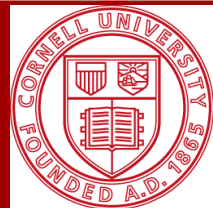




FRUIT NOTES

Lake Ontario Fruit Program



Volume 14 Issue 5

March 25, 2014

Fungicide Considerations for Tree Fruits in 2014 Dave Rosenberger and Kerik Cox

Designing disease control programs for tree fruits is increasingly complex as we deal with fungicide resistance issues (and the resulting higher inoculum levels in many orchards). At the same time we are challenged to learn the intricacies of new products and how changing crop management practices affect fungicide use. Following is an overview of our current perspectives.

Fungicides for apples:

Apple orchards with high levels of apple scab last year (i.e., with high inoculum for this spring) should either have received an inoculum reduction treatment last fall or such a treatment should be applied as soon as possible this spring. Inoculum reduction can be achieved by leaf shredding with a flail mower set to scalp the sod, but that approach is only effective if leaves beneath trees are raked into the row middles. The sod scalping generated by effective flail mowing of leaf litter can result in a slippery surface for subsequent pesticide applications in a wet spring. Better alternatives would be applications of either urea (40 lb/A in 100 gal of water) or of 2.5 tons/A of dolomitic lime. All inoculum reduction practices should be completed before green tip if possible, but there may still be some benefit even if they are implemented shortly after green tip.

Syllit (dodine) should be applied in combination with mancozeb in two early-season sprays in high-inoculum orchard unless dodine-resistant apple scab is known to be present in the block. If copper is used in the first spray for fire blight suppression, then Syllit plus mancozeb could be used in the second and third applications. Syllit is incompatible with some formulations of copper fungicides and with some formulations of chlorpyrifos insecticide. Combining Syllit and chlorpyrifos has sometimes resulted in buttering out in the sprayer tank. Syllit is less useful after tight cluster because it does not control rust or mildew. Including a mildewcide at tight cluster and pink is becoming increasingly important as mildew populations are becoming increasingly resistant to the DMI fungicides (Rally, Indar, Topguard, Inspire Super). None of the other fungicide groups will effectively control mildew if the first mildewcide application is delayed until petal fall.

Combinations of mancozeb and captan have worked well for many growers in prebloom sprays, but this program of contact fungicides is unforgiving because it provides no post-infection or anti-sporulant activity to suppress scab that may develop as a result of less-than-perfect application timing or fungicide coverage. The latter can result from spraying in the wind and/or from alternate row spraying. Therefore, we strongly recommend that growers include one of the more potent modern fungicide chemistries (i.e., an SDHI, QoI, or DMI, in that order of preference) in either their tight cluster and pink sprays or in their pink and bloom sprays so as to reduce risks of having secondary scab emerge after petal fall. Growers who opt to continue relying on the captan-mancozeb mixture through bloom should at least add several pounds per acre of sulfur to the tank mix at tight cluster and pink to suppress mildew.

The SDHI fungicides Fontelis, Luna Tranquility, Luna Sensation, and Merivon are effective against scab, rust, and mildew, but only Fontelis and Luna Tranquility are currently registered in NY (via special local needs labels), and none of these products are labeled on Long Island due to concerns about the



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Every effort has been made to provide correct, complete, and up-to-date pesticide recommendations. Nevertheless, changes in pesticide regulations occur constantly, and human errors are still possible. These recommendations are not a substitute for pesticide labeling. Please read the label before applying any pesticide.

potential for ground water contamination. Merivon may get a New York label later this spring. For early-season disease control, these products are best used between tight cluster and first cover. Our preference is to use them before petal fall. That is especially true for Luna Tranquility, which is a premix of Luna (the SDHI component) and Scala (pyrimethanil). Scala alone is not effective in protecting fruit from scab or in controlling rust, and the Luna component, like many of the SDHIs, has only moderate activity against rust diseases. Controlling cedar apple rust on leaves is usually most difficult during the period of rapid shoot growth after petal fall, so Luna-T does not fit very well after bloom.

All of these SDHI fungicides should be applied in combination with either mancozeb or captan. This is essential for both fungicide resistance management and because the SDHI fungicide products may not redistribute well enough to protect newly expanding leaves that develop between sprays. In most cases, we prefer to see these products combined with mancozeb rather than captan because of the additional rust control provided by mancozeb and because Fontelis, which is formulated with mineral oil, can enhance uptake of captan into leaves and fruit where captan will cause injury under certain environmental conditions. Merivon has label warnings against tank mixing with oil sprays or other pesticides formulated as emulsifiable concentrates.

The strobilurin or QoI fungicides (Flint and Sovran) also control scab, rust, and mildew in most New York orchards, but they are losing activity against mildew in some orchards and they can fail catastrophically against scab, as has already occurred in many orchards in Michigan. Resistance to QoI fungicides in scab begins as a gradual loss of activity, especially post-infection activity, but can suddenly change to a total loss of activity. In the field, the final loss of activity would mimic the scenario that occurred when apple scab populations became resistant to the benzimidazole fungicides. Because control failures resulting from QoI fungicide resistance can occur quickly and unpredictably, and because we have already used QoIs for many years, we believe it is safer to avoid using them during the prebloom and bloom periods in apples when both scab pressure and the negative consequences of control failures are greatest. Where the QoIs are still working, their best fit may be at petal fall and/or first or second cover sprays.

Both Luna Sensation and Merivon are package mixtures of QoI and SDHI fungicides, so we suspect that using either of these products in prebloom sprays will add to selection pressure for QoI resistance. That selection pressure would certainly be minimized by the presence of the SDHI in those package mixtures, and the recommended inclusion of a contact fungicide (captan or mancozeb) with those products would further reduce selection pressure. Nevertheless, a spray program that starts with two sprays of Syllit plus contact fungicide, followed by two sprays of either Fontelis or Luna-T plus contact fungicide, and ending with two sprays of either Flint or Sovran plus contact fungicide at petal fall and first cover should provide excellent resistance management because that program includes back-to-back sprays of at least three different and non-overlapping at-risk fungicide groups (i.e., dodine, SDHI, QoI). Where labeled, Merivon can be used as a substitute for Pristine in preharvest sprays, so excluding it from the scab spray program does not reduce its importance in apple disease control programs.

The DMI fungicides (Rally, Indar, Topguard, Inspire Super) can still be very useful where resistance has not emerged as a problem. However, they are losing activity against both scab and mildew in many orchards in eastern United States. Hence, it may be wise to avoid trusting them for prebloom scab control for the same reasons cited for avoiding Flint and Sovran in prebloom sprays. Where mildew pressure is high and they have been used for many years, they may also fail to provide acceptable control of mildew when used at petal fall and first cover. This is especially true for Inspire Super, which is very weak on mildew if the mildew population has shifted toward DMI resistance. Nevertheless, the DMI fungicides are still the most effective products for controlling rust diseases, against which they provide exceptional post-infection activity. If Inspire Super is used for scab control, adding a few pounds per acre of sulfur may compensate for Inspire Super's weakness against mildew. Of course, sulfur cannot be used if oil is included in the tank mix.

Captan issues:

For a variety of reasons, we are suggesting for the first time this year that apple growers avoid captan in their petal fall and first cover sprays. Growers who choose to follow this suggestion will need to avoid any prebloom applications of mancozeb or Polyram that exceed 3.2 lb/A because mancozeb

will be needed as a contact fungicide in the petal fall and first cover sprays. If mancozeb is applied at more than 3.2 lb/A in any spray, then the label does not allow for any use of mancozeb after bloom.

Our suggestion for avoiding captan in petal fall and first cover sprays is based on the increasing complexity of tank mixtures applied at those timings. Tank mixes at petal fall frequently include one or two plant growth regulators, two or three fungicides, one or two insecticides, foliar nutrients, pH buffers, water conditioners and/or spreader-stickers, and perhaps streptomycin for controlling fire blight on late flowers. These complex mixtures increase the likelihood that something in the mixture will enable the transport of captan across the cuticle into plant cells where it will cause leaf injury and/or fruit russetting. The potential for injury from captan in complex tank mixtures is especially high if the weather between late bloom and first cover is cool, overcast, and wet. We observed or received numerous accounts of fruit and foliar damage throughout northeastern United States in 2013, but the frequency of damage from captan has gradually been increasing over the past decade. Therefore, in the interests of minimizing risks of crop damage, we believe it would be wise to avoid captan in the petal fall and first cover sprays when tank mixes are complex and fruit are most vulnerable to damage.

Bee toxicity issues:

Several reports in the past year have implicated fungicides as potential contributors to widespread

honeybee mortality that is commonly known as colony collapse disorder (CCD). In particular, chlorothalonil (Bravo and generics) and Indar have been shown to interact synergistically with some insecticides, meaning that some insecticides become more toxic to some bee species when mixed with those fungicides in laboratory tests (Biddinger et al., 2013; Zhu et al., 2014). There is still much that remains unknown about these interactions. Whether these fungicides are having any real impact on bee mortality under field conditions remains unclear. Ultimately, EPA will evaluate all of the data and require label changes if there is solid scientific evidence that these fungicides contribute to bee mortality.

References:

Zhu, W., Schmehl, D.R., Mullin, C.A., Frazier, J.L. 2014. Four common pesticides, their mixtures and a formulation solvent in the hive environment have high oral toxicity to honey bee larvae. PLoS ONE 9(1): e77547. doi:10.1371/journal.pone.0077547. On-line at <http://www.plosone.org/article/doi/10.1371/journal.pone.0077547>&representation=PDF

Biddinger, D.J., Robertson, J.L., Mullin, C., Frazier, J., Ashcraft, S.A., Rajotte, E.G., Joshi, N.K., and Vaughn, M. 2013. Comparative toxicities and synergism of apple orchard pesticides to *Apis mellifera* (L.) and *Osmia cornifrons* (Radoszkowski). PLoS ONE 8(9): e72587. doi:10.1371/journal.pone.0072587. On-line at <http://www.plosone.org/article/doi/10.1371/journal.pone.0072587>

Weed Control Options for Spring 2014. D. Breth

When considering herbicide choices in perennial fruit crops, remember that the soil is a huge seed bank for many weed species. When an herbicide controls some weed species, it removes the competition for others not affected by the herbicide, allowing those weeds to flourish using the water and nutrients in the crop rows. So don't be surprised if something grows through the treatments. There are very few herbicide treatments that are adequate for the entire growing season. Think of weed control like we think of insect control in fruit crops. Is there one insecticide application that will control the long list of insects that attack perennial fruit crops using one treatment per season? NO. So we cannot expect an herbicide treatment to do the same for all the weed species that grow in orchards and fruit

plantings. Review the weed problems in your plantings, check the herbicide label for the list of weeds controlled, what growth stage to target the weeds, and find the specific rate required.

Successful herbicide treatments depend on even distribution of the residual herbicide on the soil surface. Most herbicides require water for activation in the top 2 inches of soil, the weed seed germination zone. Post-emergence herbicides such as glyphosate, 2,4-D, Stinger, paraquat, TreeVix and Venue have optimal target weed size. But bottom line, rotation of mode of action of herbicides will be key to preventing buildup of certain weeds and resistance to herbicides.

Early spring options:

Casoron CS can be used in blueberry, brambles, apples, pears, and cherries established for 1 year. Best results are achieved when CS is applied before weeds emerge or are less than 2 inches tall, temperatures must be below 70F and followed by rainfall or irrigation to wash into the weed seed germination zone, otherwise it will volatilize before it can be activated. Unless you can incorporate the granular form of Casoron, the label only allows application up to Feb 15. Casoron is effective for many annual broadleaf and grasses (at the lower rate), and some perennials (at the higher rate) but will require a tank mix with a post-emergence herbicide like glyphosate for controlling emerged weeds, especially perennials. Do not apply Casoron to sandy soils since it will go deeper into the root zone and result in crop damage.

If you plan to use Goal or Goaltender (in combination with Prowl or Surflan) in tree fruit herbicide strips, this needs to be applied before budbreak in pome and stone fruit. These herbicides have performed well in trials giving up to 60 days of control through mid-Jun. Prowl or Surflan used alone provide only 30 days control.

Chateau requires application by pink bud in apples, budbreak in stone fruit and pears. Chateau should be tank mixed with Prowl or Surflan, or other residual to extend the spectrum of weeds controlled. Chateau used at the 12 oz./acre rate will provide longer residual control than the 8 oz./acre rate.

Alion (in pome and stone fruit established for 3 years) or Matrix (in pome and stone fruit established for 1 year) are options than can be applied early spring for extended control. They are both broad spectrum control of annual broadleaves and grasses. In my trials, these herbicides typically required no more than 1 follow-up treatment. In fact, Alion continued to provide some control into the next season allowing a cover of moss to develop over the soil.

Of course, there are the old stand-bys including simazine/diuron, or Sinbar (in new plantings at the low rate or in apples and peaches) or Solicam. But if these herbicides are used regularly from season to

season, the risk of resistance especially to simazine is likely.

All of these herbicides require a tank mix with post-emergent herbicides such as glyphosate or paraquat. When perennials are actively growing, glyphosate is the most effective herbicide for those plants. A glyphosate application can be safe in spring to kill the perennials when they are smaller rosettes is the best option. But there is always the precaution on the label to not allow glyphosate to contact green bark. Glyphosate should not be used in stone fruit trees established for less than 2 years and there should be no contact with any part of a peach tree with glyphosate.

Stinger is the new option in weed control in apples with a supplemental label for NY (<http://128.253.223.36/ppds/535976.pdf>). It has both post-emergent growth regulator activity and residual activity preventing regrowth from the roots. Stinger is selective for composite family (thistle, horseweed, etc.) and legume family (vetch and clover) and some buckwheat family (curly dock). Dr. Brad Majek, Rutgers, just published an article on Stinger to get the best value, <http://plant-pest-advisory.rutgers.edu/?p=8632>. For perennial weeds like Canada thistle, asters, and goldenrod, the best results are achieved with a split application of 1/3 pint in late April or May when the rosettes emerge. Mark the spot and spray again in 60-70 days after the first application even if there is no visible growth of the problem weed. If you do not do this second application, you will see the weeds reemerge in August and September gaining strength for the root systems for the next spring. The NYS Supplemental label requires the application to be made in a minimum of a 3 foot band on each side of the tree row. There is a 30 day PHI. Consider Stinger when trying to control dandelion before they bloom and clover in row middles to reducing the attraction of bees in the orchard when we are applying insecticides. Stinger can be tank mixed with glyphosate or 2,4-D in the tree row, or with 2,4-D in the sod middles.

The Apple Research and Development program awarded continued funding to study the critical timing of weed control in new high density plantings. Stay tuned for results.

Plant Pathologists Need Your Input

Dr. Dan Cooley, UMASS and Dr. Kerik Cox, Cornell University

Apple pathologists in New England and New York would like to know how apple growers rate the importance of fungicide resistance and whether they are trying to manage it. The following short survey will help us a great deal. If growers do report fungicide resistance as an important issue in their orchards, we will use the information as justification

to apply for research and education grants to address the problem.

The survey should take less than 5 minutes on-line. We greatly appreciate your willingness to give us this very useful information. Here is the link: <https://www.surveymonkey.com/s/MFFGZWR>

Be Careful When Pruning Those Berry Canes Mario Miranda Sazo

Due to the low winter temperatures this year, blueberry and raspberry researchers are advising growers to wait to prune. The following weeks are a good time to see what type of weather injuries the canes may have experienced, and then prune accordingly. Growers should delay pruning until early April to see what kind of cold injuries (the plants may have) or what the cold weather has done to the flower buds or to the bushes in general. If winter injuries are moderate, growers need to make sure that the bushes are not too overloaded with berries by pruning their bushes a little harder.

Gary Gao, an Extension specialist and Associate Professor of small fruits with The Ohio State University expects young canes of sensitive blueberry varieties to be hit with winter injury, but growers may not see the impact that the weather had on older canes until later in the growing season. He believes that a delayed response will be seen in May or June, where all of a sudden two or three larger canes may die.

Pruning blueberry canes is an art of balance. This year growers must carefully prune to target good yield and quality. How much is enough? It is difficult to say, because different growers approach pruning differently. Some growers aim for a good yield. Other growers aim for the best quality possible. It can be hard for growers to decide how much to prune because it takes a conscious decision to eliminate some of the potential fruit. However, as much as growers are risking by pruning, there is also a risk of poor fruit quality if only light pruning is made on a plant. If a grower doesn't prune the

bushes properly and leaves too many flower buds, when the bushes come out, they can't support all those flower buds. As a result, the plants will be overloaded with berries and then all of the blueberries will be small and not very sweet.

The age of the cane does impact how much pruning should be done to a cane. Gary Gao suggests the following pruning tips for each growth stage of a blueberry cane:

Young Plantings (less than three years old): (1) Remove flower buds to encourage growth, (2) Remove short, weak stems at the base of the plant, (3) Remove short, horizontal stems too close to the ground.

Fourth Year Through Sixth Year: (1) Count flower buds on a stem and guesstimate what the yield would be for that bush, (2) Based on past years' yields, estimate whether the plant could support a little more yield or whether some buds need to be removed, (3) Remove short stems with small flower buds, (4) Remove most horizontally growing canes, (5) Keep canes that are large in diameter with big flower buds.

Mature Plantings: (1) Maintain proportions of canes of different ages: (two to three each of one-year-old canes, two-year-old canes, three- to five-year-old canes), (2) Cut out canes older than six years old to encourage new growth, (3) With good pruning, Gao says that bushes can last 50 to 75 years. But, growers must keep in mind that canes need to be constantly renewed, keeping a constant ratio of young, thriving, and mature canes.

Lime and its Benefits W. Stiles and W. Shaw Reid

Thorough incorporation of adequate amounts of lime prior to planting a new orchard is essential. The topsoil (0-8 inch depth) should be adjusted to pH 7 and subsoil (8-16 inch depth) to pH 6.5. An

adequate liming program based on soil tests should be the first consideration in developing orchard fertilization plans. Lime is the most economical source of calcium and magnesium. Regulation of

soil pH through liming is also necessary to achieve optimal response to other nutrient elements.

Type and fineness of lime. Solubility of lime, and therefore the rate at which it is effective in neutralizing soil acidity, is influenced by the fineness to which it is ground as well as its chemical composition. In general, hydrated (slaked) lime and burnt lime (oxides) are more reactive than ground limestone. Ground limestone is usually suggested for most orchard situations.

Placement of lime. Time required for lime to act is influenced by method of placement (i.e. soil contact) and by fineness of the material. In preparing soil before planting a new orchard, maximum benefit is obtained by thoroughly harrowing or rototilling the lime into the surface soil, and then plowing to work it as deeply as possible into the soil. If large quantities of lime are required it should be applied in split applications. Working one-half to two-thirds of the total amount of lime into the soil as indicated above, plus thoroughly harrowing the remainder into the

topsoil after plowing, is often suggested as an appropriate method for liming during preplant soil preparation. With some fine-textured soils that require large quantities of lime, application of about two-thirds of the total lime required in such a manner, followed by biennial surface applications of additional lime may be necessary to achieve the desired goal.

Surface applications of lime in established orchards move slowly into the soil and must be considered as long term corrective or maintenance programs. Regularly scheduled applications of lime of 2 tons per acre every two years, as predicted by soil and leaf analysis, represent the best available means of maintaining pH values of 6-6.5 and calcium and magnesium supplies in the soil. The type of lime (i.e., calcitic or dolomitic) should be determined by the need for magnesium. In most cases, even if soil magnesium is fairly high, dolomitic lime is suggested for orchards. Dolomitic lime generally has a greater neutralizing value than calcitic lime.

Will you Worry too Much or Little about Potassium and Nitrogen this Season?

M. Miranda Sazo

If you are one of those growers who worry too much about nitrogen and too little about potassium, you should know that (1) apple fruits remove significant amounts of potassium from the orchard every year, (2) sandy or gravel soils have low potassium supply power, (3) NY soils generally have low potassium levels, and (4) low organic matter leads to low potassium supply. Potassium has the highest concentration in fruit and more than two thirds of the total tree K requirement is found in fruit. Current research conducted by Dr. Cheng has shown that apple trees have a constant demand for potassium from bloom to fruit harvest and that about 55 to 60 lbs of potassium is removed at a fruit yield of 1000 bushels/acre. This number increases to about 75 to 80 lbs at a fruit yield of 1500 bushels/acre. It is critical to have a maintenance program to make up for the K removed from your orchards even if your soil K levels are adequate. If you use regular ground applications, you can apply K in the spring.

If you just worry about nitrogen, you should know that there are two windows for regular soil nitrogen application that would fit the tree nitrogen demand pattern: one is from budbreak (early April) to the beginning of rapid shoot growth (late May) and the

other is late season when soil N application no longer affects fruit quality (just before or shortly after fruit harvest). Nitrogen applied early in the season contributes directly to rapid shoot leaf development, spur, fruit set, and fruit growth in the current season while nitrogen applied late in the fall helps to build up nitrogen reserves. Therefore, soil application of nitrogen between budbreak and petal fall is probably the best way to meet the tree nitrogen demand early in the season. For orchard soils in NY and the Northeast, the amount of fertilizer N required is anywhere between 0 and 80 lbs, which would contribute 0 to 30 lbs of actual nitrogen to the trees, assuming the fertilizer uptake efficiency is between 30 to 40%. If more than 40 lbs actual N per acre is to be applied, a split application, half at a couple weeks after budbreak and the other half at petal fall or shortly thereafter, is recommended. Optimum growth of apple trees is associated with leaf nitrogen values of approximately 1.8 to 2.6 percent depending on tree age, type of fruit, and the intended market. For example, rapid growth of young trees is highly desirable for developing the canopy to capture sunlight for promoting early cropping. The optimum leaf N for young apple trees is approximately 2.4 to

2.6 percent. As trees mature, less vegetative growth is desired and the “satisfactory” level of nitrogen is generally reduced to improve color development and fruit firmness. Consider early foliar N spray for

fruit set and early fruit growth when leaf analysis shows less than 2.2 percent leaf N the previous year. Foliar N spray can extend the effective pollination period and promote cell division.

EPA WPS changes proposed in Federal Register – for public comment

Ron Gardner, Cornell Pesticide Education Management Program called this to our attention.

Executive Summary <https://www.federalregister.gov/articles/2014/03/19/2014-04761/WPSrevisions>

1. *Purpose of the regulatory action.* The Environmental Protection Agency (EPA or the Agency) proposes to revise the existing Worker Protection Standard (WPS) at 40 CFR part 170 to reduce the incidence of occupational pesticide exposure and related illness among agricultural workers (workers) and pesticide handlers (handlers) covered by the rule. This regulation, in combination with other components of EPA's pesticide regulatory program, is intended to prevent unreasonable adverse effects of pesticides among pesticide applicators, workers, handlers, the general public, and vulnerable groups, such as minority and low-income populations.

2. Summary of the major provisions. This proposal revises the existing WPS in several areas: Training, notification, hazard communication, minimum age, and personal protective equipment. The key changes are described below.

For training, the proposal requires employers to ensure that workers and handlers receive pesticide safety training every year. The content of the training is expanded to include how to reduce take-home exposure to pesticides, as well as other topics. Employers are required to retain records of the training provided to workers and handlers for 2 years from the date of training.

For notification, the proposal requires employers to post treated areas when the product used has a restricted-entry interval (REI) greater than 48 hours. It also requires that workers performing early-entry tasks, i.e., entering a treated area when an REI is in effect, receive information about the pesticide used in the area where they will work, the specific task(s) to be performed, and the amount of time the worker may remain in the treated area. Finally, the proposal requires employers to keep a record of the information provided to workers performing early-entry tasks.

For hazard communication, the proposal eliminates the requirement for a central display of pesticide application-specific information. The proposal requires the employer to maintain and make available upon request the pesticide application-specific information,

as well as the labeling and safety data sheets for pesticides used on the establishment for 2 years.

For minimum age, the proposal requires that handlers and workers performing early-entry tasks be at least 16 years old. This minimum age does not apply to immediate family members working on an establishment owned by another immediate family member.

For personal protective equipment (PPE), the proposal adopts the Occupational Safety and Health Act requirements for respirator use by handlers, i.e., fit test, medical evaluation, and training. In addition, the proposal adopts the existing California standard for closed systems.

Submit your comments, identified by docket identification (ID) number EPA-HQ-OPP-2011-0184, by one of the following methods:

- Federal eRulemaking Portal: <http://www.regulations.gov>. Follow the online instructions for submitting comments. Do not submit electronically any information you consider to be Confidential Business Information (CBI) or other information whose disclosure is restricted by statute.

- Mail: OPP Docket, Environmental Protection Agency Docket Center (EPA/DC), Mail code: 28221T, 1200 Pennsylvania Ave. NW., Washington, DC 20460. In addition, please mail a copy of your comments on the information collection provisions to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attn: Desk Officer for EPA, 725 17th St. NW., Washington, DC 20503.

- Hand Delivery: To make special arrangements for hand delivery or delivery of boxed information, please follow the instructions at <http://www.epa.gov/dockets/contacts.htm>. Additional instructions on commenting or visiting the docket, along with more information about dockets generally, is available at <http://www.epa.gov/dockets>.

Get ready for peach leaf curl sprays! Spring will be here soon and crop or no crop, we need to prevent defoliation of peaches by leaf curl fungus.

**Lake Ontario Fruit Program
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**DEC Special Permit Training Class for Non-Certified Applicators and Handlers of
Federally “Restricted-Use” Pesticides**

Wayne County, Tuesday, April 8, 2014
Registration Begins at 8:30 am (English)
and at 12:30 pm (Spanish)
English Session - 9:00 am to 12:00 pm
Spanish Session - 1:00 pm to 4:30 pm
 Cornell Cooperative Extension Wayne Co.
 1581 Rt. 88N, Intersection of Hydesville Rd.
 Newark, NY

Orleans County, Wednesday, April 9, 2014
Registration Begins at 8:00 am
English & Spanish sessions
8:30 am to 12:00 pm
 Orleans Co. Coop. Ext. Fairgrounds Trolley Bldg.
 Rte. 31 between Albion and Medina
 Knowlesville, NY

Certified Supervisors are required to attend the first 30 minutes of training!

\$20 per DEC Special Permit - You must pre-register by April 3!

To register: Contact Kim Hazel: 585-798-4265 x26; krh5@cornell.edu or

Mail registration and check to: CCE, Attn: Kim Hazel, CCE, 12690 NYS Rt. 31, Albion, NY 14411

Or FAX registration to: 585-798-5191 **Make check payable to: “Cornell Cooperative Extension”**

April 8, English AM, Wayne Co. April 8, Spanish PM, Wayne Co. April 9, Orleans Co.

Grower Name (supervising certified pesticide applicator)

Farm Name DEC Applicator ID#

Farm Address

Names of non-certified applicators attending: \$20 each, choose session

_____ Eng ☐ Span ☐

_____ Eng ☐ Span ☐

_____ Eng ☐ Span ☐

Number attending x \$20 = total submitted