Subject: New England Grape Notes, April 23, 2017 From: Sonia Schloemann <sgs@umext.umass.edu>

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# New England Grape Notes - April 23, 2017



## **Crop Conditions:**

Grape vines in Southern New England are beginning to show budswell in many areas. There doesn't appear to be much cold injury to vines this spring. Growth happens rapidly at this stage and it is important to keep several practices

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in mind during this time.

- Early season disease management Phomopsis, Black Rot and canker diseases can be addressed with early season management. See the previous issue of Grape Notes for detailed information about these diseases.
- Spring weed management Studies being conducted at Cornell Univ. and at other research programs are finding that mature vines do not always need vigorous in-row weed control and can benefit from a variety of cover crop options (Chicory, tillage radish, various annual grasses or native vegetation). However, establishing young vines is aided by limiting competition from weeds or other under-vine growth either mechanically (mechanical or hand cultivation), or with herbicides. See the current New England Small Fruit Guide for specific recommendations (see link below).
- Early season insect management Scale insects, Mealybugs and Flea Beetle are among the insect pests found early in the season. See article from Long Island below.
- Early season fertilization This is an important time to make sure that vines are getting nitrogen fertilization. See more about this in an article from Virginia Tech below.

For information about all of these issues you can also consult the (New and fully updated) 2017-18 New England Small Fruit Management Guide at: <a href="http://ag.umass.edu/fruit/ne-small-fruit-">http://ag.umass.edu/fruit/ne-small-fruit-</a> management-guide.

### Coming up soon:

**Shoot thinning -** once new shoot growth has begun and we are past the time for likely frost/freeze events, it is time to do some shoot thinning. The shoot density goal will differ according to the type and cultivar or grapes you are growing but thinning shoots is almost always needed and the best time to do it is before the shoots are long and begin to lignify or have tendrils that attach to other shoots. More on this in the next issue of Grape Notes.

~ Sonia Schloemann, UMass Fruit Team

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#### Mealybugs and Soft Scales

Alice Wise, LIREC and Cornell University

We have been seeing these in local vineyards for a long time now. One clue is the presence of ants who enjoy the honeydew that the insects secrete. Sometimes we see ants in the research vineyard feasting on sap coming from the cut ends of canes. It is possible that they are also tending mealybugs (MB) and soft scales (SS). In the research vineyard, we have seen light infestations of MB but more commonly, find leucanium scale under the bark on trunks and on canes. It is likely that adults are roaming on vines now. To monitor vines, use double sided sticky tape.

MB very occasionally infest clusters close to harvest. When infestations are heavier, sooty mold grows on the honeydew. This can be messy and fruit may have to be sorted prior to processing. In addition, based on recent research, Cornell entomologist Greg Loeb and virologist Marc Fuchs have determined that, in some blocks, MB's may contribute to the spread of leaf roll virus. Currently, it is not known if either insect spreads red blotch. Regardless, these creatures merit our attention and we need to try to understand the degree of infestation in our vineyards. The UC Dept of Natural Resources has put out several well–done scouting videos:

Monitoring for scale: <a href="http://www.youtube.com/watch?v=OtPNxIDLVk4">http://www.youtube.com/watch?v=OtPNxIDLVk4</a>
Monitoring for mealybug: <a href="https://www.youtube.com/watch?v=YgL4BMK8PGg">https://www.youtube.com/watch?v=YgL4BMK8PGg</a>

(Source: Long Island Fruit & Vegetable Update, No. 3, April 20, 2017)

## Nitrogen Fertilization

Tony Wolf, Virginia Tech.

Nitrogen is the nutrient used most commonly in Virginia vineyards, with typical maintenance applications ranging from 20 to 50 pounds per acre of actual N per year. Here are some reminders on nitrogen fertilization:

- The need for N is based on visual assessment of vine size, canopy color and crop yield, and confirmed with plant tissue analysis. See our Wine Grape Production Guide for Eastern North America (2008) for details on the visual assessment. Plant tissue analysis (leaf petioles) can be done either at bloom time or at veraison; however, we believe that veraison provides a somewhat better assessment of the actual vine N status.
- Nitrogen fertilizer is generally applied in the bud burst to bloom period, but closer to bloom than to bud burst. Split applications are warranted if total rate per acre is greater than 30 pounds/acre (apply ½ at bloom and the balance 4 to 6 weeks later).
- Compost is an excellent source of N, but it also can add undesirable levels of other nutrients such as P and K. Urea (46% N) is often the most economical form of N to apply.
- Banding soil-applied N under the trellis provides more N to the vine and less to the cover crop. This is particularly important where under-trellis cover crops are used to restrict water availability to vines and/or to minimize soil erosion.
- Relatively heavy rates of soil-applied N are most effective at increasing vine capacity (vegetative growth AND crop), while foliar-applied N (urea), is very effective at increasing

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yeast assimilable N (YAN).

• If no increase in vine size/vine vigor is needed, one or two foliar apps of N (urea, at 5 lbs actual N per acre) around veraison is very effective in increasing YAN levels.

(Source: Virginia Vit Notes, Vol. 32, No. 2. April 2017)

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