2018 in the Vineyard
MARCH

Almost no leaves in the vineyard, so it's time to start worrying about protecting the foliage and fighting Powdery Mildew (PM). It is floating in the air, everywhere, so there is no saying "I can't get it here. PM is worst when the PM Index is highest, but it can also attack susceptible varietals when the book says that you should be safe.

Powdery Mildew and Fungicide Rotation

PM is a spore based organism, it rests on the leaves and woody portions of a grapevine until it can start a reproductive cycle. The spores are always floating around in the perfectly suitable San Diego air. Since it reproduces so quickly once it gets going it does not take very many spores to establish a colony. It does not take too big of a colony to take down a cluster of grapes.

When you spray the PM in your vineyard you will kill almost all of the colonies. A few individuals will survive because they are resistant to the particular fungicide that you sprayed this time. As they reproduce, almost the entire colony will be resistant to that spray. If you spray the same chemical week after week in your vineyard you will do an excellent job of creating a resistant strain of PM. Your spays become less an less effective.

That is why the UC Davis IPM literature suggests a rotation of fungicides throughout the year. Each class of fungicide kills PM in a unique way (the FRAC #), attacking different molecular weaknesses in the organism. The mode of action of each fungicide needs to be known. It does no good to rotate Rally and Procure in a spray program since they are both in FRAC Groug 3.

It is a good idea to know the relative cost of each fungicide you would like to use. The cost is a factor of both the unit price of the chemical and the application amount needed. It seems that sprayable sulfur is always the lowest cost alternative, but most of the common fungicides are in the same price range per acre. At the bottom of this document I've included a price comparison for many of the chemical carried by Grangettos. Since I last did the research 2 years ago they may have introduced new items or (maybe even) changed the prices. I've also attached a PDF of the UC/IPM Fungicide paper, it is very complete ... page 30 is the "money page" if you can't read the whole thing.

I use a rotation of sulfur / Rally / sulfur / Quintec / sulfur ... if things look realy bad I wil add Pristine to the rotation, though is considerably more expensive per acre. There was discussion last year at UC Davis that Rally is getting less effective in Northern California. I don't think we've seen that here yet.

If you have some other favorites, let us know.

Yellow Jacket Control

This seems like a strange time to talk about yellow jackets, those nasty wasps that love to eat ripe grapes and hide business-end-out in grape clusters waiting to welcome you to the harvest. However, this is the season for the yellow jacket Queens to come out of hibernation, get some quick energy and look for a new nesting site. Since they are the only ones that over-winter this is a vulnerable stage of their life cycle. Remember all those empty squirrel nests that are left over after you have effectively controlled the squirrel population. That is where the yellow jackets love to make nests.

This used to be an April activity, but early springs have made March the time to start.

Put out wasp traps (available at Home Depot, Grangettos, Ransom Bros, almost everywhere) this month. Each queen you capture now takes out 20,000 nasty wasps at harvest season. I like to use about one trap per acre ... but more can't hurt.

Pruning in the Rain

This year is the first in quite awhile where it didn't rain until the EXACT week that final pruning time has arrived. Now we've had a small, almost useless .25 inches about every three to six days for weeks. That is perfect timing to trigger the "don't prune 72 hours before or after rain" alert. We know that pruning in a wet environment is an invitation for Eutypa Dieback to decimate your vineyard.

I've started using VitiSeal while doing the final pruning. It is tedious, adds about 25% to pruning time, but lets us keep moving. Rich McClellan and Micole Moore had a few tips at last week's general RVVA meeting that really work. VitiSeal looks like Elmer's white glue, it goes on clear and dries clear. It is hard to know where you've already applied it. Rich suggest putting a few drops of blue dye in to the mix. There is no missing the application then when there is a brightly colored spot where the pruning wound used to be. I used green lawn dye since I had some in the shed.

Micole suggested storing the VitiSeal/dye mix in an empty PVC glue can with the application cap. Those cans are available at Ransom Bros, Ramona Irrigation or Grangettos. The applicator works well and the can seals nicely to avoid spills and preserve unused sealer. You can also use a low-priced 3/4" paint brush as an applicator.

Frost

We've had some nasty frosts in the last couple of years. This week is the first time I've seen leaf damage on the newly sprouted shoots. I even so a dead flower cluster on a bud that I would have wanted to keep. That's one bunch of grapes that is not going to be harvested. There's not much you can do about frost, but remember to keep you pre-pruned canes long enough to delay the lowest buds from breaking too soon.

Water, water, water

Have I mentioned watering yet? Don't assume that 1/2" of rain we've gotten is taking care of your vineyard. Check the soil moisture level. Water as needed.

I recently reviewed the chemicals for Powdery Mildew control that Grangettos has available. All the prices listed here are the RVVA discount prices in late May 2016.
I calculated usage based on low pressure / low application rates.
It is a good idea to have several different modes of control available and to sequence them throughout the season. NEVER use the same chemical two applications in a row. Most of the chemicals we use do not attack “Downey Mildew”, only group 2 is useful for that. **Pristine** and **Luna** are best for Botrytis and Bunch Rot if we get more summer rain.
Included below is the UC Davis detailed information.

1. ***STEROL INHIBITORS***

1B. Procure … 4 ounces per acre, not sold,
1C. Rally … 4 ounces per acre, $75.18 for 5 dissolvable 4 oz packets, **$15 / Acre**

2. STROBILURINS

2A. Abound … 11 ounces per acre, $306.59 for 1 gallon, **$26 / Acre DM ++++**
2B. Flint … 1.5 ounces per acre, $333.16 for 20 ounces, **$25 / Acre DM +++**
2D. Pristine … 8 ounces per acre, $445.29 for 120 ounces, **$30 / Acre DM ++++**
2E. Sovran … 5 ounces per acre, $141.25 for 20 ounces, **$36 / Acre DM ++++**

3. CELL SIGNALING INHIBITOR

3A. Quintec … 3 ounces per acre, $136.49 for 30 ounces, **$14 / Acre**

4. SULFUR COMPOUNDS

4A. Wetable Sulfur … 50 ounces per acre, $41.79 for 30 pounds, **$10 / Acre**
The sulfur changes brands as Grangettos gets better deals from distributors. The price is pretty steady. Some dissolve better and don’t clog filters as much as others. “MicroThiol” seems to be the best.