

Welcome to our 2023 season weekly issue of our UF/IFAS Extension Suwannee Valley Watermelon Crop Update. These updates will be summarized by Bob Hochmuth, Regional Specialized Extension Agent- Vegetable Crops, with input from Suwannee Valley Extension Agents: Mark Warren (Levy), Tyler Pittman (Gilchrist), Tatiana Sanchez (Alachua), Luke Harlow (Bradford), Jay Capasso (Columbia), Dan Fenneman (Madison), Keith Wynn (Hamilton), Emily Beach (Lafayette), Jim Devalerio (Union), De'Anthony Price (Jefferson), Bob Hochmuth (for vacant Suwannee position), Kevin Athearn (RSA- Agri- business), and Sudeep Sidhu (RSA- Water Resources).

If you know someone who wants to be added to this weekly notice, contact your Extension Agent or Mark Warren (352-949-8288) if you want to be added to the regional watermelon group text app.

We have initiated a more formal way to support our watermelon growers with a rapid diagnostics system through Suwannee Valley Regional and County Extension Agents. This industry-funded program allows Extension Agents to submit and pay for watermelon grower's plant disease and other diagnostic samples. This SV Rapid Diagnostic Watermelon Program will help us to get quicker diagnostic results, helping to give early alerts to everyone, and not have to charge the growers directly. **Sponsors of this program in 2023 to date include Harrell's, TriEst Ag, Gowan USA, and Syngenta Crop Protection. Those reps interested in sponsoring can contact Bob Hochmuth at bobhoch@ufl.edu or 386-288-6301.**

General updates for this week:

There is not much change in our assessment of the disease situation. The bottom line is, "we have got them all", downy mildew, powdery mildew, Alternaria leaf spot, gummy stem blight, and watermelon mosaic. Of course, Fusarium wilt is in a category of its own, a very serious situation that has been quite severe in many fields. I probably missed a couple diseases, but, what the heck! Certainly, the extended season here this year plays a role in why we have so many disease situations. With 4-5 harvests and some still going, it is inevitable to have multiple disease situations. As in past weeks, we still maintain that downy mildew is the main "crop terminator" if left unchecked. However, we see very aggressive powdery mildew now as well and in young fields we need to be attentive to powdery mildew as well. As Kendra McCorkle, Agronomic Service Representative, Syngenta Florida District has reminded me, it is very important to consider resistance management in a year like this (thanks, Kendra). Paying attention to a good pesticide rotation program and not exceeding the maximum number of applications or total amounts per acre per season are very important. This is especially critical in narrowly targeted fungicides, like Orondis Ultra, Ranman, Quintec, Procure, etc. These types of narrow target fungicides are typically more likely to have resistance build up quickly when overused. Broader spectrum fungicides like mancozeb (Manzate, Penncozeb, etc.) and chlorothalonil (Bravo, etc.) are less likely to build resistance. So, follow the label for maximum use rates and number of applications per season. Also, as we get near to the very end of the harvest season (less than 5-7 days), consider the benefit of the narrow target fungicides in your program. (Bob Hochmuth)

I will also bring into consideration here regarding the potential value in terminating the crop chemically when you are absolutely done harvesting. The idea here is to stop the further buildup of a given pathogen, nematodes or even whitefly vectored viruses by killing the crop. For instance, in South Florida, crop termination is a widely recommended regional strategy for managing whitefly-vectored virus in tomatoes. I am not sure if this strategy will have an impact on all of our diseases, such as Fusarium wilt, however, there is general agreement with our UF/IFAS pathologists, crop termination has multiple

benefits from pest and weed management standpoints. This may be a future research need. I am particularly interested in finding cultural practices that may help reduce the carryover load of soil borne pathogens, like Fusarium wilt. I can't help but wonder if there are fields that "look Fusarium free" at the end of a given season in a given field, yet to find out Fusarium may have been there in low amounts and was undetected,.....until the next time watermelons are grown there. (Bob Hochmuth)

If your fields are still receiving fertigations (about 1.5 lbs per acre per day rate), these applications can be useful. However, once you reach the final harvest period, fertigations of nitrogen and potassium in the 7 days prior to the final harvest are not needed and therefore not recommended. (Bob Hochmuth)