

# Summary – PCA Breakfast

County

16. May. 2024

---

## Topics for Discussion

1. Review early spring pest issues such as tortricid larvae, grape leafhopper nymphs, spider mites, mealybugs, sharpshooters, powdery mildew, and weeds.
2. Updates from the participants on pest issues and vine disorders observed.
3. Monitoring and best management practices including new and soft materials or conventional control options if needed.
4. Discuss timing of systemic insecticides targeting mealybugs for maximum uptake relative to cultural practices (leaf removal and shoot thinning) and soil texture.

## Other topics

1. Events
  - Pinot Fest May 17-19
  - Pear and Grape Day May 28<sup>th</sup>
  - Oakville Grape Day June 5<sup>th</sup>
  - Soil Carbon Workshop June 12<sup>th</sup>
2. Walnut orchard study site
  - Need collaborators who grow walnuts to test traps
  - PCAs and/or Growers welcome to help out

**7:30am – 7:40am = Introductions and Other Topics**

**7:40am – 9:00 am = Discussions**

**1. Vine Development**

- a. Bloom starting

**2. Early season vineyard pests**

- a. Leafhoppers

- i. Maybe fewer VCLH adults than in previous years
- ii. Although we had a mild winter (expect opposite)
- iii. Lake Co. – Smaller populations in recent years
- iv. High point 7-8 years ago
- v. Since then, switched over to oils and lime sulfur (fore Esca control)
- vi. Oils suffocate early instars (can't clean pores like adults)
- vii. Houston Wilson's *Anagyrus* wasps – need a survey of what the parasitoid populations are; he is currently processing our samples from vineyards in the north coast for parasitism levels from the eggs of VCLH
  - 1. Has to overwinter in another parasitoid's eggs (overwintering host)
  - 2. May not have survived in Mendocino, but maybe Lake they did
  - 3. Distance of vineyard from overwintering hosts matters
  - 4. Overwintering hosts overwinter as adults which makes the developmental timing tricky
  - 5. Populations in Davis survived, but they may not have in the north coast

6. Houston's lab is running genetic analysis of samples taken in 2023 to see if the *Anagyrus* species varies from Davis to North Coast
- viii. We don't have the answer as to why they aren't well established after release
- ix. Lacewing control of Leafhopper grant – Rejected
- x. Alternate hosts for leafhoppers (i.e., pears) – do pear orchards next to vineyards have higher VCLH populations or overwintering success?
- xi. VCLH goes into quiescence instead of diapause; can reproduce as soon as it starts getting warm
- xii. Western Grape LH needs to feed on grapevine tissue before ovaries develop to lay eggs (develop later in the spring than VCLH)
- xiii. Basal leaf removal for control of VCLH – control of 30-50% of the population; can't crawl back up the vine after being removed to the vineyard floor
  1. Timing of basal leaf removal?
  2. Post-fruit set is good for not affecting crop load
  3. Pre-bloom leaf removal can reduce crop, but also reduce mildew and VCLH eggs
  4. During and 2 weeks after fruit set is best for crop loads and controlling VCLH (Source: UC IPM)
  5. Also good to remove leaves with feeding damage if possible
  6. Eggs crack as leaf dries out
- xiv. Leafhoppers prefer glabrous leaves (or leaves without tomentum/hair on bottom of leaf)

### **3. Mites/Pacific Mites**

- a. New organic chemicals
  - i. Testing by Bob van Steenwyk
- b. Oils for control of mites
  - i. Seems to work well; oil only
  - ii. Maybe in combination with dry-dust sulfur in two week cycles
  - iii. Most of the time mites are issues due to dust conditions and unmaintained roads
  - iv. Also impacts beneficial species
- c. Focusing early helps maintain low populations of mites
- d. Mite issues
  - i. More in slow-growing vines (vines aren't outgrowing damage caused by mites)
  - ii. Prefer leaves with tomentum, less exposure to pesticides and oils
- e. Limiting dusty conditions
  - i. Chipping wood to spread across dirt roads to limit dust emissions
  - ii. Dust-off (Magnesium chloride) – expensive, but holds onto moisture from the air to limit dust emissions

### **4. Ripping out vineyards**

- a. More vineyards are considering reducing farmed acreage
- b. VESCO – makes it a lot harder to farm grapes or remove grapes; permit process to remove grapes takes 1-2 years to approve so the vine can be removed
  - i. Can't do any soil disturbance (no vine removal or post removal)

- ii. Can do anything above soil, but this often goes hand-in-hand with soil practices (e.g., no drip line then the vines need to go)
- iii. Need VESCO permit to alter soil profile (e.g., planting, trellising) of  $\geq 1\%$  of the vines
- c. Can do minimal management to reduce pest pressures, but it's healthier for the soil to leave fallow
- d. Cutting trunks and painting with glyphosate would kill vines, but most large companies are glyphosate-free now
- e. Other varieties – maybe a large over supply of specific cultivars right now; particularly by region (e.g., Pinot Noir in North Coast or Cabernet Sauvignon everywhere)
- f. More imports of wine from other countries

## 5. Spotted Lanternfly

- a. Egg masses identified in bronze sculpture at Truckee CDFR stop and sterilized/removed/washed in Sparks
- b. Egg masses remained and still made it to Petaluma
- c. Three more egg masses found upon unloading and the statue was fire-sterilized
- d. Control
  - i. Systemics
  - ii. IGR
  - iii. Parasitic oils, neem oils
  - iv. Pyrethrin
  - v. Soaps and botanical oils
  - vi. Information from Penn State and Cornell University
- e. Can kill a grapevine from feeding over a few years
- f. Hosts
  - i. Tree of Heaven – preferred host of SLF and makes SLF unappetizing to predators

- ii. Grapevines – Feed until death of vine; decline each year
- g. Adults start emerging in July
- h. One generation per year (on East Coast)