BIOTYPE-Q UPDATE
AND
PUTTING THE Q INTO PERSPECTIVE

# PLEASE DON'T SEND LIVE MATERIAL TO FLORIDA. IT IS ALWAYS BEST TO PUT THE ADULT WHITEFLIES IN ETOH (ETHANOL)!

## UPDATE 6/16/16

Biotype-Q has been detected on plants at a total of 8 residential properties, 3 wholesale and 2 retail nurseries.

## UPDATE 6/07/16

What do we know as of 6-7-2016.
Biotype-Q has been found in 5 different communities with three properties in one neighborhood having infested plant material. These communities are: Palm Beach Gardens (4/25/16), Palm Beach Island (5/10/2016, 5/25/2016), Boynton Beach (5/11/2016), and Boca Raton (5/11/2016). There was also one wholesale nursery in Palm Beach County AND one in Highlands County (6/1/2016). The primary host plant on which this whitefly has been found is hibiscus. Dr. McKenzie has also determined that these finds represent only one of the 3 haplotypes known to have been previously introduced into the U.S. greenhouses and nurseries. The diagnostics used by Dr. McKenzie's lab are state of the art: Once a *properly preserved* dead insect is received, a biotype determination can be made within 24-48 hours. This rapid diagnostic ability gives us the ability to track the spread of this pest very quickly.

Unfortunately, sample submission has been somewhat confused over the last week or so.

Homeowners should put leaves with samples into a plastic bag, seal the bag, and take it to their local county extension office for initial identification. The agents will determine if it is similar enough to *Bemisia tabaci* to require future processing. The agents will then send the sample to the USDA-ARS laboratory in Fort Pierce, Florida where Dr. McKenzie will evaluate it and make a biotype identification if needed.

Agricultural concerns and ornamental Industry professionals can send their samples directly to Dr. McKenzie.

If anyone would prefer to submit an insect to the Florida Department of Agriculture and Consumer Services – Department of Plant Industries or to the Diagnostic Laboratory in the Department of Entomology and Nematology at the University of Florida in Gainesville they can do so, although adding this step will take longer for the sample to reach Dr. McKenzie and thus delay a biotype determination.

What is the threat posed by this insect?

- It is more difficult to manage with pesticides that other whiteflies.
- It has limited distribution in Florida and the United States. **This is the first time it has ever been found on plants outside of a nursery or greenhouse**.
- This whitefly attacks a significantly larger number of plants than we have observed for the Ficus, Rugose spiraling or the Bondar's nesting whitefly in the last few years.
- This whitefly produces honeydew and sooty mold but the amount will probably be greatly reduced compared to the Rugose Spiraling whitefly and will lack the white-waxy fluff. Thus, the aesthetic damage won't be as obvious as that caused by both the Rugose and Ficus (leaf drop).t.
- Biological controls exist that are sold commercially and present naturally in the environment. We fully expect these natural enemies to provide control of Biotype-Q as they have done for Biotype-B since the mid-90's, **so long as they are not disrupted by pesticides applications.**
- The real threat of Biotype-Q in Florida will be to the commercial production of vegetables. Biotypes Both Biotype-B and Biotype Q are efficient vectors of viruses. We already know how difficult it is to manage the spread of viruses in both cucurbit and tomato crops as a result of Biotype-B feeding. The presence of the more resistant Biotype-Q will make the production of crops more challenging and expensive. Biotype-Q is also perceived as a major threat to cotton and vegetable production in other U.S. states.

Sample submission specifics:

- Homeowners who suspect they have a whitefly infestation should contact their UF/IFAS Extension county office. Offices may be found at http://bit.ly/1Q8wguw or http://sfyl.ifas.ufl.edu/map/index.shtml

Infested leaves and dead insect specimens should be brought to local Extension offices. Wrap in a dry paper towel and place in a sealable plastic bag and then in an envelope. Freezing the specimen overnight before transport is highly recommended. Live insects should not be transported.

- The collection information should be included with the sample. Date, location, what type of vegetation is affected, number of suspected whiteflies, and any information about whether a pesticide has been used on the plant, is helpful information to managing the pest. For steps on how to submit a sample to FDACS DPI, visit http://www.freshfromflorida.com/Divisions-Offices/Plant-Industry/Business-Services/Submit-a-Sample-for-Identification.

- Samples can be prepared in the same fashion and sent directly to Dr. McKenzie:

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# ETOH (ETHANOL)!

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We will post updates on this website:

http://mrec.ifas.ufl.edu/lso/bemisia/bemisia.htm

as well as through notes sent to the Bemisia-L Listserver.

**BEMISIA-L Listserver**

What is a list server? A list server is like on open conversation that travels through e-mail. One person e-mails a question to a specific email address and it is sent to all on the list. As people respond to the questions and statements they are e-mailed back to all on the list. This is a good way to get questions answered and to learn about the many new species of whiteflies attacking plants in Florida. This list is not limited to Bemisia. In fact, we will probably concentrate on a number of newly introduced invasive species.

To Subscribe

Send an e-mail to listserv@lists.ufl.edu

Leave the subject line blank and in the text of the message type the following:
Subscribe Bemisia-L "YOUR NAME GOES HERE"
DO NOT PUT "" AROUND YOUR NAME

You can also contact me:
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Future updates can be obtained by visiting:
http://mrec.ifas.ufl.edu/lso/bemisia/bemisia.htm