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Eastern New York Commercial Horticulture

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Tree Fruit News

New Technicians Join ENYCHP!

The ENYCHP has hired two technicians, Natasha Field and Andrew Galimberti. They will be based out of the Capital Region and the Champlain Valley, and will be assisting the regional specialists with programming and research trials throughout the upcoming growing season.



Natasha Field grew up on a small berry and agritourism farm in Wyoming County, PA. She went to

Penn State for her bachelors in AgriBusiness Management and worked for Willard Agri-Service in Maryland after graduation. At Willard, she was a sales support person with a specialization in fruits and vegetables, and was scouting and sampling throughout the season. She also wrote MD and DE nutrient management plans, scouted agronomic crops, and did data analysis for the growers. She is very excited to work for Cornell Cooperative Extension as a Technician to get a hands on, ground level view of the agriculture industry in the region. She can't wait to learn about

all the exciting work being done by the farmers in the area and be a part of it!



Andrew "Andy" Galimberti came to Cornell from Michigan; he grew up in Ann Arbor and went to school at

Kalamazoo College, where he studied biology. After graduating, he worked a few jobs which piqued his interest in agriculture. As a research assistant at Michigan State, he helped with projects ranging from pest management in celery to soil health in corn and other crops. He also worked as a scout for several local greenhouses, inspecting plants for pests and diseases to help growers manage their pest issues. After that, he wanted to learn more about the subject, so he went to the University of Maine to earn his master's in entomology. At Maine, he studied pest management in potato. He's looking forward to getting out in the field and working with many different crops!

We're excited to have both of them on the team!

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New Weather Data Tools Available!

NEWA Workshop Program Key Takeaways

Dan Olmstead, NEWA Coordinator, NYS IPM
Mike Basedow & Dan Donahue, CCE ENYCHP

The ENYCHP hosted a NEWA training workshop in Voorheesville on March 28th. We reviewed some of the key pest

models available on the site, and discussed some future changes to the site that will make it more user friendly. Here are some of the main takeaways from the training. NEWA is a decision aid system (DAS) consisting of 611 networked weather stations across the Northeast, Midwest and Mid-Atlantic regions of the U. S. The network offers a collection of 40+ online models, tools, and resources. Tree fruit producers have access to weather data tools such as daily summaries, hourly histories, and degree-day estimators. **Prediction models available include:**

Apple Diseases

- Apple Scab
- Fire Blight
- Sooty Blotch/Fly Speck

Apple Insects

- Spotted Tentiform Leafminer
- Oriental Fruit Moth
- Codling Moth
- Plum Curculio
- Obliquebanded Leafroller
- Apple Maggot
- San Jose Scale

Orchard Management

- Carbohydrate Thinning
- Irrigation

As we walked through the NEWA tools, we discussed how many of the models require user-entered information to return accurate information. A number of the models require phenology input for each cultivar you would like information on. **The phenology dates needed include:**

- 50% Green Tip
- First Blossom Open
- Full Bloom
- 90% Petal Fall

You will also need first trap catch dates for the following insect pests:

- Spotted Tentiform Leafminer

- Oriental Fruit Moth
- Codling Moth
- Obliquebanded Leafroller
- Apple Maggot

While the models will insert a default best guess for these dates based off of historic pest phenology and degree days, you will get the most useful reports out of the system if you can enter the exact dates that they occurred in your blocks.

The NEWA website is in the process of undergoing a redesign to make the site more user friendly. The development team received a USDA grant to make the site easily readable on all mobile devices and web browsers, so you can view your models at home or in the field. This new website is in development and will not be released until after the 2019 growing season. Many new features are in the works. Growers have prioritized the inclusion of a login option with a username to allow preferred weather stations and model biofix dates to be saved, so you do not have to navigate to each of these separate pages or enter custom data every time you visit the site.

Station maintenance is vital to making sure your model predictions are as accurate as possible. You need to have good data going in to get good recommendations coming out. Stations have a 6-year expected lifespan according to Rainwise, Inc. manufacturer recommendations, though many in the network are older than that and are still working well due to routine maintenance.

NEWA launched a new help desk at support@newa.zendesk.com. Use this address for any questions or issues relating to the NEWA website, any model, or your weather station. They will redirect you to Rainwise if there is a station hardware issue or to Dan Olmstead if it relates to the system or the models.

If you do not currently have a station and would like to purchase one, send an email to support@newa.zendesk.com to get more information and review weather station details before making a purchase decision. NEWA staff are happy to get you started. Your ENYCHP regional specialists will be publishing additional instructions on how to effectively utilize specific prediction models as the season progresses, so stay tuned! You can access the NEWA website at the web address newa.cornell.edu



newa.cornell.edu | support@newa.zendesk.com

Connect to NEWA

Weather data have greater value when shared. NEWA provides a means for growers to share data resources and crop management information with their community.

Benefits of owning a weather station

- Site-specific recommendations from any NEWA tool or resource at newa.cornell.edu.
- Precise NEWA recommendations.
- Automated station outage notification emails.
- A dedicated NEWA weather station page with links to all tools and resources.
- Customized hourly and monthly weather summaries that are location specific.
- NEWA website assistance and technical support.

Grower perspectives

A 2007 survey found that NEWA users in New York saved \$19500 in spray costs per year, on average. Prevented per crop loss was valued at \$264K annually by growers as a direct result of using NEWA IPM tools and resources.

"The orchard was largely scab free for the first time in several years. The orchard manager depended heavily on NEWA and could see significant differences when using recommendations coming from an on-site weather station compared to a more remote location."

"I use the NEWA site almost every day during the growing season."



The Rainwise MKIII SP1-LR weather station, located on a Cornell AgriTech @ NYSAES research farm in Geneva, NY. Photo credit: Nicole Mattoon, NYS IPM Program.



Cornell Cooperative Extension

Updated 23 March 2018



newa.cornell.edu | support@newa.zendesk.com

NEWA weather station buying guide

Always contact your NEWA state coordinator before purchasing a weather station. They are listed on the back side of this document and can provide additional guidance.

Company	Specifications
Rainwise, Inc. www.rainwise.com Sales Lonnie White 800-762-5723 (preferred) lonnie.white@rainwise.com Service 800-762-5723 <ul style="list-style-type: none"> • 2-year warranty • 6-year manufacturer suggested lifespan • 2-year calibration cycle (\$150 per service, shipping extra) • Rainwise.net access 	NEWA AgroMET MKIII SP1-LR \$1890.00 (2018 pricing) Station data transmission <ul style="list-style-type: none"> • 2.4Ghz radio transmitter Data receiver <ul style="list-style-type: none"> • Wireless high speed internet (IP100 receiver, 2.4Ghz) • Cellular service (extra cost) Power <ul style="list-style-type: none"> • Solar panels, battery power Sensors <ul style="list-style-type: none"> • Temperature • Relative humidity • Precipitation (unheated) • Wind speed • Wind direction • Barometric pressure • Solar radiation • Leaf wetness • Soil moisture (extra cost) • Soil temperature (extra cost) Memory <ul style="list-style-type: none"> • Non-volatile RAM (data is retained during power loss) Optional mounting hardware <ul style="list-style-type: none"> • Monomount • Mounting brackets • Tripod Optional transmission hardware <ul style="list-style-type: none"> • High gain antenna • Radio repeater



The Rainwise MKIII SP1-LR weather station, located on a Cornell AgriTech @ NYSAES research farm in Geneva, NY. Photo credit: Nicole Mattoon, NYS IPM Program.

FSMA Produce Safety Rule FAQ's

Aaron Finley, NYSDAM & Mike Basedow, CCE ENYCHP

On behalf of the New York State Department of Agriculture and Markets (Department), this article presents information on the Food Safety Modernization Act (FSMA) Produce Safety Rule and answers frequently-asked questions from producers.

The Produce Safety Rule is the first mandatory federal food safety standard for the production of fruits and vegetables in the United States. In July 2017, New York State adopted the Produce Safety Rule under a grant-funded cooperative agreement with the U.S. Food and Drug Administration (FDA). The Produce Safety Rule will affect many of New York's growers, harvesters, packers and holders of produce. The rule addresses the areas of: personnel health, hygiene and training; agricultural water, including for irrigation and washing; biological soil amendments of animal origin and human waste; domesticated and wild animals; equipment, tools, buildings and sanitation; and sprouts.

The following are frequently-asked questions from producers on the Produce Safety Rule.

Which portions of FSMA will impact my farm?

The Produce Safety Rule affects growers, harvesters, packers and holders of produce whose average produce sales over three years exceed \$25,000. The Produce Safety Rule is one of seven rules outlined in FSMA.

Where can I determine if I might qualify for any exemptions to the Produce Safety Rule?

There are certain exemptions from the Produce Safety Rule that would subject farms to recordkeeping requirements, but not to on-farm inspections. There are three potential exemptions for farmers: qualified exemption, rarely consumed raw exemption, and processing exemption.

- Farms may be eligible for a **qualified exemption** if they generate less than \$500,000 in average annual food sales. A majority of these food sales must also be to a qualified end user. A qualified end user is defined as a consumer, a retail store, or a restaurant within the same state or within 275 miles of where the food was produced. The FDA defines food as all human and animal food, including items such as chewing gum, bottled water, and dietary supplements.
- Farms may be eligible for an exemption if they only sell produce that is defined by the FDA as **rarely**

consumed raw. Rarely consumed raw produce includes: asparagus; black beans, great Northern beans, kidney beans, lima beans, navy beans and pinto beans; garden beets (roots and tops) and sugar beets; cashews; sour cherries; chickpeas; cocoa beans; coffee beans; collards; sweet corn; cranberries; dates; dill (seeds and weed); eggplants; figs; horseradish; hazelnuts; lentils; okra; peanuts; pecans; peppermint; potatoes; pumpkins; winter squash; sweet potatoes; water chestnuts; and milk. This is considered an exhaustive list. Produce not included in the above list is considered covered produce and subject to the Produce Safety Rule. If a farm sells both rarely consumed raw produce and covered produce, the part of the operation that grows and handles covered produce will be subject to inspection.

- Lastly, farms may be eligible for an exemption if they only sell produce destined for further **processing** that includes a validated kill step to reduce pathogens. For example, a farm that sells grapes to a facility that makes wine would be eligible for the processing exemption. If a farm sells both produce destined for further processing and other covered produce, the covered produce and the associated farm operation will be subject to on-farm inspections.

Producers can complete an information survey, which will help determine coverage rates and compliance dates: <https://www.surveymonkey.com/r/9HM3NTP>.

Where can I find out how soon my farm will be subject to the Produce Safety Rule?

Farms that average \$25,000 in produce sales over three years must meet staggered compliance dates. However, farms will not have to meet agricultural water guidelines at these designated dates. FDA has recently announced its intention to delay the requirements of Subpart E- Agricultural Water until four years after the above compliance dates for each of the farm size categories. Farms with over \$500,000 in total produce sales, or "other farms," must comply with the Produce Safety Rule first. These farms have a compliance date of January 26, 2018.

Farms with over \$250,000, but less than \$500,000 in total produce sales are considered "small farms" and have a compliance date of January 26, 2019. Lastly, farms with over \$25,000, but less than \$250,000 in total produce sales are considered "very small farms" and have a compliance date of January 26, 2020.

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When will Produce Safety Rule inspections begin?

The Department will not begin inspections before Spring 2019. Current efforts will be concentrated on outreach and education to the industry.

Who will be conducting these inspections?

The Department's Division of Food Safety and Inspection will be conducting inspections. The Department adopted the Produce Safety Rule into its own laws so that New York State inspectors would be conducting outreach, education, and inspections on New York State farms rather than the FDA. We expect cooperation with the FDA and do not expect them to be conducting inspections.

How do these inspections differ from Good Agricultural Practices (GAP) audits?

Produce Safety Rule inspections are mandatory and required under FSMA. These inspections are free and encompass all covered commodities and covered activities on the farm. In comparison, GAP audits are voluntary and driven by the market. Producers must pay for the audit and choose what commodities and what scopes are included.

Can GAP audits and Produce Safety Rule inspections be combined into one inspection?

The Produce Safety Rule aims to refine these voluntary GAP audits and provide a standardized food safety inspection for produce. However, producers that are exempt from the Produce Safety Rule may still be required by their buyer to undergo a third-party food safety audit, such as USDA's GAP, Harmonized GAP or Safe Quality Food (SQF) Institute. The third-party, GAP audit will always be driven by the buyer. There have been discussions with states, USDA and FDA to address this issue. The USDA Harmonized GAP audit is currently being aligned with the Produce Safety Rule so that all aspects of the Produce Safety Rule will be contained in the Harmonized standard.

Will the Department be providing mock inspections?

The Department will be performing On-Farm Readiness Reviews (OFRR) in conjunction with Cornell Cooperative Extension (CCE) to producers willing to participate. This will not be a mock inspection, but rather an educational visit. The OFRR will consist of a walk-through of farm operations to observe what areas may or may not be compliant with the Produce Safety Rule.

How can I sign up for this educational visit?

An OFRR may be scheduled by contacting Aaron Finley at (518) 457-3846 or Aaron.Finley@agriculture.ny.gov. Aaron is

the Department's Produce Safety Program Office Administrator based in Albany. Steve Schirmer is also an administrator of the program and serves as the Department's Produce Safety Program Field Administrator based in Syracuse. Steve can be contacted at Steve.Schirmer@agriculture.ny.gov. Producers can also indicate on their Farm Information Form that they want to participate in an OFRR. Farm Information Forms have been distributed at grower trainings and by produce associations.

How often will I have to perform water quality testing for my agricultural water?

Guidelines and compliance dates for the use of agricultural water are currently under review by FDA. Agricultural water includes both production and postharvest water used in contact with covered produce. Producers should consider the source, quality, application method and timing of the application of their water.

There is no requirement to test water from a public water supply. However, documentation must be provided of test results or current certificates of compliance. Ground and surface water must be tested. Samples must be representative of use and must be collected as close in time as practicable to, but before, harvest. Ground water will need to be tested four or more times during the growing season or over the period of a year. Additionally, one or more samples must be rolled into a profile every year after the initial year. Surface water must be tested twenty or more times over a period of two to four years. Additionally, five or more samples must be rolled into a profile every year after the initial survey.

Updated information on agricultural water requirements will be distributed by the Department as received by the FDA.

For more information on FSMA, the Produce Safety Rule in New York State and to determine your farm's coverage or exemption under the rule, please visit the Department website at: <https://www.agriculture.ny.gov/FS/general/fsma.html>.

Questions can also be sent to Aaron.Finley@agriculture.ny.gov and Steve.Schirmer@agriculture.ny.gov.



**Agriculture
and Markets**

First Flight: Considerations for Early “Worm” Management to NY Apple

Peter Jentsch, Entomology, Cornell's Hudson Valley Lab

The early ‘worm’ complex found in commercial apple during the pre-bloom period begins with the emergence of the speckled green fruit worm (SGFW). In Highland, we traditionally have our first flight of SGFW in early March, yet in 2018 our first capture of this insect occurred on 2nd of April this season. This insect group is comprised of at least three different lepidopteran species whose larvae feed on the foliage, flowering parts, and developing fruit of pear and apple. An in-depth look at this insect complex can be found in a PDF of the 1974 NYSAES station bulletin by Chapman, P.J., Link, S.E. 1974. (<http://fls.cals.cornell.edu/OCRPDF/50a.pdf>)

In the Hudson Valley it's a fairly predictable event to catch the SGFW adult flying during the warmest days of early March, yet the damage to fruit can be sporadic from year to year. This Green Fruit Worm (GFW) group, comprised of many species includes the speckled green Fruitworm, *Othosia hibisci* (Guenee), the widestriped green Fruitworm (*Lithophane antennata*), and the humped green fruitworm (*Amphipyra pyramidoides*) among others that are aptly named after predominate physical features the larvae exhibit (Image 4). Many other lepidopteran follow the GFW complex during the pre-bloom period and include the redbanded leafroller, spotted tentiform leafminer, oriental fruitworm, lesser apple worm, codling moth and emerging larval populations of overwintering obliquebanded leafroller (OBLR). The GFW and OBLR are of greatest concern to commercial fruit growers prior to and shortly after bloom with many control measures used against these two insects effective in managing the secondary lepidopteran pests.

The adult GFW complex are members of the Noctuid family and as their name implies, fly at night. Flight begins during apple bud development and peaks at tight cluster with flight completed by the pink stage (Graph 1). GFW

adults have a wingspread of about 1.5 inches. The forewings are grayish pink; each is marked near the middle with two purplish gray spots, outlined by a thin pale border with the hind wings lighter in color than the forewings (Image 1). Females begin oviposition on twigs and developing leaves when apples are in the half-inch

Graph 1. Spotted green fruit worm adult flight.

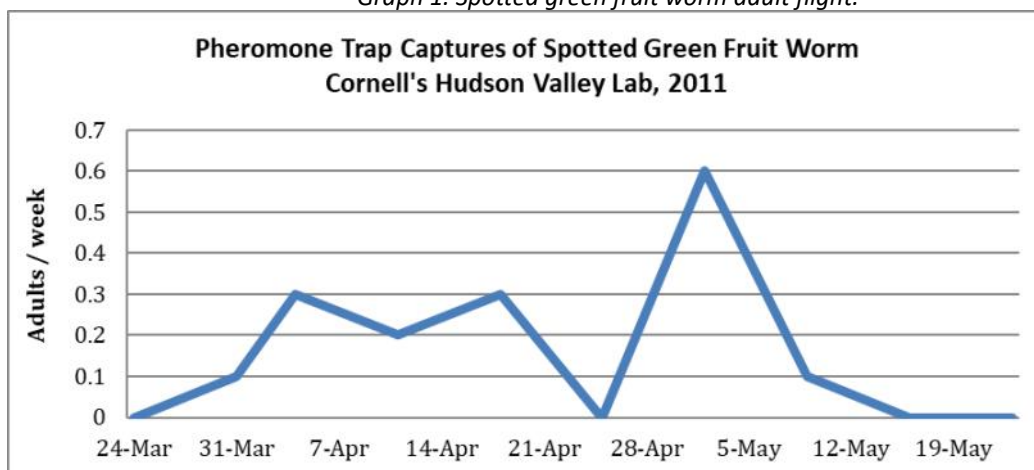
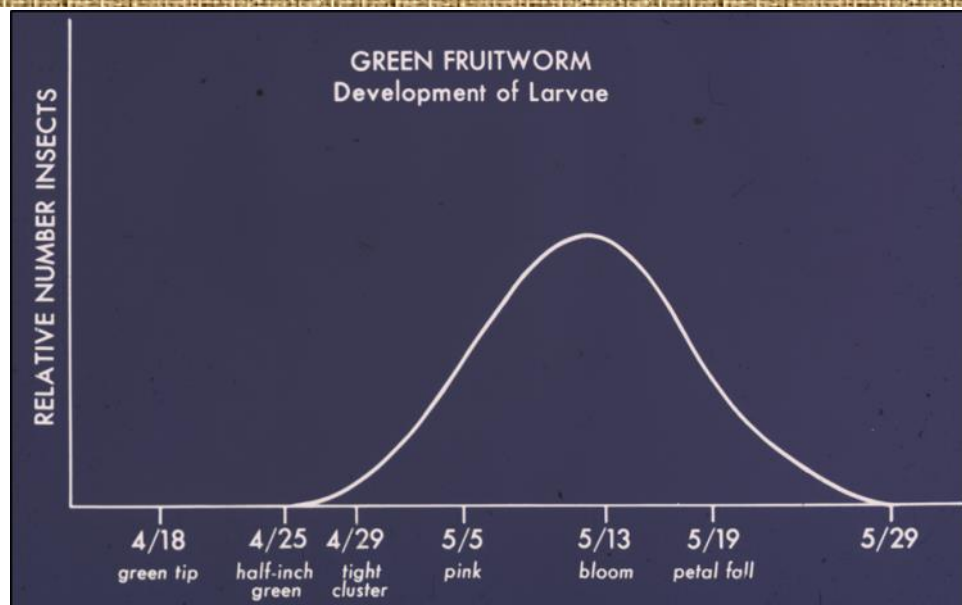


Image 1. Green fruit worm adult and egg.

green stage. GFW eggs are about 3/8" in diameter and 3/16" in height. GFW eggs are white with a grayish tinge and ridges radiating from the center (Image 1). The egg takes on a mottled appearance shortly before hatch. A female will deposit only one or two at any given site, laying several hundred eggs from late March to mid-May in the Hudson Valley.

In the northern regions of the Champlain Valley and throughout the mid-Hudson Valley, the GFW can be a severe pest on early developing apple. The GFW larva pass through six instars, the early stages possessing a grayish green body, brown head and thoracic shield. Mature larvae, about 1.5" in length, have a light green body and head. A number of narrow white stripes run along the top of the body with a wide, more

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Graph 2. Spotted green fruit worm larvae development (Highland, NY).



Image 2. Green fruit worm larvae and feeding injury for fruit at petal fall.

pronounced white line running along each side. The areas between the stripes are speckled white. Early stages of larvae feed on foliage and flower buds, found inside rolled leaves or clusters (Image 2). Mature larvae will damage flower clusters during bloom, feeding on developing fruit and foliage 2 weeks after petal fall with peak populations during bloom (Graph 2). The fruit remaining on the tree will have both shallow and deeply indented corky scars at harvest, indistinguishable from obliquebanded leafroller injury (Image 3). Larva then drop to the ground, burrow into the soil to pupate and overwinter 2-4 inches into the soil to emerge the following spring as adults.

Control: In years of heavy infestation pressure from GFW, as much as 10% fruit injury can occur. Employing adult pheromone trap captures will provide growers with information on GFW presence and the onset of adult flight. Scouting for larva to determine levels of pest pressure should begin shortly after tight cluster. Although NY has not developed thresholds for this pest, a provisional threshold of one larva or feeding scar per tree has been used to begin applications in Massachusetts. A

more conservative threshold should be applied in high valued apple varieties on dwarfing rootstock of high-density planting systems. If GFW populations historically cause economic injury to fruit, management should begin from tight cluster to pink to target the pre-bloom Lepidoptera complex. The GFW complex and OBLR are less susceptible or resistant to most organophosphates, with the exception of chlorpyrifos (Lorsban, IRAC Class 1B). If Lorsban was used as a pre-bloom foliar application, it would also control San Jose scale. Asana, Ambush / Pounce, Baythroid, Danitol, Warrior, pyrethroids in IRAC Class 3, tend to have highest efficacy against larva under cooler temperatures (<72°F). Generally, as temperature increases larva metabolize / detoxify pyrethroid chemistries more effectively, while OP's, carbamates and newer chemistries tend to be more stable and less susceptible to this phenomenon.

The Bt products such as Biobit, Dipel, Javelin, and MVP (IRAC 11 B2) also

have a low impact on beneficial mite and are very effective against OBLR and the GFW complex. The Bt products can be used through bloom as needed and their use should be optimized employing multiple applications at 5-7 day intervals at the low-labeled rate. Intrepid (methoxyfenozide) (IRAC 18A) another reduced risk insecticide very effective against the larva, imitates the natural insect molting hormone and works by initiating the molting process. Intrepid is quite safe to birds, fish, and most beneficial insects. Proclaim (emamectin benzoate) (IRAC 6), a second-generation avermectin insecticide related to Agri-Mek, is also an excellent insecticide against the GFW complex while having a low impact on beneficial mites. If European red mite (ERM) has emerged, Proclaim, used with a penetrating adjuvant, would reduce early ERM populations. Altacor (chlorantraniliprole), Delegate (spinetoram) and Entrust (spinosad) (IRAC Class 5), have been used successfully against the surface feeding and internal Lep. complex. However, the placement for these materials has been predominately at the onset of hatch of the summer generation larva of OBLR,

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Image 3. Green fruit worm feeding injury to fruit during early development and at harvest.

providing excellent results in NY State.

As we would be managing the overwintering OBLR larva at the same time as we would the control of GFW, we need to consider these applications in light of OBLR management throughout the remainder of the season. Since the development of insecticide resistance is dependent on the volume and frequency of applications of insecticides and the inherent characteristics of the insect species, we should limit one insecticide class to a single generation of pest for resistance management purposes. The present model for insecticide resistance management (IRM) practices then is to use a single insecticide class for a single generation of insect pest. For example, an IRM program against the lepidopteran complex, specifically OBLR, would use effective insecticides listed above (X, Y, Z) in three different IRAC classes (A, B, C) throughout the season.

Insecticide X (Class A) 1 application @ TC-P for GFW, or PF for OBLR, RBLR, LAW, OFM larva

Insecticide Y (Class B) 2 applications @ 14d; first emergence of 1st brood OBLR larva

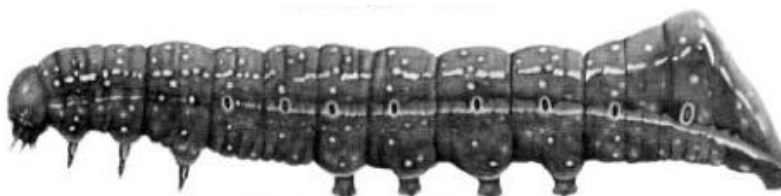
Insecticide Z (Class C) 1 application @ first emergence of 2nd brood OBLR larva if needed.

Given the historic failures the apple industry has experienced managing the leafroller and internal worm complex, we should consider designing programs to maintain the effectiveness of these excellent IPM tools beginning early in the season, before the heat of the battle begins.

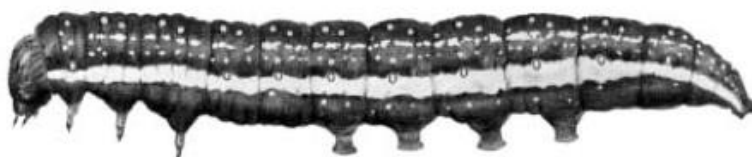
Peter Jentsch, pjj5@cornell.edu



A. Speckled green Fruitworm, *Othosia hibisci* (Guenee)



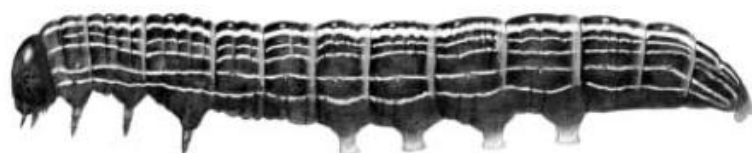
B. Humped green fruitworm (*Amphipyra pyramoides*)



C. Widestriped green Fruitworm (*Lithophane antennata*)



D. Bailey green fruitworm (*Lithophane baileyi*) Grote



E. Fourlined green Fruitworm (*Himela interactata*) Morrison

Image 4. Full-grown larva of the green fruitworm complex (watercolor paintings by J.A. Keplinger). Adapted from Chapman P. J. And Lienk S. E. Green Fruitworms. New York's Food And Life Sciences Bulletin No. 50, Entomology (Geneva) #6. October 1974 <http://fls.cals.cornell.edu/OCRPDF/50a.pdf>

Eight Farm Management Tips for the 2018 Season

Elizabeth Higgins, CCE ENYCHP

A good time to make New Year's resolutions is at the start of the new growing season. This year why don't you try adopting one or more of the following 8 key management strategies of good managers on your farm. They might help you help get your employees off to a good start this year.

1. Actively Involve Your Employees in the Operations of the Farm.

In the business world, it's known as participative management style. Remember that the person who does the job knows the most about how the job can be done (or changed). Despite a farm's hectic schedule some owners do find time to:

- Be with their key employees during a short morning session once the work crews are going to check in and see how things are going.
- Take key employees equipment shopping and to meetings and shows.
- Encourage their employees to work directly with their service providers, i.e., the vet and extension specialists, who can be effective trainers.
- Try to see and greet all employees each day.

2. Create a Positive Attitude. "Have you caught an employee doing something right today?" (from The One-Minute Manager book) If we feel an employee is stupid, lazy, and no good, then they will sense this and fall into this rut. If we feel an employee is moral, trainable, and a worthwhile human being, they probably will be. Again, put into your vocabulary the phrases- "well - done," "thank you," "I appreciated the extra effort."

3. Understand That Time Off Is Essential. Planting and harvesting seasons are long. Most employees accept this and enjoy the challenge. What they don't accept is getting only every other Sunday off. Probably the #1 pet peeve for farm employees is not having enough time off, especially weekends. Many farmers are organizing their schedules to create at least one weekend day off a week for each employee, so they can spend time with family or friends.

4. Train a Trainer. If you have skills that you want developed in your employees but haven't the time to do the training yourself or don't have the patience, then develop training skills in some of your key people. Send them to seminars, etc. to learn skills they can bring back to train your other employees.

5. Establish Systems to Improve Communication. Some that are working quite well include: maintenance schedule checklists, blackboards to write messages to one another, texting and 2-way radios. To help your employees see the results of their labor and post production results (i.e., CSA bags packed this week, number of cases of apples packed/hr). These become monitoring tools and goals that offers opportunities for working together.

6. Do Not Give Titles Without Authority. A market manager in charge of farmers markets had better be in charge. If they can't load and unload the produce, set up the display, handle cash and customers and supervise other workers independently, then they aren't a market manager. One of the major miscommunications with employees is the perceived expectations versus the real-world responsibilities. Although it is important to encourage employees to assume responsibility and grow in their jobs, it is a mistake to give someone a title and responsibility for a job that they cannot meet expectations in, especially if that job involves managing other employees.

7. Do Performance Appraisals - Frequently. An employee has a right to know how they are performing. Have you sat down and discussed with your employees for at least an hour their strengths and weaknesses and how you can help them do a better job. Farmers who do this regularly have told us how rewarding it is to both parties.

8. Prepare an Employee Handbook. Businesses with several employees are putting together written information for their new employees on expectations, rules and policies (i.e., vacations, holidays, absenteeism, etc.), and details regarding fringe benefits. This creates fair standards for everyone and eliminates politics and favoritism, which, if not controlled, become roots of employee discontent.

This material is based upon work supported by USDA/NIFA under Award Number 2015-49200-24225.



United States
Department of
Agriculture

National Institute
of Food and
Agriculture

Adapted from Rogers, Don Human Resource Management Practices in Action in Maloney, Thomas et al. Human Resource Management on The Farm: A Management Letter Series. Department of Agricultural Economics, Cornell University. 1988. pp21-22.

Complete the NY Labor Survey for Farm Owners and Managers

Do you own or manage a farm or farm employees in New York? Please take the Survey of Farm Labor Management Practices. Your feedback will help the Cornell Labor Ready Farmer's Project develop educational programs and tools to improve farm labor management skills and decision-making.

Participants can enter to win either a \$100 gift certificate to Tractor Supply or a free Cornell Small Farms online agricultural course of their choice in the coming year. One winner will be selected for every 50 participants.

Please take the survey and share this link with farmers and farm managers you know: www.tinyurl.com/farmlabormanagement

If you have any questions, please contact Kat McCarthy (kmm485@cornell.edu; 607-255-9911).

Tree Fruit Specialists

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Mike Basedow

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Email: mrb524@cornell.edu

Business Specialist

Liz Higgins

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Email: emh56@cornell.edu

Calendar of Events

Good to Great in Ag Labor Management

The 20 Minute Manager—Lunchtime Webinar Series in April
7 short programs on key management skills

- April 2 – Creating a farm culture that attracts and retains employees
- April 3 – Being a great manager
- April 4 – Writing effective employee handbooks and policies
- April 5 – Writing great job descriptions
- April 6 – Managing your risk as an ag employer
- April 9 – Getting off to a great start, hiring and orienting new staff
- April 10 – Getting great staff — giving feedback on skills and performance
- April 11 – Effective strategies for getting the most from your pay and benefits

All sessions **12:00-12:30**. The webinars are free, but you must register in advance to get the link. Registration information <https://enych.cce.cornell.edu/event.php?id=925>



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April 13, 20 & 27, Farm Law Focus Sessions – Free Webinars

12:00 noon Central Daylight Time (1:00 PM Eastern Daylight Time)

Admission and attendance to these webinars is free, and you can register at the provided links.

- April 13 - Business Entities, Sales Agreements and Employment Law.
<https://farmcommons.org/farm-law-focus-session-business-structures-sales-employment>
- April 20 - Insurance, Food Safety Liability & April 27 - Agritourism, Value-Added Production, Land Matters



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