

Welcome to this week's 2022 season's weekly issue of our UF/IFAS Extension Suwannee Valley Watermelon Crop Update. These updates are 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. Syngenta Crop Protection, Glades Crop Care, TriEst Ag Group, Gowan USA, Summit Agro-USA, and Harrell's Fertilizer for sponsoring this effort. Other industry reps interested in sponsoring this effort can contact Bob Hochmuth at bobhoch@ufl.edu or 386-288-6301.

Reminder: You are invited to a Watermelon Field Day at the Watson's Farm near Trenton on May 3rd, 2022. The Field Day will begin at 6:00pm at one of the Watson fields near the intersection of NW 60th Avenue and NW 165th Street, southwest of Trenton (see attached map). Dinner will be provided by Industry and will be served after the fertilizer plot tour. The topics to be covered will include: Irrigation Management, Use of Controlled Release Fertilizer, Automating Irrigation Systems, and an update on food safety. There will be an "annual food safety certificate of training" for those who need that.

There is no registration fee for the Field Day, but a call to your County Agent may better assure your meal!

2022 WATERMELON FIELD DAY

The logo for UF IFAS Extension, University of Florida. It features the letters "UF" in a large, bold, blue font. To the right of "UF" is a vertical orange line, followed by the text "IFAS Extension" in a blue serif font. Below "IFAS Extension" is the text "UNIVERSITY of FLORIDA" in a smaller, blue, sans-serif font.

Watson's Farm
Tuesday, May 3rd, 2022

6:00 PM Program/ Tour of Fertilizer Plots

Discussion on Nutrient Management as part of a BMP program
Mark Warren, UF/IFAS Extension Agent, Levy County

Controlled Release Fertilizer Project Overview and Observations
Annual Food Safety Update (Certificate Provided)
Bob Hochmuth, Regional Specialized Extension Agent-Vegetables/Assistant

Center Director North Florida REC-Suwannee Valley

Automating Irrigation Systems

Tyler Pittman, UF/IFAS Extension Agent, Gilchrist County

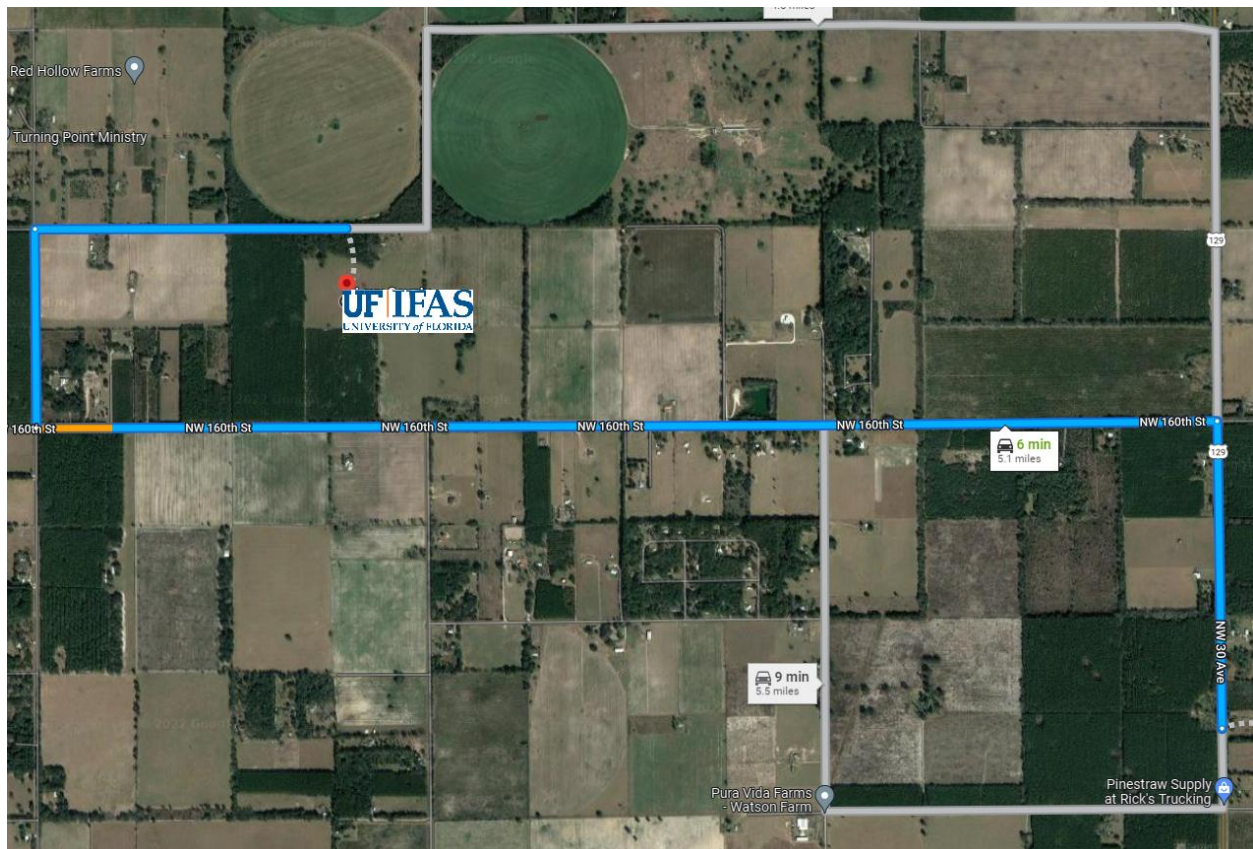
7:00 PM Dinner (Sponsored by Industry)

Directions:

Off US 129 in Trenton turn onto NW 160th Street, turn right onto NW 60th Avenue, turn right at the 1st cross street onto NW 165th Street

Special thanks to:

- Greg and Dale Watson, Watson Farms for hosting and cooperating on the project
- Loran Brookins for cooperating on this project at a second farm location
- Pursell Agri-Tech Fertilizer and Mayo Fertilizer for partnering and providing fertilizers for this trial
- NFREC-SV – Technical support
- FDACS-OAP-Funding
- Florida Watermelon Association



Observations from last week (Bob Hochmuth)

Stay on Powdery Mildew Spray Program (Bob Hochmuth and Mathews Paret)

We had the first UF lab confirmation of powdery mildew in the Suwannee Valley two weeks ago. As a result, we suggest you start and stay on your powdery mildew preventative fungicide programs. Once powdery mildew is present in the region, we recommend you rotate between Quintec and Procure rotated and one or the other sprayed weekly along with your broad-spectrum fungicides (Mancozeb or Chlorothalonil). Intensify your scouting schedule now until harvest.

Fusarium Wilt (Bob Hochmuth)

Same update as last week. We are continuing to see Fusarium wilt in some fields as plants get to the point of vigorous vines and fruit set, and as a result, demanding more water than the plant can get through the Fusarium clogged water vessels. The warm weather should help slow the spread of the disease but expect to continue to see more plants succumb to Fusarium.

Prepare for Preventative Rindworm Sprays (Bob Hochmuth)

We have not heard of any active rindworm feeding activity yet, but we expect reports of early damage in the next week or so. Here are a few suggestions. A very economical program is to add a Bt (*Bacillus thuringiensis*) spray now and continue this weekly until pressure gets high. Bt product names include Dipel and Xentari as examples. Bt is effective in killing young worms shortly after they hatch from feeding on the leaves. But, Bt is not a good choice for larger worms discovered later in their life cycle. So, start early with Bt. Once pressure is very high, you can switch to Coragen or Intrepid. This is the general program we have used very successfully here at the Center in Live Oak for several years.

Petiole Sap Testing for Seeded vs Seedless Cultivars (Bob Hochmuth and Mark Warren)

Extension Agents in the Suwannee Valley are now in full swing with petiole-sap testing for nitrogen and potassium. Collectively Extension Agents and support staff are sampling over 100 fields each week now. Last week, we saw the great demand of the watermelon plants using N and K as fruits are set and enlarging to larger than softball size. This drawdown of N and K will naturally continue from now until harvest. Some fields are at fertigation rates of 2.0 lbs per acre per day of nitrogen and potash, but many will likely go to the maximum rate this week of 2.5 lbs per acre per day of nitrogen and potassium. Under a good irrigation program, we should not need to go beyond this 2.5 lbs rate. This is only informational and not intended as an across-the-board recommendation for everyone. Use the guidance given by Extension Agents in YOUR fields. Table 1 below shows the different target levels of petiole sap for N. Potassium target levels remain the same, regardless of seeded or seedless cultivars, but target levels for seedless are lower than for seeded once we start sizing fruit. This table was developed based on very recent research conducted at NFREC-Suwannee Valley and funded by the Florida Watermelon Association.

Table 1. Guidelines for plant leaf petiole fresh sap nitrate-nitrogen- and potassium-testing

Crop	Crop Developmental Stage	Fresh Petiole Sap Concentration (ppm)	
		NO ₃ -N	K
Watermelon- Seeded Cultivars	Vines 6-inches in length	1200-1500	4000-5000
	Fruits 2-inches in length	1000-1200	4000-5000
	Fruits one-half mature	800-1000	3500-4000
	At first harvest	600-800	3000-3500
Watermelon- Seedless Cultivars	Vines 6-inches in length	1200-1500	4000-5000
	Fruits 2-inches in length	900-1100	4000-5000
	Fruits one-half mature	600-800	3500-4000
	At first harvest	400-600	3000-3500