

Weekly Watermelon Crop Update for May 23, 2021

Welcome to our UF/IFAS Extension Suwannee Valley Weekly Watermelon Crop Update. These updates will be summarized by **Bob Hochmuth** with input from Suwannee Valley Extension Agents: **Mark Warren, Tyler Pittman, Tatiana Sanchez, Luke Harlow, Jay Capasso, Sylvia Wills, Dan Fenneman, Keith Wynn, Danielle Sprague, Kevin Athearn, and Charles Barrett.**

Topics this week:

Downy Mildew Alert- First Report of the Year

Feature This Week- Chimera

Nutrient Management Update

Insect Update- Spider Mites and Rindworms

Reminder- Join the Florida Watermelon Association

Rapid Diagnostic Watermelon Program

Downy Mildew Alert: There have been several reports of the incidence of downy mildew in watermelon in the southern part of the Suwannee Valley region past couple days. We will get lab confirmation as soon as possible, but we are confident downy is in here. I can also indicate we did have a first confirmed case of downy mildew in pumpkin variety trial at our Center a few days ago. Downy mildew is the disease traditionally known as “wildfire” and arrived last year early in May. Because of the high risk of damage and movement throughout the region, we are expressing a high level of concern to plan to spray if you have not already initiated a program targeted at downy mildew, especially in the southern parts of the Suwannee Valley region (Levy and Gilchrist County is where the reports have been made. However, it is expected to continue to move north to Suwannee, Lafayette, Columbia, Madison, and Union Counties next. Contact your Extension Agent if you see areas of the field where the plants look blighted (dried up leaves sticking straight up in the mid part of the canopy). The leaves in more advanced stages will quickly become “crispy” with the leaf veins being the only part of the leaf to become crispy and dry (see Photos). You should consider adding one of these fungicides to your program soon. The best choices, based on recent trials, are Ranman, Orondis Ultra, or Zampro (all three have a zero-day pre-harvest interval (PHI)) and should be added to a broader spectrum mancozeb (Manzate or Penncozeb (5 day PHI)) spray plus either Quintec or Procure, for the continued

pressure from powdery mildew. Good luck with this additional challenge. For those fields where downy has been confirmed, we have suggested starting with Orondis Ultra or Zampro this week and Ranman next week. Where downy mildew has not yet been detected, you could start with Ranman this week and follow with Orondis Ultra, or Zampro. Be very cautious with your spray this week in the high temperatures. Likelihood of burn is greater when temperatures are high, and 2-3 materials are tank mixed.

Photo 1. Early stages, and Photo 2. later stages of downy mildew





Feature This Week- Chimera

These photos below show the characteristic unusual color pattern in a plant or part of a plant (see Photos). This is caused by a genetic mutation and is known as a chimera. It is striking, but not of concern as it is not a pathogen or disease. Chimera is due to a mutation, typically spontaneous rather than induced, resulting in cells of different genotypes (genetic makeup) growing adjacent. A common type of chimera is variegated plants. Some tissue is yellow to white

because those cells are unable to synthesize chlorophyll. Now you know what that odd looking plant was! (Bob Hochmuth)

Photos of chimera traits- a genetic mutation.





Nutrient Management Update:

Once we start harvests, it is common to set the rate at 2.0 lbs per acre per day and leave it there until one week from last pick. (Bob Hochmuth)

Insect Update: We have confirmed a couple of isolated cases of spider mite damage this past week. This is not surprising in extended dry periods of weather. Spider mite feeding typically results in patches of yellow-bronze coloration (see photo) of leaves in distinct spots in the field, often starting in the perimeter of the field. If you see these patches, contact your county Extension Agent for diagnosis.

Spider mite damage in watermelon.



We continue to receive confirmations of rindworm feeding. As a reminder, the better materials will include the higher labeled rates 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.

(Bob Hochmuth)

Reminder- Join the Florida Watermelon Association: It is the mission of the Florida Watermelon Association to support research, education and promotion of the fresh Florida watermelon industry. If you are not a current member, I encourage you to join. Your voice as a watermelon farmer needs to be heard on so many issues, now more than ever. All watermelon farmers and allied industry representatives should join. I am a member, and I encourage every reader of this weekly update to join as well. To join, go to <https://www.flfwa.com/> (Bob Hochmuth).

Thank You to the Suwannee Valley Rapid Diagnostic Watermelon Program and Its Industry Sponsors: UF/IFAS Extension agents have initiated a more formal way to support our watermelon growers with a rapid diagnostics system through Suwannee Valley Regional. This industry-funded program allows Extension Agents to submit and pay for watermelon grower plant disease and other diagnostic samples. This SV Rapid Diagnostic Watermelon Program will help us to get quicker diagnostic results and not have to charge the growers directly. Plant disease samples are typically \$40 and leaf tissue analyses are typically \$20. We want to thank the initial sponsors of this program: **Syngenta Crop Protection, Harrell's Fertilizer, Koppert Biological Systems, SEEDWAY LLC, BASF Vegetable Seeds, Bayer Crop Science, Gowan Seed, and Gowan USA** for sponsoring this effort. Other industry reps interested in sponsoring this effort can contact Bob Hochmuth at bobhoch@ufl.edu or 386-288-6301.