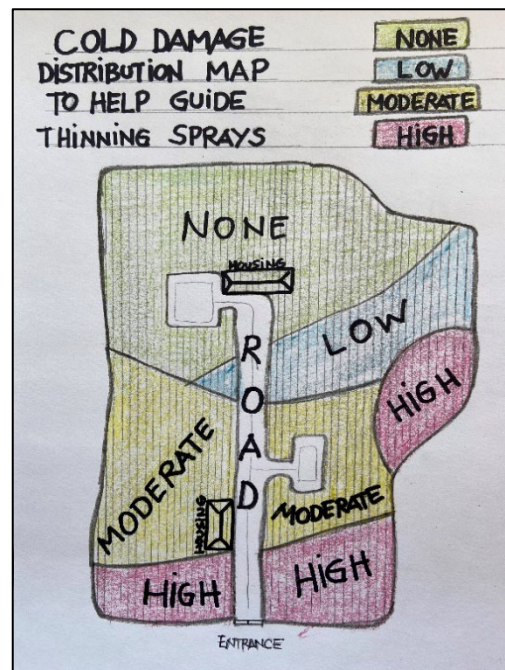




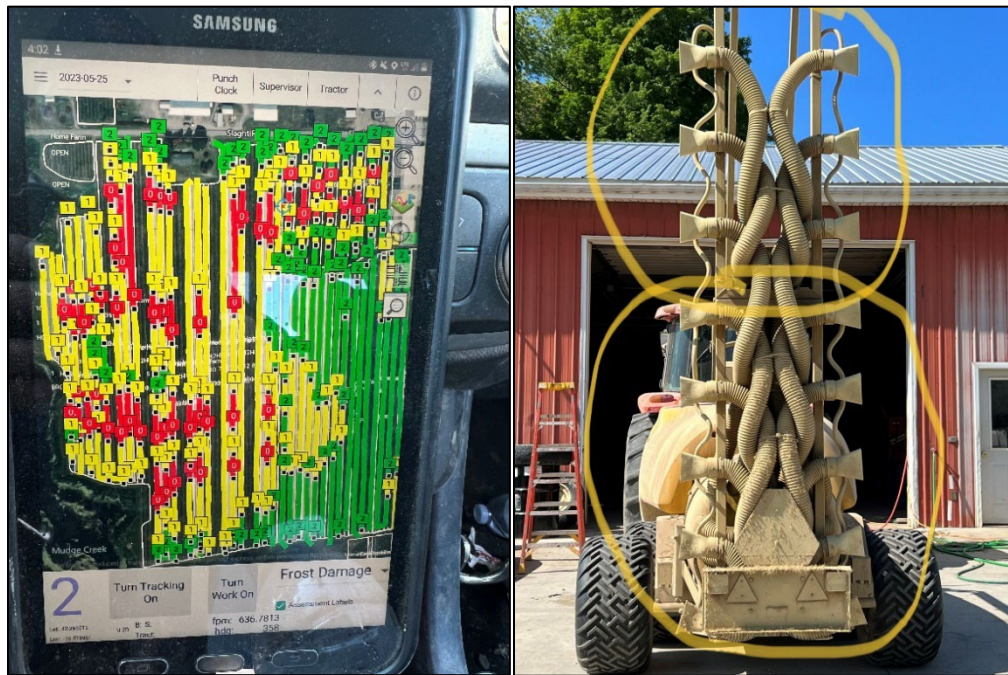
**“Fruit Facts” – Saturday, May 27<sup>th</sup>, 2023**  
**Mario Miranda Sazo, Janet van Zoeren and Anya Osatuke**

**To Do Today**

- **Read/review the article sent this past Wednesday May 24 titled ‘2023 WNY Thinning Recommendations for Blocks That Were Damaged or Not by the Recent Frost’.** The article provides detailed information about:
  - An assessment of the damage to the WNY apple crop.
  - Explains how to conduct fruitlet evaluations for cold damage.
  - Predicts optimum thinning windows for blocks located south and north of 104.
  - Suggests recommendations for several cultivars for chemical thinning at 10-13mm fruit size.
  - Lists chemical thinning programs for young trees.
  - And provides detailed spray mixing instructions considering tree row volume.
- **Growers can still develop and use practical ‘cold damage distribution maps’ to guide coming thinning sprays (see below sketched cold damage map):**
  - By now growers should have a better idea of the extend of cold damage at their farms. This information can be hand-drawn and colored by cold damage levels as shown in the drawing.
  - Hopefully, several growers carefully assessed their blocks (bottoms and tops with the use of ladders) and did not find damaged fruitlets and the crop needs to be thinned with full/normal rates.
  - For those growers with a **whole range of damage levels** (none, low, moderate, high) with some blocks showing no damage and others showing massive fruit damage, we suggest the use of **cold damage distribution maps** to guide thinning sprays.
  - If through a systematic assessment of damage levels growers find that only **20-30%** of the fruitlets are damaged then a full dose thinning spray will remove the damaged fruitlets and also thin of excess fruits.
  - If the damage level is more severe where around **50%** of the fruitlets are damaged then a reduced rate thinning program is prudent.
  - However, if damage levels are in the **70-75%** level then no thinning sprays is suggested.

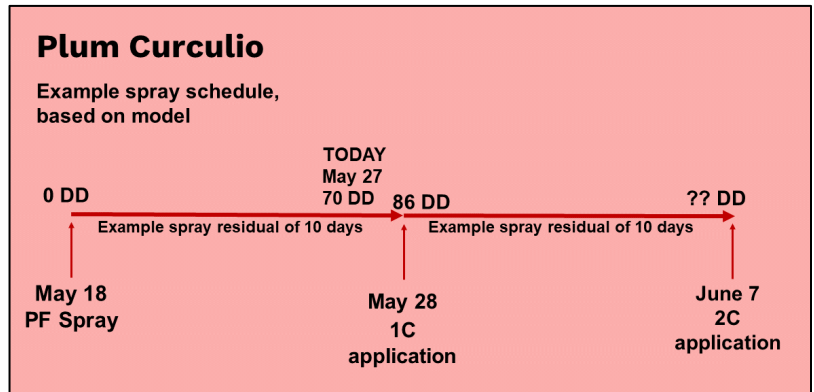


- **First time use of a variable-rate spray chemical thinning application (for tops, bottoms, or both) to adapt to a changing canopy with low, medium, and high cold damage levels:**
  - Recently, a very practical and detailed cold assessment/block helped grower Paul Wafler (Wafler Farms, Wolcott, NY) to develop his own cold damage distribution GPS-maps to guide thinning sprays for a higher level of precision (see below pictures provided by Paul).
  - The map sections colored in **green** color will receive normal thinning sprays at the tops and bottoms of the trees.
  - The map sections colored in **yellow** will receive thinners only on the tops.
  - The map sections colored in **red** won't be sprayed with chemical thinners.
  - Thinning sprays guided by the cold damage distribution GPS-maps (for several hundred acres) were successfully started yesterday and will continue today, tomorrow Sunday, and will finish next week.



- **Expected optimum thinning window:**
  - The main thinning window started yesterday (Friday May 26) or starts today Saturday May 27 (will probably close on Monday May 29) for blocks located south of 104.
  - For blocks located north of 104, it will start on Sunday May 28 to Wednesday May 31, or possibly until Thursday June 1.
- **If you have not done it, there is still a little bit of time to assess damage before thinning sprays:**
  - Evaluate **50 clusters/block** (5 trees/block, 5 clusters/tree at the top and 5 clusters/tree at the bottom) and get a percentage of the cold damage fruitlets/block.
  - Rank the cold damage as none, low, moderate, or high, and produce a cold damage distribution map to guide your thinning program.
  - Use ladders and check the tops! when evaluating cold-injured blocks.
- **The frost damage this year complicates the thinning program for many orchardists:**
  - However, with proper assessment of the damage and waiting until today or tomorrow Sunday to spray (for blocks south of 104) will allow a more informed decision to be made. In almost all cases there is still substantial fruit in the tops of the trees that need thinning. Thus, don't lose the opportunity early next week (for blocks located north of 104).
  - For those growers who did not experience any frost damage, there is a large crop that needs an aggressive thinning program.

- No risk of **Apple scab or Fire blight** this week. If you see any fire blight ooze in your orchards please let me know. I've seen it in research blocks but have not yet seen any in commercial orchards. Apple scab foliar symptoms began showing up in hotspot blocks this week.
- **Watch for powdery mildew.** We have begun seeing mildew symptoms in high inoculum locations. Some options for PM control include Flint extra, Inspire Super, Luna Sensation, Merivon, Miravis, Rally, and others.
- We've begun to see PC damage scars in apples and stone fruits. **Continue to keep Plum Curculio coverage in your blocks!** With the cooler temperatures we've had the past week, it will likely be a long plum curculio oviposition season. As a reminder, plum curculio continues to oviposit until we reach 308DDs past petal fall. At this time, we're at around 70DD at most locations (using a petal fall date of ~May 18<sup>th</sup>). To be more precise, calculate using NEWA and your own petal fall and spray dates.



Materials effective against PC include: Exirel, Imidan and Verdepryn (also control OFM), Actara (also controls Rosy apple aphid), Assail and Avaunt.

## On The Horizon

**Oriental Fruit Moth** Degree Day accumulation has reached ~180-200 degree days across the region (out of 350DD to time a larvicide application), so no OFM insecticide is recommended for this week.

**Codling moth** flight began at the begin of the week, and we are at around 30DDs.

**No action required for leps yet!**

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. Copyright 2023. All rights reserved. No part of this material may be reproduced or redistributed by any means without permission. Cornell Cooperative Extension provides equal program and employment opportunities.

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