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Tree Fruit News

Plant Growth Regulator Applications for Apple Return Bloom

Dr. Gemma Reig, Cornell HVRL and Dan Donahue, ENYCHP

Now is the time to think about the Return Bloom spray applications. I'm recommending delaying slightly this year because of June drop. I've observed a degree of June drop in some varieties, particularly Honeycrisp, and our Precision Thinning data supports this. Return bloom sprays applied too early increase the potential for unwanted additional thinning of the current season's crop. This risk is greater with Ethephon than with NAA, and higher rates (>12 oz. Ethephon, or > 3 oz. NAA per acre) can increase the risk of unwanted thinning. This is particularly the case with varieties that are sensitive to late thinning, such as Macoun and Golden Delicious. Usually, return bloom sprays should start at 6 weeks after full bloom with 4 week-

- Fortune, Fuji, Mutsu (Crispin) and Northern Spy apply 0.5 pt. Ethephon (Ethrel) or 3 oz NAA (Fruitone L is

preferred over Fruitone N) in 100 gallons. However, NAA is the better choice because they are late varieties.

- Golden Delicious and Jonagold apply 0.5 pt. Ethephon (Ethrel) or 2 oz. NAA (Fruitone L is preferred over Fruitone N) in 100 gallons
- Honeycrisp and Macoun 3 oz. NAA (Fruitone L is preferred over Fruitone N) in 100 gallons
- If applying RB sprays as part of a tank mix, it is better to skip the adjuvants. Use of adjuvants can result in greater, but less predictable absorption of these plant growth regulators.
- Avoid the use of Ethephon (Ethrel) on McIntosh, Macoun, and Honeycrisp due to advanced ripening.

Temperature and Rain 5/24/16 - 6/22/16

Locations	Avg Temp (F)	Max Temp (F)	Min Temp (F)	Total Rain (in)
Chazy	65.9	89.8	45.5	2.86
Peru	66.3	90	46.9	2.29
Crown Point	66.7	92.2	45.2	2.7
Clifton Park	68.3	93.9	45.9	3.42
Hudson	68.9	95.4	42	5.84
Highland HVRL	68.9	91.2	47.8	4.31
Marlboro	68.3	91.4	47.9	2.66
Riverhead	70.5	90.6	50.4	2.32

Time for Foliar Nutrition Analysis

Compiled from Agro One Soils Laboratory

For orchard sites in the Hudson Valley, mid-July (about 60-70 days after petal fall) is the time to take leaf tissue samples. Leaf tissue analysis is the best tool we have to get a picture of macro- and micronutrient levels in trees.

What to Sample: Select at least 60-100 leaves from the middle of this current season terminal shoots. **If sampling is done later than 60 to 70 days after petal fall** select the first full-sized mature leaf behind the shoot tip. Select 1 or 2 leaves/shoot from several shoots on each of several trees located throughout the area being sampled. **A minimum of 50 grams (~ 2 oz) fresh weight is needed.** Select shoots that are well exposed to light. Shoots sampled should be of **average** vigor (length and diameter) from the trees in the planting.

- **Large trees:** sample 5 to 7 feet above ground level.
- **Small trees** (young, trellised or slender spindle plantings): 3 to 6 feet above ground level.
- **Avoid** excessively strong shoots (near pruning cuts) and extremely weak shoots.

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Foliar Nutrition, continued from page 1

- **Do not** include spur leaves.
- **Do not** include leaves that are damaged by: diseases; insects; weather or mechanical injury.
- **Do not** mix leaves from trees of different varieties.
- **Do not** mix leaves from trees of different ages.
- Trees sampled should represent the average condition within the orchard unless special samples are being taken to determine cause(s) of a distinct problem.

Collecting and Preparing Samples: Remove leaves by pulling downward so the petiole remains attached to the leaf. Place leaves in a dry paper bag or perforated plastic bag and immediately label the bag for identification. Wash the leaf samples while still fresh, before they wilt. If a large number of samples are involved they may be stored overnight in cold storage, refrigerator or ice chest to keep them from drying out. Use distilled water, available at most drug stores, for washing and rinsing the sam-

ple. Change the water if it becomes dirty or after 8 to 10 samples (whichever occurs first). Gently and lightly scrub the leaves together in distilled water. Shake to remove excess water and immediately rinse the sample in clean distilled water. Again shake to remove excess water. Spread out sample on clean paper towels until leaf surfaces are dry. Transfer sample to paper bag, with top open and dry at room temperature until the leaves are brittle.

NOTE: DO NOT let leaves to stand in water –complete the washing and rinsing process in one minute or less.

Two popular laboratories to use for both foliar and soil analysis are:

Dairy One: Information and sample submission forms can be found at <http://dairyone.com/analytical-services/agronomy-services/plant-tissue-testing-services/>

Waypoint Analytical (*formerly known as A & L Eastern Laboratories*): Information and sample submission forms can be found at <http://www.al-labs-eastern.com/agricultural.aspx>

2016 Guidelines for Fire Blight Management in New York

Dr. Kerik Cox, Cornell NYSAES & Dr. Juliet Carroll, Cornell NYS IPM

BACKGROUND

Fire blight is a reoccurring problem for apple production regions in western NY and occasionally a problem for production regions in eastern NY. Fire Blight has been uncharacteristically severe in the Champlain Valley this season. Streptomycin-resistant strains of the fire blight bacterium, *Erwinia amylovora*, (SmR Ea) were identified in western NY in 2002, and from 2011 to 2013. The occurrence of SmR Ea was localized to specific fields at specific operations and was not present region-wide. In subsequent surveys in 2014 and 2015, SmR Ea was not detected in western NY even in orchards that had SmR Ea in previous years. In 2016, we will continue to screen fire blight samples for SmR Ea. Information on submitting samples is outlined in a separate article below. We now have a NY registration for kasugamycin sold as Kasumin 2L. Kasugamycin is an alternative antibiotic to streptomycin and provides a similar high level of blossom blight control.

GUIDELINES FOR PRODUCTION REGIONS WHERE STREPTOMYCIN RESISTANCE HAS NEVER BEEN DETECTED

1. All fire blight cankers should be removed during winter pruning. Remove all trees with central leader or main trunk infections. Infected wood should be removed from the orchard and either burned or placed where it will dry out rapidly.
2. Copper sprays should have been applied at green tip.

Processing varieties can be protected with copper as late as ½ inch green depending on requirements of the label.

3. When blossom infection is forecast, apply at least 24 oz. /acre of streptomycin. If there are concerns about the effectiveness of streptomycin, submit a sample for testing and follow the guidelines for regions where streptomycin resistance has been confirmed. Consider including the penetrating surfactant Regulaid (1 pt./100 gal of spray solution) in the first streptomycin spray to enhance the effectiveness of streptomycin. Regulaid would be especially beneficial when applied under rapid drying conditions. Regulaid can be omitted from subsequent applications so as to minimize the leaf yellowing that is sometimes associated with repeated applications of strep. If later antibiotic applications are needed, streptomycin or kasugamycin (Kasumin 2L) should be used.
4. Prohexadione-Calcium (Apogee) applications [6-12 oz./100 gal (3-6 oz./100 gal for tree <5 years)] for shoot blight should be seriously considered, especially on highly-susceptible varieties when apple trees have 1 -3 inches of shoot growth typically late bloom. A second treatment should be made 14-21 days later. This is a preventative treatment and will not be effective if you wait until you see signs of infection.
5. Fire blight strikes should be pruned out promptly and destroyed. It is best to prune well back into healthy

wood, at least 12 inches behind the water soaking margin or into 2nd year wood.

6. If severe blossom blight occurs where strep was applied in a timely manner, contact CCE for SmR Ea testing (see Sample Submission Instructions). No quarantine will be imposed if SmR Ea is found in your orchard as SmR Ea is not a regulated pathogen.
7. If you need to interplant apple trees in existing orchards where fire blight was observed; replant in late fall to better synchronize bloom with the established trees in the following season.

CHEMICAL MANAGEMENT GUIDELINES FOR HIGH RISK REGIONS WHERE STREPTOMYCIN RESISTANCE HAS BEEN DETECTED (confirmed SmR Ea)

Follow the guidelines (above) *except for the following differences:*

1. If **SmR Ea** has been confirmed at your operation:
 - a. When the first blossom infection is forecast, apply kasugamycin (Kasumin 2L) at 64 fl oz. /acre in 100 gallons of water. Do not spray alternate row middles. Do not apply after petal fall. The PHI is 90 days. The REI is 12 hours. Consider including the penetrating surfactant Regulaid (1 pt./100 gal of spray solution) to enhance the effectiveness of kasugamycin.
 - b. At the 2nd high risk period, apply a tank mix of streptomycin at 24 oz. /acre in combination with either oxytetracycline* at 32 oz. /acre, or a bloom time rate of a registered copper** product.
 - c. At the 3rd or 4th high risk periods, repeat steps ‘a’ and ‘b’, respectively.
2. If **SmR Ea** has **not** been confirmed at your operation, it is present in the region:
 - a. When the first blossom infection is forecast, apply a tank mix of streptomycin at 24 oz. /acre in combination with either oxytetracycline* at 32 oz. /acre, or a bloom time rate of a registered copper** product.
 - b. At the 2nd high risk period, apply kasugamycin (Kasumin 2L) at 64 fl oz. /acre in 100 gallons. Consider including the penetrating surfactant Regulaid (1 pt./100 gal of spray solution) to enhance the effectiveness of kasugamycin.
 - c. At the 3rd or 4th high risk period, repeat steps ‘a’ or ‘b’ depending on concerns about the effectiveness of streptomycin.
3. Prohexadione-Calcium (Apogee) sprays should be applied at 6-12 oz./100 gal (3-6 oz./100 gal for tree <5 years) at 1-3 inches shoot growth. A second treatment

should be made 14-21 days later. Apogee will not be effective if applied after you see fire blight symptoms.

*Oxytetracycline must be applied before infection occurs, since it is only bacteriostatic (stops bacteria from multiplying) and will leave live cells behind. Therefore, monitor fire blight forecasts and heed CCE alerts carefully when using oxytetracycline. Data from university field research trials suggest that different formulations of the same antibiotic active ingredient may perform differently in the field. Consult with specialist before choosing the product for your operation.

**Copper must be applied before infection occurs. Therefore, monitor fire blight forecasts and heed CCE alerts carefully when using copper. Copper may cause fruit russet. Hydrated lime may be used to safen copper. An example would be Badge SC at rate of 0.75 to 1.75 pints /acre buffered with 1-3 lbs. of hydrated lime for every 2 pints of Badge to minimize fruit finish damage.

ADDITIONAL GUIDELINES FOR NEW PLANTINGS (1-2 years)

1. If possible, plant varieties grafted on fire blight-resistant rootstocks.
2. Trees should be carefully examined for fire blight infections before planting. Infected trees should be submitted for strep-resistance testing and subsequently discarded. Contact CCE for SR Ea testing, listed under “Sample Submission” below.
3. Immediately after planting, and 14 days later, a copper application should be made using the lower copper rates that are labeled for use after green tip. Ensure that soil has settled to avoid phytotoxicity to roots.
4. Trees should be scouted at 7-day intervals for fire blight strikes until July 31st. Infected trees should be removed as described above. Plantings also need to be scouted 7-10 days after hail or severe summer storms. The NEWA disease forecasting model for fire blight can assist by providing an estimate of symptom emergence following a storm or other trauma event. Also scout the planting at the end of the season (mid-September).
5. If possible, remove flowers before they open. New plantings may have considerable numbers of flowers the first year, and blossom removal may not be practical. If practiced, the blossoms should be removed during dry weather and before a lot of heat units have been accumulated and there is a high risk of fire blight infection.
6. Trees should receive an application of copper at a stage equivalent to bloom. Observe the labeled REI before blossom removal.

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7. To protect any remaining bloom, follow the chemical management program for your regions of streptomycin resistance risk.
8. Samples of any infections observed after planting should be submitted for strep-resistance testing – see contact information below. Infected trees should be removed entirely in these high density orchards.

SAMPLE SUBMISSION INSTRUCTIONS

If fire blight infected trees and strikes are observed after proper streptomycin application, call or email one of the persons below to provide you with sample submission instructions, and possibly to come and collect samples and

take data on the situation.

- Hudson Valley Region: Dan Donahue, Tel: 518-322-7812, email: djd13@cornell.edu
- Lake Champlain Region: Anna Wallis, Tel: 518-410-6823, email: aew232@cornell.edu
- Western New York Region: Tess Grasswitz, Tel: 585-261-0125, email: tg359@cornell.edu
- Statewide: Dr. Juliet Carroll, Tel: 315-787-2430, email: jec3@cornell.edu
- Statewide: Dr. Kerik Cox, Tel: 315-787-2401, email: kdc33@cornell.edu

**Suspect Streptomycin Resistant Fire Blight in your Orchard?
Here’s How to Take a Sample and Request a Test**
Dr. Juliet Carroll, Cornell NYS IPM

If you applied streptomycin sprays during bloom this season at the correct rates and timings, or you have newly set orchards, and Fire Blight has appeared seemingly out of nowhere, consider sending in a sample for streptomycin resistance testing. Here are a few pointers and instructions:

- If sending samples via mail – use overnight delivery and avoid sending on the weekend.
- Typically, no more than 3 samples should be submitted for any one orchard, so as not to swamp our diagnostic laboratory at the Geneva Experiment Station.
- Caveat: Nectria canker symptoms may be quite similar and usually fire blight strikes are darker than the one in the picture. Droplets of ooze near the margin are characteristic of Fire Blight.

Instructions for sampling

It is only possible to isolate the bacteria (*Erwinia amylovora*) from fresh, active lesions, where healthy tissue meets the diseased tissue – **the lesion margin**.

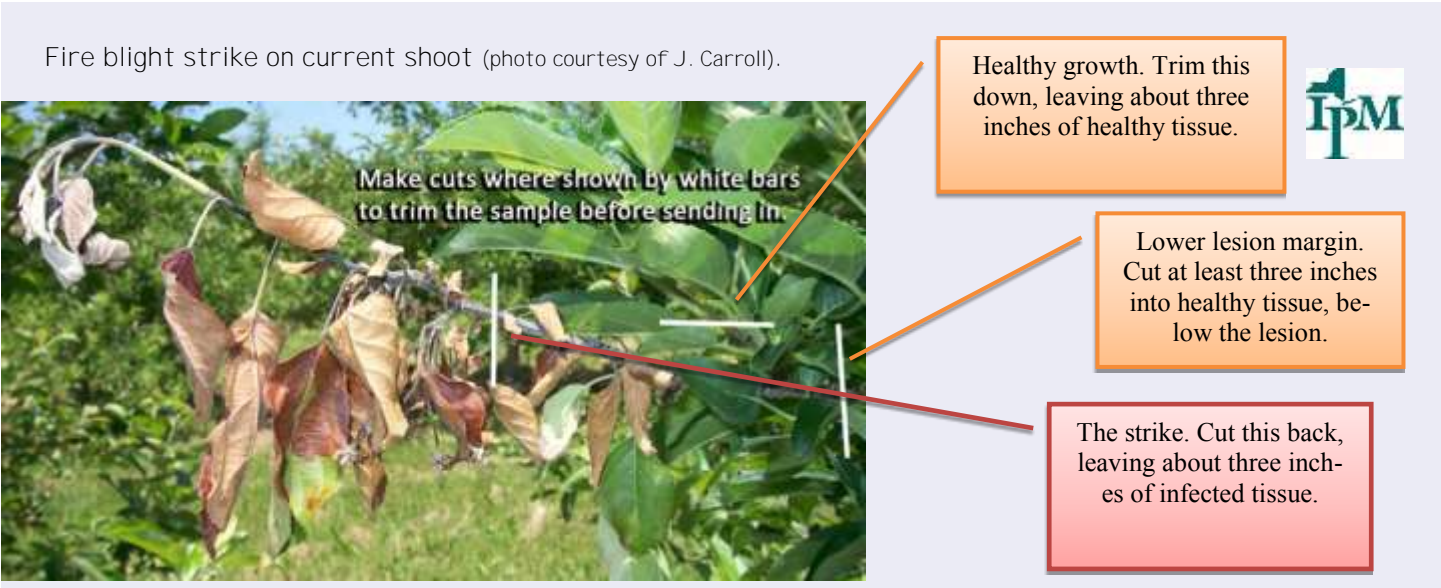
It is impossible to isolate fire blight bacteria from dead, dried out tissue.

The Lesion Margin

Collect samples that include about 3 inches of healthy tissue beyond the infected tissue, and include about 3 inches of infected tissue. Do not submit all the dead branch of the strike, this is often too long and can be cut back, as described, to 3 inches of infected tissue above 3 inches of healthy tissue.

If possible, refrigerate infected trees and strikes. Protect samples from drying out prior to submitting them. Do not collect entire branches or trees unless symptoms are unusual.

A downloadable copy of our Fire Blight Sample Submission Form can be found [here](#). Please print it out, answer all questions, and include with your sample



Summer Insect Control in the Champlain Valley

Anna Wallis, ENYCHP

The three most economically significant insects in this summer lepidopteran pest complex in Northeastern NY include obliquebanded leafroller (OBLR), codling moth (CM), and oriental fruit moth (OFM). Through trapping and scouting this season and last season (2015 & 2016) we've been able to track the presence, pattern, and pressure of the major insects in NENY. With this information we can give IPM recommendations, targeting specific pests at the appropriate times.

Summer Lepidoptera are highly region specific in their presence, therefore so are the management strategies required to control them. On the NY side of Lake Champlain, in the northern part of the region, OBLR is the most significant summer insect pest.



Obliquebanded leafroller trap from an orchard in Peru, NY on June 20th. First flight trap counts typically exceed 40 moths/week. Unfortunately, trap counts do not correlate well with fruit damage.



Codling moth trap from an orchard in Northern VT, on June 1, 2016.

Photo: E. Boier

They are native to the region and historically control of them has been fairly straightforward with the use of broad spectrum insecticides. One of the main reasons management became difficult in the past decade is due to the availability and potential resistance to insecticide materials. Resistance to organophosphates has been a contributor, but several new chemistries available have been excellent replacements (i.e. Altacor, Delegate). CM and OFM also are present, but in most places populations are below thresholds that warrant control measures. But trapping and

scouting is necessary to know whether they are significant in specific blocks.

In contrast, in Vermont, CM is the driver of summer insecticide programs, while OBLR takes a back seat. This is important to know because the insects are active at slightly different times, and therefore targeted insecticide applications should be applied at different times in order to be effective.

OBLR Control

OBLR first flight peaked this week (June 20, 2016) in Peru, NY, or approximately 1048 DD base 43 since January 1. In 2015, OBLR peak flight was on approximately June 15 or approximately 1021 DD base 43. First flight trap counts during this time can exceed 40 moths/week.

Unfortunately, trap counts do not correlate well with fruit damage. To control this insect, trap captures should be used only to determine the timing of the start of flight. This 'biofix' can be used to predict when the next generation of larvae will be active, approximately 600-700 Degree Days base 43F after first trap catch date. This is usually about the first week of July. At this time, you should scout for insect damage by observing 500 fruit clusters for insect damage (25 clusters per 20 trees throughout a block). If one fruit is detected with OBLR feeding, an insecticide should be applied. While scouting, it is very important to check all parts of the tree and to break apart clusters in varieties like Cortland. At this time it is also a good idea to be scouting for internal lepidoptera.

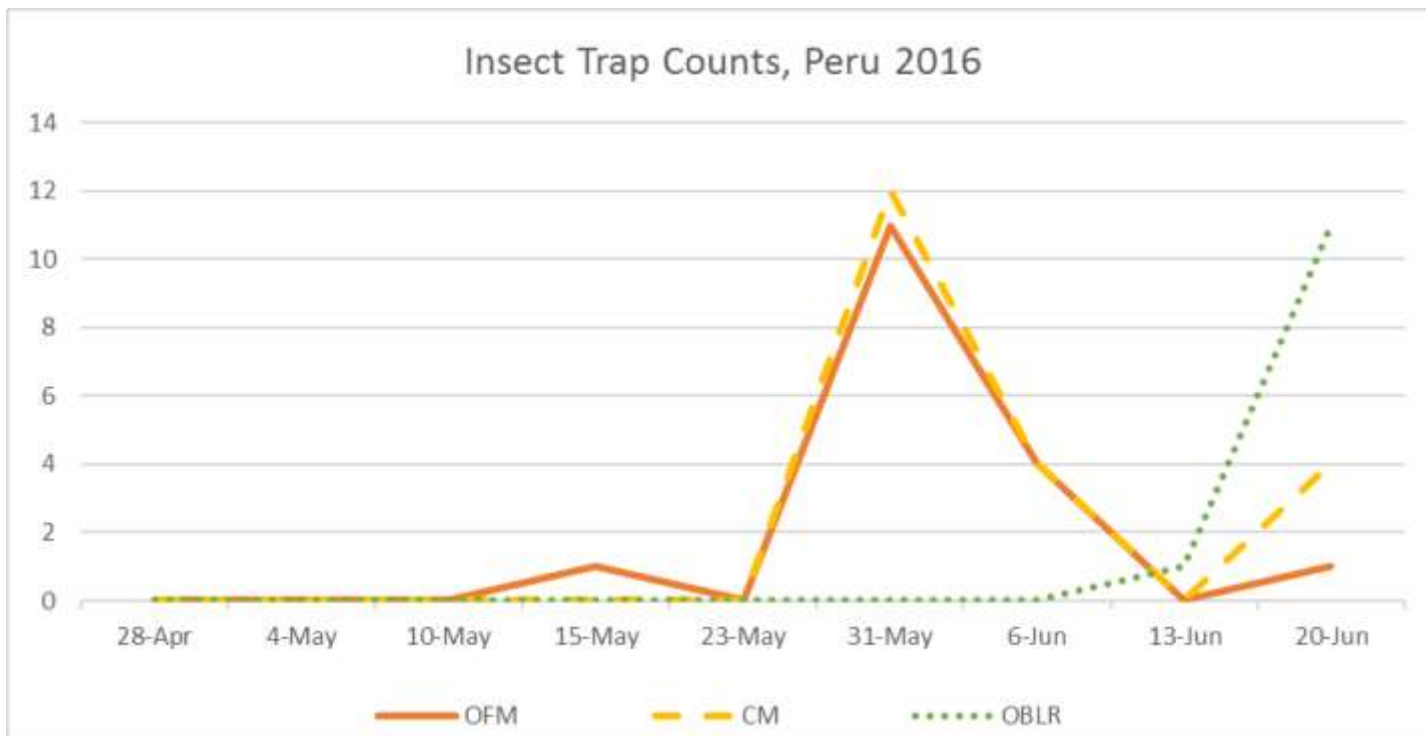
Scouting is a very time-consuming activity, and may be time-prohibitive over large acreage. In this case, the NEWA models have been very accurate at predicting the life cycle of these insects and the timing of an insecticide application where populations are known to be high and there has been fruit damage in the past.

This insect prefers to feed on leaf tissue, so presence only of the insect on leaf terminals does not warrant a control measure. It is when the population builds up and insects move to fruit that an insecticide is necessary.

CM Control

Codling moth populations are only high enough to warrant control in some places in the Champlain Valley of New York. This season, CM biofix (first trap capture) was recorded between May 31st and June 6th, depending on the location. This was approximately 310-413 DD base 50F. In 2015 biofix was between June 1st and June 10th, or 412-499 DD base 50F. This poor consistency of dates and DD between seasons is the reason trapping to detect insect activity is necessary on an

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TREE FRUIT NEWS



Insect trap counts for one orchard in Peru, NY. OFM counts just about 10 moths/trap did not warrant control. CM counts in this orchard were above threshold for control (>5 moths/trap), but this is not true of most orchards. The beginning of peak OBLR flight was detected this week (6/20).

annual basis.

For this insect, trap counts *do* correlate with the potential for fruit damage. One threshold recommended for control is if trap counts exceed 5 moths per week and fruit damage has been noted. If this threshold is reached, an insecticide should be applied within 200-250 DD base 50F after biofix (first trap catch) and then again after 2 weeks. Traps should continue to be monitored through July for the second generation. Again, trap counts of >5 per week could warrant an insecticide application for control; verification by sampling to detect any fruit damage is recommended.



Using NEWA to predict monitor DDs

It seems like a daunting task, and a significant labor requirement, to monitor so many insect traps and keep track of the degree day accumulation associated with each insect. But the NEWA models make it easy, as long as you keep records of insect counts. All you have to do is enter the biofix, or first trap catch date, into NEWA under the correct

model. The model output tells you how many DDs of the appropriate temperature have accumulated and when to apply your insecticide.

On the following page (7) is the NEWA output for oblique-banded leafroller in Peru, 2016. The model tells us that 72 DD base 43 have accumulated since the biofix, or first trap catch, on 6/20 (28+21+23 from June 20-23). No control measures are recommended now. Larval hatch is predicted at about 360 DD from the biofix; if it has already been determined that a specific block should receive a spray against emerging larvae, this would be the time to apply it. If it is not certain that an OBLR control spray will be necessary, then it is advisable to scout for medium size (3rd-4th instar) larval infestations. This occurs later, when larvae become active at about 600-700 DD base 43 after the biofix, and the model will recommend scouting terminal clusters.

Work that has been done so far indicates that significant savings can be realized by using this IPM strategy. The labor that goes into trap monitoring and scouting for insect activity is offset by the cost of labor and materials for unnecessary insecticide applications. Following this season's data collection, we hope to quantify the actual cost of this labor savings. More importantly, the IPM strategy implements well-timed insecticide applications which lead to better control of insects, and ultimately higher quality fruit.

Obliquebanded Leafroller Results for Peru

First Trap Catch:

First Trap Catch date above is estimated based on degree day accumulations or user input. Enter the actual date for blocks of interest and the model will calculate the protection period after first trap catch more accurately.

Accumulated degree days (base 43°F) first trap catch through 6/22/2016: 78 (0 days missing)

	Past	Past	Current	5-Day Forecast			Forecast Details	
Date	Jun 21	Jun 22	Jun 23	Jun 24	Jun 25	Jun 26	Jun 27	Jun 28
Daily Degree Days (Base 43BE)	28	21	23	22	28	33	32	31
Accumulation since January 1	1117	1138	1161	1183	1211	1244	1276	1306

[Show Degree Day Graph](#)

Pest stage:

The pest stage above is estimated. Select the actual stage and the model will recalculate recommendations.

Pest Status	Pest Management
Adults are still flying and laying eggs. Peak flight usually occurs within two weeks after the first adult is captured.	No control measures are recommended at this time, because eggs have not yet begun to hatch. It is also too early to sample growing terminals to estimate larval populations.

WPS Mock Inspection Training Course

Tuesday, July 12

Indian Ladder Farm

342 Altamont Rd,
Altamont, NY 12009

Registration
9:30am- 10:00am

Training
10:00am- NOON

There is no Fee for this training

As many of you already know, the EPA passed legislation in 2015 that institutes changes to the Farmworker Protection Standard. **The new rules will be in effect and enforced as of January 1, 2017.** “The Worker Protection Standard seeks to protect and reduce the risks of injury or illness resulting from **agricultural workers**’ (those who perform hand-labor tasks in pesticide –treated crops, such as harvesting, thinning, pruning) and **pesticide handlers**’ (those who mix, load, and apply pesticides) use and contact with pesticides on farms, forests, nurseries and greenhouses. The regulation does not cover persons working with livestock.” source: <https://www.epa.gov/sites/production/files/2015-09/documents/worker-protection-factsheet.pdf>

The WPS does apply to farms using Organic OMRI listed Pesticides who have workers and handlers. The only exemption is for farm owners and their immediate families.

DEC will be hosting this WPS Mock Inspection Training Course in an effort to help farmers in the area understand the WPS regulations, changes that will soon be in effect, and what farmers need to do on their farms in order to comply. We encourage all growers to attend as the information will be relevant whether you are a large-scale conventional fruit farm with 60 workers or small scale organic vegetable producer with 2 workers.

The DEC will be issuing 2 pesticide applicator’s recertification credits in the following categories – commercial 1A, 1D, 10 and private 21, 22, 23, 24, 25. You must be in attendance for the full two hour course/mock inspection in order to receive credits. Please arrive early to register and sign the roster for credits. Please bring your pesticide applicator’s license.

Upcoming Events

July 20, 2016 – Cornell Fruit Field Day in Geneva

The Cornell Fruit Field Day will be held in Geneva and will feature ongoing research in berries, hops, grapes, and tree fruit, and is being organized by Cornell University, the NYS Agricultural Experiment Station, CALS Fruit Program Work Team and Cornell Cooperative Extension. Attendees will be able to select from tours of different fruit commodities.

The event will be based at the NYSAES Fruit and Vegetable Research Farm South, 1097 County Road No. 4, 1 mile west of Pre-emption Rd. in Geneva, NY. Registration will begin at 8:00 AM and tours will begin at 8:30 and run until 11:30. Lunch will be served at the exhibit tent area between 11:30-12:30 PM. Tours will resume at 1:30 and run until 5:00 PM.

Admission fee will be \$50/person (\$40 for additional attendees from the same farm or business). Pre-registration is required; walk-in registration may be available for a \$10 surcharge on the day of the event.

Topic will include:

Berries, Hops: Spotted wing drosophila research update in berry crops; hummingbird use, monitoring network| Use of exclusion netting for managing spotted wing drosophila in fall raspberries| Monitoring spotted wing drosophila for management decisions in summer raspberry and blueberry| Behavioral control of spotted wing drosophila using repellents and attract & kill stations| Effect of habitat diversity on ecosystem services for strawberries| High tunnel production of black, red raspberry| Day-neutral strawberries/low tunnel production| Hop variety trials

Tree Fruits: Apple breeding and genetics studies| Bitter pit in Honeycrisp| Research updates on fire blight, apple scab, mildew| 3D-camera canopy imaging| Ambrosia beetle management trials| *Malus* selections for potential use in cider production| NC-140 rootstock trials on Honeycrisp and Snap Dragon| Role of insects in spreading fire blight in apples| Precision spraying in orchards

Grapes: Sour rot of grapes| VitisGen grape breeding project| Precision spraying in orchards and grapes| Managing the spread of leafroll virus in *Vinifera* grape using insecticides and vine removal

Also: FSMA/food safety considerations

<https://app.certain.com/profile/web/index.cfm?PKwebID=0x831574809f&varPage=home>

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Registration is Open for the 2016 International Fruit Tree Association Summer Study Tour of Western NY Orchards

July 19-21, 2016

(held in conjunction with the 2016 Cornell Fruit Field Day in Geneva)

Registration Includes:

- Hotel accommodations (Monday-Wednesday nights)
- Breakfast and lunch (Tuesday-Thursday)
- Transportation

-3 Days of Tours including a full day at Cornell Fruit Field Day ([click here to view the full itinerary](#))

Single and double occupancy options available. A local option is also available but does not include hotel accommodations or transportation. **Questions?** Contact info@ifruittree.org or (636) 449-5083