

New England Grape Notes

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General Info -

Recent warm weather accelerated bud break and shoot growth in some areas. Below are some photos sent in to illustrate where various varieties are in different locations.

Grape Bud Stages week of 4/26-5/2

Frontenac	 Belchertown, MA	Seyval	 Southampton, NH
Chardonel	 Belchertown, MA	Vignoles	 Southampton, NH
Mars	 Belchertown, MA	Foch	 Southampton, NH
Marquis	 Belchertown, MA		
Vanessa	 Belchertown, MA	Chardonnay	 Newport, RI

Disease Management:

Dr. Wayne Wilcox has released his annual Grape Disease Control Update for 2009. It can be read in it's entirety in the attached file.

An excerpt for early growth stages can be read below.

1-INCH SHOOT GROWTH. A Ph spray may be warranted if wet weather is forecast, particularly if the training system or block history suggests high risk.

Option A: Nothing.

Option B: Captan or mancozeb (or ziram).

3- to 5-INCH SHOOT GROWTH. A critical time to control Ph rachis infections if it's raining or likely to be soon, especially in blocks with any history of the disease. Early is better than late if it starts raining. This spray can provide significant benefit against fruit infections as well, since many of them appear to move into the berries from infected rachises and berry stems. Also an important time to control shoot infections, since this is where the fungus will reside in the future if infected tissue is retained in canes, spurs, or pruning stubs. Now is the time to start thinking about control of PM on vinifera varieties if temperatures remain above 50°F for long stretches of the day. This spray is much more likely to be important in vineyards that had significant PM last year than in those that were "clean" into the fall; however, it may be beneficial even in relatively clean blocks of highly susceptible cultivars, particularly in cloudy, wet years when temperatures aren't limiting. And if you're already spraying for Ph, why not include something for PM on highly susceptible (and valuable) varieties while you're at it. In NY, spending extra money for BR control is almost never justified this early unless you're trying to clean up a severe problem block AND weather is wet and reasonably warm. Still too early for DM.

Option A: Nothing.

Option B: Mancozeb or ziram (BR, Ph).

Option C: Captan* (Ph, some BR). Easier on predator mites than mancozeb or ziram, probably good enough against BR this early, but 3-day REI issue.

Option D: Sulfur (PM). As discussed above, historical pronouncements concerning reduced activity of sulfur at temps below 65°F appear to have been significantly exaggerated. It should be good enough, and is a cheap insurance option. With thorough coverage, can eradicate incipient infections initiated during the last week or 10 days (depending on temps since then).

Option E: Rally [Nova], Elite [or tebuconazole generics], or Mettle [where allowed] (PM, BR). Use 3 oz/A of Rally or Elite for economy with so little foliage now, but remember that coverage becomes even more important when you're working with lower application rates (the activity of these materials is very rate-dependent, particularly in vineyards with a long history of use, so incomplete coverage with a low rate is unlikely to cut it). Did I already mention coverage problems with alternate row spraying?

Option F: Rubigan (PM). Cheaper than Nova and Elite, especially if BR control isn't an issue, and it usually isn't at this time. Same issue with the need for superior coverage at low rates. Vintage (the non-stinky version of Rubigan) isn't labeled for use this early.

Option G: JMS Stylet Oil* (PM). Should eradicate young infections IF thorough coverage is provided, and can provide limited forward activity (although much of this washes away with less than ½-inch of rain). Can use with mancozeb or ziram, but not with or near captan or sulfur (plant injury).

Option H: Nutrol, Armicarb, Oxidate, Kaligreen. (PM). Should eradicate young infections IF thorough coverage is provided, but no forward activity. If choosing this option so early in the year, go with the low end of the label rate and use the cheapest one.

Option I: Serenade or Sonata, if you want to experiment with these "biocontrol" products while disease pressure is low.

Option J: One of the PM products plus mancozeb, ziram, or captan for Ph.

[*Editors Note: Never use any oil products in combination with or in close succession with captan or phytotoxicity may result.]

Virginia Tech Info

Another very good resource for disease management information is Dr. Mizuho Nita's website at Virginia Tech. His main website is at: <http://arecs.vaes.vt.edu/arec.cfm?pid=nita24>

Good disease management writeups are

Early season disease note: Phomopsis, Black Rot, and Powdery Mildew at:

<http://arecs.vaes.vt.edu/webinfo/files/Vineyard%20meeting%2029April2009%20at%20Horton.pdf>

and

Phomopsis cane and leaf spot at:

<http://arecs.vaes.vt.edu/webinfo/files/Notes%20on%20Phomopsis%20042209.pdf>

Insect Management:

Early Season Insects

Alice Wise, Cornell University Extension Suffolk County

Generally early season insects are a curiosity more than a concern, the exception being European red mites. Scouting, which we all should be able to do at this time of year, is important in catching any developing problems. A reminder to check registration status of each and every material before purchase or use. In recent years, we have stumbled upon several situations where a material is no longer legal to use but the

information was not well publicized.

- **Flea beetle.** Flea beetles or steely beetles are small (5 mm), shiny black beetles. They overwinter as adults. They attack both wild and cultivated grapes by boring into swollen buds, hollowing out the inside. Damage is more common near shrubby or wooded areas. Sometimes it is difficult to discern between flea beetle and cutworm injury. Sevin, Danitol and Imidan are labeled.

- **Cutworm.** This general term applies to the larvae of a large number of lepidopterous species. These nocturnal feeders chomp on buds and will also feed on young leaves. In some eastern grape growing regions, cutworm is a pest problem that sometimes requires treatment. Infestations are apparently worse with cool spring weather as bud swell for an extended period gives the larvae more opportunity to feed. Damage is also more likely if there is mulch and/or weeds under the trellis as these provide daytime cover for larvae. This damage is not uncommon on LI but it does not appear to be so serious as to warrant treatment. As buds swell, take a couple of walks around the vineyard, particularly where previous cutworm damage has been seen. Danitol and Capture 2EC are labeled for control. Both are pyrethroids, harsh on predators. If the damage is extensive enough to warrant treatment, consider a spot treatment vs. a larger area.

- **Grape plume moth.** Signs of grape plume moth feeding have been increasingly common in local vineyards. First seen a few years ago on Long Island, this prebloom pest is actually the hairy larva of the plume moth. More advanced cases involve webbing together of leaves and even clusters. If the mass is examined, usually frass and sometimes the larvae may be present. You might also see a vine or part of a vine with basal leaves full of large holes. Expect to see more problems on edge rows. According to Cornell entomologist Greg Loeb, Danitol is currently the only labeled material. Dr. Loeb recommends a 20% threshold, that is, 20% of shoots/clusters affected before treatment is warranted. If the infestation involves primarily clusters, the risk of crop loss is higher and a slightly more conservative threshold would be warranted.

Usually the window for treatment is gone by the time damage is seen. At the research vineyard, the level of damage has varied from year to year but it has never been widespread. Also, by the time the canopy fills the trellis, it can be difficult to tell where the plume moth damage has been.

- **European red mite.** Very stunted, pale shoots may mean a mite outbreak. Upon close examination of both upper and lower leaf surfaces, leaves are loaded with tiny red mobile mites. It is common for a small area – shoots in the head area of a vine seem to harbor mites but infestations also may occur on just one side of a vine. One vine or two vines might be infested while neighboring vines have few or no mites. Thus, these early spring outbreaks are usually not well distributed through a block. It is difficult to predict exactly where these infestations will take place. If you can't walk your blocks, tractor scouting is a good way to spot mite infestations because the pale, stunted shoots will stand out. Best treatment option – use of horticultural oil in early season sprays for powdery mildew will also provide control of ERM if coverage is good. Because of the widespread early season use of oil, these early infestations have not been a major problem in recent years. However, this is not an option if committed to a sulfur schedule due to the risk of phytotoxicity.

- **Thrips.** Tiny leaves, stunted shoots, leaves often somewhat tattered or shredded in appearance with necrotic (dead) areas may be due to a thrips infestation. An affected shoot can be next to a shoot with no symptoms. Thrips are impossible to see without a good hand lens or microscope. Older leaves are usually not affected. Thrips are more common bloom to postbloom. Thrips infestations are not common but do occur occasionally. (*Source: Long Island Vegetable & Fruit Update, No. 7, April 24, 2009*)

Early Season Insects – Continued:

European red mite early season infestations happen periodically in local vineyards. The need for treatment depends on the number of hot spots in a block. Use of JMS Stylet Oil or Purespray Green Oil prebloom likely keeps these early infestations in check and is the recommended treatment given the narrow options in miticides. The big advantage to early season oil – miticides can be saved for later in the season (if needed) when oil application becomes tricky due to heat, incompatibility with materials such as sulfur and issues with Brix accumulation. However, if sulfur and/or captan are part of your early season schedule, horticultural oils cannot be used due to incompatibility issues.

Miticide options other than oil are as follows. Prebloom miticide treatments are not common but neglect of a significant mite infestation at this time can really set vines back. Due to limited products and the considerable expense of some of these materials, choose your strategy carefully. Lower rates are appropriate at this time of year.

Onager – Labeled in 08 in NY, including LI. This is an EC formulation with a 12 hr rei. Active against eggs and immatures (not adults), thus knockdown will be slow. Best use is not on a raging infestation. Limited to 1 app/season. The label lists a rate range of 12-24 oz. Though this is purely a guess, a lower rate should suffice for an early season application.

Acramite 50 WS – Has reduced risk status, only one application per season permitted. Use a minimum of 50 GPA water, 12 hr. restricted entry interval (rei). Minimal impact on natural enemies. Acramite has continued to work well in research plots at LIHREC. Agri-Mek 0.15EC and ABBA 0.15EC (generic label) – Restricted use materials with a 12 hr. rei. Do not apply within 150 ft. of water and include an NIS (non ionic surfactant). Labeled for two spot but not for ERM. Use a minimum of 50 GPA water. Two apps/season permitted but Agri-Mek is most effective on tender young foliage. A lower rate + generic label may make this cost competitive.

Danitol 2.4 EC – Restricted use, 24 hr. rei. Harsh on mite predators. Use no more than 2 apps/season for resistance management. Do not use within 100 ft. of water.

JMS Stylet Oil and Purespray Green – Horticultural oils can do a good job of ERM control if coverage is excellent. Both have a 4 hr. rei. Not compatible with sulfur, captan and other materials – check label for details. JMS has both a standard and an organic formulation. Pure-spray Green is similar to JMS in formulation and thus should work in a similar manner.

Kelthane 50 WSP – According to the Cornell PIMS website, this is no longer registered in NYS.

M-Pede – This insecticidal soap is OMRI listed. It is labeled for control of ERM on grapes with a 1-2% v/v solution for motile stages. Experience with materials such as M-Pede suggest that its best use would likely be for low to moderate infestations. Keep an eye on infested blocks to judge the need for follow up. Do not expect to successfully use this type of product on a raging infestation of mites. Also check label carefully for potential incompatibilities with other spray materials. Sulfur, adjuvants and penetrants and foliar fertilizers are all listed as incompatible.

Vendex 50 WP – According to the Cornell PIMS web-site, this is no longer registered in NYS.

Zeal Miticide 1 - Experience with Zeal indicates that it is best used earlier in the season, not on a raging infestation. It can take a week or so for Zeal to control mites. In research plots, after about 10 days, Zeal was one of the better miticide treatments. Zeal is reduced risk. Zeal is labeled for two-spot. (*Source: Long Island Vegetable & Fruit Update, No. 8, May 1, 2009*)

Weather data: compiled from various sources for 5/1/09

Region/Location	2009 Growing Degree Days		Precipitation 1-week gain
	1-week gain	total accumulation for 2009	
Cape Cod	57	95	0.50"
Southeast MA	65	103	0.10"
East MA	69	87	0.74"
Metro West (Waltham) MA	62	88	0.53"
Metro West (Hopkinton) MA	--	--	--
Central MA	55	76	0.73"
Pioneer Valley MA	82	138	0.48"
Belchertown MA		100	0.04"
Berkshires MA	74	125	0.26"
South Hampton, NH	--	--	--
Riverhead, NY	90	120	0.07"

Meetings:

The Vermont Grape and Wine Council is Sponsoring a Conference on May 20 - The Vermont Grape and Wine Council has posted the Agenda and the Registration Form for their First Annual Conference on their website at: <http://www.vermontgrapeandwinecouncil.com/>. The Conference will be held at The Three Stallion Inn in Randolph, VT, on May 20. Directions to the Inn can be found at: <http://www.3stallioninn.com/directions.htm>. It should be a very interesting and informative conference ! Dr. Anna Katharine Mansfield of Cornell University is a featured speaker. There will also be a grower/winemaker panel and a wine tasting. Seating at the Inn is limited and registrations will be accepted on a "first-received" basis. Deadline for discounted registration is May 6. Please see registration form for details.

FYI - check out the newly formed [Massachusetts Farm Winery and Growers Association](#) and [New Hampshire Winery Association](#) and the [Vermont Grape and Wine Council](#). These associations are of, by and for you! Join today!!

For Massachusetts residents, check out the new [Massachusetts "Ag Tag" license](#) plate. Each purchase can yield \$15 for the Massachusetts Farm Winery and Grower's Association through a check-off plus pooled funds available for various programs or competitive grants. Get yours today!

*This message is compiled by Sonia Schloemann from information collected by:
Arthur Tuttle, Dan Cooley, Hilary Sandler, Bill Coli and students from the University of Massachusetts
and Richard Kiyomoto from the University of Connecticut. We are very grateful for the collaboration with UConn.*

We also acknowledge the excellent resources of [Michigan State University](#), Cornell Cooperative Extension of Suffolk County, and the [University of Vermont Cold Climate Viticulture Program](#). See the links below for additional seasonal reports:

[University of Vermont's Cold Climate Grape Growers' Newsletter](#)
[UConn Grape IPM Scouting Report](#)

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