



Cornell University Cooperative Extension Regional Vegetable Programs

November 2012

Volume 8, Issue 27

2012 High Tunnel Cucumber Trial Results

Judson Reid, Cornell Vegetable Program

Greenhouse cucumbers, if marketed successfully, can be a high revenue crop in tunnels.

Advantages include:

- High quality fruit
- Decreased downy mildew
- Quicker yields than tomatoes

Disadvantages include:

- Powdery mildew
- Spider mites

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Base

<u>Research</u>

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Source

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Higher labor than tomatoes

The Cornell Vegetable Program worked with several seed companies to conduct a variety trial of high tunnel cucumbers in 2012.

Materials and Methods - Cucumber varieties Lisboa, Manny and Taurus were seeded in a heated greenhouse on April 9 into 50 count trays. These were trans-



Transplanting the cucumber trial. *Photo: J. Reid, Cornell Vegetable Program*

planted into the high tunnel soil, a Lima Silt Loam, on May 15. The high tunnel is a 30 by 120 foot galvanized steel structure, covered with Tuff Lite IV 6 mil polyethylene. The trial was arranged as a randomized in-row block design with four replications. Each replicate consisted of four plants, transplanted into black plastic mulch with a 24-inch double staggered row with drip irrigation. The grower cooperator maintained the trial site for fertilization, irrigation and weed control to their standards. Plants were trained to a single growing-point, with no fruit pruning. On June 5th 50,000 thrips predators (*Amblyseius cucumeris*) and a mixture of 500 aphid parasitoids (*Aphelinus abdominalis, Aphidius colemani* and *Aphidius ervi*) were released. An in-row application of imidacloprid (Admire Pro) was applied on July 12 for control of striped cucumber beetles and squash bugs. Cucumbers were harvested from June 12 to July 31. The weight and number of marketable fruit was recorded at each harvest date. Mean yield (lbs) per plant, mean fruit per plant and mean fruit weight were calculated (Table 1). Data was statistically analyzed.

Results - Yield as measured by pounds of fruit per plant were significantly different among the three varieties, although very closely grouped. Lisboa was the highest yielding as measured by pounds although in the same statistical grouping as Taurus, which shared a grouping with Manny (Table 1). Number of fruit per plant was also statistically separate with Lisboa and Manny in a higher group than Taurus. Fruit weights were broken into three separate groupings, with Taurus heaviest, followed by Lisboa then Manny.

Table	1.	Cucumber Yield
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Variety	Average Fruit Weight (lbs)	Total Fruit per Plant	Plant Yield (Ibs)
Lisboa	0.59 b*	22.69 a	12.91 a
Manny	0.42 c	23.69 a	10.03 b
Taurus	0.66 a	16.25 b	10.78 ab
lsd	0.0001	0.0090	0.0583

*Numbers followed by the same letter (in the same column) are not statistically different.

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NY Disaster Due to Drought



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 NYS must be registered with the NYS Dept of Environmental Conservation (DEC). Questions concerning the legality and/or registration status for pesticide usage in NYS should be directed to the appropriate Cornell Cooperative Extension (CCE) specialist or your regional DEC office.

CCE 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.**



Veg Edge is a shared publication of two Cornell Cooperative Extension teams, the **Cornell Vegetable Program**, serving 12 counties in Western & Central NY, and the **Capital District Vegetable & Small Fruit Program**, serving 11 counties in the Capital Region of NY

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Discussion - All three varieties grown provided acceptable levels of production, although the cucumber season was truncated by high insect and mite pressure in the trial. Pest management of high tunnel cucumbers continues to be one of the greatest constraints. We caution against making direct comparisons in this trial as each variety represented a different type of cucumber. Manny is a Beit-alpha, smooth skinned fruit, about 6 inches in length. Lisboa is a parthenocarpic, American slicing cucumber with 8 inch long fruit with small spines. Taurus is a Japanese, smooth skinned greenhouse cucumber with 10" fruit.

Market preference is the deciding factor in cultivar choice. In this situation the grower-cooperator found the market most receptive of fruit of Lisboa. However, there exist other markets that would respond to smooth-skinned types of different lengths. We do caution against longer greenhouse cucumbers in high tunnels. As this is a passively ventilated structure, there is considerably more wind and pollinator visitation than in controlled environment greenhouses. These factors lead to misshapen fruit.



Cucumbers in mid-June. Photo: J. Reid, Cornell Vegetable Program

Conclusions - Cucumbers remain an under used crop in Northeast high tunnels. The varieties in this trial exceeded 10 lbs of fruit/plant in just 10 weeks of production. As more tunnel growers look to create rotations which accommodate cool season greens, cucumbers provide greater flexibility than tomatoes, which require 6-7 months in the soil to reach maximum economic return. However, cucumbers are more likely to suffer from pests such as mites and thrips, which increases input costs for control measures. Labor on cucumbers is also higher than that of tomatoes.

The Cornell Vegetable Program and cooperating grower express gratitude to Harris Seed and Bejo Seed for their collaboration in this project. ■

Bejo Seeds offers a wide range of quality hybrid vegetable seeds





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Help Grow Your Farm Future

USDA National Ag Statistics Service

America's farmers will soon have the opportunity to make a positive impact on their communities by taking part in the Census of Agriculture. Conducted every five years by USDA's National Agricultural Statistics Service (NASS), the Census captures a complete count of all U.S. farms, ranches and those who operate them. Census data is used by those who serve farmers and rural communities from federal, state and local governments to agribusinesses and trade associations. Often legislators use the information when shaping farm policies and programs.

NASS will mail out Census forms in late December, and responses are due by February 4th, 2013. Producers also have the option to complete their forms online. The Census is your voice, your future and your responsibility. For more information, visit

www.agcensus.usda.gov or call 1-800-4AG-STAT (1-888-424-7828).



USDA is an equal opportunity provider and employer. To file a complaint of discrimination, write: USDA, Office of the Assistant Secretary for Civil Rights, Office of Adjudication, 1400 Independence Ave., SW, Washington, DC 20250-9410 or call (866) 632-9992 (Toll-free Customer Service), (800) 877-8339 (Local or Federal relay), (866) 377-8642 (Relay voice users). 🔳

Electronic H-2A Application Filing Begins

NY Farm Bureau. 9/27

The U.S. Department of Labor (DOL) will begin using an electronic filing system for H-2A applications beginning December 10, 2012. NYFB worked with farmers to communicate to DOL that an online application system, which allows for more immediate feedback on the status of applications and any deficiencies, was necessary to streamline and speed up the often complicated process. DOL is holding public webinars to orient H-2A

program users to electronic filing through the iCERT System, ocert.doleta.gov. NYFB encourages H-2A users to take advantage of this opportunity. Each webinar is limited to 200 participants, so read the instructions in advance and plan to log in early.

Choose one of two webinar dates on orientation to electronic application filing:

- Mon, Nov. 26, 1:30 4:00 pm, or
- Thurs, Nov. 29, 1:30 4:00 pm

Complete instructions for participating in these webinars can be found at: http:// www.nyfb.org/img/document files/ webinar tech details.pdf

Conservation Stewardship Program

NRCS, USDA

USDA's NRCS Conservation Stewardship Program (CSP) sign-up deadline is January 18, 2013. Interested producers should submit applications to their local NRCS office. CSP participants receive an annual land use payment for environmental benefits they produce - the greater the benefit, the higher the payment. Organic production qualifies. For 2013, new enhancements and combinations have been added. For more info call your local NRCS office or go to: http://www.ny.nrcs.usda.gov/programs/csp/index.html

Results of the 2011 U.S. Certified Organic Production Survey

USDA, National Ag Statistics Service, 10/12

All certified organic producers were surveyed in 2011. The number of farms, acres and value for many certified organic vegetable crops, by state, are reported. Other field and horticultural crops are also included, as is livestock. For the report of the 2011 survey go to: http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1859

Under Current Documents click on Organic Production, 10/04/12 ■

2012 Trial of Late Blight Resistance in Tomato Varieties

Chris Smart and Zach Hansen, Cornell

Varieties are listed in alphabetical order:

Since 2009, we have had annual outbreaks of late blight (LB) in NY. Several tomato varieties with resistance to LB are now commercially available, and there are other varieties for which there are occasional reports of resistance. To see how these varieties, along with other popular tomato varieties, withstood LB disease pressure in 2012, a variety trial was performed in both Freeville and Geneva, NY. In both locations, Bill Fry's lab determined that the strain killing plants was the US-23 clonal lineage, pathogenic on both tomatoes and potatoes, and mefenoxam (Ridomil formulations and OLF) sensitive.

We used 35 commercially available varieties of tomato, which are listed below. Some varieties were chosen because of known resistance to LB, while others were included by grower request. The list includes a mixture of fresh market, processing, cherry, and grape tomatoes, along with recently-released and heirloom varieties.

Of the 35 varieties tested in 2012, there were 6 that had excellent resistance** to US-23. They were: Mountain Magic, Mountain Merit, Defiant PHR, Lemon Drop, Matt's Wild Cherry, and Plum Regal. Additionally there was one variety, Mr. Stripey, which had very good resistance*. It's important to remember that even though the trial was done in two locations, both locations were found to have the same strain of LB. We will be testing the more resistant varieties against other strains of the pathogen in the laboratory this winter.

Lansan Dran **



A late blight susceptible tomato variety in the trial. Photo: Chris Smart, Cornell

AB 2	Lemon Drop **
Aunt Ginny's Purple	Matt's Wild Cherry **
Amish Paste	Mountain Fresh Plus
BHN1009	Mountain Magic **
Brandywine	Mountain Merit **
Charger	Mr. Stripey *
Defiant PHR **	New Yorker
FL 8059	Plum Regal **
FL 8111	Primo Red
Florida 47	Red Bounty
Golden Sweet	Red Deuce
H1439	Red Pearl
H3402	Rocky Top
H9704	Scarlet Red
H9780	Sun Gold
JTO-99197	Tasti-Lee
Juliet	West Virginia 63
Legend	



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For more information contact:

Gale Drake, Western & Central NY Gale.E.Drake@usa.dupont.com 585.447.7305

Carl Bannon, Eastern NY & New England Carl.D.Bannon@usa.dupont.com 413.253.4017



Upcoming Meetings

Basic Farm Business Management Planning

	ster: 518-765-3500 or 518-380-1498 or <u>sab22@cornell.edu</u>
•	Albany Cty. 24 Martin Road, Voorheesville, NY.
December 4th - 6:00 – 8:30 p.m. at CCE-C	Columbia Cty. 479 Route 66, Hudson, NY
January 12th - 2013 - 9:30 a.m. to noon a	at CCE-Washington Cty. 415 Lower Main St, Hudson Falls, NY.
February 7th - 2013 - 6:00-8:30 p.m. at C	CE-Washington Cty. 415 Lower Main St, Hudson Falls, NY.
Farm Business Management specialist Sa	ndy Buxton is working on a follow-up class on farm recordkeeping.
Small Farm Cultivation Equipment Workshop	There are lots of cultivation equipment choices. How do you know what's right for your farm? Equipment will demonstrate the theories discussed. Knowing why and
Friday, November 9	when you use equipment is just as important as how to use it.
12:30 - 4:00 pm	\$5 for CCE enrollees, \$10 non-enrollees. Please pre-register. For more information, contact Robert Hadad, <u>rgh26@cornell.edu</u> or 585-739-4065.
Honeyhill Farm, 6241 Price Rd, Livonia	contact hobert hadad, <u>ignzo@conten.edu</u> of 585-753-4005.
Introduction to Small Farm Hydroponics & Farm Tour	An introduction to agricultural hydroponics, both crops and aquaponics. Tour: Seneca Breeze Berries, an outdoor hydroponic strawberry farm.
Saturday, November 10	\$30; each additional person from the same farm - \$20. Register by calling Cornell
8:30 am - 3:30 pm	Cooperative Extension of Yates County: (315) 536-5123.
CCE Yates County, 417 Liberty St,	Sponsored by Cornell Cooperative Extension of Ontario and Yates Counties
Penn Yan, and Seneca Breeze Berries	
Cover Crop Tour & Meeting Thursday, November 15 9:15 am - 3:30 pm	For agenda, pre-registration and directions, go to: <u>http://</u> <u>events.r20.constantcontact.com/register/event?</u> <u>oeidk=a07e6elpb3817b400b3&llr=7ex5qzeab</u> or contact Paul Salon at: <u>paul.salon@ny.usda.gov</u> or 607-562-8404.
USDA-NRCS Plant Material Center	<u>paul.salon@ny.usua.gov</u> 01 007-502-6404.
3266 Rt 352, Big Flats 14814	
Management Practices to Reduce	View from home or at:
Phytophthora capsici - Webinar	CCE Clinton County, 6064 Route 22, Plattsburgh, NY 12901 CCE Rensselaer County, 61 State Street, Troy, NY 12180, or
Thursday, November 15	Cornell University's Hudson Valley Lab, 3357 US Rt. 9W, Highland, NY 12528
3:00 pm	Meg McGrath and Chris Smart, Cornell, will explain long term strategies for staying
View at home or one of the locations listed to the right.	P. capsici free and minimizing the impact of this disease on your farm. The previous two webinars are available for viewing at http://cdvsfp.cce.cornell.edu/
	\$10 per person. Register online at http://cdvsfp.cce.cornell.edu/
Northeast Region Certified Crop	Both basic and advanced CCA training; CCA and DEC credits available.
Advisor (CCA) Training	Registration: Jeannette Marvin at: imarvin@rochester.rr.com
November 27 - 29	
8:00 am	
Doubletree Hotel, 6301 Route 298, E. Syracuse	

In-Depth Greenhouse & High Tunnel Vegetable Pest Management Meeting	NYS IPM Specialists and Cornell staff will discuss pest management and how to test and manage greenhouse soils. Bring container plant /potting mix (quart Ziploc bag), and greenhouse water (in a rinsed 20 oz pop bottle) for testing.
9:00 am each day	\$10/person includes lunch and materials. Contact Laura McDermott, 518-746-2562
November 27 - Canajoharie	or <u>lgm4@cornell.edu</u> or Crystal Stewart, 518-775-0018 or <u>cls263@cornell.edu</u>
Canajoharie Volunteer Fire Dept, 75	
Erie Boulevard, Canajoharie, NY 13317	
or	
November 28 - Ancram	
CCE Greene County, 6055 Route 23,	
Acra, NY 12405	

Cornell Seed School	Cost: \$20
Thursday, November 29	For more information contact: AI Taylor at: agt1@cornell.edu
9:00 am - 4:00 pm	
Jordan Hall, NYS Ag Experimental Station, Geneva	

Cornell Fall Hops Conference	\$85; \$75 for Northeast Hop Alliance members (for info on NeHA go to:
Saturday, December 1	http://www.nehopalliance.org) Questions? Steve Miller at: 315-684-3001 x127
8:00 am - 5:00 pm	Register at http://reg.cce.cornell.edu/225
Morrisville State College, Morrisville, NY 13408	USDA / NYS Dept. of Ag & Markets Specialty Crop Block Grant

Upstate NY Potato Advisory Meeting and Cornell Potato Breeding Line Show & Tell	Annual roundtable on concerns of the potato industry, reports on research, agency updates, and presentation of promising new potato breeding lines. All potato growers are invited to attend. DEC credits will be available.
Wednesday, December 5	\$10 Pre-registration required by Fri, Nov. 30 th – contact Carol MacNeil at
9:30 am - 3:00 pm	<u>crm6@cornell.edu</u> or 585-313-8796. To suggest agenda items contact Don Halseth at <u>deh3@cornell.edu</u> or 607-255-5460.
CCE Ontario County, 480 N Main St, Canandaigua 14424	Thanks to the Empire State Potato Growers for sponsoring!

Greenhouse Vegetable Shortcourse,	Directions: <u>http://www.cornell.edu/visiting/ithaca/directions_car.cfm</u>
and Tour of Finger Lakes Fresh	Cost: \$100; \$130 after 11/16
Lettuce	Send your contact info and fee to:
December 5 & 6 Ken Post Lab Greenhouse, Cornell Post Circle (Judd Falls and Tower Rds) Ithaca 14853	 CCE - Orange Co. 18 Seward Ave, Ste. 300, Middletown, NY 10940-1919 Attn: Greenhouse Vegetable Shortcourse Checks payable to: <i>CCE Orange County</i> Questions? Contact Cathy at 845-344-1234 Partial funding is provided by the USDA Risk Management Agency and NYS Dept. of Ag & Markets, as part of a risk management and crop insurance education cooperative agreement.

Upcoming Meetings...continued

Processing Sweet Corn, Snap & Lima Beans Advisory Meetings	A complimentary lunch will be served at noon. DEC and CCA credits will be available. No registration is required and the meetings are FREE.
Tuesday, December 11 10:00 am Sweet Corn 12:30 Snap and Lima Beans	For more information, contact Julie Kikkert, 585-394-3977 x404 (office), 585-313- 8160 (cell), or <u>irk2@cornell.edu</u> .
Jordan Hall Auditorium 630 W. North St, NYSAES, Geneva	

Mohawk Valley Produce Auction Growers' Meeting	Contact Crystal Stewart, 518-775-0018 or <u>cls263@cornell.edu</u> for more information.
Tuesday, December 4	
9:00 am - 3:00 pm	
Canajoharie Fire House, 65 Erie Blvd, Canajoharie 13317	

Labor Issues for Ag Employers	Registration is \$65/person (\$55 if received by 11/28/2012)
Tuesday, December 11	To register call Gale at 518-765-3500 or Sandy 518-380-1498 or <u>sab22@cornell.edu</u> .
9:30 am - 3:30 pm	See registration form and flyer at: <u>http://bit.ly/2012Labor</u>
Century House, Latham	

Processing Beet, Carrot & Pea Advisory Meetings	A complimentary lunch will be served at noon. DEC and CCA credits will be available. No registration is required and the meetings are FREE.	
Thursday, December 13	For more information, contact Julie Kikkert, 585-394-3977 x404 (office), 585-313-	
10:00 am Beets and Carrots 12:30 Peas	8160 (cell), or jrk2@cornell.edu.	
Batavia First United Methodist Church 8221 Lewiston Rd (Rt 63), Batavia		

NYS Dry Bean Industry Advisory & Educational Meeting	Roundtable on concerns of the industry, reports on dry bean research. All growers are invited. 1.7 DEC credits, and CCA credits will be available.
Friday, December 14	Cost: \$12
9:00 am - 3:00 pm LeRoy Country Club, 7759 E Main Rd/ Rt. 5, LeRoy	Pre-registration is required by Monday, December 10 th . Contact Carol MacNeil at <u>crm6@cornell.edu</u> or 585-313-8796. Contact Chairman John McCreedy with suggestions for the agenda at <u>john@nybean.com</u> or 585-538-6100.
	Sponsor opportunities are available!

Improving Your Business with On-Farm Research	Contact adg12@cornell.edu, 518-380-1496
Tuesday, December 18	
9:30 am - 3:30 pm	
Century House, Latham	

Cornell Agribusiness Economic Outlook Conference	A.M Agricultural Economic and Political Environment after the Election - Panel P.M Sessions on vegetables/fruit, grape/ornamental, dairy, and grain
Tuesday, December 18 9:00 am - 3:30 pm	Cost: \$65; \$80 after 12/7. For info and registration go to: <u>http://dyson.cornell.edu/</u> outreach/ag_outlook_conference.php
Statler Hall, Ballroom, Cornell, Ithaca	Questions: Carol Thomson at <u>cmt8@cornell.edu</u> or (607) 255-5464
National No-Tillage Conference	Presentations by experienced growers, educators and researchers - featuring cover
January 9 - 12, 2013	crops and reduced tillage. Roundtables lead by growers. Donn Branton, LeRoy, will outline how he determines what crops to no-till and which to strip-till or zone till.
Hyatt Regency Indianapolis Indianapolis, IN 46204	Go to: <u>http://www.no-tillfarmer.com/pages/NNTCNational-No-Tillage-Conference-</u> <u>Home-Page.php</u> , (866) 839-8455 or email: <u>info@lesspub.com</u>

Northeast Beginning Farmers Online Courses

5 – 7 week courses for growers in their first 10 years. Cost is \$200 each. Go to: <u>http://nebeginningfarmers.org/online-courses/</u>

January

<u>BF 104: Financial Records – Setting up Systems to Track Your Profitability</u> <u>BF 121: Veggie Farming – From Season-Long Care to Market</u> <u>BF 203: Holistic Financial Planning – Building Profit into the Picture</u>

March

<u>BF 103: Taking Care of Business – Understanding the Business, Regulatory, and Tax Implications of Your Farm</u> <u>BF 105: Machinery and Equipment – Evaluating What's Right for Your Operation</u>



January 21 - 24, 2013

The OnCenter, Syracuse



The NYS Vegetable Growers Association (NYSVGA) Board of Directors is proud to unveil a new name and logo for what has become the largest gathering of vegetable, fruit and flower growers in New York State - The Empire State Producers Expo. "I can remember years ago attending the conference with my father in Niagara Falls, New York," recalls NYSVGA President Mark Henry, of Eden Valley Growers in Eden, New York. "Jean Warholic organized a fine show. But I doubt she ever imagined how big the [Vegetable] Expo would become."

The Empire State Producers Expo runs January 21 - 24, 2013 at the OnCenter in Syracuse, New York. This year the Expo includes the Becker Forum on Agricultural Labor, three days of concurrent educational sessions, and the three-day Trade Show. Contributing organizations include: the NYSVGA, Cornell Cooperative Extension, Empire State Potato Growers Inc., NYS Berry Growers Association, NYS Flower Industries, Inc., NYS Horticultural Society, Farmers' Direct Marketing Committee, and Cornell University. The Expo offers DEC and Certified Crop Adviser credits. The Expo Trade Show includes over 164 companies representing products and services from equipment and inputs to software, packaging, bakery supplies and much more.

Watch for Expo updates in future issues of Veg Edge. For more information, the complete agenda, or to pre-register and pay online go to: <u>http://www.nysvga.org/expo/info</u>. The printed program will be mailed in early December to CCE vegetable and fruit program enrollees, and to members of cooperating grower organizations.

2013 NOFA-NY Organic Farming & Gardening Conference – *Resilience*

January 25 - 27, 2013

Saratoga Hilton & City Center Saratoga Springs, NY A record breaking 1,400 people attended the 2012 conference! Includes presentations, half and full day courses, and informal roundtables on all aspects of organic production and food.

For more info go to: <u>www.nofanyconference.org</u>

Local Potato/Tomato Late Blight Update

Carol MacNeil, CCE Cornell Vegetable Program

Late blight (LB) continued to be found in more counties, with Monroe Co. garden tomatoes/potatoes being confirmed in early October, and in Erie Co. garden tomatoes shortly after. Frost likely brought an end to aerial LB spread in mid-October in many areas. If tomato and potato leaves and stems are dead and brown the LB fungus will be dead.

LB spores can survive in moist soils for 2 – 3 weeks so potato tuber infection is possible if the disease was present in or near a potato field. Check later dug potatoes for the dry, red-brown decay of LB, on the surface and growing unevenly into the tuber. LB infected tuber tissue is rapidly infected with <u>soft rot bacteria</u> and the moisture from the decay can cause infection in adjacent tubers.

Communicate with your potato seed grower – LB occurred in many parts of Maine, in NY and other Northeast states, Mid-Atlantic states, Ohio, Wisconsin, and southwest Ontario. Accept only <u>certified seed</u> and request a <u>North American Certified Seed Potato Health Certificate</u> for each seed lot from your seed grower. LB can only overwinter in live host tissue. Potato tubers (cull piles, compost piles, volunteers, seed) are the most common vehicle for carrying the disease overwinter. Greenhouses/tunnels which remain warm enough to allow survival of a few tomato, potato or hairy nightshade plants overwinter are a less likely possibility. Southern greenhouses could become infected with LB overwinter or in early spring so that tomato transplants could be shipped to the Northeast next spring with the disease. Communicate with your tomato transplant grower! ■

USDA Designates Counties Natural Disaster Areas Due to Drought, Heat

U.S. Department of Agriculture, 10/24/12

The U.S. Department of Agriculture (USDA) has designated 29 counties in New York as primary natural disaster areas due to damage and losses caused by drought and excessive heat that began June 1, 2012. The counties are:

Albany	Orleans
Broome	Otsego
Chenango	Putnam
Columbia	Rensselaer
Cortland	Schenectady
Dutchess	Schoharie
Erie	Schuyler
Greene	Seneca
Jefferson	Steuben
Lewis	Tompkins
Madison	Ulster
Niagara	Westchester
Oneida	Wyoming
Ontario	Yates
Orange	

Farmers in the following counties also qualify for natural disaster assistance because they are contiguous to the counties above:

Allegany	Montgomery
Bronx	Onondaga
Cattaraugus	Oswego
Cayuga	Rockland
Chautauqua	Saratoga
Chemung	Sullivan
Delaware	St. Lawrence
Genesee	Tioga
Herkimer	Washington
Livingston	Wayne
Monroe	

All farmers in the designated areas are eligible for low interest emergency (EM) loans from USDA's Farm Service Agency (FSA), provided eligibility requirements are met. Farmers in eligible counties

Knowlesville: Kirk Zinkievich

Gainesville: Larry Dumbleton

have eight months from the date of the declaration to apply for loans to help cover part of their actual losses. FSA will consider each loan application on its own merits, taking into account the extent of losses, security available and repayment ability. FSA has a variety of programs, in addition to the EM loan program, to help eligible farmers recover.

Other actions by USDA to provide assistance to producers impacted by the drought include reducing the emergency loan rate from 3.75% to 2.25%. Additional programs available to assist farmers and ranchers include the Emergency Conservation Program, Federal Crop Insurance, and the Noninsured Crop Disaster Assistance Program. Interested farmers may contact their local USDA Service Centers for further information on eligibility requirements and application procedures for these and other programs. Additional information is also available online at <u>http://</u> disacter fsa usda gov

disaster.fsa.usda.gov.

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Filling Your Crop Needs	
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Agronomist: Don Jones 585.734.2152

Chemicals, fertilizer, seed, custom application, airflow spreading & seeding

585.798.3350

585.322.7273

GROWMARK FS

2012 Late Blight Summary and Research Results

Bill Fry, Ian Small & Steve McKay, Cornell, from The Potato News, Fall, 2012, Empire State Potato Growers, Inc.

The late blight (LB) situation in the eastern USA was mixed this past season. Parts of the mid-Atlantic had a very wet spring and early summer and LB was a significant challenge in some of those areas. Our lab received more than 200 samples during the season, and in all of the Northeast the US23 lineage predominated. This lineage is pathogenic to both potatoes and tomatoes, and mefenoxam (Ridomil formulations and OLF) sensitive. From Pennsylvania to Maine, we identified only US23. However, in some parts of the mid-Atlantic region, other strains were also detected, including one individual of US8 (mainly pathogenic on potatoes and mefenoxam resistant), one individual of US11 (pathogenic to potatoes and tomatoes and mefenoxam resistant) and two individuals of US24 (mainly pathogenic on potatoes, and mefenoxam sensitive).

Because mefenoxam sensitivity is assayed in the lab, we wanted to evaluate the lab tests with a field test (supported by the Empire State Potato Growers). The lab assay was confirmed by the field test using both potatoes and tomatoes. Against isolates of US23 and US24, mefenoxam was effective on both potato and tomato (Fig. 1). However, US11 (resistant to mefenoxam) was totally unaffected by mefenoxam in the field test (Fig. 1). In fact, US11 seemed to cause more disease in the presence of mefenoxam (Fig. 1). This also is consistent with our lab tests.

We also evaluated potato breeding lines and clones for their foliar resistance to LB lineage US23 (Fig. 2). The clones were Adirondack Blue, Aeggeblomme, Defender, Early Ohio, Katahdin, Kennebec, Keuka Gold, Lehigh, Waneta/NY138, Lamoka/NY139, Red Maria, and Yukon Gold. Katahdin, Kennebec and Yukon Gold were controls. Several cultivars were very resistant (Adirondack Blue, Defender and Kennebec), but others were quite susceptible (Early Ohio, Ketahdin, NY138, and NY139). ■

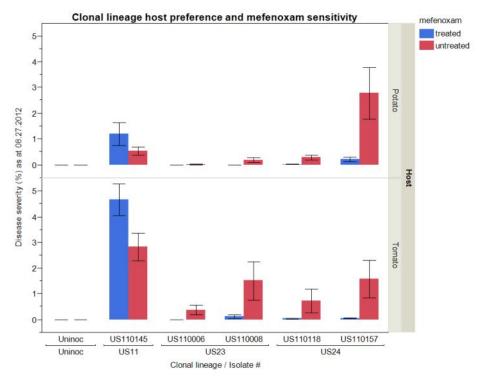


Figure 1. Amount of potato and tomato late blight on plants treated with mefenoxam or not treated. These data were obtained on the seventh day after inoculation. Mefenoxam (Ridomil Gold SL) was applied at 3.2 oz. per acre on 8/21 at 10 am. The trial was inoculated 8/21 at 8 pm. The disease intensified with time, but the relative results remained as indicated in this figure.

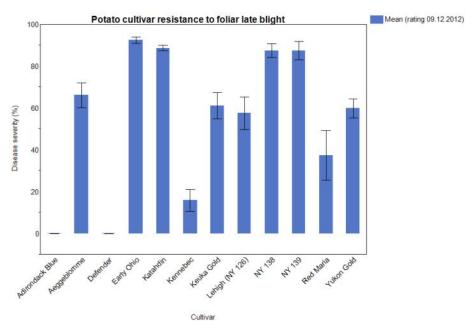


Figure 2. Late blight severity on foliage in reaction to US23. Plots were inoculated 21 August and the disease severity (as % of total foliage diseased) was recorded on 12 September 2012. Plots with very little disease are resistant, and plots with much disease are quite susceptible.

Diverse Cover Crops for All Seasons

Carol MacNeil, CCE Cornell Vegetable Program

Cover cropping is an expanding and fastchanging practice on both vegetable and crop farms in NYS. The January 23rd Cover Crop & Soil Health session at the 2012 Empire State Producers Expo in Syracuse, beginning at 1 pm, will feature presentations on using a wide variety of cover crops for different reasons, different seasons, and in different production systems.

Charlie White, Penn State Extension, has been researching diverse cover crop mixes to maximize soil and cash crop benefits. Mixes typically include some fast growing covers to crowd out weeds, and overwintering covers to carry over nutrients. Legumes to fix nitrogen, tillage radish to break through compaction, and grasses to scavenge and hold soil nutrients are common covers in these mixes. Charlie will share the results of his latest research. Thomas Bjorkman, Cornell, has been researching different cover crops for use in vegetable systems for a number of years. This year he'll report on how to get the most value out of summer cover crops, those filling the niche between early harvested vegetables and fall vegetables or wheat, by adjusting seeding and killing times. Anu Rangarajan, Cornell, has been researching reduced tillage systems for a wide variety of vegetable crops. She has recently researched the use of strip planted cover crops to improve the growth of reduced till cash crops. Her results will be presented.

Last in the session is a Cover Crop Roundtable, an opportunity for growers to share their experiences and/or to ask questions of more experienced cover croppers and researchers. Bring your photos or digital .jpg shots saved on a flash drive to share with the group. Join us for an exciting, lively learning and sharing experience!



Cover crop mix at Donn Branton's farm, LeRoy. Photo: C. MacNeil, Cornell Vegetable Program



Tillage radish in the cover crop mix at Branton Farms, LeRoy. Photo: C. MacNeil, Cornell Vegetable Program

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Volume 8, Issue 27

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Visit our website at http://cdvsfp.cce.cornell.edu

If you have questions or comments about this publication or the Capital District Program in general, please contact your county's grower advisory member or the Agricultural Program leader of your local Cornell Cooperative Extension office.



SUCCESS FACTORS in FARMING: Exclusive to Veg Edge

The collective knowledge of the farmers we know far surpasses all of the agricultural research conducted by Cornell and other universities, but is much harder to access. Success Factors in Farming is a new series of thought-provoking commentaries from farm owners who have key tips of wisdom to share. These remarks were collected by Extension agent Jim Ochterski, and are presented exclusively in the coming issues of Veg Edge to offer real-life insights about sustainability and long-term success in agriculture.

Ben Wiers is part of the leadership team of Wiers Farm in Willard, OH, better known as Dutch Maid brand produce. They farm 2,700 acres and market more than 40 different fresh vegetables across the East Coast. One success factor Ben thinks farm owners should keep in mind is to **focus on the positive impacts of vegetable farming far from the farm itself**:

SUCCESS FACTORS IN FARMING

There is a big risk we take producing fresh food. But we do it because, every day, we are extending and improving lives with the fresh produce we grow."

This far-sighted purpose for farming can elevate and sustain a farm as it faces the daily slog of mechanical, labor, and marketing problems. If you can recognize a far-reaching purpose for your farm, you can cope better with the inevitable challenges that make up a day in the life of a farm.

For more information about Wiers Farm, see their website at <u>www.wiersfarm.com</u>

Wiers Farm Dutch Maid