

Cornell University Cooperative Extension Cornell Vegetable Program Serving Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Monroe, Niagara, Ontario, Orleans, Seneca, Wayne & Yates Counties

CORNELL VEGETABLE PROGRAM HIGHLIGHTS OCTOBER – DECEMBER 2015

Onion Growers Benefit from Improved Weed Control

Onions are a high value crop and fear of crop injury prevents growers from trying new herbicides. As a result of multiple years of CVP in-field trials and demonstrations of the efficacy and crop safety of Chateau, a previously underutilized herbicide, 82% of large-scale onion growers have now tried this product, according to a survey in 2015 of 11 large-scale onion growers representing all of the five major muck land onion growing regions. Of those that tried Chateau, 89% claimed that it is now a standard component of their onion weed management program. During 2015, this sample of growers used Chateau on 1,528 acres of direct seeded onions, which is equivalent to 78% of their total acreage. One hundred percent of those who used Chateau according to our recommendation regarding its timing to weed growth stage, rated the overall performance as excellent. The exceptional control of pigweed, ability to provide post-



CVP onion herbicide demonstration in 2012: Growers learned efficacy and crop safety of a previously under-utilized herbicide, Chateau, giving them the confidence to trial it on their own farms. *Photo: CCE Cornell Vegetable Program*

emergent control of other small weeds including previously troublesome yellow nutsedge and mustards, ability to stunt larger weeds and ability to hold weeds back all season were cited as the herbicide's strengths. Growers stated that the improved weed control saved them \$150 to \$200 per acre in hand weeding costs. Comparatively, using Chateau costs only \$18 per acre. In 2015, one grower saved \$39,000 in hand weeding expenses on 195 acres of onions, while another saved \$11,400 on 76 acres.

Processing Advisory Meetings Set Priorities for Research

Each year, the Cornell Vegetable Program organizes a series of processing advisory meetings focused around crops. On December 14th in Geneva, NY, a group met to discuss the sweet corn crop in the morning and snap beans in the afternoon. Similarly, groups met on December 16th in Batavia, NY to discuss peas, lima beans and then beets and carrots. All processing vegetable growers are invited to attend meetings of interest. Each meeting consisted of a total of 30-40 growers, processors, crop consultants, and Cornell University researchers and extension educators. All agreed that the 2015 growing season was a tough one, with too much

rain affecting planting and growing operations. Other concerns included troublesome weeds, diseases and insects. Priorities were set for upcoming research proposals, which are funded by the growers and processors through the New York State Vegetable Research Association. Attendees could earn DEC pesticide applicator recertification credits or Certified Crop Advisor continuing education credits. Processing vegetables are grown on roughly 40,000 acres in New York each year, with a value of \$53.5 million (USDA Ag Statistics, 2014). Research is supported by the industry, and various state and federal grants.





CVP Technician, Missy Call, assists with harvest of lima bean research trial (above). Leaf spot disease on lima beans (left). *Photos: Sarah Pethybridge, Cornell*

Cornell Vegetable Program Co-Hosts International Meeting of Produce Auction Management Teams

On December 30, the Cornell Vegetable Program co-hosted with the Finger Lakes Produce Auction an international meeting of produce auction management teams from over 12 different auctions with nearly 100 people in attendance. This meeting brought together presidents and managers of produce auctions to address questions such as business growth, management, packaging and food safety. The Cornell Vegetable Program was honored to participate in the Food Safety Panel and present data from Harvest New York research. The presentation highlighted the following results:

- 88% of farmers reported investments of \$4500 per acre in response to the establishment of produce auction in their county.
- 66% of surveyed buyers reported expanding their business in response to the auction.
- 75% of auction buyers report patronizing other local businesses en route to the auction, averaging over \$1600 paid per season.
- 100% of auction farmers list CCE as an important resource.
- Farmers who participate in Cornell Cooperative Extension (CCE) programming adopt BMPs (Best Management Practices) in their high tunnels.
- Adoption of tunnel BMPs is associated with increased revenue.
- Auction profitability is linked to the number of high tunnels/greenhouses dedicated to the auction.

Cornell Vegetable Program Specialist Steps Up to Continue Weed Science Research Following the Loss of Cornell Horticulture Professor

The sudden loss of Dr. Robin Bellinder on November 13, 2015 has been a shock to Cornell University and the vegetable industry. Robin was a professor of Horticulture at Cornell for 31 years and an international expert in weed control in vegetable crops.

Steve Reiners, chair of the Horticulture section on campus has placed a priority on pursuing a new faculty position in weed science, with hopes of it being included with the next round of hiring for the university. "The Horticulture section would like to keep Robin's research projects moving forward until a replacement is hired. She leaves behind a great technical research team (Peter Purtriment and Rebecca Wilk), and with the assistance of Darcy Telenko, CCE Cornell Vegetable Program, we hope to continue her collaborative research projects through the next year," said Reiners. (Prior to joining the Cornell Vegetable Program, Darcy managed an



Robin Bellinder speaking with growers at a bean weed meeting, March 2010 in Batavia, NY. *Photo: Julie Kikkert, CCE Cornell Vegetable Program*

applied weed science research program at the University of Florida Research and Education Center.) Darcy and Robin's technical research team will have access to all of Robin's equipment and research space at the Homer C. Thompson Vegetable Research Farm in Freeville and will be able to continue any collaborations previously held with Robin. We hope the vegetable industry will continue their strong support of her program. The new team will continue replicated research trials in most vegetable crops including but not limited to sweet corn, pumpkins, snap beans, cabbage, broccoli, turnips, beets, lima beans, edamame, and rosemary. There may also be expanded opportunities for some on-farm extension demonstration sites in Batavia and Portland (Lake Erie Research Laboratory). We will not be hosting her annual weed management field day, but will offer extension outreach programming in weed management through the Cornell Vegetable Program. Please contact Darcy if you have any further questions about vegetable weed science program through the 2016 season. Darcy Telenko, dep10@cornell.edu, 716-697-4965

Return of the Upstate NY Potato Advisory Meeting

Based on grower interest, Cornell Vegetable Program Specialist Carol MacNeil brought back the Upstate NY Potato Advisory Meeting in Canandaigua. (The meeting had been discontinued following the retirement of the Cornell Potato Specialist.) Sixteen potato growers and consultants attended the meeting. They had the opportunity to share their concerns with many Cornell potato researchers and NY Seed Potato production staff, and to hear research results and a Golden Nematode quarantine update. There was discussion on the challenge of the growing season, much discussion on newer varieties and promising potato breeding lines, and great interest in the new, seedborne, bacterial blackleg disease which causes poor stands, wilting/dying stems, and tuber decay. It was just identified in Western NY in 2015, but has been causing significant losses on Long Island and in neighboring states for a year or two. Maine-produced seed has been the cause in many cases. There is no control other than using clean seed, but seed can be infected without visible symptoms. There is a multi-state task force of researchers and state seed certification agencies working on the problem.

WNY Soil Health Alliance

Carol McNeil and Darcy Telenko of Cornell Vegetable Program have teamed up with the Orleans and Genesee County Soil & Water Conservation Districts to assist a steering committee of farmers in the development of a WNY Soil Health Alliance. The Alliance is a farmer led group addressing all facets of soil health, including cover crops, reduced tillage, incorporating manure, nutrient management, etc.

Goals of the WNY Soil Health Alliance:

- Share LOCAL knowledge with LOCAL producers to make everyone better at what we do within our unique climate.
- Promote farm trials and share the results of good soil health practices, types of equipment etc.
- Bring together farms with a common interest in improving soil quality and crop production through shared experiences.
- Serve as a collective voice for issues affecting soil health production practices for crop, dairy and livestock producers.
- Develop a farmer to farmer network to promote and educate producers and the general public in the benefits of good soil health practices.

This group is open to producers interested in cover crop and soil health. More information is available at http://www.wnysoilhealth.com or contact Darcy Telenko at dep10@cornell.edu, or Carol MacNeil at crm6@cornell.edu

Survey of the Use of the Late Blight Decision Support System Forecast

Late blight of tomatoes and potatoes is costly to control and potentially devastating in a wet year. The Cornell late blight Decision Support System (DSS) forecasts the need for fungicide sprays based on growers' field location(s), varieties (thus disease susceptibility), previous fungicide use, and National Weather Service point forecasts. Eighty-five growers and consultants have been trained in the use of the DSS the past few years by Cornell Vegetable Program staff.

Fourteen growers and consultants responded to a recent survey of those trained in the use of the DSS. They represented from small, organic to large, conventional farms, totaling over 3,600 acres. Eleven replied that they used the DSS in 2015, and two more wished they had or will next year. Most replied that the DSS helped them make fungicide spray decisions. "It worked well, I had no late blight. It could save sprays in a drier year." "It provides guidelines on when to spray, and considers so many risk factors: weather, fungicide type and effectiveness." "I used it along with other tools, like scouting." Users accessed the DSS and their free account online by computer, smart phone or tablet. 35% signed up for text/email alerts from the DSS. Some referred to summarized information in VegEdge. The late blight Decision Support System has been updated every year with new features, and 6 responders wanted to attend a review session this winter.

- Together, over 1,000 farm visits and phone/email consultations were made by our team
- 10 educational events were organized by the Cornell Vegetable Program during this quarter
- 1,350 people attended meetings where presentations were made by our Vegetable Specialists

For more information about our program, contact Julie Kikkert at jrk2@cornell.edu or 585.394.3977 x404 or visit our website



http://cvp.cce.cornell.edu

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