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 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 <u>bobhoch@ufl.edu</u> 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:**

From this point forward, 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. As we noted in an alert earlier this week, we have confirmed cases of downy mildew on watermelon in the region. In addition, we have confirmed downy mildew on cucumbers in the region. Even though the strain of downy on cucumber is not the same strain of downy in watermelons, the fact is, the conditions are present for downy mildew in cucurbits. Therefore, I believe the first decision in developing your spray program is to have a strong material for downy mildew, such as Ranman or Orondis Ultra, both have 0-day pre-harvest interval. The next decision is whether to add something for gummy, which may include Aprovia Top (0-day pre-harvest) if harvests have begun. Powdery mildew reports have been very low the past 1-2 weeks, and therefore, you may be able to consider skipping a week of targeted downy sprays. Remember, you can always add a broad spectrum material like mancozeb if it will be 5 or more days to harvest from the spray. Continue a preventative spray material for rindworms (Intrepid or Troubadour; or Coragen eVo or generic versions have been good choices. (Bob Hochmuth)

## High temperatures and risk of sunburn on fruit:

We have received several questions regarding sprays to minimize sunburning of watermelon fruit, given the very high predicted temperatures this week. The temperature of the watermelon rind may reach temperatures well over 100 degrees F. on days where the air temperatures are in the mid-90s. I wish there was more definitive university research on the various spray options, but very few unbiased trials exist. However, if you plan to apply sprays to protect the fruit, I suggest you leave 25 ft or so in the middle of a spray pass and call us to come take data on whether there is less burning where you applied a spray for fruit coverage. Below are key parts of a very good article written by Dan Egel and Liz Maynard, Purdue University. (full article link is <u>https://vegcropshotline.org/article/sunburn-on-vegetables/</u>).

Loss of foliage due to poor growing conditions or disease can cause fruit to be exposed to the sun. Hot temperatures and direct sunlight can lead to areas of the fruit that appear bleached or sunburned. Sunburned fruit may not be marketable.

To reduce the probability of sunburned fruit, every effort should be made to maintain good foliage coverage throughout the season. Several products are available that are labeled for use as a preventive for sunburn. These products may be broken into two groups: kaolin (clay) based products and calcium carbonated based products.

Kaolin based products include Surround<sup>®</sup>. Some Surround<sup>®</sup> products are labeled for use as sunburn protection, while others are not. For example, the label for Surround WP<sup>®</sup> includes language about reducing sunburn damage, whereas Surround CF<sup>®</sup> lacks such language. These products are designed to place a layer of the clay product on the surface of the fruit. The clay will reflect the sunlight, thus reducing the sunlight that reaches the fruit. Kaolin based products should be applied in sufficient spray volume to obtain 'near-drip coverage'. Growers should be prepared to wash off the kaolin product if necessary, prior to sale.

Products with the active ingredient calcium carbonate represent the other major category of sunburn protectant. Products include Purshade<sup>®</sup> and Sombrero<sup>®</sup>. These products are also designed to reflect sunlight away from the surface of the fruit. Read the label to make sure it is labeled for sunburn protection. The label for Purshade<sup>®</sup> specifies NOT to apply to runoff. As with kaolin products, the grower should be prepared to wash the product off the fruit surface.

Since both the kaolin and calcium carbonate-based products work by reflecting sunlight away from the fruit surface, there is some concern that these products may reduce sunlight that reaches the leaves and therefore the photosynthesis that drives plant growth. However, a study of the use of kaolin in apples found that the reduction of sunlight to leaves may be compensated for by the reflection of sunlight into the interior of the canopy. The benefit of these products for managing sunburn may outweigh any reduced photosynthesis. However, growers must balance the possible benefits and risks of using any of Vegetable growers should avoid using products to manage sunburn unless the label specifically states such a use on the label. For example, anti-transpirant products (e.g., Vapor Gard<sup>®</sup>) do not list on the label anything about reducing sunburn on vegetable crops.

Some pesticides may aggravate sunburn problems. For example, products with the active ingredient chlorothalonil (e.g., Bravo<sup>®</sup>, Echo<sup>®</sup> Equus<sup>®</sup>) have a warning that applying the product to mature watermelon fruit may result in sunburn to the upper surface. In general, it is best not to apply any pesticides during the heat of the day. Avoiding sunburn on vegetables involves maintaining good foliage cover and the judicious us of the right product if necessary. (Den Egel and Liz Maynard, Purdue University).

## **Fertigation guidance:**

As we enter harvest periods, our 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

