

Suwannee Valley Watermelon Crop Update- May 5th, 2020
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This week's topics:

Funding sources for watermelon disease samples.

#1 topic of the past week- Disease update- Fungicide program questions.

Increasing water demand occurring in watermelon fields.

Insect pest update.

Nitrogen and potash fertigation rates increasing.

Hello watermelon growers and allied industry as well. This update is provided by your Extension agents in the Suwannee Valley and IFAS state Extension specialists Urgent crop situations that may need a farm visit to solve may require special permission for that travel, but permissions are being granted quickly. In the meantime, continue to send photos to your Extension agent for quick diagnosis.

FYI, at the NFREC-Suwannee Valley (your area IFAS research center) near Live Oak, we have been able to initiate two controlled release fertilizer trials, one degradable plastic mulch trial, and two fungicide trials. It has been challenging to initiate these trials with our limited "essential" staff and other restrictions, but that is your research update.

Funding for watermelon disease samples: The UF/IFAS Plant Diagnostic Disease labs (<https://plantpath.ifas.ufl.edu/extension/diagnostic-labs/>) are run as a fee-based service. Plant disease samples are \$40 per sample. However, watermelon growers in the Suwannee Valley may have noticed, Extension Agents often do not charge you, the grower. Why not? The main reason Suwannee Valley watermelon growers often do not pay is the "Suwannee Valley Extension Agent Watermelon Team" has chosen to use some proceeds (if any) from the Suwannee Valley Watermelon Institute each year to fund watermelon grower disease samples through their Extension Agent. The other service that may result in "no charge" is if a UF/IFAS researcher has a project on a particular disease and "wants" samples to be submitted for that project. Anyway, we decided we want to support your plant diagnostic needs as you have supported our Extension educational programs. So, keep on supporting our Extension programs, and we will do the same for you!

Disease update: Be on continued alert for the possibility of diseases becoming more active as the season progresses. Fortunately, the past few days have been beautiful and not favorable for diseases. Let's not let our guard down.

Downy Mildew: There has been high incidence of downy mildew in South Florida this spring and we have been concerned about it arriving again this year. This is the disease traditionally known as "wildfire" and arrived last year in mid-May. Because of the high risk of damage and movement throughout the region, we are expressing our concern to be on the lookout, especially in the southern parts of the Suwannee Valley region. Samples of concern should be submitted to your Extension Agent.

We have samples in the lab now to be checked out. We will let you know if downy mildew or any other new disease is confirmed.

Powdery mildew: Everyone should already be on a fungicide program for powdery mildew. This is the one disease that has been a consistent guarantee of being here the past several years. Powdery mildew usually appears in late April or early May and we now have several confirmed cases. Recommended materials at this stage to add to your regular fungicide program include Quintec or Torino. You do not need Quintec or Torino every week, perhaps every other week, but always with other broad-spectrum fungicides like mancozeb. Quintec (Group 13) and Torino (Group U6) are from groups not normally used in our regular rotations and fit more easily in our rotations. Collect samples in question and deliver to your Extension agent or UF plant disease lab for further confirmation.

Bacterial leaf diseases: This past week's low humidity, and sunny days really helped keep the bacteria slowed down and concern has lessened but not eliminated. We still see fields where some bacterial activity is present, so we don't want to assume it will go away. The UF Plant Disease specialists are working on determining whether the bacteria is a *Xanthomonas* or *Pseudomonas* species. Keep an eye out, but bacterial leaf disease problems seem to have been reduced in the past several days.

Other fungal diseases: We have also seen some gummy stem blight and where this is present control measures such as Inspire Super or other targeted materials are recommended.

Irrigation schedule adjustments: You are likely seeing significant increases in water uptake in most fields. This is about the time of year when we see these significant changes. Some growers are already on 2 cycles per day, but everyone should be paying close attention to the soil moisture sensor data now and being prepared to make adjustments. Dr. Charles Barrett (cebarrett@ufl.edu), your regional water resources agent nicknamed "Dr. Water" is very helpful in this area. He is really good at this so, if you need help, email him and leave your cell # for him to call you.

Insect update:

Squash bug nymphs: We have received several reports of high numbers of squash bug immatures (nymph stages) in Levy, Gilchrist and Alachua Counties. Less problems are being seen in more northern counties in our region. The observations include very high numbers (dozens per fruit in high population areas) and include signs of stress (wilting) in those plants being impacted by extremely high populations. Control at this point is very tricky, because the main materials of choice for control are the pyrethroids like bifenthrin. Tricky because of the toxicity to bees. So, if a spray is needed, please protect your bees and spray only at night. Let your beekeeper know what is planned so they can take measures to protect the hives. I would make this following suggestion to consider at the end of the season and the beehives have been removed. Consider a spray of a pyrethroid after the season is completed to kill the high populations that will be the source of adults next spring. I see evidence, that the high populations this year, if not sprayed, will lead to a higher overwintering population in that immediate area. Something to consider.

Rindworms: We are getting a couple reports now of rindworm feeding damage. It is worth repeating, management strategies are much more complicated now due to new label restrictions to protect pollinators (that is a good thing). Once we get high pressure and you begin to see more symptoms of

damage, the better materials include Intrepid or Coragen (as a spray only) which are also safe to pollinators. Do not use pyrethroids (bifenthrin, Asana, Lambda, etc.) for control of rindworms as there is a very high level of resistance to that class and they are very toxic to bees.

Aphids: We have had confirmed cases of aphids becoming a concern in one field. This is an isolated situation, but want to report what we know. Leaves with aphids will be strongly cupped downward and when you unroll that leaf back, the aphids will be seen there. Many beneficial insects (especially lady beetles) are often found in these aphid situations and keep the aphids under control, but if control is needed, Fulfill is the material of choice and is safe to pollinators.

Leaf tissue and petiole sap testing: This is a service we will still continue to provide throughout the region. Most plantings are requiring 2.0- 2.5 lbs per acre per day rates now, as we get close to harvest (within 2 weeks) in some early-planted fields. The good news is that we can tell you what you need immediately once the samples are collected. Once harvest is started, we typically recommend dropping back to 1.5-2.0 lbs per acre per day rates for nitrogen and potash.