

Suwannee Valley Watermelon Crop Update- May 21st, 2020
Bob Hochmuth, UF/IFAS Regional Extension Agent
NFREC- Suwannee Valley
386-288-6301

This update is for your attention:

Feature article- Yellowing watermelon syndrome

Downy and powdery mildew pressure still persists

Fusarium wilt much more prevalent this year

Rindworms and squash bug nymphs still of concern

Hello watermelon growers and allied industry as well. This update is provided by collecting information from your UF/IFAS Extension agents in the Suwannee Valley, IFAS state Extension specialists and other industry field men. Thanks to all of you who contribute to help our growers.

Yellowing watermelon syndrome (new this year): Over the past 10-14 days we have been seeing several fields (a dozen or more) with older leaves and including mid-leaves on vines, to have excessive yellowing. We have seen this some in essentially every county in the region. I am using the term syndrome because that means we have not clearly identified the cause.....yet. "Syndrome" is a term we use when we don't have it figured out yet, but I assure you, it is not due to lack of effort. Here are a few key points that are common across affected fields: the worst symptoms have been in early planted fields, the yellowing is more severe on older leaves, the symptoms include interveinal chlorosis (veins are green and between veins is yellow, fields in same vicinity (1/4 mile apart) may or may not have it, and fields typically have the symptoms from one end to the other although severity is usually variable. We are continuing to search for new clues. We have not associated this yellowing with any specific cultivar, no common disease pathogen, no common spray ingredient, and no common fertilizer deficiency. In the earliest field discoveries, I thought it looked exactly like magnesium deficiency, but it has turned out to be more complicated than straight magnesium deficiency. Leaf tissue levels of any nutrient deficiencies are not linked conclusively, including magnesium levels which go from high to low and everything in between. We have seen variable responses to injections of magnesium sulfate (Epsom salts) but the responses are so variable (good response to no response), we can not say it is solely related to magnesium either. We are continuing to seek to see new fields with the symptoms and encourage you to let us know about a field with these symptoms if you have not already done so. There are other similar symptoms that have been correlated to herbicide damage, spider mites, or feeding from squash bug nymphs, but the symptoms described above are uniquely different.

Downy mildew is still active in the region, mainly in the southern portions of the region (Alachua, Levy and Gilchrist Counties). We urge you to stay on top of fungicide spays for downy. Orondis Ultra and Ranman both seem to be doing well at containing early detected areas in a field. We suggest using one of these materials every 7-10 days until you approach the end of the harvest period. The risk is too great

not to be on a preventative program right now. These recommended materials should be added to a broader spectrum material like mancozeb (Manzate or Penncozeb) in the tank mix.

Powdery mildew is present throughout the region, but not in high levels throughout. We recommend rotations of Quintec, Procure, or Torino for those fields with pressure from powdery mildew.

Bacterial leaf diseases. It appears we are past any serious bacterial threat and we suggest dropping or keeping copper out of your spray program.

Gummy stem blight is still being detected in many fields but does not seem to be a huge threat right now due to good fungicide programs earlier.

Fusarium wilt may be as bad this year as we have ever seen. We (UF/IFAS) want to do some research and survey growers with severely affected fields, especially those fields with 50% or more of the plants affected. Contact your Extension agent so we can include your experiences.

Rindworms: Simply put, stay ahead of this pest group, especially in fields with lush, rank, deep vines. Management strategies are much more complicated now due to new label restrictions to protect pollinators (that is a good thing). The better materials that are also safe to pollinators include Intrepid or Coragen (as a spray only). It is much easier to prevent rindworms than to clean them up once they start.

Squash bug nymphs are now building populations to very high levels in certain fields and tend to be worse in certain areas of a field, not necessarily the entire field. These pockets of high activity of the nymphs may be populations of a couple dozen to a couple hundred nymphs around a single watermelon fruit or under the plastic at the base of the plants. They tend to like to feed on the stem end of the fruit. These fields with high populations show plant symptoms of poor growth, yellowing and some wilting of the vine or vines impacted. It appears in some fields, insecticide sprays are needed for management, considering the need to be safe to pollinators. I mentioned earlier this year in one of the updates, and repeat here, we may want to consider a spray of a pyrethroid immediately at the end of the harvest season after the bees have been removed. This may have great benefits in reducing the overwintering populations from year to year.

Irrigation schedules: I would like to reinforce to everyone, these fields nearing harvest need to be irrigated twice per day, once in the morning and once in the afternoon. Let the soil moisture sensors keep you on track and call us if you are having any persistent trouble keeping the beds moist.

Good luck and Thank the Lord for this good market. You deserve a good market, FOR SURE!