Bloom is a great time of year in vineyards. The canopy is relatively pristine, flowering clusters have a beautiful scent and managers are hopeful for a good harvest. Consider these points during bloom:

- **Petiole sampling** – Bloom is one of the recommended sampling times for nutrient analysis. The petiole on the leaf opposite the basal cluster is collected, usually between 40 and 60 depending on the size of the petioles. Labs will have sampling directions on their website. The advantage to doing it now – gross deficiencies can be corrected, especially with important nutrients such as potassium.

- **Prebloom** to several weeks **postbloom** are periods of high susceptibility of clusters to **powdery mildew** and **black rot**. Powdery mildew in particular can become established and spread like wildfire at this time of year. Scouting is critical now. Wayne Wilcox has state of the art PM information in his disease overview (<http://ccesuffolk.org/assets/Viticulture/Grape-Disease-Control-2013.pdf>, look in the current events section). As pointed out by Wilcox, inconspicuous powdery mildew infections may also take place at this time of year. While not the direct cause of devastating crop loss, these low level but not visible infections render the clusters much more susceptible to late season cluster rots.

- **With rapid shoot growth**, obscured cluster zones are often an issue around bloom. In the research vineyard, we have particular problems with Chardonnay, Gewürztraminer, Pinot Noir and Sauvignon Blanc. Both leaves and lateral shoots can really clog up the cluster zone, greatly reducing air flow and spray penetration at a time when it is the most important. This is how powdery mildew gets a foothold. We deal with this issue by leaf pulling now. Some growers will run their leafers; others may send in a crew to leaf one side of the canopy. After fruit set, a more substantial leaf pulling can take place. On larger acreages, this is a daunting task but maybe worth attempting on more vulnerable varieties.

- **Grape berry moth** – Larvae make their first appearance during bloom. High-risk sites include blocks near woods especially the edge rows. The question – is this generation
economically important and will treating now reduce later infestations? From his 2012 annual insect and mite overview (located on our website), entomologist Dr. Greg Loeb: ‘Our recent research indicates that the first postbloom spray has little impact on end of season damage by GBM and can probably be skipped for low to moderate-value varieties. Extremely high-risk sites, regardless of crop value, may still benefit from the postbloom spray.’ If infestations are heavy, try treating only those areas. We still have Dr. Loeb’s 2012 GBM webcast posted on our website – you can also view it at <http://breeze.cce.cornell.edu/p6rirhko6d5/> , or see the printed version at http://ccesuffolk.org/assets/Viticulture/Loeb-Insect-Review–12.pdf.

- According to the NEWA grape berry moth model, the bloom date of wild grapevines should be used for ‘biofix’, a starting point for the prediction model. I have been monitoring wild vines in Southold, they are not yet in bloom (strange but true). On the other hand, rootstock in the research vineyard was in bloom June 2–4.

- Utility of a bloom botrytis treatment – According to Wilcox, a wet bloom period allows the establishment of latent Botrytis infections. Think of all the cluster debris that gets trapped inside the cluster at cluster closing, it is a worrisome scenario – but only if weather is wet veraison and beyond. It is the late season wet weather that causes the latent infections to wake up. This is a situation where vineyard managers really draw on their experience. If bloom is relatively dry, a bloom botrycide provides little benefit. The best candidates for bloom treatment are those varieties/blocks with a history of cluster rot. Alternatively, materials such as Pristine and Flint with Botrytis suppression abilities may be helpful.

(Source: Long Island Fruit & Vegetable Update, No. 11 June 13, 2013)