

Suwannee Valley Watermelon Crop Update- April 13, 2020
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Hello watermelon growers and allied industry as well. Just a reminder, contact your Extension agent to let them know what needs you have. 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.

Crown leaves showing burned tissue: Last week, the most common photos shared, and questions asked, were about the crown leaves showing brown/bronzed leaves. These symptoms are typically on the leaf's upper surface and are isolated to the oldest crown leaves. The symptoms are very obvious on the upper leaf surface, but turn the leaf over, upside down and the lower leaf surface will not show the same burning. I think we had some pesticide spray burn, but after looking at things last week, I think most or at least much of the damage has been due to the two significant wind and sandblasting events in the past 2-3 weeks. We are not seeing any disease consistently associated with these symptoms.

Disease update: In general, crops still look very vigorous and still pretty free of disease now. We have confirmed a few gummy stem blight incidences in the region, but I would still suggest they all likely came in on infected plants but may not have been obvious the day of planting. The only other confirmed reports of gummy stem blight were isolated shipments of infected transplants. Fields with clean transplants are still clean. As a result, I still recommend staying on a weekly Bravo or other chlorothalonil schedule for this early part of the season, perhaps the first 4-5 sprays or so. This is the recommendation for the clean fields. Inspire Super or other targeted material for gummy stem blight should only be used at this time if you have a confirmed case of gummy. Remember, just because we have those few gummy cases, that does not mean everyone should even be thinking of starting with the "big guns".

We are also beginning to see symptoms of Fusarium wilt. This is a vine or two initially wilting and continuing with the entire plant wilting and dying. This is likely due to the increased demand for water with new fruit setting and parts of the water conducting vessels being partially clogged. An in-field test can give you a pretty good idea if Fusarium is the cause. Sacrifice the plant and cut through the crown area (what is about ground surface level) by cutting in an up and downward cut through the middle of the crown. A healthy crown will have nice white/green internal tissue color, but Fusarium-infected crowns will have brownish streaks in the internal tissue showing the clogging of the water-conducting vessels and tissue. No controls are available at this stage of growth, but the high temperatures are not favorable to Fusarium.

We should next be on the lookout for powdery mildew which usually appears in late April or early May. Powdery mildew will appear as splotchy yellow areas on the leaves with the white/gray fungal spores on the lower-leaf surface.

Insect update: We still see evidence of thrips feeding on watermelon leaves. The feeding symptoms are small random scratched areas on upper leaf surface. Thrips pose little economic concern in watermelons, so don't be alarmed if you see this feeding damage. Squash bug adults continue to be active and have posed a threat in certain fields. Scout the field perimeters, as this is where they move into the fields first. If only the perimeters have squash bugs, spray only the perimeters so you minimize killing beneficials throughout the field. We have no reports yet of damage from the rindworm species complex but be on the lookout and let us know if you see damage. It is a little early but be alert.

Leaf tissue and petiole sap testing: This is a service we will still continue to provide. In some cases, farmers are pulling the petiole samples and leaving them at a "drop off" location for us to pick up. Let us know if you need advice on managing your fertigation program. Remember leaf tissue samples can also be sent to a commercial lab for analysis and we can help interpret those results for you. The University of Florida has excellent research-based information as to adequate levels of each nutrient based on the stage of growth. Sometimes a commercial lab's interpretation may be different from our UF interpretation. We are happy to help interpret your results. The sap tests for nitrogen and potassium are very helpful in determining when to start your fertigation program and how to keep it on target. We are now in the critical stage regarding fertigation programs and a sap test will help with that decision. Once started, the amount of nitrogen and potassium through fertigations is more set in a typical schedule. The earliest plantings with 1-2 lb fruits may be requiring 1.0-2.0 lbs per acre per day on Nitrogen and Potassium, while other later planted crops have not needed to start fertigations yet. With such a wide range of planting dates, we really can not give a standard recommendation across the board. So, take leaf tissue samples or contact us for a quick, immediate test of N and K. In any case, our absolute top level of nitrogen and potassium is 2.5 lbs per acre per day for a few weeks once fruit are about ½ full size or so, and we are not there yet.

Remember, keep your bees protected!