



A Time for the field for LOF team

Petal Fall/Thinning Summit – May 22-23: 144 growers, consultants and industry members attended 1 of 2 field meetings to learn about the current updates on emerging pests like brown marmorated stink bug, spotted winged drosophila, and other typical disease and insect pests that need to be managed after fruit set. Attendees also learned about fruit tree nutritional requirements for the season, changes in labor procurement, and how to thin the many varieties of apples for the optimal size and value.

Precision Crop Load Management for Fruit Industry: The CCE Lake Ontario Fruit Program and Dr. Robinson organized a precision thinning workshop for NY growers and consultants in Geneva on May 1. More than 30 people attended the meeting and learned about a new precision thinning program to manage apple crop load. Dr. Robinson also introduced the precision crop load management concept at the petal fall thinning meetings. More than 20 cooperating growers, consultants and extension staff implemented the precision thinning program on Gala and Honeycrisp cultivars in NY. This new method allowed growers to first determine a target fruit number and the initial fruit number per tree and then apply sequential thinning sprays. The program utilized the Cornell Apple Carbohydrate Thinning model and the Fruit Growth Rate model to provide real time information to growers via the LOF *Fruit Fax* and LOF newsletter. The program gave growers confidence to thin when appropriate and was easily applied to more simple trees such as the Tall Spindle or Super Spindle where fruit counting of whole trees was easier than large trees.



Fruit Farm Business Summary: Data collection continues but is running behind normal due to growers filing tax extensions as a result of delays by Congress in passing laws which effected the IRS development and release of tax forms for 2012. Many growers also were distracted this spring by crop insurance record audits for their 2012 crop insurance claims. **Preliminary** data indicates that on average Fruit Farm Business Summary growers received \$1,053 per bearing acre in crop insurance indemnities on the 2012 apple crop. To date there are 3,000 fruit acres represented in the 2012 Farm Business Summary and 1,192,000 bushels of apples. Even though fruit crop yields were down significantly from the previous year at 511 bushels per acre (vs. 786 bu. in 2011), growers still needed to spend \$5,722 per acre (vs. \$5,950 in 2011) in operating expenses. All of these numbers are preliminary as 6 additional farms will likely be added to this data by mid-August.

Fire Blight update: The weather has been very conducive for fire blight epidemics, with many new tree plantings coming into bloom during very warm weather. The greater tree numbers per acre make blossom removal impossible and the practice is now replaced by applying copper, streptomycin, and oxytet in new plantings during bloom. Streptomycin resistant bacteria have been detected in western NY and 2 new sites have been identified for the 2013 season so far increasing the risk of fire blight in our apple and pear plantings. This has increased the cost of managing fire blight in new plantings, especially since NY-2 appears to be very susceptible to this disease in new plantings. Many new plantings are at risk resulting in growers removing 10% or more of the new trees, needing to walk orchards to remove infected trees on a regular basis, and installing deer fence to prevent the deer from spreading it in the row as they feed on the new shoots. Debbie just returned from the ISHS Fire Blight Workshop in Zurich, Switzerland, as the only representative from NY (the

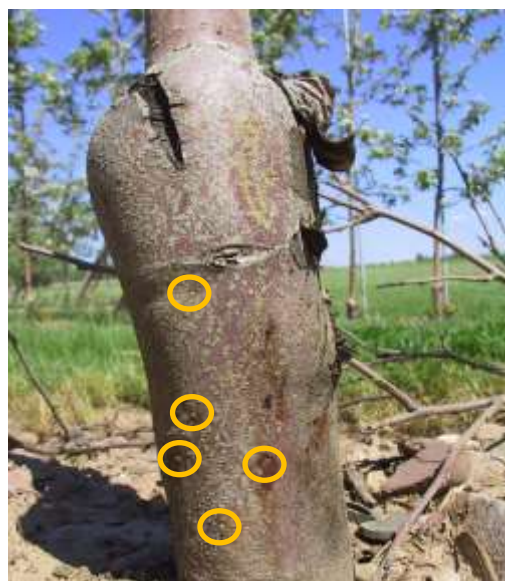
entire Northeast) attending. It was an excellent opportunity to review new research. Fire blight has been most recently detected in Kazakhstan (from where our apple selections have come from) and parts of Russia.

Debbie presented fall weed control results to >20 attendees at the Precision Nutrient and Weed Management Workshop at Lamont Fruit Farm in April. Several fall weed control treatments were tested to determine how long into the spring the residual control would hold. The treatments were applied on Oct 17, 2012, then untreated plots, and all treatment plots without a fall residual herbicide including glyphosate, gramoxone, 2,4-D + glyphosate, and 2,4-D were treated on May 27, 2013 using post-emergence herbicide. The main weeds that successfully germinated in these non-residual herbicide plots were common winter annuals that are favored by growers. But the clear benefit, as the summer annuals began to germinate in mid-May, was that the growers did not have to add weed control to their very busy spring schedule of scab, fire blight, fertilization, fruit thinning sprays, and tree planting until later in the spring. There is still a question of whether these early spring weeds will compete with tree growth for nutrients that have been applied in early spring, especially in high-density orchards. Fall applied Pindar (an herbicide under development by DOW), Chateau/Prowl, and Alion held percent weed cover below 10% through mid-June. Goal, Matrix, Gramoxone, and glyphosate w/wo 2,4-D treatments broke 10% by May 20, around petal fall in apples.

Governor Cuomo's Consolidated Funding Application – A group of CCE extension educators along with ED of Wayne CCE, Beth Claypoole (PI), received nearly \$200,000 in funding for the proposal "Increasing Cooling Space for Small and Limited Income Farms". This grant is giving a 50% cost-share (3K/6K Max) for approximately 70 growers to increase their profitability by renovating existing or building new coolers or freezers. Having cooling space on-hand extends marketing window and reduces postharvest losses, and allows for business expansion. Our team of 5 developed an application for growers. We received nearly 120 applications. The team recently reviewed applications from these farms. The committee rated the applications and recently decided who will receive funding. The team will provide technical assistance to funded applicants.

NEW Pests detected! Is this the beginning of something bigger?

Shot hole borer or Ambrosia beetles have been detected in 4 sites so far in high density tall and super spindle plantings, nurseries and established orchards where fire blight has also been detected. The questions is, "Which came first?" Is the fire blight the primary stress that the shot hole borers are attracted to or are they helping to spread the fire blight. There borers are cited in literature as insects that are attracted to injured or drought stressed trees, but I have only seen them in a peach block more than 20 years ago. They have not been noted in orchards as significant populations until this season. Stay tuned. We are working with Art Agnello and Dan Gilrein to hopefully identify the species involved and look into possible controls. The yellow circles show small holes with frass exuding from borer tunnels, and the photo below shows the borer in the trunk.



DEC Special Permit Training: 273 non-certified pesticide applicators learned about the environmental, human and non-target risks when applying pesticides and how to mitigate the risks by following the pesticide labels. They learned about the various types of chemical resistant gloves and other personal protective equipment needed with and without a spray cab on the tractor. They learned about wind speed and preventing drift off the target crop. This is an annual collaboration among the LOF, Cornell Veg Team, and the Eastern NY Hort team to develop the materials used in the training to keep applicators safe.

