

# First Thing.. It's a Drought Year: Turn Your Water On Now?!

- This was a drought year in the AVA
- Vines and grapes will suffer if they are water stressed
- ... particularly early on through bloom and fruit set
- Most irrigation should be turned on now or earlier already
- Look for signs of under or over watering
- Review the irrigation presentation on the Lamorinda Winegrowers Website: <a href="https://lamorindawinegrowers.com/wp-content/uploads/2019/06/Vineyard-irrigation-ppt-meeting-6-2-2019-1.pdf">https://lamorindawinegrowers.com/wp-content/uploads/2019/06/Vineyard-irrigation-ppt-meeting-6-2-2019-1.pdf</a>

# First Thing.. Visual Signs of Water Needs

- Look at tendrils near the growing tip
  - are they dry or green and dancing upwards
  - Are angled they sideways or horizontal
  - Are they dried out, or not present (too little water)
- Look at overall rate of grow and distance between leaves
- Look at the growth of laterals
- Look at lower leaves: are they dry or turning yellow prematurely?
- Review the Irrigation Presentation for pictures and much more information

# What's the Fuss about Powdery Mildew?



- It's the number <u>one</u>, <u>two</u> and <u>three</u> most damaging disease for grapes and grapevines
- PM on leaves eats away the green growing tissue and creates yellow or white scars
- PM on canes and stems causes tissue damage
- And if PM infects grapes it can destroy your crop, or lead to suboptimal ripeness and flavors

## Powdery Mildew in da AVA!

- In the Lamorinda AVA, powdery mildew is everywhere,
- ..is constantly trying to infect and overwhelm your grapes and vines
- ... and multiplies like crazy when the temperatures are moderate and slightly damp
  - Oh, and it will destroy your vegetables and other plants as well..

## Okay Then, How Do We Find It?





## Powdery Mildew Damage on New Shoots



# PM Curling Edges of Leaf



# Look for Yellow Spots

Move the leaf into direct sunlight to better see the powdery mildew!



# Brown/Black Damage to Stems



#### White Powder on Clusters Before Bloom



# PM on Grapes Before Verasion



# PM on Grapes at Verasion



## Okay, It's Bad.. So What Do You Do??



- Walk your vineyard, at least once per week:
  - Look for powdery mildew, on leaves, canes, clusters and fruit
  - Let your vineyard manager know asap if you think you see it.. Spray asap
  - Look at growth and vigor too, and signs of under or over watering
  - Post your questions to the Lamorinda
     Winegrowers website viticulture forum

# **Spraying for Powdery Mildew**

- Lamorinda vineyards should be sprayed for powdery mildew <u>at least every 14 days</u>, from mid-May through beginning of August
- If you are <u>using organic products</u>, like stylet oil or sulfur, you may need to spray every 7 to 10 days
  - Keep track of your vineyard spray schedule!
  - PM grows rapidly when temperatures are in the 70s and 80s..
  - Look for PM more often during nice weather!

- What to do: direct spray upwards with angled nozzle
- What not to do: wear shorts, short sleeve and no mouth or eye protection!



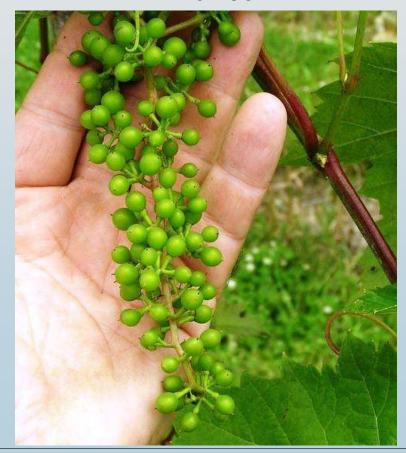
## The Most Important Time To Be On It!

- The most critical time for powdery mildew prevention is between flowering and fruit set: generally May - June. This is when you or your vineyard manager should be using their very best mildew control products and timing!!!
- Spray every 14 days or less!!!

Flowering

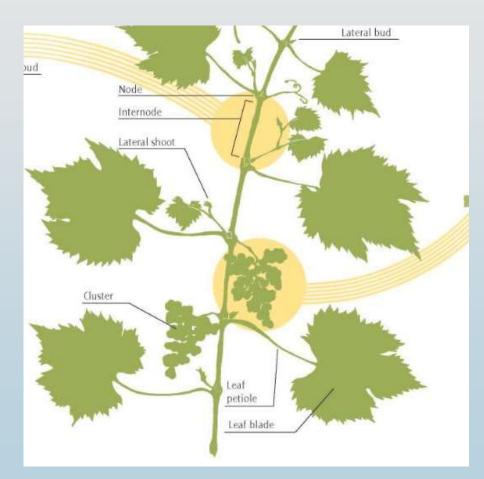


Fruit Set



## **Canopy Management for PM**

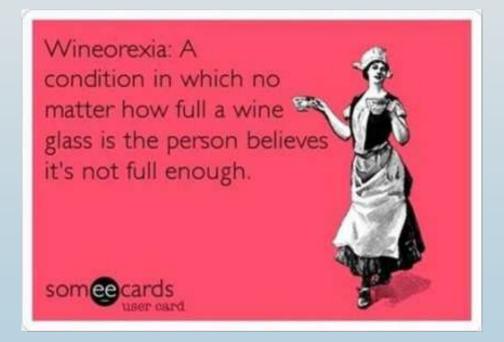
- After spraying, the next most important thing to do is to remove laterals and leaves, to open up the grapevine canopy to airflow, which reduces powdery mildew
- Laterals should be removed to well above the fruit zone, unless your vines don't push out excessive laterals
- Leaves should be pulled to above the fruit, after fruit set, on the morning sun/shade side. Interior leaves should also be removed, and perhaps some on afternoon sun side as well, so that only one leaf is shading the fruit clusters



#### Now the Good News

- After verasion, grapes finally become resistant to powdery mildew!
- Now you can sit back, taste wine, and wait for harvest!





## Need Help or Have Questions?

Email Gerard van Steyn: <u>gerardvs1@gmail.com</u>

or

Daniel Howsepian: <u>5powderhounds@gmail.com</u>

or

 Post your PM questions or post pictures that may show powdery mildew or post any other viticulture questions or issues to the Lamorinda Winegrowers Association viticulture forum:

https://lamorindawinegrowers.com/forums/forum/viticulture-forum/