Sweet corn pheromone traps are used to monitor insect pest activity near your farm so that you can determine when to spray your sweet corn.

PAGE 1

Late blight severity values are accumulating in our region. Check to see if it's time for you to apply fungicide to your potatoes and field tomatoes.

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Spinach leaf miner has infested a few plantings in WNY. Read more about this pest and our other field observations in Crop Insights.

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Read highlights from a 3-year project investigating nitrogen dynamics in cabbage, funded by the Cabbage Research & Development Program.

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VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

Volume 13 | Issue 8 | May 31, 2017

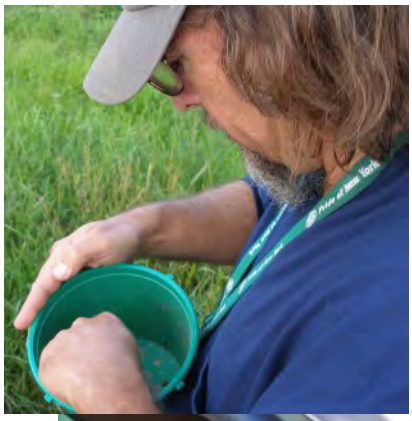
Photo: Darcy Telenko

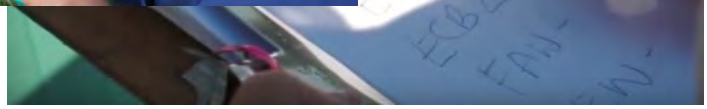
Cornell University
Cooperative Extension
Cornell Vegetable Program

Sweet Corn Pheromone Trap Network is Now Active to Help Determine Spray Intervals

Darcy Telenko, CCE Cornell Vegetable Program

The purpose of the Sweet Corn Pheromone Trap Network is to provide weekly reports on major sweet corn insect pest activity in western NY. The trap network is a collaboration between the NYS IPM Program, Cornell Cooperative Extension programs, farmers, and crop consultants. The site provides scouting and monitoring information for fresh market sweet corn, and links to resources on the major sweet corn insect and disease pests. The insect pests that are monitored include European corn borer (ECB), fall armyworm (FAW), corn ear worm (CEW) and western bean cutworm (WBC). Sweet corn traps are placed throughout western NY and the CVP team assists in collecting the activity data. Many traps will be placed this week with the first counts available next week.





Cornell Vegetable Program team members check pheromone traps and provide activity data to NYS IPM.
Photo (left): Angela Parr, CCE CVP
Photo (below): Jim Monahan, CCE

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VegEdge newsletter is exclusively for enrollees in the Cornell Vegetable Program, a Cornell Cooperative Extension regional agriculture team, serving 13 counties in Western New York.

The newsletter is a service to our enrollees and is intended for educational purposes, strengthening the relationship between our enrollees, the Cornell Vegetable Program team, and Cornell University.

We're interested in your comments. Contact us at:
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Help us serve you better by telling us what you think. Email us at *cce-cvp@cornell.edu* or write to us at Cornell Vegetable Program, 480 North Main Street, Canandaigua, NY 14424.

Cornell University
Cooperative Extension
Cornell Vegetable Program

Contents

The next issue of VegEdge will be June 7, 2017.

Early transplanted onions in Elba on May 30, 2017. *Photo: Christy Hoepting, CCE CVP*

Weekly reports for western NY counties in the CVP will be in VegEdge, in addition the statewide weekly reports are available at http://sweetcorn.nysipm.cornell.edu/. You can subscribe to receive an email of the statewide report.

For bare-ground fresh market sweet corn scouting for European corn borer (ECB) and fall armyworm (FAW) larvae, should be initiated at early tassel emergence. Early tassel has been reached in the first sweet corn plantings in the western part of our region. Two well-timed applications at tassel emergence have been found to be more effective than applications at the whorl stage on bare ground sweet corn even when ECB trap counts are high. Larvae feeding in the whorl are protected from insecticide applications and mortality will not be as high as at tassel emergence, when larvae feeding in the emerging tassel are exposed to the spray. Larvae will leave the tassel as it opens and no longer provides a moist, protected feeding environment, and move down the plant looking for protected places to feed. Insecticide applications need to be timed to kill larvae before they bore into a new feeding location where again they will be protected from sprays. In fields with very uneven development, two applications may be necessary, one when approximately 25-50% of the tassels have emerged, and again after 75-100% of the tassels have emerged, if the field is still over threshold.

The **threshold for ECB and armyworms at tassel emergence is 15% infested plants.** For corn borers, look down into emerging tassels for tiny larvae or frass (white to brown material about the size of fine sand). For armyworms look for ragged feeding holes and frass pellets the texture of coarse sawdust. (See table 1 for thresholds and comments).

Once a field has reached the **silking stage**, the **worm threshold drops to 5% infested plants**. Scout the ear zone (roughly from two leaves above and one leaf below the ears) for ECB egg masses and ECB or FAW larvae. Egg masses are found most frequently on the underside of leaves near the midrib, and consist of approximately 10-20 flattened eggs overlapping like fish scales. Egg masses can also sometimes be found on the flag leaves of the ears or on the husk itself. Eggs take approximately 100 base 50 degree days to hatch. Look down into the tops of the silks for newly hatched larvae, and pull the ear away from the stalk slightly to look for larvae feeding between the stalk and the ear.

Corn earworm is difficult to scout for but pheromone trap catches may be used to time sprays per the table below. Add one day to the recommended spray interval if daily maximum temperatures are less than 80° F for the previous 2-3 days (Table 2).

Table 1. Thresholds for the major sweet corn pests

Insect	Crop stage	Fresh market	Processing	Comments
European Corn Borer (ECB) and Fall armyworm	**Early tassel and tassel**	**15% infestation**	**15% infestation**	**Processing:** Monitor trap network once late whorl/tassel or silk stage begin scouting – sample 40 plants (five at each of eight sites).
	Silk stage through harvest	**5% infestation**	**5% infestation**	**Fresh Market:** Monitor trap network and scout weekly or more often if temperature is above 80°F.
Corn earworm	**Monitor trap catches to detect arrival and flight activity (see Table 2 for spray intervals)**			
Western bean cutworm	**July through August**	**1% infested with eggs or larvae**	**4% infested with eggs or larvae**	Use trap network to determine times to scout for WBC in fields.

Table 2. Average corn earworm catch and recommended spray interval

Per Day	Per Five Days	Per Week	Days Between Sprays
<0.2	<1.0	<1.4	No Spray (for CEW)
0.2-0.5	1.0-2.5	1.4-3.5	6 days
0.5-1.0	2.5-5.0	3.5-7.0	5 days
1-13	5-65	7-91	4 days
over 13	over 65	over 91	3 days

Information adapted from the Sweet Corn Pheromone Trap Network Scouting and Threshold Information maintained by Marion Zuefle, Vegetable IPM Extension Area Educator with the New York State Integrated Pest Management Program

Transplanted sweet corn, May 30, 2017. *Photo: Marion Zuefle, NYS IPM*

WNY Sweet Corn Trap Network Report, 5/30/17

Marion Zuefle, NYS IPM Program; http://sweetcorn.nysipm.cornell.edu

This is the first report of the 2017 season. Only three sites reporting this week with European corn borer (ECB)-E trapped at all three of those sites. Plantings have been delayed at several sites due to the wet spring, however, degree day accumulations for most sites are around the time of first egg laying for ECB-E according to the development model from the University of Wisconsin.

Development Stage	Accumulated Degree Days
First Generation	
First spring moths	374
First eggs	450
Peak spring moths	631
First generation treatment period	800-1000
Second Generation	
First summer moths	1400
First eggs	1450
First egg hatch	1550
Peak summer moths	1733
Second generation treatment period	1550-2100

European corn borer (bivoltine) development estimated using a modified base 50F degree day calculation. *From J. W. Apple, Department of Entomology, University of Wisconsin-Madison*

To manage ECB in early plantings that is close to tassel emergence during the first generation flight, please see the Managing ECB in plastic, row cover and transplanted sweet corn page at http://sweetcorn.nysipm.cornell.edu/information-for-trap-network-cooperators/season_ext/

WNY Pheromone Trap Catches: May 30, 2017

Location	ECB-E	ECB-Z	CEW	FAW	WBC	DD to Date
Baldwinsville (Onondaga)	NA	NA	NA	NA	NA	515
Batavia (Genesee)	NA	NA	NA	NA	NA	469
Belfast (Allegany)	NA	NA	NA	NA	NA	529
Bellona (Yates)	NA	NA	NA	NA	NA	566
Eden (Erie)	NA	NA	NA	NA	NA	569
Farmington (Ontario)	5	0	0	0	NA	505
Hamlin (Monroe)	NA	NA	NA	NA	NA	411
LeRoy (Genesee)	NA	NA	NA	NA	NA	474
Pavilion	NA	NA	NA	NA	NA	426
Penn Yan (Yates)	1	0	0	0	0	522
Ransomville (Niagara)	NA	NA	NA	NA	NA	484
Seneca Castle (Ontario)	6	0	0	0	NA	501
Spencerport (Monroe)	NA	NA	NA	NA	NA	522
Waterport (Orleans)	NA	NA	NA	NA	NA	405
Williamson (Wayne)	NA	NA	NA	NA	NA	436

ECB - European Corn Borer
CEW - Corn Earworm
FAW - Fall Armyworm
WBC - Western Bean Cutworm
NA - not available
DD - Degree Day (modified base 50F) accumulation

Late Blight Risk – Severity Values are Accumulating and First Potatoes Have Emerged

Darcy Telenko and John Gibbons, CCE Cornell Vegetable Program

Planted potatoes were emerging May 19 in Erie County. Late blight was not officially found in NY last year, due to the dry conditions, so it is less likely that infected potatoes could have overwintered in NY in most counties. There is still a risk if southern potatoes that are planted are infected with late blight, then spores from these infections could be in the air, carried on wind for up to 30 miles. The good news is that currently late blight has only been detected in southern Florida, we will continue to watch the national occurrence map to track late blight movement.

JUST IN! *Late blight update from Amanda Gevens, Univ. of Wisconsin, 5/31/17:* "I received several updates regarding new finds of potato late blight along the eastern seaboard - not yet posted to usablight.org. Late blight was detected in northeastern North Carolina and southern Virginia. The infected plant samples are currently being typed for pathogen clonal lineage/strain by pathologists at Cornell University. Wet weather can promote late blight when temperature conditions are favorable and the pathogen is present."

Once late blight has been detected in our region, Blightcast can be used to time the first fungicide application on potato. The tally of late blight SVs for many locations can be found at http://newa.cornell.edu/index.php?page=potato-late-blight-dss .

The threshold for risk is 18 SVs and within about a week of reaching 18 SVs growers need to apply fungicide on all potatoes 4+ inches tall, and on all field tomatoes, to protect them against late blight. Based on weather forecasts since May 19, Gainesville has reached **25 severity values (SVs)**, exceeding the threshold risk if late blight was detected in the region. In the CVP area, Albion has 16 SVs and will likely reach 20 in the next week per the forecast, Fulton has 14 reaching 19 in the next week, Versailles has 11, Ransomville has 8. Once you've applied your first fungicide, use Simcast or early blight P-Days to help schedule your fungicide applications.

Late Blight Severity Values* 5/30/17

Location	Total	Forecast 5/31-6/02	Location	Total	Forecast 5/31-6/02
Albion	22	1	Lodi	0	0
Baldwinsville	8	2	Lyndonville	7	0
Bergen	8	0	Medina	8	0
Buffalo	15	0	Niagara Falls	11	0
Ceres	3	0	Penn Yan	9	4
Elba	9	0	Rochester	12	0
Fairville	6	0	Sodus	8	1
Farmington	11	0	Versailles	11	0
Gainesville	34	0	Volney	15	3
Geneva	0	0	Wellsville	12	0
Kendall	5	0	Williamson	7	0
Knowlesville	32	0	Wolcott	11	1

* Severity value accumulations start 5/12/2017

Colorado potato beetle adults active. Found on some early sprouting potatoes.

Flea beetles also found feeding on potato foliage as well as on brassicas.

Black cut worms damaging seedling and transplants under plastic mulch and on field with a lot of surface stubble and organic matter. This season doesn't seem to be too bad with this pest it can be troublesome. Unless the losses are high, the cutworm season doesn't last long and spraying may not be economical.

Spinach leaf miner has infested a few plantings in WNY. The fly has been active during the cooler weather. Problems have been seen closer to Lake Ontario and down in and around Allegany Co. Tell-tale symptoms is tunneling on the leaves. When scouting, look for small whitish eggs on the underside of the leaves. Treat before hatch.

Spinach leaf miner damage. *Photo from UMass Vegnotes*

Black aphids on fava bean and peas have been feeding heavily. Yellowing of leaves can be seen. Lambsquarter weed are also harboring this cool season pest.

Beet seedling rot or wirestem is still prevalent in many plantings where soils haven't fully dried since the rains. Soil drench or later plantings may beat the disease.

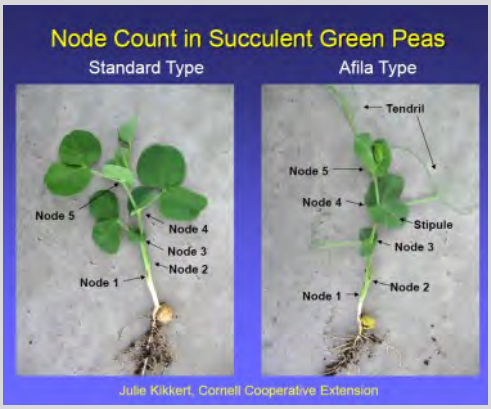
ONIONS

Majority of direct seeded acreage is in 1-leaf stage. Earliest transplants have 7 -9 leaves. With soil temperatures finally warming up and the month of June right around the corner, the crop is off to the races. Although behind, the crop looks good with better than expected stands and weed control, considering how much rainfall it has had. It's time to start checking early transplants for onion thrips and Botrytis leaf blight; although I have spotted the odd one of each here and there, these pests remain below spray thresholds at the moment. For post-emergent weed control applications, keep in mind that the cooler, cloudier and wetter soil conditions of spring 2017 is much different than the hot and dry conditions of spring 2016. Hot and dry conditions allow for thick waxy cuticle on both onions and weeds, which requires higher rates to kill weeds and makes onions more tolerant to herbicide injury. This year, onions may be more prone to injury and weeds may not need as high herbicide rates. For post-emergent herbicide applications to 1-leaf onions, waiting until second leaf starts to come and flag leaf begins to die (= "strong" 1-leaf) is best (Fig. 1), especially if "soft" onions coming out of rainy cloudy weather can get a couple of days of sun and wind on them before herbicides are applied.

Figure 1. Left: onion in "strong" flag leaf stage with second leaf starting to come. Annual mustard seedlings dying after Chateau 1.0 oz. Right: Although technically in 1-leaf stage, these onions are at greater risk for post-emergent herbicide injury than those on the left. *Photos: C. Hoepting.*

PROCESSING CROPS

Wet conditions continue to prevail throughout the region, with brief planting and field work windows for some over the past week. Planting and weed management are the priority activities for vegetable crops at this time.



Post-emergence herbicides need to be applied at the correct stage of crop growth to avoid crop injury. This is especially important for peas. Most products refer to the number of nodes in a pea plant. A node is a point on a stem where a leaf is or has been attached. When a pea seed germinates, the cotyledons remain below the soil surface. The shoot grows upward. The first two nodes have incomplete or stipular leaves. Beginning with the third node, the pea plant has a compound leaf comprised of two fleshy stipules at the base, a petiole (leaf stalk) with two or three pairs of leaflets, and usually several tendrils at the end. When counting nodes, it is very important to remember that one or several nodes may be below the soil surface depending on how deep the seed was planted. Thistrol and Raptor herbicides cannot be applied within a certain number of nodes to flowering. Early varieties can flower as soon as 9 nodes. The first node to flower for many of the processing varieties is listed in Table 1.

Table 1. The average node to first flower for commonly grown processing pea varieties in NY.

Variety	Vine type	1st node to flower
Early Season		
Spring	Normal	9 to 10
FP 2269	Afila	9 to 10
PLS M-14	Normal	9
Mid-Season		
Portage	Afila	10
SV0935QH	Determinant Afila	?
Late-Season		
Bolero	Normal	14 to 15
Ricco	Afila	16
Spartan	Afila	12 to 14

SWEET CORN

Early sweet corn plantings are just starting to show a tassel developing in the whorl. The first report of the sweet corn pheromone trap network is available, European corn borer was detected in three locations in WNY, Farmington, Penn Yan and Seneca Castle.

Understanding Nitrogen Use in Cabbage: New York Study

Christy Hoepting, CCE Cornell Vegetable Program

The Cabbage Research and Development Program (CRDP) funded a three-year project to investigate various aspects of nitrogen dynamics in cabbage from 2014 to 2016. Following are highlights from this work.

The project involved two on-farm small-plot trials, a grower survey and four case studies. In 2014, treatments included five rates of total applied nitrogen (31, 66, 132, 197, 262 lb/A), which were applied at three different timings (ratio at planting: side-dress; 100:0, 50:50, 25:75) in storage cabbage (c.v. Constellation). In 2016, treatments included three rates of total applied nitrogen (100, 150, 200 lb/A) and two application timings (100:0, 50:50), each with and without nitrogen stabilizer (will not be discussed in this article) in summer cabbage (c.v. Bronco). In 2014, in mid-September, nine fields of summer cabbage were sampled for available nitrate-nitrogen (NO_3-N) in soil and grower nitrogen records collected. In 2015, nitrogen dynamics were studied in three commercial fields of summer cabbage (c.v. Transam) and in one field of red storage cabbage (c.v. Kilmaro). Christy Hoepting (CVP) was the project lead and Steve Reiners, Department of Horticultural Sciences served as an advisor.

Cornell University recommends 100 to 120 lb/A of nitrogen divided among broadcast and incorporated prior to planting (40 lb/A), banded at planting (40 lb/A) and side-dressed 4 weeks after planting (20-40 lb/A). However, there is tremendous variability in nitrogen use among cabbage growers in New York. **In our sampling of 11 large-scale cabbage NY growers, total amount of applied nitrogen ranged from 72.6 to 210 lb/A and averaged 149 lb/A.** Timing of nitrogen application ranged from ratios of at planting: side-dress of 100:0 to 15:85 and everything in between (66:33, 50:50, 40:60, 23:75) with some growers making two side-dress applications.

CONSISTENT TRENDS IN NITROGEN DYNAMICS IN NEW YORK STUDIES, 2014-2016

When 100% of total nitrogen was applied at planting, yield/head size continued to increase as rate of total applied nitrogen increased. Maximum yield was not achieved at maximum applied rate.

Trial Year	Increase in Yield per 50 lb/A N:	Highest Rate of Applied Nitrogen	Yield at Highest Rate of Applied Nitrogen	Yield at 150 lb/A N
"Normal year" (2014 trial)	2.3 ton/A* (storage cabbage)	262 lb/A	38.8 ton/A	34.2 ton/A
Hot & dry year (2016 trial)	0.6 ton/A (summer cabbage)	200 lb/A	34.1 ton/A	33.5 ton/A

*results confounded by club root. As rate of total applied nitrogen increased, severity of club root increased. Would nitrogen use been more efficient in absence of club root (e.g. increase per 50 lb/A even higher)?

Split applications of nitrogen between at-planting (pre-plant incorporated and during planting) resulted in more efficient use of nitrogen and maximum yields were achieved.

Split Application (at-planting: side-dress)		Rate of Total Applied Nitrogen When Maximum Yield Achieved
2014 trial	50:50	197 lb/A
2014 trial	25:75	132 lb/A
2016 trial	50:50*	150 lb/A

*In 2016, 50:50 split applications of nitrogen increased yield by an average 4.6% (Fig. 2).

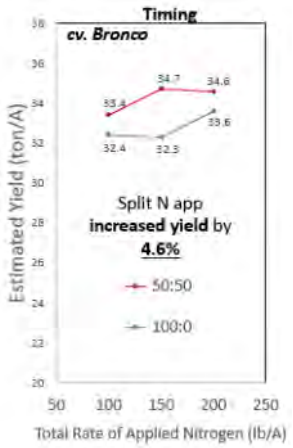


Figure 1. Effect of timing of nitrogen application on cabbage yield (Hoepting 2016). 50:50 – half of total applied nitrogen applied at planting and half applied at side-dress. 100:0 = 100% of total nitrogen applied at planting. When 100% of nitrogen was applied at planning, yield increased as rate of nitrogen increased. When 50% of nitrogen was applied at side-dressing, maximum yield was achieved at 150 lb/A.

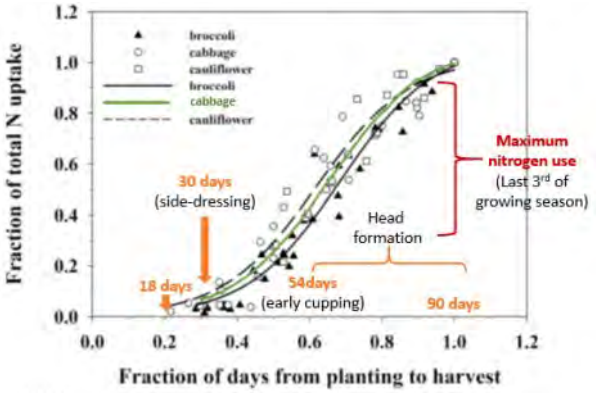


Figure 2. Nitrogen use in cabbage (green) demonstrated in a recent study in California (Smith et al. 2016) that half of the nitrogen use occurs during the last third of the growing season during cupping and head formation.

More efficient nitrogen use with split applications makes sense, because **half of the nitrogen uptake by the cabbage crop occurs within the last third of the growing season** during cupping and head formation (Fig. 2). Generally, it takes about two weeks for a newly transplanted cabbage crop to begin to take up nitrogen. At the time of side-dressing, it has only taken up about 10% of its total uptake. During this 4-6 week period, nitrogen applied at planting is especially prone to leaching. Therefore, when 100% of total nitrogen is applied at planting, higher rates are needed to compensate for losses that

continued on next page

occur during this time. Alternatively, when nitrogen is applied at side-dressing, it is applied to the crop just ahead of when uptake begins to ramp up, which results in more efficient use.

CABBAGE CROP LEAVES 100 LB/A OF NITROGEN IN LEAF RESIDUE IN THE FIELD

Originally, CRDP funded closer investigation of nitrogen dynamics in cabbage, because there was concern that too much nitrogen remained in fields of summer cabbage after harvest that later could cause lodging in winter wheat. Winter wheat is prone to lodging when it takes up greater than 150 lb/A of nitrogen. For this project, **we sampled available soil nitrogen after cabbage harvest extensively, and consistently found less than 10 lb/A**, which was in line with studies in Canada and California (Table 1). This in itself poses no concern for lodging of winter wheat.

Analysis of cabbage tissue at harvest revealed that a **summer cabbage crop uses about 200 lb/A of nitrogen**, which was divided fairly equally between the head and the leaf and stump residue (Table 2). Interestingly, our studies showed that **nitrogen uptake by the cabbage crop exceeded the amount of nitrogen applied via fertilizer.** For example, in the 2016 trial, nitrogen uptake exceeded amount applied (150 lb/A) by 35 to 73 lb/A (=23 to 48%). Apparently, this is typical, and an indication that a **cabbage crop is a very efficient nutrient scavenger.**

Approximately 100 lb/A of total nitrogen remains in the field within the leaf and stump residue after cabbage is harvested. Once the residue breaks down, this nitrogen will be mineralized and become readily available for plant uptake again. Depending on when this occurs, this could conceivable contribute to lodging of winter wheat. **Growers should consider cabbage residue as a source of nitrogen for proceeding crops, and potentially reduce their nitrogen inputs for these crops.**

Table 1. Amount of available nitrate-nitrogen remaining in soil in cabbage field after harvest (Hoepting 2014-2016).

Study	Available NO_3-N (lb/A)		
	Average	Minimum	Maximum
2014 Nitrogen Trial (33-262 lb/A N) Storage cabbage	**7.5**	1.8	29.0
2014 Grower Survey Summer Cabbage	**9.0**	2.1	43.3
2015 4-Field Case Study 3 Summer; 1 storage cabbage	**8.0**	0.0	30
2016 Nitrogen Stabilizer Trial (50-200 lb/A N) Summer cabbage	**8.0**	0	32
Salinas Valley, CA study (30 broccoli, cabbage & cauliflower fields)	**10** (NO_3-N + NH_4-N)	--	--
Canada study (0-446 lb/A N) c.v. Bartolo	**8-10** (0-267 lb/A N)		26.7 (267-446 lb/A)

Table 2. Amount of total nitrogen in cabbage tissue at harvest (Hoepting, 2015 & 2016).

Study	Mean Total Nitrogen (lb/A) (range)		
	Head (Harvested)	Stump & Leaves (Left in Field)	Total N Use
2015 4-Field Case Study **2 Summer; 1 storage cabbage**	101 (=48%)	**109**	**210**
2016 Nitrogen Stabilizer Trial (100-200 lb/A N) **Summer cabbage**	96.5 (=48%) (56-143)	**103** (78-143)	**200** (168-226)

STUDY INDICATES 150 LB/A NITROGEN MORE APPROPRIATE FOR CABBAGE IN NEW YORK

When all of the data is compiled from the on-farm trials and the case studies in this project, it appears that the Cornell recommendations for nitrogen of 100-120 lb/A for cabbage are too low and that 150 lb/A would be more appropriate. Our work on nitrogen dynamics in cabbage continues and we hope to have new nitrogen recommendations in the Cornell guidelines in the near future.

FOR MORE INFORMATION

Contact Christy Hoepting (cah5@cornell.edu; 585-721-6953).

Also, an executive summary on this project was presented at the 2017 Empire Expo and is available online at http://www.hort.cornell.edu/expo/2017proceedings.php (scroll down to cabbage session and click on nitrogen dynamics in cabbage).

UPCOMING EVENTS *view all Cornell Vegetable Program upcoming events at cvp.cce.cornell.edu*

Elba Muck Donut Hour Every Tuesday

June 6 - August 15, 2017 | 8:30 AM - 9:30 AM
Elba muck, corner of Transit and Spoilbank, Elba, NY

Meet with Cornell Vegetable Program Specialist Christy Hoepting every Tuesday morning to ask questions and share your observations. Grower experience is combined with research and scouting information for a whole lot of talk about growing ONIONS! Questions? Contact Christy Hoepting at 585-721-6953.

Fresh Market Minutes - Every Other Tuesday in Eden Valley

June 6 - August 29, 2017 | 9:00 AM - 10:00 AM
Across from W. D. Henry & Sons, Inc., 7189 Gowanda State Rd, Eden, NY 14057

New this year! Meet with the Cornell Vegetable Program Specialist Darcy Telenko every other Tuesday morning to ask questions and share your observations in fresh market vegetables. Darcy will be in Eden Valley on the first and third Tuesdays June - August. Questions? Contact Darcy Telenko at 716-697-4965.

Fresh Market Minutes - Every Other Tuesday in Niagara County

June 13 - September 5, 2017 | 9:00 AM - 10:00 AM
Kneed the Dough, 3678 Ransomville Rd, Ransomville, NY 14131

New this year! Meet with the Cornell Vegetable Program Specialist Darcy Telenko every other Tuesday morning to ask questions and share your observations in fresh market vegetables. Darcy will be in Niagara County on the second and fourth Tuesdays during the 2017 season. Questions? Contact Darcy Telenko at 716-697-4965.

Produce Safety Alliance Grower Training Course

June 13, 2017 | 8:00 AM - 5:15 PM
CCE Wayne County, 1581 NYS Rt 88 N, Newark, NY 14513

Fruit and vegetable growers and others interested in learning about produce safety, the Food Safety Modernization Act (FSMA) Produce Safety Rule, Good Agricultural Practices (GAPs), and co-management of natural resources and food safety should attend this food safety training. Individuals who participate in this course are expected to gain a basic understanding of microorganisms relevant to produce safety and where they may be found on the farm, how to identify microbial risks, practices that reduce risks, and how to begin implementing produce safety practices on the farm, parts of a farm food safety plan and how to begin writing one, and requirements in the FSMA Produce Safety Rule and how to meet them.

In addition, the PSA Grower Training Course is one way to satisfy the FSMA Produce Safety Rule requirement outlined in section 112.22(c) that requires *'At least one supervisor or responsible party for your farm must have successfully completed food safety training at least equivalent to that received under standardized curriculum recognized as adequate by the Food and Drug Administration.'*

COST: $25 for NY grower/attendee; $140 for out-of-state attendee. (Price for NY growers low because of a grant from NYS Dept of Ag & Markets.) For more info and to register, visit https://lof.cce.cornell.edu/event.php?id=747

Baskets or Pallets – High Tunnel Field Day

June 15, 2017 | 6:30 PM - 8:30 PM
CCE Wyoming County, 36 Center St, Warsaw, NY 14569

The Baskets or Pallets series of field days to aide in understanding how to determine quality and grade of agricultural products is co-hosted by CCE Allegany, Erie and Wyoming Counties. The High Tunnel Production session will be an introductory class on growing vegetables in high tunnels. We will cover basics from choosing structure, potting materials and plant varieties through to marketing produce.

The field days are open to 25 participants; preference given to active or retired NYS Military Veterans on a first-come, first-served basis. COST: $10/person, veterans may apply for stipend to cover cost of attending. For more info or to apply, contact Lynn Bliven, CCE Allegany County at 585-268-7644 x18 or email lao3@cornell.edu.

2017 Oswego Muck Onion Twilight Meeting

June 22, 2017 | John Dunsmoor Farms, 3883 Co Rt 57, Oswego, NY 13126

This on-farm meeting will provide crucial, in-season research to aid onion growers with their management decisions to keep them profitable. The twilight meeting will emphasize strategies to prevent economic loss from onion pests and weeds. DEC recertification credits will be available. More details soon. Contact Christy Hoepting at 585-721-6953 with questions.

Weather Charts

John Gibbons, CCE Cornell Vegetable Program

Weekly Weather Summary: 5/23 – 5/29/17

Location	Rainfall (inch)		Temp (°F)	
	Week	Month May	Max	Min
Albion	1.34	5.73	75	49
Appleton, North	NA	NA	NA	NA
Baldwinsville	1.04	4.86	78	44
Buffalo*	2.20	6.42	79	46
Ceres	1.44	3.85	74	40
Elba	1.61	5.11	78	47
Fairville	0.98	4.79	77	43
Farmington	0.91	4.84	77	46
Gainesville	1.53	4.83	76	42
Geneva	1.07	4.93	76	45
Lodi	1.06	3.59	77	44
Niagara Falls*	1.85	6.63	79	50
Ovid	0.96	4.08	77	45
Penn Yan*	1.08	4.16	77	48
Phelps	1.10	4.44	78	45
Portland	1.20	4.54	76	51
Rochester*	1.70	4.99	79	48
Silver Creek	NA	NA	77	50
Sodus	0.91	4.40	76	50
Versailles	1.81	6.19	77	46
Volney	0.89	5.74	78	42
Williamson	1.34	4.56	77	47

Accumulated Growing Degree Days (AGDD) Base 50°F: April 1 – May 29, 2017

Location	2017	2016	2015
Albion	299	316	413
Appleton, North	NA	235	327
Baldwinsville	337	280	426
Buffalo	311	298	418
Ceres	308	191	343
Elba	289	180	310
Fairville	293	237	NA
Farmington	297	251	416
Gainesville	238	182	325
Geneva	318	267	417
Lodi	394	295	484
Niagara Falls	350	310	373
Ovid	361	272	454
Penn Yan	348	274	458
Phelps	319	255	425
Portland	358	259	385
Rochester	342	289	464
Silver Creek	330	229	359
Sodus	300	256	377
Versailles	357	249	376
Volney	293	NA	NA
Williamson	285	214	342

* Airport stations

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

Cornell University
Cooperative Extension
Cornell Vegetable Program

480 North Main Street
Canandaigua, NY 14424

VEGEdge

YOUR TRUSTED SOURCE FOR RESEARCH-BASED KNOWLEDGE

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VegEdge is the award-winning newsletter produced by the Cornell Vegetable Program in Western New York. It provides readers with information on upcoming meetings, pesticide updates, pest management strategies, cultural practices, marketing ideas and research results from Cornell and Cornell Cooperative Extension. VegEdge is produced every few weeks, with frequency increasing leading up to and during the growing season.

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