Announcements

(I plan on attending both these events. Call me if you want a ride. I am leaving from Washington County.)

July 31, 2018, Reduced Tillage in Organic Systems Field Day
Cornell Willsboro Research Farm, 48 Sayward Lane, Willsboro, NY 12996
9:00 AM – 3:00 PM
Free to the public, lunch included
More Information
Questions: Amy Ivy, adi2@cornell.edu / 518-570-5991
Carly Summers, cfs82@cornell.edu / 518-962-4810 x409

The field day will feature in-field demonstrations of equipment and discussions with speakers and growers. Rotate between 3 demonstration/discussion stations in the morning, 3 more in the afternoon.

Topics include: roller-crimping, zone tillage in high residue, in-row cultivation tools, stale seedbed and weed seed bank management strategies with an overall focus on soil health.

Friday, August 3, 2018 - 9:30am - 2:00pm - Crop and Nutrient Management Workshop and Farm Demonstration. Middlebury Recreation Center: 154 Creek Rd, Middlebury, VT. Come join us as we learn about new and innovative crop and nutrient management technology and practices from around the world!
At this Workshop:
- A representative from Veenhuis Machines of The Netherlands will join us for a presentation about the latest in Crop and Nutrient Management in Europe and around the world!

Building Strong and Vibrant New York Communities
Cornell Cooperative Extension provides equal program and employment opportunities
- We will share results of research and other projects happening regionally.
- After lunch, we will have a live demonstration and discussion of a new Grassland Manure Injector at Foster Brothers Farm.
- Stick around for a tour of a new 8 robot dairy facility at Foster Brothers Farm after the live demonstration.

Lunch is provided if you RSVP Free, but space is limited so RSVP BY WEDNESDAY AUGUST 1 at https://cropandnutrientmanagementworkshop.eventbrite.com

August 13, 2018, 8:30 a.m. – 5:00 p.m. — Increasing Farm Milk Prices & Net Farm Income: The Impact of Farm Milk Production decisions at the Empire State Plaza Convention Center, Albany, NY. Bob Wellington, Dairy Economist at AgriMark, has organized an Open Dairy Meeting about persistently low milk prices in the U.S. and possible solutions. It is open to all dairy producers, industry leaders, policy makers, and all interested parties. For more information & to register go to the following link: https://www.agrimark.coop/open-dairy-meeting/index.php

FYI
Welcome to Lindsey Christianson, our new Senior Resource Educator for Commercial Ornamental Horticulture. Email ldc74@cornell.edu; Cell: (518) 429-8608; Office: (518) 765-3513; 24 Martin Road, Voorheesville, NY 12186.

For information about keeping cows cool, go to Cornell ProDairy, https://prodairy.cals.cornell.edu/about-us/news-e-alerts/

Be on the look out for “southern rust” on corn. Common rust pustules and spores are more brown compared to the orangish cast of southern rust spores. Common rust pustules tend to be elongated and are found on upper and lower leaf surfaces. Southern rust pustules are more oval, occur more densely, and are mostly found on the upper leaf surface. If you see these symptoms on corn, please contact me (Aaron Gabriel) and I will pass on the info to Gary Bergstrom, Cornell plant pathologist.

Are you seeing lesions on soybeans that look like this (picture to the right)? Please call me (and send a photo). Gary Bergstrom, Cornell plant pathologist, is on the look out for this as well. These symptoms have been found in other states, but scientist could not isolate a pathogen.

Soil information is available online at https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx. At this site you can get a soil report. It is a bit difficult to use this site until you learn it. BUT, UC Davis has made this site more user friendly, https://casoilresource.lawr.ucdavis.edu/gmap/. Only, you cannot get a soil report. Both are great sites to learn about your specific soil type.
Alfalfa: It is after the fact, but previous to this week of rain, heat and drought stressed alfalfa, and caused it to reach maturity (flowering) faster than normal. Would it have been okay to harvest early bloom alfalfa only 21 days after the previous cutting?? In short—yes. Here is a more in-depth article—http://msue.anr.msu.edu/news/managing_alfalfa_during_drought

Corn: I was in corn that previously lost its lower leaves from drought stress. I noticed that it was in late tassel, but few silks were visible. The stress may have delayed silking and not tasseling. I will have to go back and see how ear development progresses. Take a look at your drought-stressed corn and be sure that the silks get pollinated.

WESTERN BEAN CUTWORM are active. Last Thursday in Easton my trap had 9 moths, today (Tuesday) it had 64. Last year, the most I caught in one week was 34. I put a trap in Moreau this year. Last Thursday I caught 157. Today I caught 171. Also, I scouted for the egg masses and found 7 egg masses in 100 plants (20 plants in 5 locations).

Corn with genetic traits may not be effective. There is a “Handy Bt Table” available at http://msue.anr.msu.edu/news/handy_bt_trait_table to see which pests are controlled by your hybrid traits. However, the Cry 1F trait has not been effective for the western bean cutworm, even though the table says it is. See the article below by Mike Hunter.

Managing Western Bean Cutworm With Bt Traits
A Reality Check
• Mike Hunter and Kitty O’Neil Cornell Extension
• Mar 5, 2017

The Western bean cutworm is an emerging pest in New York that has the potential to cause economic losses in field corn, sweet corn and dry beans. There is growing concern from corn growers and agribusinesses that Western bean cutworm feeding on corn ears can lead to increased mycotoxin levels. Since 2010, Western bean cutworm moths have been monitored using bucket traps with pher-
mone lures. Based on these trap monitoring efforts, northern New York is considered a “hot spot” for the Western bean cutworm.

Current management strategies include the use of foliar insecticides or selecting transgenic corn hybrids with specific Bt traits. Foliar insecticide treatments are effective, but applications are difficult to apply correctly.

Two Bt traits, Cry 1F and Vip 3A, are reported to have some activity on Western bean cutworm. There have also been reports from Michigan, Indiana, Ohio, and Ontario, Canada, suggesting varying levels of control of the insect with the Bt corn trait containing the Cry 1F protein.

Bt corn hybrids with the Cry 1F Bt trait are found in Herculex 1 and Xtra; most Acremax, Intrasect, and TRIsect; and Agrisure E-Z refuge products (3122, 3220, 5122, 5222). The Northern New York Regional Ag Team received funding from the Northern New York Agricultural Development Program to initiate an on-farm research project titled “Evaluation of the Efficacy of Bt Corn for the Control of Western Bean Cutworm in NNY.”

Last year, four large-scale replicated corn trials were planted on farms in Jefferson, Lewis and Franklin counties. We compared four sets of Bt corn traits for the control of Western bean cutworm and for the presence of ear molds on Western bean cutworm-damaged corn ears. Corn grain samples from all treatments were also tested for the presence of mycotoxins. We included two corn varieties with traits that are used to control Western bean cutworm — Cry1F and Vip 3A — and a variety that combines both traits. We compared these three trait packages to a corn variety with Cry1A.05+2Ab2, which is known to provide no control of Western bean cutworm.

Through these on-farm studies, we detected varying levels of insect control from the Cry 1F trait. Results from two of the sites showed that the Cry 1F Bt trait provided no control of Western bean cutworm when compared to the susceptible corn variety planted in the trial. Another site demonstrated that the Cry 1F hybrid provided some suppression, but not control, of Western bean cutworm.

The earliest planted trial had minimal to no Western bean cutworm damage across all treatments. The lack of Western bean cutworm in the corn at this site was likely due to the fact that the corn had tasseled prior to the arrival of the insects. Western bean cutworm moths do not like to lay eggs on corn with emerged tassels. The feeding damage of the Western bean cutworm larva is typically limited to ear kernel feeding.

While this trial was not designed or set up to evaluate yield losses attributed to the Western bean cutworm, we do not feel that corn yields were affected by feeding damage found at any of these locations. At the current Western bean cutworm damage levels observed in these trials, it is not likely that the insect has reduced corn yields.

One of the concerns corn growers have is that kernel feeding damage from Western bean cutworm larva presents an opportunity for growth of harmful pathogens. If environmental conditions are right, this could lead to mycotoxins developing in damaged grain.

Six ear molds and rots were identified on damaged corn ears in our trial. We found Fusarium ear rot, Gibberella ear rot, Rhizopus ear rot, Penicillium ear rot, trichoderma and cladosporium. Some of these were likely a result of Western bean cutworm damage.

We also collected corn grain samples from each treatment in each of the four on-farm trials and sent them to DairyOne for a mycotoxin panel screening. Despite as much as 21.5 percent of the ears being damaged, there were no harmful mycotoxins detected in corn grain samples from this research project.

We would like to acknowledge the support and assistance from the following individuals who made this project possible: Logue Farms, Murcrest Farm, Conway Farm, JPL Farm, Joe Lawrence, Harry Fefee, Elson Shields, Gary Bergstrom, Jaime Cummings, Ken Wise and Keith
Waldron.
We will replicate this on-farm project this year to further evaluate the control of Western bean cutworm with Bt corn hybrids under a different set of growing conditions and Western bean cutworm populations.
If you have any further questions or would like more information about this on-farm research project, contact Mike Hunter at 315-788-8450 or Kitty O’Neill at 315-379-9192.
Editor’s Note: Michael Hunter and Kitty O’Neil are field crops and soil educators with the Northern New York Regional Ag Team.