

Cornell University
Cooperative Extension
Cornell Vegetable Program

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Veg Edge Weekly

Blossom End Rot

by Judson Reid

A calcium deficiency causes Blossom End Rot, **a disorder of eggplant, pepper and tomatoes**. Fruit with the disorder have a dry, sunken area on the blossom end, which often becomes colonized by opportunistic fungi (see photo). On peppers the rot may be on the side of the fruit instead of the end. Blossom End Rot has been found in a number of tomato fields recently. Low soil calcium is usually not the cause, but rather lack of water which moves the calcium out to the end of the fruit.

Tips to prevent Blossom End Rot:

- Check soil moisture under plastic mulch several times a week.
- Water regularly. Smaller amounts more often is preferable to irregular soakings
- Avoid ammonia based nitrogen, which inhibits calcium uptake.
- Soil test and apply lime or gypsum per recommendations before the growing season.
- Remove affected fruit as soon as it is discovered. ■



Blossom End Rot on pepper

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Recycle Ag Plastics in Many Parts of NYS

Recycling Agricultural Plastics Project (RAPP) is offering recycling for ag plastics in many parts of NYS.

To learn how and where, check out the following schedule:

- Aug 9-11: **EMPIRE FARM DAYS**, Rt 414, just south of Seneca Falls.
Ongoing all 3 days: RAPP information booth in the Cornell Empire Building, and BigFoot baler on display just north of the Empire Building. Daily demonstrations at 10 am & 1:30 pm, followed by trainings.
- Aug 13: **Tompkins County Farm City Day**, 39 Fall Creek Rd, Freeville.
BigFoot baler on display at the SWCD booth, 11 am-4 pm. Demonstrations at 12 (noon) and 3 pm, followed by a training. Contact Tompkins Co CCE for info about Farm City Day (607-272-2292 x151) and Tompkins Co SWCD to learn more about the county's agricultural plastics recycling program (607-257-2340).

Contact RAPP's NYS Field Coordinator to find out how to participate, and for info about other BigFoot demonstrations and trainings: Nate Leonard - 607-216-7242, nrl3@cornell.edu. ■

2011 Financial Assistance Program for Producers

William Murphy, USDA Risk Management Agency, Washington, DC

Section 524(b), Agricultural Management Assistance, of the Federal Crop Insurance Act (the Act) states that the Secretary shall provide financial assistance to producers in the States of—CT, DE, HI, ME, MD, MA, NV, NH, NJ, NY, PA, RI, UT, VT, WV and WY. Pursuant to section 524(b) of the Act, funding will be made available by the Commodity Credit Corporation.

Financial Assistance Program (FAP) funding will be provided to producers who purchase buy-up insurance policies for the 2011 crop year with acreage reporting or inventory value reporting dates prior to September 30, 2011. Catastrophic risk protection policies, and policies under Livestock Risk Protection are not included. The Risk Management Agency (RMA) will provide a fixed premium reduction of \$150 per crop policy for eligible producers. RMA is making \$3.5 million available for this initiative. If participation in the FAP results in total expenditures that exceed this amount, RMA will determine a pro-ration factor.

Contact your local Approved Insurance Provider for details. ■

National PROCESSED VEGETABLES DOWN 8 percent

USDA, National Agricultural Statistics Service, New York Field Office, VEGETABLE REPORT, July 2011

U.S. vegetable processors have contracted 1.02 million acres to be planted to the 5 major vegetable crops (snap beans, sweet corn, cucumbers for pickles, green peas, and tomatoes). This is down 8 percent from last year. Reported acreage declined for all 5 major processed vegetable crops. Contracted green pea acreage at 162,300 is down 13 percent. Green pea contracted production forecast, at 302,090 tons, is down 16 percent from 2010. Contracted tomato production is forecast at 12.8 million tons, up 1 percent from 2010. ■

Dates...

July 25 - PowerPoint and Your Farm, 7-9pm, Cornell Food & Agricultural Technology Park, Geneva. Learn how to use PowerPoint software to plan and create a basic digital slideshow. Will also cover how to make posters or signs for your farm or farm stand using this software. \$10. To REGISTER: Call Nancy Anderson at 585-394-3977 x427 or send name, address and phone number to nea8@cornell.edu

August 2 - Annual Elba Muck Onion Twilight Meeting, 1.5 DEC recertification credits in category 23 available.

August 4 - Innovations in Organic Research
Thompson Vegetable Research Farm, 133 Fall Creek Rd, Freeville, 4 – 7 pm. Join NOFA-NY and Cornell University for a look at: organic variety trials in vegetables bred for late blight, downy mildew and cucumber beetle resistance; soil health impact of cover crops; and reduced tillage cover cropping for broccoli.

August 9 - Protecting & Improving Your Crops From the Soil Up

4-7pm, Mud Creek Farm, McMahon Rd, Victor 14564. Crystal Stewart, CDVSFP, will focus on best management techniques for organic farmers trying to eliminate or prevent garlic bloat nematode and soil-borne pests and pathogens. Learn the management techniques that promote soil physical health, reduce soil compaction and encourage healthy soil microbia. Potluck dinner. To register, visit <http://www.nofany.org/events/field-days>, NOFA-NY Shopping page or call (585)271-1979 ext 512.

August 9-11 - Empire Farm Days, Rodman Lott & Sons Farm, Seneca Falls. For more info: 877-697-7837, mwickham@empirefarmdays.com

August 10 - Putting a Food Safety Plan into Action on a Diverse Organic Farm

Time, TBA. Canticle Farms, 3835 South Nine Mile Rd, Allegany 14706. Join David Schummer for a look at Canticle Farm's transition to GAPs compliance. Learn how they have established a painless but reliable record-keeping system (integrated with their crop planning system) that is the key to a good farm food safety plan. See Canticle Farm's new washing and packing facility and see how the farm's food safety plan has been implemented on the farm. Register by visiting the NOFA-NY Shopping page or calling Katie (585)271-1979 ext 512.

August 12-14 - NOFA Summer Conference

UMass Amherst. 225 workshops on organic farming, gardening, land care, draft animals, homesteading, sustainability, nutrition, food politics and more. Go to: <http://www.nofasummerconference.org/beginningfarmer.php>

Favorable Conditions for Black Rot in Cole Crops

C. Hoepting, CVP: Black rot (BR) can be a very serious bacterial disease of cole crops and is very challenging to control when weather conditions are favorable. Optimum conditions for BR are moist and warm temperatures (75°F to 95°F), the bacteria do not spread below 50°F or during dry weather. UNLESS, there is dew during the night and morning, those dew drops on diseased plants will contain the pathogen. BR does not spread without water, but irrigation can provide water to spread this disease in dry weather.

The diagnostic symptoms of BR are yellow-brown V-shaped lesions on the margins of leaves (Figure 1). Upon close inspection (i.e. holding the lesion up to the light), veins are also blackened (Figure 2). Veins throughout the plant will eventually turn black too (Figure 3). If BR is suspected, contact one of the CVP Specialists for confirmation via Chris Smart.

At this time, only secondary spread of black rot within the field may be managed, primarily

with copper sprays. Targeting sprays before/after rain is a good plan, but if there are significant dews or even short rain showers, or irrigation, go ahead and spray on a 7-10 day schedule. While not all coppers are the same (make sure to follow the label), they all work equally well to reduce the spread of BR. Maneb and mancozeb are not labeled for BR (rather, Alternaria leaf spot and downy mildew), but have reportedly worked well tank-mixed with copper for control of bacterial diseases in other crops. Other materials labeled to suppress BR include Actigard (1 oz/A) and AgriPhage (sold by Omnilytics). Neither have yet to provide significant control over the untreated in Cornell cabbage trials. When overhead irrigation is necessary, do so in the morning to minimize hours of leaf wetness. Avoid entering fields when foliage is wet. People, animals, and equipment can all spread black rot bacteria throughout a field and into other non-infested fields. ■



Figure 1. Black rot on cabbage. Note V-shaped lesions on leaf margins.



Figure 3. Blackening of veins due to black rot in stem of cabbage.



Figure 2. V-shaped lesions of black rot on cabbage. Note, blackening of leaf veins.

Late Blight Severity Value Accumulations

C. MacNeil, CVP: Late blight (LB) severity value (SV) accumulations for 10 key on-farm and airport weather stations in the 12 county CVP region are reporting 0 – 2 SVs for the past week, 3 for Lafayette, mostly from the cloudy, humid, occasional rain Monday. Unless you're closely following the LB Decision Support System (DSS) you should maintain a 7 day fungicide spray interval.

LB has now been detected in NY (Long Island), PA, ME, FL, VA, DE, WI, WA, CA and Ontario, Canada. See links to photos, articles, pamphlets for your garden neighbors in the 7/13 *Veg Edge Weekly*.

From the Long Island Fruit & Veg Update, 7/14: LB is fairly widespread in commercial tomato and potato plantings and gardens on the North and South Forks. The isolate was identified as US 23 and is mefenoxam (Ridomil, etc) sensitive. Mefenoxam will provide good systemic control of this isolate – not eradication. (Not all US

23 isolates across the country, however, have tested equally sensitive to mefenoxam, according to Bill Fry, Cornell. If an isolate is identified as US 23 in our area use Ridomil, etc. against it but monitor whether new lesions appear. Note that it takes about 4 days from infection to a visible lesion. CRM, CVP)

From Amanda Gevens, U WI, 7/17: The LB collected from a tomato planting two weeks ago was US 23, sensitive to mefenoxam. In 2010 US 22, US 23, and US 24 were all present in WI, the latter found primarily on potato and being intermediately and variably sensitive to mefenoxam. (Note: This contrasts with info in the 7/13 *Veg Edge Weekly* for testing in NY which indicated that US 24 was sensitive. Potato seed planted in NYS is obtained from all over the country, as well as from NY, so it's hard to predict what isolate may appear, and what its sensitivity to mefenoxam may be. CRM, CVP) ■

CROPS Tidbits & Insights

CABBAGE & OTHER COLE CROPS

Hot weather has of course been favorable for insect pests, especially worms and flea beetles. However, despite lack of wet conditions, the heat is very favorable for black rot, and has shown up in cabbage that has been irrigated – see article on pg 3.

CARROTS

If carrots are being irrigated, you should be on the watch for leaf diseases. For non-irrigated carrots, the risk of leaf diseases is low as long as dry weather continues. Aster leaf hoppers are a concern because they can transmit carrot/aster yellows disease. The adult is 3/16th inch long and pale green with six, black spots on the front of its head. Nymphs resemble adults, but are smaller and lack wings. A foliar insecticide should be applied at the first appearance of leafhoppers. Spray up to three applications at ten day intervals. For areas where yellows disease has been a problem, follow a seven day spray schedule and continue spraying through August or until leafhoppers can no longer be found. Yellow sticky cards can be used to monitor leafhopper activity. Because it takes a month for yellows symptoms to appear, sprays can be discontinued one month before harvest. See the Cornell Vegetable Guidelines for more information.

DRY BEANS

Unfortunately heat and lack of rain are coinciding with flowering in many fields. If soil moisture is adequate in the plow layer the effect will be less damaging to pod set. If soils are in good physical condition (good organic matter level for greater water-holding capacity, and little compaction and/or deep rooted cover crops previously for deeper bean rooting) the crop will be better able to weather this stress.

Western bean cutworm (WBC) moths are beginning to be caught in the bucket traps set out next to 12 dry bean fields in the major production area in NYS. The dry bean trap network is part of a much larger effort to track the presence of this pest moving east from the High Plains region. So far moths have been caught at 4 of the 12 dry bean sites, and 2 other sweet corn sites in the dry bean production area. Numbers are very low at this point and there is no cause for concern. The WBC is a pest of field and sweet corn as well as beans.

Continue scouting for potato leafhoppers (PLH) whether you had Cruiser on your seed or not. The presence of nymphs on the undersides of leaves indicates a multiplying population.

LETTUCE

Tip burn from the heat and poor water uptake has hurt many summer plantings of lettuce. Leaf hopper and tarnished plant bugs also are present in some locations. Even with good irrigation, many plants are suffering from not being able to keep up with losing water through transpiration. Shade cloths might be of some help.

ONIONS

An early variety of yellow transplants were harvested this week with very good yields. The crop continues to look good, but could use a nice rain. Growers continue to irrigate where possible.

Onion thrips (OT) counts doubled again this week, and are expected to continue to increase in this heat wave and with the continued harvest of wheat. Many direct seeded fields reached the spray threshold for Movento of 3 OT per leaf. With such rapid buildup of OT in this hot weather, it is best to error on the side of spraying when counts are below the spray threshold e.g. between 1 and 2 OT per leaf, rather than waiting until they exceed 3 OT per leaf. We have reports of Movento + high rate of penetrating surfactant + fungicide with no spreader sticker (i.e. everything we recommend) not reducing OT counts. Brian Nault, Cornell, assures us that Movento is an excellent insecticide for OT, and that in his trials, Movento does knock down OT counts to less than 1 OT per leaf after two consecutive sprays. It is not uncommon for it to take two consecutive sprays in two weeks to knock down an OT infestation, even with our best insecticides, Movento and Radiant. We recommend making the second application of Movento before abandoning this chemistry. Note, Movento does not control adults, so if your OT infestation is predominantly adult OT (migrating into onions from wheat, for example), then you should use another insecticide, such as Agri-Mek or Radiant.

Cooler nights and long periods of dew have been driving Botrytis leaf blight (BLB) in the absence of rain in direct seeded fields. The forecasted heat wave should be less favorable for BLB, and this disease, with some exceptions, is well under control. The hot and humid weather of July and August in combination with maturing plants is favorable for Purple Blotch (PB).

POTATOES

The crop is developing but suffering from the heat and dry conditions. Once air temperatures reach 90°F the plant's rate of respiration in effect cancels out its rate of photosynthesis. If soil temperatures are above 70°F tuber bulking slows and a lower specific gravity can result. Irrigation can cool both the tops and the soil. How do you know whether soil moisture is adequate? Dig down to the root zone and take a handful of soil. If you can make a soil ball that will just hold its shape there's enough soil moisture for the present time. If the soil is too dry to make a soil ball the crop is expending a lot of energy to extract water from it. Potential evapotranspiration (water loss) from a full crop canopy was – 1 - 1.25" during the past week and is forecast to be 0.6" over the next three days (at: <http://newa.cornell.edu/> Crop Mgmt, Evapotranspiration Map).

Scab is another result of hot, dry weather, besides reduced yield, size and specific gravity. Tom Zitter, Cornell, summarized what we know about scab on potatoes at the July 7th Cornell Potato Field Day. Scab can be both seed-borne and soil-borne, and it can survive in soils indefinitely. No potato varieties are immune though some are more sensitive than others. Other susceptible crops are beets, carrots, radishes, parsnips and turnips. Scab enters tubers by pushing a tiny fungal thread through immature lenticels during the first 5 weeks of tuber growth. When soil moisture is good beneficial bacteria are present in the lenticels and they prevent the scab

Continued on next page



Fig 1. Common scab on potato

CROPS Tidbits & Insights *(continued)*

threads from entering, but the bacteria are not present in dry soils. The tuber responds to the fungal invasion by producing corky tissue (Fig. 1). Variety selection (at: http://vegetablemdonline.ppath.cornell.edu/NewsArticles/Potato_CultivarsFeb2011.html), crop rotation, use of acid-forming fertilizer (ammonium sulfate, urea, etc), liming only when absolutely essential and in the fall, and maintaining soil moisture near field capacity (good moisture), can substantially reduce scab infection.

SNAP BEANS

Many fields are stressed from heat and lack of rain. Flowers may not set pods during this time, resulting in low yields and split-sets. Irrigated fields will have a higher risk for molds and these should be controlled (see 6/29 *Veg Edge Weekly*). Sunscauld may occur during periods of intense sunlight, especially following conditions of high humidity and cloud cover. High temperatures may also induce sunscauld. Ozone injury is another possibility this week. It appears on the upper leaf surface first as small, water-soaked or necrotic lesions that may coalesce and become bronze or reddish brown, resembling sunscauld injury. Premature senescence and defoliation may then occur. The severity of plant damage depends on variety and many environmental factors. Continue to scout for other insects that might be present in snap bean fields at this time: potato leafhoppers (PLH), Mexican bean beetle (MBB), bean leaf beetle (BLB), aphids, spider mites, tarnished plant bugs and seed corn maggot (SCM). Cruiser seed treatments are effective on PLH, MBB, BLB and SCM, but not the others. It is also important to manage European corn borer during the bloom stage (see 7/6 *Veg Edge Weekly*).

SWEET CORN

Fresh market sweet corn with irrigation has been growing and harvests are coming in. Fields without irrigation are not doing so great. Ear size is lower and plants are shorter.

As more processing fields come into tassel, management of European corn borer and other "worm" pests becomes the priority. See the weekly insect trap report.

VINE CROPS

Water stress has created nutrient deficiencies in many summer squash and zucchini plantings especially as harvests continue. Magnesium is one of the first nutrients to get low causing yellowing of the leaves between the veins, especially to the older leaves. Adding Epsom salts through the drip lines or spraying over the top can be helpful.

With the heat, complete pollination has become problematic. Small and curved fruit are an indication of poor pollination. Bees have to make repeated trips to squash flowers in order for pollination to be complete.

Downy mildew hasn't been found yet in NY. A new case was reported in OH, Wisconsin, and Ontario Canada within the last 7 days. Winds were out of the northwest on Monday so potential areas where the disease might be found in NY are closer to Lake Ontario east of Niagara County down to the Finger Lakes (potential). As the winds turn more westerly, Erie Co and the rest of the WNY region are threatened.

Last week we thought we had an infection in a field but the tests turned out negative. Keep vigilant and scout fields every couple of days. Early in the morning while the sun is low and the leaves are still damp. Look for yellow spots on the upper surface of the leaves and grayish spores within the vein margins on the underside.

Powdery mildew is starting to show up here and there. It hasn't really taken off yet but it can be found on some squash and pumpkin plants especially in fields that might be close to wooded areas where early morning shade might allow for leaf wetness to last a little longer. When this weather pattern breaks and we start getting heavier morning dews or a few days of clouds and showers, the spread might come on fast. Watch the forecasts and get some protectant sprays out on the leaves. Maybe spot treat those shady areas now.

WNY Sweet Corn Trap Network Report, 7/19/11

WNY Pheromone Trap Catches: July 19, 2011

| Location | ECB -E | ECB -Z | CEW | FAW | WBC |
|----------------------------|-----------|-----------|-----|-----|-----|
| Baldwinsville (Onondaga) | 18 | 1 | 1 | 0 | 0 |
| Batavia (Genesee) | 0 | 0 | 0 | 0 | 1 |
| Bellona (Ontario) | 11 | 5 | 0 | 0 | 5 |
| Eden (Erie) | 0 | 2 | 1 | 0 | 0 |
| Farmington (Ontario) | 0 | 3 | 0 | 0 | 0 |
| Great Valley (Cattaraugus) | 0 | 1 | 5 | 0 | 0 |
| Hamlin (Monroe) | 3 | 0 | 0 | 0 | 0 |
| LeRoy (Genesee) | 5 | 1 | 0 | 0 | NA |
| Lockport (Niagara) | 0 | 2 | 0 | 0 | 0 |
| Penn Yan (Yates) | 3 | 0 | 0 | 0 | 0 |
| Spencerport (Monroe) | 0 | 2 | 0 | 0 | 0 |
| Waterport (Orleans) | 0 | 0 | 1 | 1 | 0 |
| Williamson (Wayne) | 1 | 0 | 0 | 0 | 3 |

Abby Seaman, NYS IPM Program

ECB-E race trap catches are picking up at some locations this week, indicating the beginning of the second generation flight. Z race catches are mostly 0 to the low single digits this week. More moths flying makes it more important to scout the ear zone of plants in silk stage for egg masses and newly hatched larvae. Remember that egg masses take about 100 base 50 degree days to hatch, and with the weather that's being predicted for later this week, we'll be accumulating over 30 DD per day and it could be as few as 3 days between egg deposition and hatch.

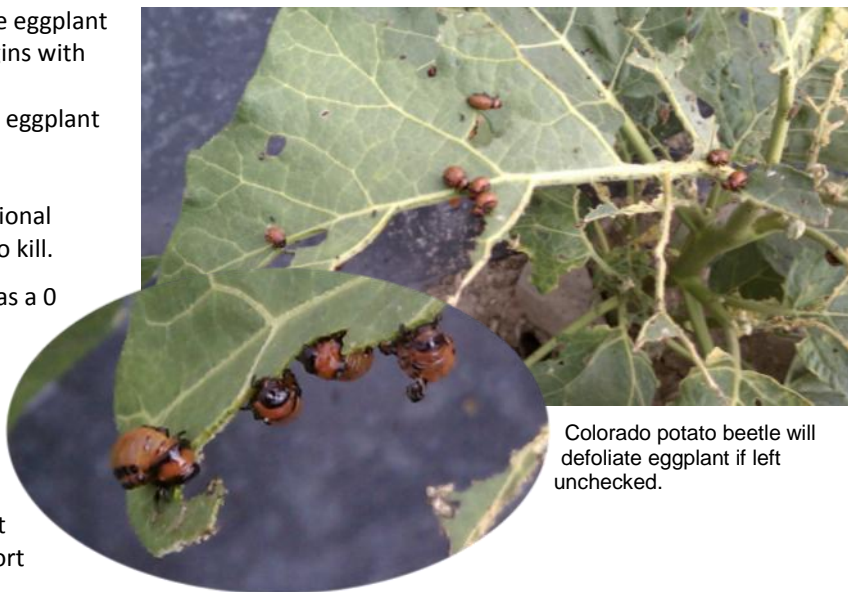
Most trapping locations caught no corn earworm this week, and where they were caught, numbers were no higher than 5. Low numbers of fall armyworm and western bean cutworm were caught at scattered locations. ■

Colorado Potato Beetle on Eggplant

J. Reid, CVP: These loathsome pests will defoliate eggplant if left unchecked (see photos). Management begins with prevention.

- Rotate away from the common hosts: potato, eggplant and tomato
- If labor is available, hand pick the larvae
- Treat early, whether using organic or conventional sprays. The smaller the worm the easier it is to kill.

The Cornell Guidelines indicate that Baythroid has a 0 day preharvest interval (PHI), while Vydate and Radiant have a 1-day PHIs. Provado has 0 days PHI, but should not be applied to plants treated with Admire. Organic growers can have good success with Entrust, which has a 1-day PHI. There are many more materials approved for control of Colorado Potato Beetle, but as harvest is under way, we have mentioned those with short PHIs. ■



Colorado potato beetle will defoliate eggplant if left unchecked.

Purple Blotch in Onions

C. Hoepting, CVP: In Elba, the first Purple Blotch (PB) lesions were detected a couple of weeks ago. This disease usually develops and spreads during July and August as plants begin to mature. It also can get a foothold on plants that have herbicide injury from Buctril or Chateau. In small-scale onion production on plastic, PB is fairly common and sometimes severe. Optimum conditions for PB are 77°F and high humidity. PB lesions can girdle onion leaves

resulting in leaf dieback and in severe cases, onions can die standing up. When scouting, look for boat-shaped target-spot lesions about 0.5 to 1.0 inch in length. Lesions can be tan-ish or purplish, sometimes blackish in color (Figs 1 & 2). PB is closely related to secondary saprophytic fungi (fungi that naturally break down dead tissue) and can be confused with lesions caused by these commonly occurring organisms in onions. With saprophytic fungi, the lesions occur only on necrotic tissue that is already dying. Two tell-tale signs that the pathogenic PB is present are: 1) tan or purple lesions occur on otherwise green tissue (Fig 1 & 2), and 2) lesions are purple, even if they are occurring on necrotic tissue. PB lesions occur on the oldest 2-3 leaves of the plant. It is recommended to start spraying for PB at first sign of disease. In the most recent Cornell fungicide trials (2005-2007), half rate of Scala (9 oz) + half rate of Bravo (1.5 pt), Switch, Rovral and Endura were the top 4 best treatments for control of PB. Scala + Bravo also provided best control of BLB. Other fungicides that can be used to manage PB include Quadris Top, Pristine, Cabrio and Inspire Super. Note, mancozeb and Bravo are weak on PB. Generally, fungicide sprays for PB need to be continued weekly for the rest of the season. ■



Figure 1. Characteristic boat-shaped target spot purple lesions of Purple Blotch on otherwise green leaf tissue.



Figure 2. Less diagnostic tan-colored lesions of Purple Blotch on otherwise green leaf tissue.

Weather Charts

J. Gibbons, CVP:

Weekly Weather Summary: 7/12 - 7/18

| Location | Rainfall (inch) | | Temp (°F) | |
|-----------------|-----------------|-------|-----------|-----|
| | Week | Month | Max | Min |
| Albion | 0.00 | 0.00 | 90 | 52 |
| Appleton, North | 0.17 | 0.17 | 87 | 46 |
| Baldwinsville | 0.75 | 0.75 | 90 | 57 |
| Buffalo* | 0.11 | 1.14 | 89 | 58 |
| Ceres | 0.00 | 0.49 | 88 | 49 |
| Elba | 0.16 | 0.25 | 90 | 46 |
| Farmington | 0.10 | 0.12 | 91 | 49 |
| Geneva | 0.07 | 0.07 | 91 | 54 |
| Himrod | **** | **** | 94 | 51 |
| Knowlesville | 0.22 | 0.22 | 91 | 52 |
| Lafayette | 0.00 | 0.00 | 89 | 49 |
| Lodi | 0.10 | **** | 92 | 54 |
| Lyndonville | 0.16 | 0.16 | 91 | 49 |
| Ransomville | 0.01 | 0.01 | 90 | 49 |
| Rochester* | 0.13 | 0.18 | 92 | 53 |
| Syracuse* | 0.48 | 2.02 | 93 | 58 |
| Williamson | 0.14 | 0.16 | 91 | 56 |

Accumulated Growing Degree Days (AGDD) Base 50°F: Jan. 1 — July 18, 2011

| Location | 2011 | 2010 | 2009 |
|-----------------|------|------|------|
| Albion | 1223 | 1391 | 975 |
| Appleton, North | 959 | 1187 | 806 |
| Buffalo | 1277 | 1400 | 1017 |
| Elba | 1153 | 1383 | 800 |
| Farmington | 1225 | 1359 | 929 |
| Geneva | 1356 | 1593 | 1036 |
| Himrod | 1307 | 1395 | 986 |
| Lafayette | 1271 | 1312 | 955 |
| Lodi | 1384 | 1526 | *** |
| Lyndonville | 1191 | 1396 | 961 |
| Ransomville | 1203 | 1377 | 944 |
| Rochester | 1307 | 1455 | 957 |
| Syracuse | 1522 | 1491 | 1084 |
| Wellsville | 1099 | 1244 | 822 |
| Williamson | 1234 | 1433 | 943 |

*Airport stations

** Data from other station/airport sites is at: <http://newa.cornell.edu/>
Weather Data, Daily Summary and Degree Days. ■

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Veg Edge Weekly is a seasonal weekly publication of the **Cornell Vegetable Program** providing information about crop development, pest activity and management, pesticide updates, local weather conditions, meetings and resources.

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.

Cornell Cooperative Extension provides equal program and employment opportunities.

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This publication contains pesticide recommendations. Changes in pesticide regulations occur constantly and human errors are possible. Some materials may no longer be available and some uses may no longer be legal. All pesticides distributed, sold or applied in New York State must be registered with the New York State Department of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide usage in New York State should be directed to the appropriate Cornell Cooperative Extension specialist or your regional DEC office.

Cornell Cooperative Extension and its employees assume no liability for the effectiveness or results of any chemicals for pesticide usage. No endorsement of products or companies is made or implied. READ THE LABEL BEFORE APPLYING ANY PESTICIDE.

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