

Suwannee Valley Watermelon Crop Update- May 15, 2019

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Mid-Week Alert: Anthracnose confirmed

Thanks to everyone who attended the Suwannee Valley Watermelon Grower Field Day this Monday evening. We were thrilled to host 70+ attendees total, including so many growers.

This mid-week alert is to let you know we have confirmed a major surprise disease this week. We have confirmed 4 cases of the fungal disease anthracnose in the Levy/Gilchrist/Alachua County area. Fungal causal agent: *Colletotrichum lagenarium*. The surprise is that we have only very rarely seen this fungal disease in the spring season here in the past 25 years. It is much more common in the fall season in this region. The infections appear to be very limited to only a few fields to date, so, most fields may not need any adjustments to the spray program. If you see aggressive leaf spotting and browning down the entire bed, it may be anthracnose.

Let me first give the full credit for the proper identification to **Tatiana Sanchez, Alachua County Extension agent**. She “stared down” Bob Hochmuth and Anthony Drew and stuck to her guns after helping us identify it under a compound microscope at the Watermelon Field Day from some samples brought to the event. Her ID has since been confirmed at the UF lab on campus. Great job Tatiana!!! Further info on anthracnose can be found at this link.

<https://plantpath.ifas.ufl.edu/u-scout/cucurbits/anthracnose.html>

Symptoms: This fungus infects leaves, stems, and fruits. It is seedborne and the disease may first appear as a brown spot on seedling cotyledons. Leaf lesions are angular or irregular, dark brown to black, and usually with a narrow yellow border. Many lesions characteristically develop on a single leaf. Lesions on the stems are usually deep and elongate while those on the fruit are raised with sunken centers. The spores of the pathogen are spread from plant to plant in wind-driven rain and are carried by people and machinery moving through the vines when they are wet

We have evaluated all available research data and have concluded the fields confirmed with anthracnose should consider an immediate application of **Quadris Top** (specific for anthracnose). Follow up applications of materials like Manzate (maybe plus Topsin M) should be used. This is the specific suggestions for anthracnose. Other programs are better if the target is gummy stem blight or bacterial diseases.

The information below has been compiled and provided by Dr. Mathews Paret, UF/IFAS Vegetable Pathologist, NFREC-Quincy.

The tables below summarize the fungicide research on anthracnose in watermelon based on studies/reports from SC and NC

1.) Best choices for fields with anthracnose already confirmed/high risk identified (Ref: Keinath, 2018, Quesada-Ocampo, 2018)

Active ingredient/s	Product	FRAC Code (Fungicide group)
Azoxystrobin + Difenconazole	Quadris Top	11 + 3
Tebuconazole and Azoxystrobin	Tebuconazole and Flint/Quadris	3 and 11
Fluxapyroxad + Pyraclostrobin	Merivon	7 + 11
Pyraclostrobin + Boscalid	Pristine	7 + 11

For field locations with anthracnose not present yet, but if concerned list below can be good protection materials (Ref: Keinath, 2018)

Product
Mancozeb
Chlorothalonil
Topsin-M

Fungicides below here are those not suggested due to lack of effectiveness or due to fungicide resistance confirmed for anthracnose (Ref: Quesada-Ocampo, 2018, Keinath, 2018)

Products
Cabrio
Curzate
Tanos
Endura
Luna Experience
Inspire Super
Switch