UNIVERSITY OF FLORIDA
EXTENSION
Institute of Food and Agricultural Sciences

RFSR010

# Insect Identification Service [1]

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One of the primary goals of the Insect Identification Laboratory is to identify insects promptly so that management recommendations can be made with little delay.

There are thousands of species of insects in Florida. Some are harmful, yet many are beneficial. A large number of insects are difficult to identify to species even under optimal conditions. It is very important to correctly identify the insect before an effective recommendation for control, if needed, can be made.

## Collecting

If simple rules involving collecting and shipping insects are followed, more accurate and rapid diagnosis of an existing insect problem can be made.

Try to collect several specimens in different stages of development. Some identification keys we use are for adults, while other are for immatures. Insects which are submitted whole are more useful than when submitted in segments.

## Packing

Insects should be killed before shipping. Live caterpillars often pupate during shipment. Beetles may eat their way out of the shipping container.

- Send all mature and immature insects (except butterflies and moths) in a glass vial or bottle containing ethyl or isopropyl (rubbing) alcohol. The vial or bottle should be properly padded in a mailing tube or other container to prevent breaking. Make sure that the cap for the vial is well secured so the alcohol doesn't leak from within the vial during shipping. Send butterflies or moths dry in pill boxes or similar container with tissue paper to prevent the specimen from being broken.
- It is often easier to identify an insect by seeing the damage it is doing to foliage, twig, fruit or other plant parts. If foliage or tender twigs are sent, they should be placed in a plastic bag and sealed. During the summer months, add a paper towel in with the plant material when mailing specimens in a plastic bag. It absorbs any excess moisture and prevents the plants from decaying en route. Thus, plant material will remain moist and will arrive in such condition that diagnosis can be made. Mailing leaves in paper envelopes results in their drying out so that insect damage is difficult to determine.

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2. P.F. Ruppert, biologist, Entomology and Nematology Department, Cooperative Extension Service, Institute of Food and Agricultural Sciences, University of Florida, Gainesville, 32611.

## Some "Do's and Don'ts"

- **Do** fill out an Insect Identification Form and submit this form with the sample.
- **Do** give information about the specimen and host. An identification form should be filled out as completely as possible. It is important to know where the specimen was collected and on what host (if a plant, the name of plant), if it is from a commercial grower or homeowner, under what conditions, the number involved and the nature of the injury. Additional information is always welcome and often serves as the main criterion for selection for the proper control measure.
- **Do** order identification forms, vials and mailing tubes when needed. They will arrive on the campus truck. For each sample submitted thereafter, a replacement kit will be sent back to your county.
- **Do** ship specimens in proper container, alcohol, pill box, etc.
- **Do** indicate in writing what chemicals or treatments, if any, were used on the affected plant.
- **Do** indicate what information you would like to receive (indentification only, control information, etc.)
- **Don't** send specimens loose in an envelope.
- **Don't** send live specimens.

## Additional Information

For more details or for question about the Insect Identification Service, contact:

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