**Weekly Update**

**Vine Crops Update**

**Angular leaf spot** continues to be a problem in a fair number of pumpkin, summer and winter squash plantings. Now is the time to try and get a handle on it before it spreads out onto runners and eventually the fruit. Copper is still the best management tool we have applied every 5-7 days. If the weather remains like it has the last couple of days (warm and dry), your spray schedule could be stretched a little longer. And remember that it is better to get a fungicide spray on before a rain event rather than after! The best results for control can actually be achieved by adding a mancozeb material (Dithane, Penncozeb, Manzate) to the copper as it improves the efficacy of the copper. Until recently, these mancozeb materials were only labeled on cucumbers, melons and summer squash, but the good news is that label changes to the Manzate labels have been expanded and it can now be used on all cucurbits including pumpkin and winter squash. However, mancozeb has a 5 day pre-harvest interval so for summer squash plantings that you are picking on, you will have to stick to just copper as most of these have a 0 days to harvest, but a 24 hour re-entry interval. Add the mancozeb to younger plantings and use it on other vine crops such as pumpkins and winter squash. The other good news is that the copper/mancozeb tank mix will also give you some protection against Cucurbit Downy Mildew as well.

New outbreaks of **Cucurbit Downy Mildew** have been reported in Michigan, Ohio, Pennsylvania and Ontario, Canada, but none has been found in NY. All outbreaks have been in cucumbers so far so keep a close eye on them. The current DM forecast indicates that “unfavorable conditions are expected for the transport events out of the Great Lakes once again and the upper mid-Atlantic area as well”, which means that we are still in a low risk for disease moving into our area. That coupled with our bright, sunny, dry days should help reduce the chances of DM getting started. However, we are still recommending that you maintain a protective spray schedule. The following recommendations come from Cornell Plant Pathologist Dr. Tom Zitter: The top 5 materials used preventively (in order of their efficacy) if DM has not occurred in your fields are Gavel (not labeled on pumpkins or winter squash), Presidio, Previcur Flex, Ranman or Tanos all mixed with a protectant such as Bravo(chlorothalonil) or mancozeb. Once DM is found in your fields, Dr. Zitter’s

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choices starting with most effective are Presidio, Previaur Flex, Ranman and Tanos, all mixed with a protectant again such as Bravo or mancozeb. However, I think maintaining a good cover of Bravo or mancozeb until DM gets closer is a fine for now. For organic growers, continue to maintain a good copper coverage of your plants.

Squash bug eggs and newly hatched nymphs are being found in just about every vine crop field we have been in the last week. Now is the time to try to control them when they are small — trying to control adults is very difficult. There are a number of materials available including Sevin XLR, Thionex, Asana, Warrior II, Assail and Pounce. If you are trying to control them in summer squash you are harvesting, be careful of pre-harvest and the re-entry intervals. Pounce has a 0 days to harvest interval with a 12 hour re-entry interval, as does Assail. I would also recommend spraying late in the evening so that you do not harm any bees that might be pollinating during the day. Good coverage is important so use higher volume of water if possible.

Pyganic is organically labeled for the control of squash bug and can be mixed with Surround Kaolin clay. Again, I would recommend applying this late in the evening as Pyganic is quickly broken down by sunlight and it would allow more time for the insects to move through the material before it dries. Many growers feel the combination of the two materials is better than either one alone. If you’re not sure you have squash bugs, lay some old planks in your field and after a couple of days lift the planks up. The adults will often like the protection of the planks and therefore hide underneath them.

I have also gotten a few questions in the last week or so about post emergent weed control in pumpkins and winter squash. We have two very good post emergent grass herbicides that are very effective, but only one broadleaf materi-

al that is good on some weeds, but poor on others. Select (or Winfield Solutions generic version called Section) at 6 – 8 ozs per acre or Select Max at 12 – 16 ozs per acre will work well on actively growing grasses. It is also very important to add a non-ionic surfactant (NIS) to any Select (1% of finished spray volume or 1 gallon per 100 gallons of water) or Select Max application (0.25% per finished volume or 1 quart per 100 gallons of water). The other post grass material is Poast and can be used at the 1.0 – 1.5 pints per acre rate with the addition of 2 pints per acre crop oil concentrate (COC).

Sandea (Gowan’s version) or Profine (Winfielded Solutions version) is the broadleaf material that I mentioned. It will do a excellent job with pigweed, several of the mustards, galinsoga and yellow nutsedge and a good job with smaller ragweed and velvet leaf plants. We recommend using the 0.5 ounce rate plus a non-ionic surfactant (NIS) at the rate of 0.25 – 0.50% per finished spray volume or 1 to 2 quarts per 100 gallons of water. Make sure you look at your crop before you spray as the label is very specific about applying only to pumpkins and winter squash that do not have any female flowers visible (see picture below for what a female pumpkin flower looks like). In discussions with the Gowan representative, they are not recommending that you tank mix Sandea with any of the grass materials (Select and Poast) due to the potential for increased injury to the crop, especially if crop oil concentrate is used.-CDB

Sweet corn update

This week might mark the start of the second generation of European Corn Borers for the Capital District. We have two distinct races or populations of ECB’s in New York which we call ECB – E or ECB-Z. Even though they cause the same kind of damage and the controls aren’t different, the timing of their flights tends to be slightly different. They don’t necessarily coincide with one another. This week we have caught a number of ECB-E race moths which indicates to me that the second flight might be getting underway. If there is any good news, it’s that Corn Earworm moth numbers were low this week. See the table on the last page for a complete list of trap catches from throughout the Capital District. –CDB
**Potato update**

Early potatoes are being dug in several locations for farmers markets and many of reached a nice size. Potato leafhoppers are dominating the pest scene and really need to be treated as soon as they are detected. Adults will fly when disturbed, but nymphs tend to be found on the undersides of leaves and cannot fly. With some varieties is does not take much damage to reduce tuber yields and quality.

No new late blight was reported this week and in many of the potato plantings we have looked at have been clean of most diseases. However, maintain a protectant fungicide program for the time being. If things change and late blight is found locally, we will let you know immediately. -CDB and CLS

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**Rate alert for Synapse on Cabbage (Brassicas)**

By Dan DiGiacomandrea, Bayer CropScience

Our Brassica label rate has recently changed (3/23/11) from 2 fl oz/acre to 3-5 fl oz/acre. Unfortunately the CDMS label found on-line is the old (11/21/08) 2 oz/acre label. Confusing the issue is a Supplemental label in CDMS that lists the new rate range.

We have done work with both the 2 and 3 oz rate on Brassica worms over the years and have had good efficacy with both rates. Apparently the rate was upgraded to reflect our rate ranges on other labeled veggies. So, there are commercial applications taking place at 2 oz, and we expect that results should be acceptable at that rate. However, we should be recommending a minimum of 3 oz now. Our Regulatory folks have been notified of the confusion and should be updating CDMS, etc.

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**Opportunity: Glens Falls Hospital seeks farmer to sell**

Glens Falls Hospital is looking for a grower to come to the hospital one day per week to sell their products. We employ well over 2000 employees and products should sell well. We are looking for someone for next season also. Please contact C.C. Merrithew@ 518-926-2621 or cmerrithew@glensfallshosp.org if you are interested for this season or for next season.

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**Be on the lookout for squash vine borer**

Squash vine borer are showing up in traps in NH at their highest level in 5 years, and squash bugs have been seen colonizing cucurbit crops. Many vine crops are in bloom, and care should be taken during bloom to avoid insecticides which are toxic to pollinators.

Squash vine borer moths are day-flying moths with a 1.0 to 1.5 inch wingspan and bright orange markings. In flight, they look like wasps. There is one generation each year and adults emerge in late June/early July. They lay eggs at the base of squash plants, and upon hatching, larvae bore into stems (where they are protected from insecticides). Thick-stemmed squashes are preferred. Unless you use traps or scout fields for evidence of eggs or larvae, the first sign of squash vine borer infestation can be wilting vines in July and August. By that time, it is too late to do anything.

Growers should scout their pumpkin and squash fields weekly for squash vine borer from late June through early August. Examine the base of vines for evidence of larval feeding (sawdust-like frass near entrance holes) and then split open the stem to confirm the presence of larvae, which suggests more eggs are being laid. Two insecticide sprays, ideally applied to the base of the plants and timed five to seven days apart, will control newly hatching larvae before they are able to bore into the stem. Alternatively, you can monitor with a Scentry Heliothis pheromone trap from early June through early August.

Make 2 to 4 weekly applications if more than 5 moths per week are captured. Timing is very important. Treat base of stems thoroughly to target hatching larvae. Some selective materials, such as spinosad (Entrust) or spinetoram (Radiant), provide excellent control of hatching SVB larvae.-R. Hazzard and A. Cavanagh, July 7th UMass Vegetable Notes
Garlic maturation across the Capital District has been very uneven this year. Some growers are well into harvest; others are probably still a week off from pulling anything. As we know, garlic doesn’t stick to a calendar based schedule. The key is to pay close attention to your each of your varieties’ maturity and harvest when cloves have either just filled or have almost filled the wrapper leaves. Getting this right is very tricky—too early and the cloves are small and don’t store well, too late and the head pops, making it unmarketable and more susceptible to diseases. So, as we near harvest, how should a grower decide if the garlic is ready? The best answer we have is to pull a few plants, cut through the head sideways (so you cut through all the cloves), and see how well developed the cloves are. You can use the leaves as a guide to decide when to do this (lowest third or half of the leaves yellowing and dying is a good mark to start with), but looking at the cloves is the best way to know if the garlic is ready. Cloves should fill the wrappers—if they seem a little loose, the garlic has a little ways to grow. A little of the very outer wrapper may have started to decay at this point. That is okay—it’s a normal part of the maturation process. The key is to harvest before the bulbs pop, which can happen relatively quickly, especially if we have another wet period in the next week or two. If you don’t think you will be able to get out and harvest for a period of time, it’s better to harvest bulbs a little too early than a little too late.

To wash or not to wash? Generally, you want to clean your garlic in the most gentle way possible. For some soils this can be done dry, for others washing is necessary, especially if the garlic is harvested muddy. Garlic harvested from sandy soils may be brushed clean, while garlic harvested from most wet soils and heavy soils under any conditions probably needs to be washed. The quicker you can move from harvesting to washing, the better. Do not bang heads to remove dirt, gently remove excess and then wash off the dirt that clings to cloves. The more garlic is banged during the process, the more it will bruise and the worse it will store.

Curing the garlic: After cleaning, curing garlic is the step that assures good storage ability. Traditionally, we cure garlic hanging in small (5-7 heads) bunches out of direct light with roots and tops on, though more and more people are trimming some (not all-leave a foot or so) of the tops off and are also trimming the roots before curing. We are still working on determining what the ideal trimming method is in our humid climate. No matter what, you want to provide the best curing conditions possible. Many people use barn rafters. The ideal temperature range for curing garlic is 75 to 90 degrees F. Higher temperatures can damage the bulbs, leading to waxy breakdown. We would like humidity to be 60-75%, but since we can’t control it in most operations, just bear in mind that the higher the RH, the slower the drying time. If you can use fans to move humidity out of the structure, you are using to dry garlic, that can help. If humidity is very high outside (it’s raining), the fans are not useful. Curing may take up to two weeks. The goal is to have the neck dry nice and tight, which will help keep diseases out of the head.

Look at each bulb for disease or damage prior to curing.

Up until just a couple of weeks ago, garlic was looking really uniformly good in the Capital District, with the exception of some botrytis causing a few scapes here and there to collapse. However, as we near harvest we have been seeing more and more problems. Harvesting is one last opportunity to remove disease inoculum from your crop before it goes into the enclosed space where you do your curing. Make sure you remove anything that has breakdown of the basal plate, severe damage to wrapper leaves (you can see the individual cloves), or mechanical damage. These are all either sources of or sinks for disease. Go back into your curing area a week after harvest and look at the garlic again, if it is accessible. Take out any additional bulbs that show any signs of damage or disease. This step can help slow the spread of any diseases you have present.

We are starting to see more and more cases of garlic bloat nematode as we move into harvest. Please, if you think you might have nematodes, give me a call and I will come out and look at your field or your garlic in storage. Until we get a certification program up and running, it is up to the growers to pay close attention. Make sure you don’t assume issues here and there aren’t important. If you have nematodes, they can go from being a small problem to causing crop failure in as little as one year. –CLS

When should leaf sampling be done in blueberries and how?

Use a leaf analysis (supplemented with a soil test) to determine fertilizer needs after the planting is established.

- **Strawberries**: Collect 30 leaflets after renovation in July or August.
- **Raspberries**: Collect 30 newly expanded leaflets from primocanes in early August.
- **Blueberries**: Collect 30 newly expanded leaves from well-exposed branches in late July.
- **Currants and Gooseberries**: Collect 30 newly expanded leaves from well-exposed branches in late July.
- **Cranberries**: Collect upright tips only (no more than top 2” of growth), mixing flowering and vegetative uprights for about 1 cup material between mid-August and mid-September.

Wash dirt off collected tissue, blot off excess water, place tissue in a paper bag, allow tissue to air dry and then send to: Agro-One, 730 Warren Rd., Ithaca, NY 14850. *(from 2011 Pest Management Guidelines for Berry Crops)*

Blueberries often have 2 flushes of growth during season. Leaves for analysis should be fully expanded new growth from 1st flush, not second. Foliar analysis in new blueberry plantings may be beneficial but sometimes produce rather erratic results. This is attributed to the need for 4-5 years to pass after planting for plants to settle down and juvenile growth spurts to be over. Age usually calculated from when plants go in the ground; transplant age not necessarily included in calculation in this respect (i.e. 3 year old transplants, planted 3 years probably still in juvenile growth spurt.)

With fall raspberries, sampling timing maybe a little tricky; and it is good to have soil analysis to compliment it. For example – foliar analysis in an early fruiting year showed low Potassium; soil levels were adequate. Probable explanation – fruit acting as a sink for foliar potassium.

Should you wait a certain number of weeks after fertilizer application before soil sampling?

Soil N testing is not very useful for perennial crops as levels fluctuate seasonally and over the course of the season. A suggestion is to sample PRIOR to application of fertilizer(s) in early spring or late fall. This prevents getting artificial readings from digestion of recently applied fertilizer taken up with soil samples.

*I am using a Cardy meter to monitor nitrogen status in day neutral strawberries and I saw a sudden drop in nitrogen from adequate to hardly detectable this week – Is this because plants are in full production or is it because of recent heavy rains causing leaching?*

Possibly both reasons are in play. N is needed to take up C to make sugars; fueling fruit. N drop to be expected during period of rapid fruit filling. Leaching plays a huge role in soil N levels.

Source for Cardy Meter:


*Is it too late to apply Boron to HT fall raspberries not fruiting?*

It’s never too late to apply Boron and there is no best time of year to apply it. If your soil B level is short, you should put it on when you can, but if you are applying Boron in the middle of the summer, it is best to apply through drip irrigation to avoid foliar burn.

Information edited from Weekly Berry Call Summary – June 30, 2011. –**LGM**

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**Websites of Interest**

Diagnose pest and disease problems using color pictures: [http://vegetablemdonline.ppath.cornell.edu/](http://vegetablemdonline.ppath.cornell.edu/)

Cornell *Guidelines* for fruit and vegetables: [http://www.nysaes.cornell.edu/recommends/](http://www.nysaes.cornell.edu/recommends/)


USDA Fruit and Vegetable Market News: [www.marketnews.usda.gov/portal/fv](http://www.marketnews.usda.gov/portal/fv)

July 17: Organic Berries and Apples—Adding Value and Diversity to your Farm  a NOFA-NY event from 1:00 pm – 6:00 pm (including potluck) at Thompson-Finch Farm: 750 Wiltsie Bridge Rd., Ancram, NY 12502 (Columbia Co.).

This workshop is FREE for NOFA-NY and other NOFA Chapter Members/$15 for All Others. Please register for this event by visiting the NOFA-NY Shopping page or by calling Katie (Membership & Registration Coordinator) at (585)271-1979 ext. 512.

July 16th: Hops 101 – Introductory Level: Hilton Doubletree in Tarrytown, NY, on July 16. The workshop will run from 8:30 am - 4:30 pm with lunch included, for $125 per participant. Register online at www.atlantichops.com.

Valatie Summer Meeting: 1st week in August, 9:30 to noon. More details to follow.