

Welcome to 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-Jones (Alachua), Luke Harlow (Bradford), Dan Fenneman (Madison), Keith Wynn (Hamilton), Emily Beach (Lafayette), Jim Devalerio (Union), Ben Hoffner (Jefferson), Raymond Balaguer (Suwannee), Derick Conover (Columbia) Kevin Athearn (RSA-Agri- business), Shivendra Kumar (RSA-Agronomic Crops), and Jay Capasso (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 will continue this year 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. Plant disease samples are typically \$40 and leaf tissue analyses are typically \$20. **We are always soliciting those industry reps interested in sponsoring this effort. The past year's sponsorships have ranged from \$200 to \$2,000 per company. Sponsors will be recognized every week beginning this week. Those interested in being added as a sponsor can contact Bob Hochmuth at bobhoch@ufl.edu or 386-288-6301.**

Current 2025 sponsors of our Watermelon Rapid Diagnostics Program include: Mayo Ag Services, Gowan USA, Smurfit/WestRock Paper Mulch, Orbia Netafim, Syngenta Crop Protection, Harrell's Fertilizer, TriEst Ag, and Triangle Chemical Company. Other sponsors are still welcome to join.

Observations from last week:

As mentioned in the past week, at this point, it is very difficult to make the same region-wide recommendations for everyone, but we can provide some general guidance based on what we are seeing. I still believe downy mildew is the most important threat we have right now, even though it has not "blown up" all over the region. I also believe most farmers across the region have done an excellent job getting ahead of this disease with sprays such as Ranman or Orondis Ultra, both also have 0-day pre-harvest interval. In rare instances where sprays had not been initiated prior to last week, downy infections were easy to find. One note here, if you do not see downy spots of infection in your field and have just used Orondis Ultra, you should have protection for 10-14 days. Powdery mildew reports have been very low the past 1-2 weeks, but we are occasionally finding infection, so scout for powdery to see if a spray material is needed. Remember, you can always add a broad-spectrum material like mancozeb if it will be 5 or more days to harvest from the spray. A good scouting program now and until the end of the season may save several unnecessary and expensive sprays. Continue a preventative spray material for rindworms. Intrepid or Troubadour; or Coragen eVo or generic versions have been good choices. (Bob Hochmuth)

Spider Mites Found:

Every year when we have extended dry weather periods for several weeks, we get reports of spider mites. Generally, these spots are isolated to small areas along the perimeter of a field and are noticed for the general yellowing that is seen (see photos below). If caught early only the area of initial infestation needs to be sprayed. Spider mites are tiny arachnids (not insects) that feed on the underside of leaves, causing damage to a wide variety of crops in Florida. Common species include the two-spotted spider mite (*Tetranychus urticae*) and the carmine spider mite (*Tetranychus cinnabarinus*).

Causes of Infestation

- **Hot, dry weather:** Conditions that reduce natural predators and increase mite reproduction.
- **Overuse of broad-spectrum insecticides:** Kills beneficial predatory mites and insects.
- **Dusty field conditions:** Dust settles on leaves and discourages predators.
- **Weeds as alternate hosts:** Mites can migrate from weeds like pigweed and purslane.

Damage Symptoms

- Stippling or yellow speckling on leaves
- Bronzing or bleaching of foliage
- Fine webbing on the undersides of leaves
- Leaf drop, stunted growth, or yield reduction

Monitoring and Scouting

- Inspect the undersides of leaves weekly, especially during hot and dry periods.
- Use a hand lens (10x) to detect mites.
- Look for early signs like speckling before webbing becomes visible.

Biological Control

- Conserve or introduce predatory mites (*Phytoseiulus persimilis*, *Neoseiulus californicus*).
- Avoid broad-spectrum insecticides to preserve natural enemies.

Chemical Control (Miticides)

Rotate miticides from different IRAC groups to prevent resistance. Examples include:

- **Abamectin (Agri-Mek)** – Fast-acting, good knockdown
- **Bifenazate (Acramite)** – Effective, good residual activity
- **Etoxazole (Zeal SC)** – Targets eggs and immature stages
- **Fenpyroximate (Portal)** – Broad activity but higher cost
- **Spiromesifen (Oberon)** – Best on immature stages

Note: Always follow label directions and observe pre-harvest intervals (PHIs). Article by Derrick Conover, Columbia County Extension, photos by Bob Hochmuth.

**Lightning strikes:**

One of the most interesting diagnoses every year is a lightning strike in a watermelon field. As I say in these cases, lightning has to hit somewhere, and a large watermelon field can often be the target. This past week, there were two fields with confirmed cases of a lightning strike from the last weather front that came through. The areas initially look like a sudden and serious case of a disease, but upon closer inspection, there are no spots on leaves, just sudden death, more like Fusarium wilt, but even more sudden than Fusarium. The lightning strike areas are usually small, less than one-tenth of an acre. The cool detective part is looking closely at plastic and drip tape in the center of the dead area. In almost every case, you can find the actual point of the strike. The point of the strike often melts a hole in the plastic mulch and drip tape. In severe cases, you will see watermelon fruit that look like they caught on

fire during the strike, or had a pattern burned or etched into the rind of the fruit where the electricity followed the vines laying on the fruit (see photos below from this 2025 season). (Bob Hochmuth)



**Fertigation guidance:**

As you enter harvest periods, our UF/IFAS petiole sap testing program will be stopped in those fields. Once you are about 1 week prior to harvest, the N uptake will be at a maximum level. That level is about 2.5 lbs of N per acre per day. Once you begin harvesting, the recommended N rate will typically decrease to 1.5 to 2.0 lbs of N per acre per day until 7-10 day to the very last harvest. There is no need to add N or K during that very final week.

Union County Watermelon Field Day Co-planned by BASF and UF/IFAS Extension at Dukes Family Farm, near Lake Butler. This will be a morning field day starting at 9 am on Wednesday, **June 11, 2025**.

[Watermelon Variety Trial Tickets, Wed, Jun 11, 2025 at 8:30 AM | Eventbrite](#)



WATERMELON VARIETY TRIAL

BASF/NUNHEMS NORTH FLORIDA WATERMELON VARIETY SHOWCASE



JUNE 11, 2025
08:30 AM - 01:00 PM

About Our Event!

Dukes Family Farms, BASF| Nunhems and the UF/IFAS are pleased to invite watermelon producers and enthusiasts to a day of learning fun!

LOCATION:

7669 Brown and Roberts Road
Lake Butler, FL 32054

REGISTER HERE!



Event Highlights

Educational Opportunities ◀

Attendees will view 16 varieties in the field & learn about the latest water and fertilizer application tools. Also, disease, insect and weed suppression.

Watermelon Tasting ◀

Taste some delicious watermelon with a special appearance from our Watermelon Queen!

Sponsored Meal ◀

Enjoy a fine lunch provided by Dukes Family Farm. A multi generation family farm

CEU Credits Available ◀

Ag Row
Private Applicator



Contact us
386-496-2321



Website
<https://sfyl.ifas.ufl.edu/union/>

