

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), and Jay Capasso (RSA- Water Resources), and Sydney Williams (NFREC-SV).

If you know someone who wants to be added to this weekly notice, have them contact Taite Miller, taitemiller@ufl.edu, or Bob Hochmuth, bobhoch@ufl.edu, or navigate to <https://subscribe.ifas.ufl.edu/extweb/nfrec-sv-watermelon.html>

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 solicitating 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 2026 sponsors of our Watermelon Rapid Diagnostics Program include: Mayo Ag Services and Harrell's Fertilizer. Thanks for this early commitment. Other sponsors plan to and will be joining shortly.

Early season irrigation and nutrient management:

It is important 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 due 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. Our Extension Agents and Regional Extension Agent for Water Resources, Jay Capasso, can be excellent resources in helping interpret sensor data. 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. The main 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 soluble portion of fertilizer. (Bob Hochmuth)

Label Interpretation of Proline and Propulse injections:

There have been questions regarding how to figure the application rates of materials such as Proline or Propulse or generics of these products, especially with the reduced cost of Proline in 2026. It may make sense to calculate the rate based on portion of the field with the "wetted zone" under the mulch and use that as the rate. However, the labels allow for the full label rate to be used even though only a

portion of the acreage is actually treated. After follow-up discussions with UF research specialist, Dr. Nick Dufault and industry reps, all agree the correct amount to use is the full rate per acre via chemigation through the drip irrigation system. One very important aspect that supports this situation is that the research trials that have been conducted all use the full rate. For instance, research with Proline used the full 5.7 ounces per acre, not a reduced amount based on the “wetted zone” only. There was no research on whether the reduced rate of Proline would result in the same level of Fusarium wilt reduction/suppression. Therefore, our recommendation is we can only recommend following the rates used in the research trials to as this approach is the only one known for Fusarium wilt control/suppression, as there is no data supporting the efficacy of reduced rates attaining the same level of control. (Bob Hochmuth and Nick Dufault)

NC State Fusarium Research Trials:

The following summarizes research conducted by Lina M. Quesada-Ocampo, State Vegetable Pathology Extension Specialist at North Carolina State University, on the management of Fusarium wilt (*Fusarium oxysporum* f. sp. *niveum*, FON) in watermelon. [Management of Fusarium wilt and anthracnose in watermelon](#)

This trial used ‘Black Diamond,’ a highly susceptible cultivar, planted in soil inoculated with Race 1 FON. White plastic mulch was used to maintain cooler soil temperatures and enhance disease pressure. Treatments compared combinations of soil-applied (drench; labeled for drip) and foliar applications of Miravis Prime (early name: Adepytin) and Proline at 14-day intervals.

The non-treated control had greater than 80% disease incidence.

- Treatment 1 (two Proline foliar sprays only) resulted in disease incidence higher than the non-treated control, indicating that foliar sprays alone were ineffective under heavy pressure.
- Treatments 2–5 (Miravis Prime drench followed by one or two foliar sprays of Miravis Prime and/or Proline) provided only minimal reductions in disease incidence.
- Treatments 6–9 began with a Proline drench. With the exception of Treatment 8, the drench-only treatment, these included one or two follow-up sprays of Miravis Prime and/or Proline. While these programs showed a significant reduction in disease incidence over the Miravis Prime drench treatments (treatments 2-5), the slight numerical reductions seen between treatments 6-9 do not represent statistically significant differences (all grouped together statistically).

Key takeaways: Under high disease pressure in a susceptible cultivar, fungicide programs, particularly those beginning with a **Proline drench**, may reduce disease incidence and improve yield. Other methods of application of Proline sprays after planting did not significantly improve Fusarium wilt control. (Contribution of sharing this research by Mark Warren and Bob Hochmuth)

Value of rye windbreaks:

We have been using rye as a windbreak in watermelon fields for years in the Suwannee Valley, and for this spring, the value of windbreaks has been undisputable. Here are the points to review from past year’s articles in honor of the role rye plays in our system. But, before moving on, mark your calendars this fall to get seed and establish the windbreaks early.

Rye, when established early, can serve as a windbreak, and protects the young crop from high winds and sand blasting in March and April. Of the small grain options here, rye generally provides the greatest growth in the winter when temperatures are cool. Studies have shown that the effective distance of wind reduction on the lee side (protected side) of a windbreak is at least 10 times the height of the windbreak. So, the taller the windbreak, the greater the distance it provides protection. A 4 to 5-foot-tall windbreak should provide 40-50 feet of protection, assuming the rye strips are perpendicular to the wind direction. Rye variety "Florida 401" is perhaps our best rye variety for windbreaks, early to tiller and grow upward. Along with just the wind alone, we see great damage when sand is blown too. These issues are all too familiar, but rye has some other features as well. The aphids usually found feeding in rye is a grain aphid that poses no threat to watermelon, so do not spray the rye strips. These grain aphids are a food source for many beneficials, but mainly lady beetles in the Suwannee Valley. We frequently see high populations of lady beetles on watermelon rows next to the rye windbreaks (See photo). Cereal rye also produces several compounds in its plant tissues and releases root exudates that inhibit germination and growth of weed seeds. These allelopathic effects, together with cereal rye's ability to smother other plants with cool weather growth, make it an ideal choice for a windbreak. Have you ever noticed there is little to no nutsedge in the rye windbreaks when the rye is actively growing? This allelopathic effect of rye is why few weeds are associated with rye strips, especially when the rye is started early. A healthy rye windbreak, after it is mowed down can also provide cover to the soil keeping the soil cooler and helps in shading out weeds in the row middles (B. Hochmuth, Tatiana Sanchez-Jones, and T. Pittman).

