Crop Conditions:
Grape vines in Southern New England are at bud break and early shoot growth in most areas. As temperatures rise things will progress quickly in the next few weeks.

- **Early season disease management** - Phomopsis, Black Rot and canker diseases continue to be on the radar. See the previous issues of Grape Notes for detailed information about these diseases. Once more green tissue is exposed Downy and Powdery Mildew and Black Rot management become important, too.
- **Early season insect management** - Flea Beetle and Climbing Cutworm may be active in the vineyard at this time.
- **Early season canopy management** - Shoot and cluster thinning are important practices at this time. See article about this below. A more detailed publication on this topic can be found at: [https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9071.pdf](https://catalog.extension.oregonstate.edu/sites/catalog/files/project/pdf/em9071.pdf).


~ Sonia Schloemann, UMass Fruit Team

**Shoot and Cluster Thinning in Grapes**
*Bruce Bordelon, Purdue University*

Crop management through shoot and cluster thinning is a critical management practice for most varieties. Many varieties grown in Indiana tend to produce a large number of “non-count” shoots from adventitious buds and basal buds at count nodes. This lead to excess crop and shading in the canopy.

Shoot thinning reduces excess shoot number to both adjust crop and reduce shading. Growers typically select 40-60 nodes per vine during dormant pruning. If delayed-double pruning was done, that number...
may be much higher. Now that the danger of frost is mostly past, it is time to go through the vineyard and assess shoot number and adjust it to the desired number. Five to six shoots per foot of row is generally considered to be the optimum density. That equates to 40-50 shoots per vine at typical 8 foot vine spacing. It is very easy to accomplish now while the shoots are short and tender. They are not attached to the vines very firmly so the break off easily. If you wait too long, the shoot attachment toughens and the shoots many need to be cut, greatly increasing the time required for removal.

Cluster thinning will also be necessary on most large clustered varieties. Typically each shoot is allowed to carry only one or two clusters. Excess clusters are removed, and all clusters from “short shoots” are removed. Growers should try to adjust the crop to balance the fruit production to about 10 times the vine pruning weight. e.g. vines that average 2 lb of pruning wood should be able to produce 20 lb of fruit (and 2 lb of pruning wood again). If you have taken pruning weight data in your vineyard you should be able to estimate the appropriate number of clusters to leave to produce the optimum yield. If you do not know the average cluster weights, see HO-221 Grape Varieties for Indiana for average cluster weight data from my trials and a discussion about crop load ratio. Large clustered varieties such as Chambourcin and Vidal typically have clusters that weigh 0.3 to 0.4 lb. That means you will have 1 lb of yield for every 2.5 to 3 clusters. If you leave 50 shoots per vine and each one produces 2 large clusters, you could have twice as much fruit as desired. So thinning is very important at maintaining vine size and producing high quality fruit. (Source: Facts for Fancy Fruit, Issue 16-03, April 26, 2016)

Buds Swelling in Local Vineyards
Terry Bradshaw, Univ. of VT

Grapevine buds are showing significant swelling in vineyards both in the Champlain Valley and at my house at near-1500 feet in Washington County, so bud break is right around the corner. However, This extended cool weather expected this week will leave those buds in this swollen state for an extended period, which leaves them susceptible to damage from grape flea beetle and climbing cutworms. It may be a good idea to scout vineyards this week; feeding damage on more than 2% of buds scouted may indicate a need to treat; carbaryl or a pyrethroid material (Including, for organic growers, Pyranic) would be effective options. However, once vines have pushed 1" or more growth, they are no longer susceptible to damage from these pests, so don't bother treating if you get that far without having done so.

The window to treat vines with liquid lime sulfur (LLS) is closing as vine growth increases, do not consider applying high doses of that material to vines with green tissue showing. I described the use of LLS in my April 3, 2017 message<http://blog.uvm.edu/fruit/2017/04/03/the-growing-season-looms/>.
If you will be using glyphosate to manage in-row weeds this spring, your window for safest application to the base of vines is now, before any foliage that is susceptible to herbicide uptake develops. I would still use a shield of some sort to keep the material off of vines.

Reminder: NY-PA Grape IPM Guidelines are available for order at: https://cropandpestguides.cce.cornell.edu/

(Source: UVM Fruit Blog, May 1, 2017)

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