

Summary – PCA Breakfast

Mendocino County

17. April. 2024

Topics for Discussion

1. Pre-Discussion: Events and Other Topics
2. Early Season Pests
3. Alternative Crops to Grapevines
4. d
5. e
6. f

Other topics

1. a
2. b
3. c

7:30am – 7:40am = Introductions

7:40am – 9:00 am = Discussions

1. Pre-Discussion

a. Events

i. Vertebrate Field Day – **July 15th**

1. Bird and Bat Boxes

2. Ground and Vineyard Rodents

ii. Other Mendocino/Lake Upcoming Programs

1. Olive and Grape Field Day (**TBD – Likely Last week of July**)

a. At Olivino this year

2. Small Vineyard Management at Oakville (**May 15-16**)

3. Oakville Grape Day (**June 4th**)

4. LAMP Assay for RedBlotch (**August 6th**)

b. Topics from Attendees

i. Review vineyard insect pests and diseases during early shoot growth.

ii. Discuss vine mealybug spring programs, mating disruption options and inspecting nursery green-growing plants for vine mealybug before planting.

iii. Group discussion and reporting on monitoring for sharpshooter, scale and other insect pest and management options.

c. Pests of Concern – Early Season

i. 2 - Cutworms

ii. 1 - VMB entering the county

iii. 2 - Mites

iv. 1 - Thrips

d. Alternative Crops

2. Early Season Pests

a. Frost damage on non-frosted pinot vineyard

i. But no frost occurred

- ii. Pinot leaf curl?
- iii. Bud mite?
 - 1. Need to dissect buds to look for them
- iv. Anderson Valley
- v. Maybe also near Santa Rosa

b. Early mites

- i. Spider mites in pockets (50-70 on leaf)
- ii. Currently might be more mites and leafhoppers than usual
- iii. Early leaf removal helps remove viable eggs of leafhoppers and reduces risk of fungal issues

c. Leafhoppers

- i. 2% oil works but can burn young or weak vines
- ii. Maybe more survived this winter due to fewer freezes
- iii. Virginia Creeper eggs appear 1-2 weeks earlier than Western Grape
- iv. Don't want to miss first generation

d. Fewer hard freezes 2024-2025 Winter than average

- i. Allows better overwintering success

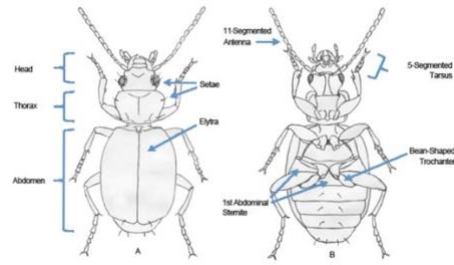
e. Cutworms

- i. Spotty damage on buds
- ii. Control is reactionary
 - 1. Bait or DiPel Pro
 - 2. Diatomaceous earth

f. Carabidae beetles

- i. These are predatory beneficials

ii.



iii.



g. Tenebrionidae Beetles (Darkling Beetles)

- i. Look very similar to Carabidae Beetles
- ii. But these are pests

iii.



h. LBAM

- i. Very small in early instars
- ii. Many Lepidoptera have a black head capsule in first instars
- iii. Webbing is often left over

i. Vine Mealybug

- i. Oils suppress the first instars of most mealybugs
- ii. Crawlers (1st instars) are also mobile and can avoid the oil applications
- iii. Trapping
 - 1. Is trapping being used in areas where vine mealybug has not been found yet?
- iv. Vine mealybug mapping
(<https://gis.countyofnapa.org/portal/apps/webappviewer/index.html?id=6e72781db6b24de3a5945cdeee8dcae5>) Napa
- v. Pheromone disruptors are very worth it if organic
- vi. Can be shipped with new vines
 - 1. Like to hide under the grafting wax
- vii. Not sure that Vine Mealybug can't establish in Mendo/Lake counties

j. Pest Control Districts

- i. Napa has one already
- ii. Sonoma is pushing for one

k. Pierce's Disease

- i. Might be too cold in Mendo/Lake
- ii. But is a persistent problem in Sonoma County
- iii. Moving equipment between vineyards is a concern and can spread infected vines
- iv. Still need to inspect vines that are being planted

3. Alternative Crops

a. Potential crops

- i. Existing
 - 1. Olives

2. Grapes
3. Pears
4. Walnuts
- ii. Predicting future trends
 1. Have to plan out 15-20 years
 2. What will be in demand then?
- iii. Grapes
 1. Failing
 2. About 10—12% removal in Mendo/Lake
 3. Ca Acreage report for vines coming online
 4. Can use satellite imagery to identify actual acreage being “Mothballed”
 - a. (company: Land IQ)
 5. Allied Grape Growers compile sales of grapevines each year
- iv. New Crops Being Planted
 1. Making money through various crops is the challenge
 2. Areas not big enough for alfalfa
 3. Contracting is not feasible
 4. Agave (in Sonoma County)
 5. Berries
 - a. Blueberries
 6. Stone Fruits (Peaches)
 - a. Fresh to market or processed?
 7. Livestock
 8. Cut Flowers
- v. Traits of new crops
 1. Frost avoidance
 2. Be able to make a profit
 3. Works on the scales of Mendocino/Lake Ag
 - a. Transport logistics

- b. Economy of scale
 - c. Co-op style?
 - i. Co-ops need to be managed well
- 4. Marketable
- 5. Infrastructure exists already or can be repurposed from vineyards
- 6. Cost of energy to process the crop
- 7. Control over quality (custom processing)
 - a. Don't mix different quality produce
- vi. Co-Operatives
 - 1. Former pear co-op in Lake County
 - 2. Requires high quality control
 - 3. Cater to the growers with better practices
- vii. Historic crops
 - 1. Hops
 - a. Not currently to scale in the North Coast
 - 2. Prunes
 - a. Removed because grapes outperformed
 - b. Processing is in the Central Valley
 - i. Shipping cost was high
- viii. Other ideas
 - 1. Field to finished product without processing and shipping costs
 - 2. Farmer market applications are increasing

4. Own-rooted vines

- a. Washington state is starting to get Grape Phylloxera
- b. Will have to replace vineyards now
- c. Reduce market supply
- d. Oregon as well
- e. Rootstocks have an impact on the wine flavor and quality
- f. Rootstocks like 039-16 do not result in impressive wines

- g. Combinations of rootstocks and scions change red wine quality
- h. Changes grape chemistry and may impact fruit based on phenological development

5. Products

- a. Vegetable oil based product
 - i. May help induce drought resistance
 - ii. Raw corn oil
 - 1. Triachontanol content?
 - iii. Prolifics = Brand name
 - iv. Ripening effects
 - v. Downsides to this?
 - vi. Triachontanol resources:
 1. <https://www.sciencedirect.com/science/article/pii/S2666154322000849>
 2. <https://www.tandfonline.com/doi/full/10.1080/17429145.2011.619281#abstract>
 3. <https://link.springer.com/article/10.1134/S1021443723601842>
 4. https://www.researchgate.net/profile/Mahaveer-Suman/publication/335365874_Effect_of_plant_growth_regulators_on_fruit_crops/links/5d6015bda6fdccc32ccc7ffd/Effect-of-plant-growth-regulators-on-fruit-crops.pdf (page 3)
 5. <https://www.tandfonline.com/doi/abs/10.1080/07352688509382197>
 - vii. Proline
 1. <https://onlinelibrary.wiley.com/doi/full/10.1111/ajgw.12523>

2. <https://core.ac.uk/download/pdf/235694171.pdf>
3. <https://ift.onlinelibrary.wiley.com/doi/abs/10.1111/j.1365-2621.1969.tb10327.x>

6. Mothballing Vineyards

- a. Methods
 - i. Low input (irrigation and fertilizer)
 - ii. Fewer growing and pruning points
 1. cane pruned or 4-spur head trained
 - iii. No-touch
 - iv. Hedging style for pruning