

What to do if you think your crop is infected with Neopestalotiopsis?

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Soon after the New Year I received a text from an Upstate SC strawberry grower and plugger, Eric Hunter, stating his concern that his Ruby June plug plants (source of runner tips was Westech in PEI, Canada), might be infected with *Neopestalotiopsis*. He shared with me that there were several producers in the state who had indicated to him that this same disease had been found in their crops, and they stated they had received positive diagnoses for *Neopestalotiopsis*. Based on what he was seeing in his own crop (Fig. 1), he was thinking he might need to, “go ahead and remove” his Ruby June plug plants. I cautioned him that he should FIRST get a positive diagnosis made before taking such a serious step as removing the plants from the field. I further suggested that he should send plant specimens of both Ruby June and Camarosa plugs (Camarosa is his main variety), to the University of Florida Gulf Coast Research Gulf Coast Research and Extension Center (Step 1), and prepare the specimen for shipping as specified by the plant pathologist, Dr. Natalia Peres (Step 2). He followed through on this recommendation and had samples sent via UPS overnight. The samples were delivered to the UF lab on Thursday, January 12th. On January 13th, Dr. Peres sent Mr. Hunter this text:

“Eric, Hope you are doing well. I just would like to update you that we received your samples. Based on our triage the leaf spots are Leaf blotch, which is caused by *Gnomonia/Zythia* sp. However we will perform some assays and let you know about the results soon.”

On January 19th the lab provided this Diagnosis/Recommendations:

Category: Fungi

Comments: Our molecular assay (HRM) did not detect *Neopestalotiopsis* sp. on the submitted sample. We also isolated from the leaf tissue and are waiting on the results.

Diagnosis: Leaf blotch (*Gnomonia* sp./spp.)

Category: Fungi

Comments: Culture results confirmed *Gnomonia* sp. causing leaf blotch in 5 of 5 samples.

More information about Leaf blotch of strawberry can be found in the following publication <https://edis.ifas.ufl.edu/publication/PP359>

The day after getting these results, Mr. Hunter wrote in a text to me:

Final report was leaf blotch and not Neo. Haven't heard anything from Clemson's sample.

Summary:

For sure, getting a plant specimen sent off to the University of Florida GREC, or to any other Plant Clinic in our immediate region, does require time, effort and some expense – the UF lab has a \$40 fee per sample. But, it is well worth it. Fortunately, in Mr. Hunter’s case, he learned that his Ruby June plugs (and Camarosa) do not have *Neopestalotiopsis*. Also, I recommended the UF Clinic because of Dr. Natalia Peres, who has considerable experience with this disease in Florida. Dr. Peres is widely recognized as a leading authority on the fungal *Neopestalotiopsis* species associated with the disease. In addition, she has always been incredibly helpful to us in the Mid-South over 20+ years. Dr. Peres is a regular speaker at conferences and meetings in our region, including the Southeastern Fruit and Vegetable Expo in Savannah, as well as the NC Strawberry Association’s Annual Expo. I believe that Mr. Hunter and myself were also quite impressed with the rapid turnaround time for the sample sent from Easley, SC, on January 11th, and then getting a final diagnosis was made on January 19th. It was also great to receive an interim report on January 13th. Further, the grower is now aware that the plants of Ruby June he submitted have *Gnomonia* sp, causing leaf blotch (Figure 1). And, the UF Clinic provided more information about Leaf blotch of strawberry can be found in the following publication <https://edis.ifas.ufl.edu/publication/PP359>.

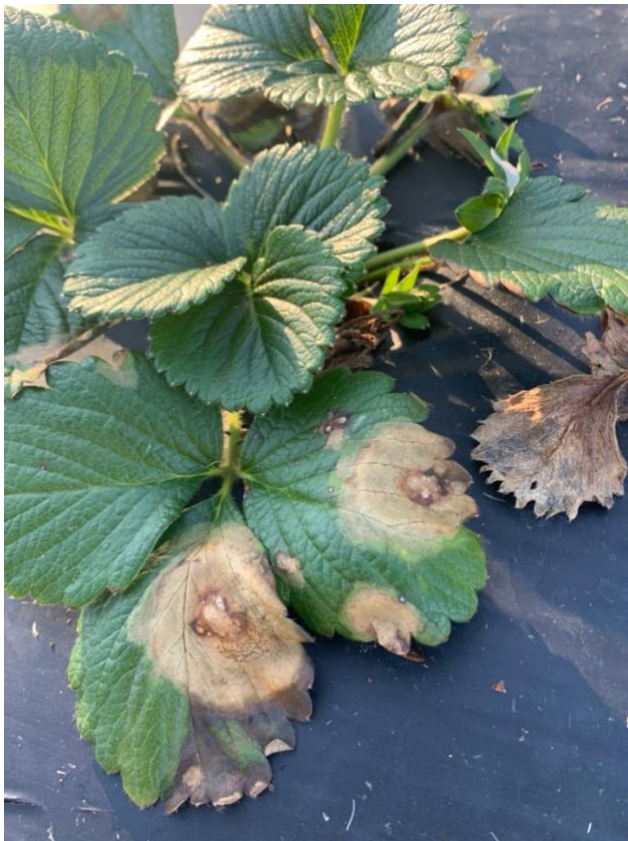


Fig. 1. Photo of Ruby June plug leaf sent by the grower on January 10th to Barclay Poling. Samples were sent of both Ruby June and Camarosa to UF-GREC for diagnosis. The culture confirmed *Gnomonia* sp, causing leaf blotch

Sample Submission:

Step 1: Sample Submission - download this document for sending specimen

https://gcrec.ifas.ufl.edu/media/gcrecifasufledu/docs/pdf/plant-clinic/forms/GCREC_Diagnostic-lab_Strawberry-sample-form_10-11-2022-update.pdf

Step 2 – Special shipping instructions: Please put on your sample form that you wish to have Dr. Natalia Peres review it. She also says to provide at least 6-10 plants representing the symptoms on a particular cultivar or field. In the case of Mr. Hunter's sample, he sent the plant samples in a container about the size of a shoe box. He also sent plants showing symptoms as well as symptomless plants. He wrapped the roots with a damp paper towel and enclosed the entire plant specimen in a large ziplock. They were shipped for next day delivery.

Submission Forms from Clemson, UGA and NCSU:

Clemson: <https://www.clemson.edu/public/regulatory/plant-problem/pdfs/form-plant-problem-2018-pdf.pdf>

Georgia: <https://plantpath.caes.uga.edu/extension/plant-disease-clinics.html>

NC State University:

<https://pdic.ces.ncsu.edu/packing-and-shipping/>