrate pest management in fresh market vegetables in both field and greenhouse (high tunnel) vegetables. A hands-on demonstration of weed, insect and disease identification in vegetables including management options such as inter-row cover crops, grafting and where appropriate, spray options will be used to educate growers. Drive lane-cover crops and tips for growing for the new Seneca Produce Auction. Judson Reid of the Cornell Vegetable Program will instruct participants and facilitate peer-based learning.

AUGUST 10 - TILE DRAINAGE FIELD DAY
8:30 am - 2:00 pm, Liylea Farms, 1320 Pre-Emption Rd, Penn Yan. Morning: soil health benefits; proper tile depth and placement; economics of traditional and tile plow installation. Afternoon: equipment demonstrations. Bring a chair. Lunch provided to those preregistered by 8/6. Call CCE Yates Co at 315-536-5123. For more information, visit the Cornell Vegetable Program website at http://cvp.cce.cornell.edu/event.php?id=29. Organized by: CCE Regional Ag Teams, Yates Co Soil & Water Conservation District. Thanks for support from Hudson Pipes and Himrod Farm Supply!

AUGUST 16 - MANAGING DISEASES & INSECTS ON ORGANIC FARMS
4:00 - 7:00 pm, Homer C. Thompson Vegetable Research Farm, Freeville. Presented by Organic at Cornell University and NOFA-NY. Learn about beneficial insect habitats, the latest disease resistant crop varieties, pest management on Cornell’s organic research farm, and growing broccoli in a reduced tillage system. FREE! For more information, contact Betsy Leonard at 607-423-8366 or bail1@cornell.edu.

AUGUST 21 - PROCESSING SNAP BEAN AND SWEET CORN VARIETY FIELD DAY
Vegetable Research Farm, County Road 4, Geneva (1 mile west of the NYS Ag Experiment Station). 1:00 pm Snap Beans; 3:00 pm Sweet Corn; 5:30 pm Vegetable Agribusiness Steak Roast, at the Pavillion behind Jordan Hall. For more information or to RSVP for dinner, contact Jim Ballerstein 315-787-2223 or jwb2@cornell.edu.

AUGUST 22 - NORTHEAST BUCKWHEAT FIELD DAY
1:00 - 3:30 pm, Oeschner Farm, 1045 Trumbulls Corners Rd, Newfield, NY 14867. Free, no preregistration needed. Buckwheat in your rotation, double-cropping after small grains, harvest equipment display, farmer-to-farmer exchange. Production information: www.hort.cornell.edu/bjorkman/lab/buck/ Questions? Thomas Bjorkman, Cornell, 315-787-2218 or tnb1@cornell.edu. Sponsored by: Cornell University, Cornell Cooperative Extension, The Birkett Mills and NOFA-NY.

AUGUST 23 - FRESH MARKET POTATO VARIETIES, AND INSECT AND DISEASE MANAGEMENT
John Williams' Farm in Marion is again the host for the extensive Cornell fresh market potato variety and breeding line trial. Don Halseth will discuss the varieties' yield, quality and marketability. Tom Zitter will describe reducing black dot stem infection (early dying) and tuber disease. Managing CPB insecticide resistance and high potato leafhopper populations will be covered by Brian Nault. CVP Specialist Carol MacNeil, and participating growers, will describe benefits using the updated Late Blight Decision Support System (DSS). Pre-register by 8/17 for dinner – 585-313-8796. Thanks to Stanton Ag Service for sponsoring! Visit the Cornell Vegetable Program website for more information and the full agenda at http://cvp.cce.cornell.edu/event.php?id=28.

AUGUST 27 - EDEN VALLEY CROP WALK AND TWILIGHT MEETING
5:30 pm, Eden Valley Growers Coop, Rt 62, Eden Valley. DEC pesticide recertification credits will be available. Crop walk and discussion of diseases plus review of pepper IPM project. For more information, contact Robert Hadad at 585-739-4065 or rgh26@cornell.edu.
Weather Charts

J. Gibbons, CVP:

Weekly Weather Summary: 7/31 - 8/06

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* Airport stations
** Data from other station/airport sites is at: http://newa.cornell.edu/Weather

Accumulated Growing Degree Days (AGDD)
Base 50°F: Jan. 1 — August 6, 2012

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Veg Edge is published 28 times annually, monthly from October-May and weekly from May-September. If you have any questions about this publication, contact Julie Kikkert at 585-394-3977 x404 or jrk2@cornell.edu. Visit the Cornell Vegetable Program website at http://cvp.cce.cornell.edu/ for information on our research, upcoming events and enrolling in our program.

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Cornell Vegetable Program Extension Specialists

Robert Hadad
585-739-4065 Cell
rgh26@cornell.edu

Christy Hoepting
585-721-6953 Cell
cah59@cornell.edu

Julie Kikkert
585-313-8160 Cell
jrk2@cornell.edu

Carol MacNeil
585-313-8796 Cell
crm6@cornell.edu

Judson Reid
585-313-8912 Cell
jer11@cornell.edu

CVP Assistants

Elizabeth Buck,
607-425-3494 Cell

John Gibbons,
716-474-5238 Cell

Katie Klotzbach
585-732-2545 Cell

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Yates County
Cornell Cooperative Extension
417 Liberty Street
Penn Yan, NY 14527