

Welcome to our first 2022 season's weekly issue of our UF/IFAS Extension Suwannee Valley Watermelon Crop Update. These updates will be summarized by Bob Hochmuth with input from Suwannee Valley Extension Agents: Mark Warren (Levy), Tyler Pittman (Gilchrist), Tatiana Sanchez (Alachua), Luke Harlow (Union), Jay Capasso (Columbia), Dan Fenneman (Madison), Keith Wynn (Hamilton), Danielle Sprague (Jefferson), Emily Beach (Lafayette), Amanda Phillips (Suwannee), 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.

Thank You to the 2022 Suwannee Valley Rapid Diagnostic Watermelon Program and Its Industry Sponsors:

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. 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, Glades Crop Care, and Summit Agro-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.**

New Extension Agents:

Welcome to new UF/IFAS Extension faculty who will be part of the Suwannee Valley watermelon team this year. They are Emily Beach in Lafayette County, Amanda Phillips in Suwannee County (starting April 25), and Sudeep Sidhu, Regional Extension Agent- Water Resources at NFREC-SV.

2022 transplant establishment summary:

Getting the season started off well means we need to get transplants established quickly. In most cases this year, transplants have looked excellent and are getting established quickly. I think the relatively good and sunny conditions in January and February helped to produce vigorous and clean plants. We had many fewer days in that period with the heavy and long-lasting fog and dew. In very few and isolated cases, transplants have shown gummy stem blight symptoms. (Bob Hochmuth and Mark Warren)

Early season disease management:

We will plan to update everyone as soon as we confirm foliar or other disease prevalence. The crops generally look very clean right now. We recommend using a weekly Bravo or other chlorothalonil product schedule for this early part of the season, perhaps the first few sprays while we can use chlorothalonil prior to fruit sizing stage. Banding sprays over the beds only while plants are small is very economical. (Bob Hochmuth)

Early season irrigation and nutrient management:

With very expensive fertilizer prices this spring, it is even more important than ever before to protect your bed fertilizer investment. Without question, the early part of the season is the most difficult to

manage potential loss of fertilizer in our drip irrigated cropping system. We can lose valuable nutrients to leaching this time of the season with either heavy rainfall events or over-irrigation. We can manage the second one, with a good irrigation management program. Soil moisture sensors are a great tool to keep us on track. But we must have confidence in what properly placed and working sensors are telling us and how to interpret them. Your service provider will give you regular guidance, but if we can help, let us know. Our new Regional Extension Agent for Water Resources, Sudeep Sidhu, will be an excellent resource. As a way of example here, early in the season assuming a medium flow drip tape (about 0.4 gal/min/100 ft), you should not run more than about 45 minutes per event this time of year. I realize, the larger the zone, the more difficult it is to run short events, but the 45-minute run (after coming up to pressure) with medium flow tape is the reality here early in the season. The point is that longer events every day undoubtedly will push water down well below the top 12 inches of the soil. With the water, goes the fertilizer when traditional conventional sources are used. When high rates of soluble bed fertilizer are used followed by consistent over-irrigation early in the season, the shallow rooted transplants never uptake much of that fertilizer, forcing you into earlier season and higher, expensive injection programs. We are continuing our research with pre-plant, controlled release fertilizer (CRF) large-scale demonstrations on three farms this spring. We will update you more on these as the season progresses. But one of the primary objectives is to demonstrate the use of CRFs in the bed as a way to reduce leaching losses and still maintain an excellent fertilizer program. (Bob Hochmuth)

Fertigation system calibration:

Work done last year on nine Levy County watermelon fields showed that significant amounts (30-100%) of liquid fertilizer was being left in irrigation systems following fertigation events due to inadequate time during the flush cycles. While it is well understood that excessive irrigation will increase nutrient losses due to leaching, we speculate that poorly flushed systems may negatively affect fertilizer placement uniformity and may even lead to premature emitter failure due to fertilizer salt crystallization. If correct, the earlier this situation is identified and corrected in your field, the greater the potential benefit. EC tests performed on your irrigation systems will provide measured times required for fertilizer to both reach and to clear your drip systems.

If you would like to perform a fertigation system calibration on your fields, contact your local county extension office. [Find your UF/ IFAS County Extension Office](#) (Mark Warren)

Preparing for upcoming cold nights:

Weather forecasts for this upcoming weekend have caught our attention. Forecasts are predicting low to mid-30s F, depending on the forecast source. Rain ahead of the cold temps will actually be helpful to add water to the row middle soil so heat can build up in that moist soil ahead of the cold. A moist soil takes longer to cool than a dry soil, so some rainfall Wednesday- Saturday will be helpful. Make sure you keep adequate moisture in the beds ahead of the cold nights so the moist soil can warm during the sunny days under the black plastic. The same principles apply here, a moist bed will stay warmer longer. Long overnight drip irrigation events are not proven to be of any benefit to temperatures but have a major negative impact by leaching fertilizer. If likelihood of freeze damage is high, covering plants with row covers, Styrofoam cups, paper plates/bowls, etc. are all labor intensive, yet proven measures that protect plants. (Bob Hochmuth)