Subject: New England Grape Notes, July 16, 2018
From: Sonia Schloemann <sgs@umext.umass.edu>
Date: 7/16/18, 2:08 PM
To: UMassFruit <umassfruit@umass.edu>

New England Grape Notes - July 16, 2018

UMass Extension
CENTER FOR AGRICULTURE

****Meeting Notice: CT Wine Grape Growers Meeting on July 24th. Open to all growers. See program details at the end of this issue. ****

Crop Conditions: Canopy management is an ongoing process at this time of the season. Combing or tucking combined with skirting or hedging are the main activities. Leaf pulling to open the fruit zone for sunlight exposure and spray penetration is also underway. And, bunch closure is approaching, so several important sprays are needed to ensure good quality of fruit clusters through veraison, ripening and harvest. See more below.

Disease management: The prevailing hot dry weather doesn't generally favor disease development, but the humidity and occasional downpour can quickly overcome this condition. Keeping clusters and rachis clean prior to bunch closure is important. Assuming good control of mildews and phomopsis in the early season, our attention shifts to Botrytis and other bunch rots. See the New England Small Fruit Management Guide for recommended materials and rates. Also, Terry Bradshaw (UVM) and Annemiek Schilder (MSU) have some good comments below.

Insect Management: **Japanese Beetle** are active now and **Grape Phylloxera** damage to foliage can be found. Mature vines have a high tolerance of **JB** feeding but young vines (3 yrs or under) can be set back by heavy feeding, especially 1yr vines in grow tubes (which should come off with the next stretch of cloudy weather if they're not off already). **Grape berry moth** is active with some 2nd generation moths still flying. In some areas, egg-laying may complete so the next opportunity to control this pest will come after emergence around veraison or approximately 1620 GDD. Scout for damage in a week or so and assess the amount of infestation there might be. If it exceeds 15%, control measures are warranted at 1620 GDD. To check your GDD accumulation see the NEWA Grape Berry Moth model at http://newa.cornell.edu/index.php?page=berry-moth.

~ Sonia Schloemann

Post Heat Wave Vineyard Management

Terrance Bradshaw, Univ. of Vermont

It's cooling off for a bit, time to think about activities in the vineyard. Thankfully, extreme heat isn't good for most grape diseases, and the dry weather hasn't been good for them either. However, berries are sizing up and bunch closure will be here before we know it, so we should consider some upcoming potential issues that might affect fruit quality at harvest.

First is grape berry moth (GBM). This moth lays eggs in developing clusters which hatch and infest

fruit, causing direct damage as well as allowing rots to develop. Now is the time to start scouting 50-100 randomly selected clusters from throughout the vineyard and inspect for the characteristic webbing of GBM larvae, six percent infested clusters indicates a need to treat. If sprays are necessary to manage them, they need to be applied before the clusters close up. Bt is effective against GBM, as is Intrepid, Delegate (also good against spotted wing drosophila, more on that next week), Entrust (SWD as well, and organic), Sevin (good against Japanese beetles), and Avaunt (also JB). Notice I'm not recommending pyrethroids like Danitol, as they tend to be harsh on predators and may increase mite populations as a result.

Next is Botrytis. This disease is increased by prolonged wet periods and moderate temperatures (60-75° F), not what we've had recently. Still, if you have tight clustered cultivars (anyone still growing Vignoles?) or a history of the disease, an appropriate material may be called for if a long rainy week ever appears in the forecast. Downy mildew can infest leaves and clusters, and, like with botrytis, an effective material may need to be applied ahead of any rainy period that may come up in the next few weeks. Finally, keep an eye out for powdery mildew on foliage. If you're relatively clean, this disease may not pose a problem for the rest of the season, but if there is incidence of the disease, it may spread given appropriate weather.

All diseases will be much better-managed with an open canopy, and your fruit quality will increase as well. Soon, if not already, the bases of shoots will lignify (get 'woody') and will be tough enough to comb shoots downward and separate them in order to expose fruit to the sun. This is an absolutely critical practice to attain highest quality fruit, as well as to allow for sufficient hardening off of shoots and other tissues heading into next winter. If the heat continues too much, I would avoid pulling leaves around the clusters at this time, the combing should expose them enough to develop some thicker cuticles on berries that will resist sunburn. A final leaf pulling can be debone a few weeks before veraison. (***Source:*** *UVM Grape Blog, July 6, 2018*)

Keep an Eye on Foliar and Fruit Diseases in Grapes

Annemiek Schilder, Michigan State University Extension

Most grape growers have done a good job controlling diseases in grapes, aided by the dry weather in June. However, rainfall has increased but has been quite variable, with some areas like northern Michigan getting more rain than others. It is therefore difficult to make blanket recommendations for disease control in grapes.

At this point, symptoms of black rot, Phomopsis, downy mildew, powdery mildew and anthracnose are common in unsprayed or minimally sprayed vineyards, showing that all pathogens are active. In general, Michigan State University Extension advises careful scouting on a weekly basis and continue protecting fruit clusters and foliage from infection using effective broad-spectrum fungicides.

Black rot is currently becoming apparent on fruit, showing creamy spots surrounded by rapidly advancing brown areas and shriveling of the berries. If you see black rot symptoms, it is too late to rescue the affected berries or clusters; however, since there may still be additional infection periods during rainy weather, any fungicides applied now will protect healthy berries from new infections.

Early black rot on fruit showing brown spreading lesion with lighter center. All photos by Annemiek Schilder, MSU.

Basically, six hours of fruit wetness from rain or dew at 80 degrees Fahrenheit is sufficient for the fungus to penetrate the fruit. Sterol inhibitors like Tebuzol and Rally are very effective against black rot and have some "kick-back" (curative) action, but no more than 24-48 hours.

One of the most active sterol inhibitors is difenoconazole, an ingredient in Revus Top, Quadris Top and Inspire Super, which may be applied for broad-spectrum disease control at this time of the season. Be careful with these products on rapidly growing plant tissues, which may have a thin cuticle, allowing too rapid uptake of difenoconazole and subsequent burning of leaves. Also, do not apply any products containing difenoconazole to Concord, Concord Seedless or Thomcord grapes.

Phomopsis spots are visible in most Concord and Niagara vineyards, and may be especially plentiful in Vignoles and other susceptible wine grapes. However, they do not seem to be increasing much. Most Phomopsis infections occurred earlier in the season, as can be seen from the preponderance of lesions on the first and second internodes and older leaves.

Similarly, **anthracnose** was also favored by spring rains, and lesions can be found on stems, leaves and berries of table grapes (e.g., cultivars Mars and Marquis) as well as Marquette and Frontenac grapes. Anthracnose may look like a severe case of Phomopsis but unlike Phomopsis, lesions are sunken on stems and develop shot-holes on leaves.

Phomopsis lesions on leaf are yellow spots with brown speck in center.

Anthracnose lesions on leaf showing shot hole development and leaf distortion.

It is still important to protect clusters from Phomopsis as well as anthracnose (if susceptible): strobilurins (e.g., Abound, Pristine) are effective against both diseases, and sterol inhibitors (e.g., Tebuzol, Rally) are effective against anthracnose.

While berries remain susceptible throughout their development to Phomopsis, the risk of infection diminishes after bunch closure because spore supplies become exhausted, especially in rainy years. Only young berries are susceptible to anthracnose.

Downy mildew started to show up on leaves in various vineyards about two to three weeks ago. Unsprayed cv. Chancellor has had an intermediate number of infected clusters compared to previous years, probably moderated by dry conditions.

Rainy weather, especially with warm, humid nights—which promote spore development—will be conducive to downy mildew, so continue to be on the look-out for this disease. When downy mildew is observed, take action soon since the disease can spread rapidly and cause premature defoliation of the vines.

Apply Ridomil Gold Copper, which has a 42-day pre-harvest interval (PHI), to eradicate downy mildew. If harvest is well over two months away, you can also apply Ridomil Gold MZ, which has a 66-day PHI. Remember that juice grapes for Welch's cannot have any mancozeb applied to them after bloom.

Alternatively, use phosphites fungicides such as Phostrol or ProPhyt to eradicate tdowny mildew by applying the highest labeled rate followed by a "booster" spray five days later. With phosphites, be careful under hot, dry conditions, as they can cause leaf burning when vines are drought-stressed.

Generally, it is a good idea to incorporate protectants such as strobilurins, copper, Ziram, Ranman, Forum or Presidio in the fungicide program as well to keep downy mildew under control.

Downy mildew on leaf showing yellow "oil spot" lesions.

Powdery mildew has been seen on clusters and leaves in some locations, for instance on clusters of unsprayed Chancellor vines in East Lansing, Michigan, showing that the pathogen has been active for some time. Warm, dry spells are especially favorable for powdery mildew, although intense solar radiation is harmful to the fungus.

Continue protecting leaves and clusters, preferably with a tank-mix of a systemic and protectant fungicides. Don't rely entirely on systemic fungicides for powdery mildew control since fungicide resistance is a real possibility in powdery mildew. (***Source**: Michigan State Univ. Fruit Crop Alert, July 11, 2017*)

Meetings:

***JULY 24, 2018** – CT Farm Wine Development Council Summer Twilight Meeting.* Paradise Hills Vineyard & Winery in Wallingford, CT. 5:30 – 7:30. 1 Pesticide Credit. RSVPs are due by Tuesday, July 17 to Rebecca.Eddy@ct.gov. See flyer attached to this email.

Sonia Schloemann
UMass Extension Fruit Program

umassfruit@umass.edu

Attachments:

Wine_RMA2018_EventFlyer (1)-1.pdf	3.3 MB

You're Invited

CT Farm Wine Twilight Meeting

Tuesday, July 24, 2018 * 5:30 PM - 7:30 PM

Paradise Hills Vineyard & Winery, 15 Wind Swept Hill Road, Wallingford, CT

Light refreshments will be served

AGENDA

- Grape Diseases with Dr. Elsa Petit
  University of Massachusetts
- New Cultivars with Dr. Francis Ferrandino
  CT Agricultural Experiment Station
- Introduction of Grape Virologist, Washington Luis DaSilva
  postdoctoral scientist
- Crop Insurance & Risk Management Update with Joseph Bonelli
  UConn Extension

Attendees Earn 1 Continuation Credit

Please RSVP by Tuesday, July 17, 2018. Program is free to growers.

Respond to Rebecca.Eddy@ct.gov

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These institutions are an affirmative action/equal employment opportunity employer and program provider.

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