

Horticultural and Pest Management Notes, produced by Lake Ontario Fruit Program, CCE

From FAX: 585-798-5191 D. Breth Jul 30, 2013

Please Pre- register to attend the 2013 Geneva Field Day NOW! Aug 1, 8:00 a.m. to 5:30 p.m.

Bring sunscreen, an umbrella, raincoat, and a seat if you need it. We have an exciting day planned. The field day will be composed of two concurrent day-long tours, one of tree fruit presentations and another tour of grapes, hops and small fruit presentations. The lunch hour will feature an address by CALS Dean Kathryn Boor, NYSAES Director Tom Burr, and an announcement of the new names for Cornell's recently released NY1 and NY2 apple varieties. Also, there will be a FREE beer sampling to spotlight the newly initiated hops research taking place at the Station. After lunch, equipment dealers and representatives from various companies will showcase their latest products and technologies to improve fruit crop production and protection. The cost of registration is \$30 per person (\$40 for walk-ins) for all-day attendance. Lunch will be provided. Pre-registration is required for the \$30 rate, register now by calling or emailing Gemma Osborne at 315/787-2248, gro2@cornell.edu.

Can you believe we are already looking for topic suggestions for EXPO 2014? Email Debbie or other team members with your ideas.

Pest Management Notes....

Spotted wing Drosophila first trap catch has been noted in Sodus close to the lake in day neutral strawberries and sweet cherries but none noted to date in fruit. Other traps in the Lake Ontario border counties have not yet detected SWD. But Ontario County traps seem to be quite active. For more information go to http://blogs.cornell.edu/swd1/2013/07/24/wayne-county-first-report/.

Japanese beetles are going wild on some of these new plantings and Assail, Calypso, Imidan, or Sevin, Endigo or Voliam Xpress but I would save the Voliam for internal lep sprays.

Codling moth trap counts are high in our high pressure orchards, but some orchards had pretty low counts for the week. We have accumulated between 1260-1300 DD 50F and are approaching 50% egg hatch for this generation. So sprays must be applied before mid-week for adequate control. For the orchards where trap counts never dropped below 10 moths for the week, you need to maintain a 2-week spray schedule to prevent this generation from building up and contributing to September flights. Oriental fruit moth trap counts are low in general where we are trapping. Recommended options in apples include Altacor, Assail, Belt, Calypso, Delegate, or Voliam Xpress. In peaches, you can use Altacor, Assail, Delegate, or Voliam Xpress. Pyrethroids and OPs may be less suitable because of locally resistant populations. This is also a suitable time for Cyd-X, Carpovirusine, or (in apples, pears and plums only) Virosoft applications against codling moth. For control of OFM, alternate row middle applications will not be as effective as whole orchard sprays in high pressure blocks. Assess the pressure in your specific situations, check the pre-harvest intervals, and determine whether a full or border spray might be in order.

Apple maggot trap counts are not too high so far, but they tend to peak the first week of August: Imidan, Assail /Calypso, or pyrethroids will control AM but read the labels for the correct rate to use for apple maggot. Do not stretch intervals past 10 days or an inch of rain for maggot control where you have a history of pressure. This is especially true for Altacor and Delegate which only mention "suppression" at higher label rates so not the best choice for apple maggot control under high pressure. Research by Harvey Reissig shows that the new materials result in more stings from apple maggot since the newer insecticides do not kill adults like the old OP's did. We also

experienced much higher trap counts last season perhaps because we are not killing the adults when using neonics, Delegate, Altacor or Belt.

Art Agnello reminds us that **European Corn Borer** moths have a final flight that extends to the middle of September, and that the offspring can inflict last-minute fruit feeding damage to later varieties, and shoot damage in newly planted trees. Delegate (PHI = 7 days) is a good option for control of European corn borer. Also, one or two late sprays of a B.t. product like Dipel can go a long ways toward minimizing this injury, and the 0-day PHI is compatible with any harvest schedule.

Woolly apple aphids still a problem? WAA is best controlled by insecticides such as Diazinon and Thionex but some newer products such as Admire, Assail, or Beleaf may offer suppression (for Assail, addition of a non-ionic surfactant or horticultural mineral oil will improve activity). Good coverage to soak through the insects' woolly coverings is integral to ensuring maximum efficacy.

Scout mites frequently – we are changing the treatment threshold to 7.5 mites per leaf for August. Acramite is still a good miticide for 2-spotted spider mites. But for red mite populations, lean toward Portal (14 day PHI), Kanemite (14 day PHI), or Nexter (25 day PHI) for control at this point. If populations are low and you want to hold them there, growers are having some success using Stylet oil (0 day PHI)

San Jose Scale trap counts increased significantly in Geneva traps this week. That raises the point that in orchards with a history of scale "freckles" on apples, recall that insecticides effective for crawlers needed this week in our territory against crawlers include Admire Pro (7 day PHI), Assail (7 day PHI), Centaur (14 day PHI), Esteem (45 day PHI), Guthion (14/21 day PHI, last time for use!), Imidan (7 day PHI), Movento (7 day PHI). Voliam Xpress (21 days PHI) also lists SJS on the label if that is your material of choice right now for CM and AM.

Leaf nutrient analysis: It is time to start collecting leaf samples for foliar nutrition analysis – leaf samples should be collected 60-70 days after petal fall – typically late July and early August, taking the mid-shoot leaf from this year's growth at the height of the majority of the canopy. Pick leaves that are exposed to the sun (not shaded interior leaves). Collect 100 leaves from the same variety in the orchard. Take 1-2 leaves from each of several shoots (not spur leaves) from several trees. It is helpful to match these samples with a soil analysis as well. Samples should be taken from fruit plantings every 3 seasons rotating around the farm.

Strawberry renovation should be well underway but here is a review... Ensure that the field has adequate soil moisture since herbicides are more effective against actively growing weeds. 2,4-D is often used to reduce broadleafed weeds in strawberry fields at the time of renovation. Since 2,4-D is taken up via leaves and not roots, it is applied right over the strawberry planting immediately after harvest. Fortunately, strawberries are tolerant of 2,4-D whereas most other broad-leafed plants are not. Wait about 5 days to give the 2,4-D a chance to be absorbed, then mow and cultivate. After cultivation and narrowing of the rows to 8-10 inches wide, a pre-emergent herbicide may be applied to prevent weed seed germination for the rest of the year. Sinbar is the most effective against weeds, but it can also damage the strawberry plants - especially if used in consecutive years or if the root system is not healthy. Devrinol is safer to use at this time. Applying a pre-emergent herbicide is the last step in the renovation process.

Strawberry fertilizer? Plantings in the first fruiting year or older are typically fertilized at renovation with 70 lb actual N/A at renovation in the form of ammonium nitrate, urea, or calcium nitrate. Consider adding an additional 20 – 30 lb. actual N/A in late summer depending on stand density, and vigor especially on lighter soils. The preferred sources of nitrate nitrogen for strawberries are ammonium nitrate and calcium nitrate, but if not available, growers can use urea as an alternative but are reminded urea is subject to volatilization during warm humid weather and may cause plant injury (leaf blackening). It should be applied on cooler, overcast days whenever possible. Another alternative nitrogen source is CAN (calcium ammonium nitrate) which apparently is of much less regulatory concern and more widely available.

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.