

RESEARCH · IPM 11CV/S

European Grape Moth Update:

There has been quite a stir across the state with another noxious pest introduction. This time our neighbors to the north in Napa and Sonoma have picked up the European Grape Moth and are waging a battle to eradicate it. Unfortunately, this small tortricid relative to the Omnivorous Leafroller has quite a jump on them. While it was first identified last summer, it is now clear that it was observed at least one if not two seasons ago. As it was not identified correctly initially, it was able to multiply relatively unchecked to the point where moths are being caught throughout the Napa valley. The lesson here is, if something about a problem or pest looks unusual; please call the Ag Commissioner, extension staff or me to check it out. It now appears that the moth has been moved by man into Sonoma, Solano, Mendocino, Fresno and Monterey counties. The good news in these spots is that they are all associated with grape processing and have been singular finds to this point. Let us hope is stays that way. As I have said before, this insect is not difficult to control as we have good materials to work with. It has a similar management plan to Omnivorous LeafRoller with the exception that greater precision is required of the timing. The reasons to prevent the pest are the issues of cost, quality and environmental impact. We will have to spend more money/time on detecting, monitoring, spraying, yield loss and insecticides. We stand to lose quality from molds and bacterial secondary infections in our grapes. And even though the materials of choice are very safe and low impact, the environment will still suffer some unavoidable impact.

As it stands now, all parties involved in the harvest, transport and fermentation of grapes within the designated areas will need to obtain a Compliance Agreement with the Napa Ag Commissioner and abide by its

fruit will need to be inspected if it is going out of the area and loads will have to be tarped.

Growers need to follow a management plan to control the pest. Most of these procedures are to prevent the moth from spreading to areas outside the existing infestation, let's hope they are

stipulation. Basically, harvested

NATIONAL SUSTAINABLE AGRICULTURE STANDARD

I attended a meeting of the American National Standards Institute (ANSI) as a voting member of the Standards Committee. The Standard we are developing would be a National Standard for Sustainable Agriculture. The attempt is to define what it is to be "sustainable". While voluntary, the objective is to make sure that those who are using the term "sustainable" actually use objective, science based standards when assessing their procedures. Our Lodi Rules program should be able to meet the requirements with few changes. The process up to this point had been very consensual and reasonable. I believe that this will be the norm in the future. There has been a great deal accomplished to date with significantly more to come. While we have established most of the guiding principles, we will soon be moving on to the metrics of measuring results. There are many powerful groups involved (American Farm Bureau, GAP clothing, organic, corn, cotton and soy organizations, NRDC, labor rights) in the process and it should be an interesting ride.

NATIONAL GRAPE AND WINE INITITIVE

We are a member of this group that is trying to advance vineyard research by obtaining consistent funding at the federal level. I represented LWC as a NGWI board member. The idea is to band all grape product groups (fresh, juice, winegrapes, and raisins) and the geographic regions (east and west) together so that we can qualify for federal funding. If we focus, as in the past, on just wine viticulture, we are a small piece in a big pie. By pooling resources, the group has made significant progress with a \$7.2 million dollar grant to study water needs and drought tolerance in grapevines. I voiced concern that as the work was being done primarily in the Paso Robles area; perhaps the Lodi irrigation needs might be overlooked or worse, deemed to be wasteful. I was appointed to the grant oversight committee to mitigate this concern. We had as guests, representatives of USDA/ARS. They were able to give us strategic pointers as to how to obtain and maintain funding without wasting political capital. We are implementing procedures to take advantage of this advice. As there appears to be \$15 million annually in federal money to be disbursed, this is an important venue. Making sure the money is spent on reasonable, directed research that will benefit our industry is an important charge. One of the projects that was rejected was a study on how to minimize "green, vegetal" characteristics that are sometimes a knock on high tonnage vineyards. This would be useful work for our area and we are strategizing on how to have this project funded.

successful and keep it out of our district.

IN THE VINEYARD

BY PAUL S. VERDEGAAL

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TOPICS:
Spring
Rain
Irrigation
Vine Decline/Dieback
Invasive Species

So far in 2010, Mother Nature continues to test growers' resolve with some environmental curve balls. Between the intermittent rains into June, cool temperatures and many windy days it has been a challenge to schedule vineyard operations and powdery mildew programs. On June 25 some more rain fell in the early morning hours, just as the official rainfall season ends for 2009-10. The unexpected drizzle was mostly in the north and east part of the District, ranging from a trace to some measurable amounts of almost a quarter inch to the east and north portions of the district!

The mild spring and above average rainfall, about 19.2 inches total, did encourage more vine growth compared to the previous three years of drought. But at this point most vineyards still appear to be about 10 to 12 days behind average in development. April was the third coolest April in the last 30 years with regard to accumulated Growing Degree Days (GDD) with 200 versus 287 long term and May was also the third coolest for its average monthly total , with 352 GDD compared to 442 long term average in the same period.

The extra rain this year helps alleviate some of the stress from the recent drought, but most vineyards still have a fairly dry soil profile below two to three feet. Vines look better this year with regard to shoot growth. But because deep soil moisture is still lacking compared to long term average, caution should be used especially on shallow soils or with vines that have limited root systems. Upcoming hot weather and ongoing ET demand may cause vine stress more quickly and more severely than would be expected. Overall cluster counts and size look good, but indicate a below average crop and lower than last year's surprise. Berry set is variable from a long drawn out bloom and many other environmental factors. Berry size is variable, but could size up well as harvest approaches.

Cluster counts and potential yields look to be average or slightly below for most varieties and most sites, but as in each year there are exceptions by variety and by site. Crop development could catch up fast, even though it is behind long term average. So harvest may still be close to average if yields are as light as expected.

Insects, mite and disease pressure appear to be average or light up to this point. Even Vine Mealy Bug (VMB), is behind as it continues to spread. Irrigation is another aspect delayed this

year by above average rainfall totals and by cool weather until recently. Irrigation schedules should be adjusted to meet full vine water use during any heat spikes, especially if you are using on a Regulated Deficit Irrigation (RDI) strategy.

Irrigation is still one of the biggest steps towards improving wine quality, while saving on field pumping costs. As I finish writing this the first 100 degree days are at hand, which means the pumps may need to be started to stay ahead of severe weather. On extremely deep soils, or with young healthy vines little to no water is needed yet, yields may also be reduced with RDI. Actual irrigation needs depend on soil, rootstock, variety, trellis system, irrigation system efficiency, spacing, vine health and of course, winery goals. After three years of drought year the vines have a ways to go to fully recover, especially during extreme hot spells such as the current one.

Vine shoot tip and tendril growth are much more sensitive to water stress than either the vine itself or the fruit being carried. There is an artful science or maybe a scientific art to observing vine growth in order to determine water stress, but monitoring vine status by pressure bomb is becoming more common. For the Lodi area, vine water needs seem to be met with a seasonal total of 18 acre inches of water which is about 65 to 70 percent of what the vine would use if allowed. This total seasonal need includes available water in the soil from winter rains, any rainfall after budbreak and irrigation.

There have been more calls on vine decline, dieback and "collapse" this year. The problems have seemed to worsen after three years of drought. In many cases vine decline or actual death of portions and entire vies can be associated with the complex of moderately aggressive fungi that cause symptoms of what is traditionally known as measles; now also known as Esca, Young Vine Decline, Petri's Disease or Black Foot. In addition Eutypa Dieback and Botryosphaeria (Bot) Canker have become more prevalent.

The threat of Glassy Winged Sharp Shooter (GWSS) is still a cause for some concern, and the Vine Mealy bug (VMB) introduced during the period of 1998 to 2002, continues to spread to new locations and within vineyards. But of more immediate concern is the appearance last year of Light Brown Apple Moth (LBAM) in the South County and even more disconcerting is the discovery of European Grape Vine Moth (EGVM) in several locations throughout the state including Napa, Sonoma, Mendocino and Fresno. If you haven't heard about this pest or seen any photos pick some up some info at the LWWC office, the Ag Commissioner's office, at the UCCE office in Stockton; or check online under invasive pest at www.ipm.ucdavis.edu . EGVM is a fairly severe problem in Europe, more recently in Chile and it now threatens California. It is similar to OLR and LBAM in many respects, but has potential for severe economic loss because it tends to feed more in the clusters and reproduces more efficiently in its egg laying pattern.

During the same time over the past year, Spotted Wing Drosophila (SWD) also showed up in California and has spread quickly throughout the state and into Oregon and Washington. SWD has caused severe problems in cherries, bush berries and

cane berries. Whether it will do as much damage in grapes no one is sure yet. The UC IPM web site is a good source for some general information. A species of Vinegar fly, Drosophila susukii, the SWD attacks sound, healthy fruit and are found in many cherry orchards. This is opposed to the long recognized Drosophila or vinegar fly which we only see on damaged fruit (including grapes) or flying around untended wine vats. The new species seems to be attracted to cherry fruit and has been found in strawberries and raspberries in the Central Coast. It was first identified in Japan in 1924 and has been reported in Spain, but not on grapes that we are aware. Be on the lookout for unusual fruit fly activity (especially near cherry orchards), for EVGM and

for LBAM, besides VMB. We may need to learn living with these new pests, but they each could cause problems and increase pest management costs once again.

It has been cool this year so far, but remember to go over the new heat stress regulations. Enforcemant continues to evolve and if you have crews working in temperatures above 85° F (even with labor contractor crews), check out CalOSHA website, or the web site www.laborcounselor.com. The Lodi Dsitrict Grape Grower Association (LDGGA) has contracted with to provide information and updates. Or check with Farm Bureau and their Farm Employment Law Service.

Good luck in 2010.

GROWER PROFILE:

Bill Thomas



Bill Thomas has been involved in San Joaquin County agriculture for a long time, pretty much his whole life. After he made the short trip from his birthplace at the hospital in Stockton, the home ranch east of Lodi was his growing grounds. He went to high school in Linden, when not helping out with the chores and work on the cattle, dry land grains and hay of his parents place. He participated in wrestling in high school but as he points out, work on the ranch and home work took most of your "spare" time. He found the time to finish a degree at Delta College and then went on to Fresno State degree in Plant Science/Agronomy. With experience in row crops and vegetables, he obtained his Pest Control License in 1986 and has worked for Mid Valley Agriculture since 1998, a full service farm supply company. He still had what I call our "addiction" to farm and now has 30 acres of walnuts and

20 acres of cherries of his own. When we talked about other interests or hobbies, he mentioned pruning in the orchard or "tinkering and building in the shop". He also spends time weekends driving his two boys to water polo matches at 6:30 in the morning. He would not, for political reasons, indicate favorite brands, but did says he leans to moderately priced cabernet and merlot wines as his favorite grape product. He did profess to enjoying a nice bottle at periodic special dinners with his wife Ann. I suggested that he might try that tonight as he was going to be three hours late due to work issues. When asked for a philosophy of farming, he did not want to be "sappy" but stated what seems to be the Lodi mantra - that it is our responsibility "to take stewardship of the ground so as to pass it on to our children and grandchildren." such, Bill has been active in the Commission and has served for some time on the Research Committee. When asked the biggest issues in our industry he had two immediate thoughts, "regulations and water". He feels that some regulations are not a problem because of their intent, but the burden of recordkeeping can be overwhelming, not to mention the cost of the overhead. He points out that most people don't understand how much time farmers spend tracking and recording our actions. Most industries are not burdened with these requirements. Water is going to be a bigger concern as there is more and more competition for water with the population centers. Bill said that it is a common anecdote but true, that many people do not have a connection to agriculture (food and fiber) and do not understand what needs to go into it, water being a principle and key component. While we as an industry may be able to grow the U.S. out of the petrochemical dependency on OPEC using rainfall irrigated Midwest corn or other crops, we cannot create more water.

While the politics of production can be stressful, Bill finds great enjoyment in working with and helping his grower clients and his fellow workers. Becoming part of the grower's team, being asked to, and solving problems together "feels good". His coworkers are also a great resource, and while it is great "watching the growth and contributions of the younger hires, as he puts it, "experience is priceless". And speaking of resources, he laments the destruction of Extension service. While he is appreciative of the efforts and knowledge of existing staff, they have been spread so thin that he sees "a greater move to privatization of research and problem solving", Mid Valley already employs two on call consultants as part of their "brain bank". At the end of the day, he feels most satisfied when he knows that his input and work has helped keep his growers sustainable, that is, safe and still in business for tomorrow and the years to come.

New Educational Workshop!

The California Sustainable Winegrowing Alliance is working with the Commission to offer a new sustainable winegrowing workshop on July 27th titled "Performance Metrics – The Next Step for Sustainable Winegrowing." This 8:00 am to 2:00 pm free workshop including lunch will be held at the San Joaquin County Office of Education (2707 Trans World Drive off Arch Airport Road in Stockton).

Many winegrowers have self-assessed their practices using the Lodi Workbook and/or statewide Code of Sustainable Winegrowing. This new workshop complements practiced-based assessment by making connections between practices and measurable outcomes (performance metrics). Grower and vintner participants will learn more about what performance metrics are, why performance benchmarking is important to their business, and what the Alliance is doing in partnership with USDA NRCS and the Stewardship Index for Specialty Crops to identify and enable calculation of performance metrics. Hands-on activities will be included so attendees can try and evaluate two online metrics tools in development, a greenhouse gas/energy intensity educational tool and calculator (for vineyards and wineries) and a pesticide risk evaluation tool (for vineyards).

This workshop presents an excellent opportunity for growers and vintners to learn about, experience hands-on, and advise efforts in performance metrics. Contact Mike Wanless at MikeW@lodiwine.com or 510-773-0905 to reserve your seat. Limited to first 40 RSVP's. Beforehand, participants will receive a simple worksheet to record their vineyard or winery operation's estimated electricity and fuel usage. This information along with a list of some of your previously used pesticides will be needed at the workshop. Look forward to seeing you on July 27th.

NEWS - OWL NESTING BOXES We just received word that we will be getting a \$25,000 grant from PGE to replace and add to existing owl nesting boxes. I volunteered to perform a confidential survey of all our growers regarding the use of existing owl nesting boxes. I will be conducting the short, 4 question survey starting soon. Please email me your preferred phone info at MikeW@LodiWine.com or call Sherri at the office (209) 367-4727.

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