PEST ALERT! SCALE INSECTS

Two species of scale insect (Putnam scale and Dearness scale) have appeared recently across all growing areas. **Putnam scale infestation** is the most common and causes discrete circular areas of dead vines and reddish areas as shown in the images below. The adult females are on the woody part of the cranberry vine and are underneath a brownish cover, as shown to the right. They are around 1/16 inch and very hard to see. If you lift the brown cover, you may see the bright yellow sac-like insect. Immatures, called crawlers, will emerge from under the female’s cover starting in the second week of June. Crawlers settle within 1-4 days, lose their legs at the next molt, and reside under a bright white cover. For more information and to view additional images go to http://www.umass.edu/cranberry/pubs/factsheets.html and select the ‘Scale Insects’ Factsheet.

**Management recommendation**: The crawler stage is targeted and the timing must be quite precise. About the third week of June (when these bright yellow crawlers can be seen moving along the vines) is when conventional insecticides should be applied via chemigation. Last year, Diazinon was shown to be highly effective (this is a FIFRA 2EE recommendation).

**Dearness scale** is much rarer, but occurs a full two weeks earlier than Putnam scale. The insect creates dingy-white clam-shell-shaped covers that are dotted over the vines. When Dearness scale populations are high enough, patches of vine injury become continuous areas of weak and dead vines. Upon inspection of the dead areas, the old white scale covers of last year’s females are readily apparent on the brittle vines. Management parallels the description for Putnam scale.

**Bottom line**: If you have new dead or weak areas on the bog, scratch along the woody area of the affected vines and check for scale insects stuck to the upright. If not sure, it would be advisable to have us check the vines. Take a healthy sample of vines just along the edges around the dead area and bring/send them to the Entomology lab.

**Anne Averill and Marty Sylvia**
How to collect good samples for disease diagnosis

When it comes to collecting plant material for disease diagnosis, I like to think of it being an art as much as it is a science. Although I always tell growers that ‘the more plant material, the better’, the quality of the sample and the background information the comes along with it are just as important as having enough plant material to observe or process in the lab. A good sample tells a story by itself and it should represent what is occurring in the field. Proper sampling becomes even more critical if dealing with unfamiliar symptoms or finicky plant pathogens. Please remember the following tips while collecting samples.

- The ideal sample should represent the range of symptoms observed in the bed. Include plants that appear to be normal and symptomatic plants, ranging from best to worst.
- Remember to examine the entire plant. Even if symptoms appear to be aboveground (leaves, flowers, fruit, uprights), observe and include part of the root system in your sample. If you suspect Phytophthora, inclusion of roots is essential.
- If there are multiple affected areas, take samples from the different areas and/or beds. Make sure to label them.
- Make and record observations: make notes of the shape and size of the symptomatic area [I recommend taking a photo] and note any distinct patterns in the bed (scattered, low spots, near edges, around sprinklers, variety affected, etc.).
- Any pictures, additional information about management practices, history of the bed, and observations about when symptoms first appeared can be very useful in ruling out unrelated problems or finding the cause in a timely manner.

If you have any questions, call (508) 295-2212 ext. 18 or email me at esaalau@umass.edu.

Erika Saalau Rojas, Extension Plant Pathologist

When sampling for Phytophthora and other unknown issues, collect symptomatic vines and part of the root system. Include several vines from within each area (represented by white arrows) that represent the range of symptoms observed.

Phytophthora root rot symptoms in a low spot. This disease affects the root system, weakens vines, and may cause discoloration in runners. Unless drainage is improved, infections will eventually lead to plant death.
Early Summer Weed Management

Special Local Needs (SLN) labeling for Adjuvant Recommendations for Chemigation and Spot-treatments with Callisto. Syngenta and I have filled out the necessary paperwork and submitted our request to MDAR. The SLN label will address 2 uses of Callisto: spot-treatment applications and the addition of 1-4 pt/A of adjuvant when chemigating (instead of 0.25% v:v NIS (nonionic surfactant) or 1% v:v crop oil, which leads to gallons of product). We will announce the granting of the label on our web site and IPM Phone message (x60) as soon as we get the word (targeting the end of June).

Poison Ivy (PI). Spot-applications of concentrated rates of Callisto with either COC (crop oil concentrate) or NIS give good control. Our 2-year trial showed better control in Year 1 when we treated mid-June/early July compared to late May/mid-June applications, but both decreased PI and cranberry growth rebounded. The difference between the 2 timings became much smaller in the second year when we treated in 2 consecutive years. The bottom line is if you have poison ivy in spots and have time to treat it, go for it. Two applications per year are recommended and they must be separated by at least 14 days. Use up to 1.5 oz/gallon with either NIS or COC, but if it is looking to be hot and/or you have flowers out there, I would favor the NIS.

Use of Grass Herbicides. Poast (sethoxydim), and Select and Intensity (clethodim) can be used for control of true grasses. Chemigation is NOT allowed for any of these products. Poast should be applied with a COC. Grasses should have at least 6-8 leaves to provide enough surface area for absorption. Select 2EC and Intensity should also be applied with a COC. Select MAX and Intensity One can be applied with a NIS. Application of a Select or Intensity product is prohibited between hook and full fruit set, but they only have a 30-day PHI, whereas Poast has a 60-day PHI. Poast has no timing restriction, however. If you are not sure if you have a true grass, send me a photo or bring a sample in before treating.

New Weed ID Guide Coming Soon!

Thanks to the excellent translating efforts by Leo Dalbec and the great support of the editorial staff of CRAAQ (Reference Center for Food and Agriculture in Quebec), the English version of the French Weed ID Guide will be available soon. This guide unites high-quality photographs with detailed text descriptions for 144 weeds. It contains nearly 1,000 photographs that illustrate botanical characteristics of weed species at different stages of development, highlighting distinctive morphological traits.

Highlights include:

- Descriptions of “Similar Species” provided to aid in correct identification.
- The “Features Key” helps to narrow down the identity of an unknown plant to a few possible species.
- “Priority Ratings” gauge the impact of each weed and its potential to colonize and reproduce.

We will be holding a workshop centered on the use of the guide and identifying weeds on a date to be announced in the mid-late summer. The Guides will be available directly through CRAAQ or at the Cranberry Station.

HILARY SANDLER
The Keeping Quality Forecast for June 2015 is for GOOD keeping quality.

We calculated 7 of a possible 16 points for the final 2015 forecast. The positive forecast derives mainly from the low rainfall averages observed during April and May (2 points awarded). The Keeping Quality Forecast (KQF) should serve as a reference when making fungicide management decisions against fruit rot.

A GOOD forecast suggests that in beds with little or low disease pressure, 2 to 3 fungicide applications may be sufficient to control fruit rot this season. That is not to say that you should make all fungicide decisions based on the final KQF. Other factors such as disease pressure, drainage conditions, overall plant vigor, and plant varieties should be considered when designing your fruit rot management program. For example, beds with a history of fruit rot may require more fungicide applications for adequate disease control. Bear in mind that proper bog management (drainage, irrigation, and fertilization), practicing late water, and removing crop debris (trash floods) may also help in increasing fungicide efficacy.

If you have any questions about fungicide efficacy, fungicide resistance management, or need help in deciding which fungicides to use this year, please feel free to reach Erika at (508) 295-2212 ext.18 or via email at esaalau@umass.edu.