

IRAC SUSCEPTIBILITY TEST METHOD SERIES

METHOD NO. 000

GENERAL PACKAGING AND SHIPPING INSTRUCTIONS
FOR COLLECTED INSECTS



Insecticide Resistance Action Committee

Method:	IRAC No. 000
Status:	Approved

Legalities for Shipping

Have all import and export documents ready prior to collection and shipment.

Be aware of shipping regulations related to the **Convention of Biological Diversity** (<https://www.cbd.int/>) and the supplemental agreement the **Nagoya Protocol** <https://www.cbd.int/abs/about/> for any collection, shipment, and data arising from any collections.

Be informed of and follow import and export laws for the countries, states, and regions involved in the shipment.

Suggested Items to Purchase Prior to Packaging and Shipping

- Duct/duct tape
- Packing tape
- Frozen ice packs
- Newspaper
- Scissors
- Sharpie or permanent marker
- Packing peanuts or Styrofoam chips
- Insulated shipping boxes

In some countries this can be difficult to find. In North America insulated shipping boxes can be found here: https://www.uline.com/BL_2157/Insulated-Shipping-Kits



Shipping Information

Avoid shipment over the weekend to minimize shipment duration. Wherever available, next day delivery is always preferred. Insect samples should arrive no later than Thursday to avoid late delivery on Fridays.

Ice Pack Packaging



Once the ice pack is frozen, wrap with plastic, then a newspaper, followed by more plastic, and then wrap everything with tape. The excessive wrapping is to make sure there is no leakage of moisture from the ice pack or from condensation into the shipment. The ice pack can then be placed inside the box, but NOT directly in contact with the insects.

General Packaging Instructions

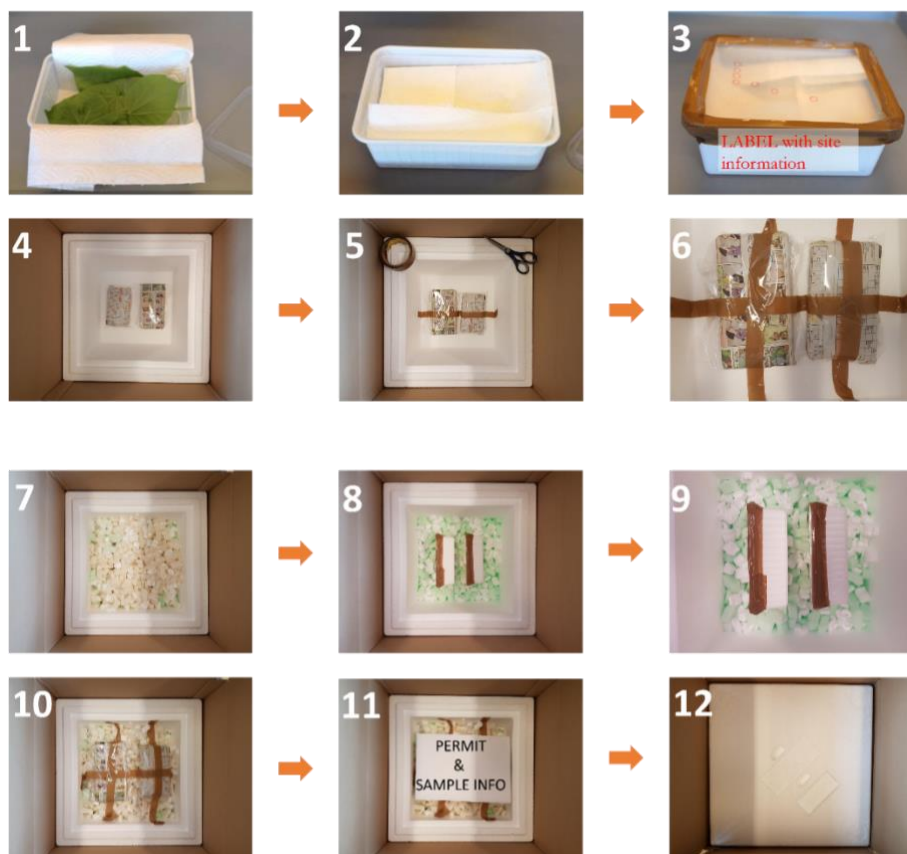


Figure legends:

1. – 2. Collect insects as instructed (collection and storage needs will likely vary based on species). Package the insects in a secure container, making sure to add holes for air flow. There should be enough holes to allow for gas exchange, but they should be sized appropriately to prevent the insects from escaping. Alternatively,

larger holes may be covered with mesh screening to prevent escape. Add paper towels in the insect container to absorb any excessive moisture. A general example is indicated in photos 1 and 2.

3. Securely tape the lid down. Label boxes with the species name, collection information, population number, and collector information on the outside of the container.
 4. – 6. Prepare a Styrofoam shipping box with two wrapped ice packs. Make sure to securely tape ice packs to the bottom. Duct tape works well for this.
 7. – 9. Fill cardboard box $\frac{1}{4}$ full of Styrofoam chips. Place insect sample container(s) on top of the Styrofoam chips.
 10. Fill the rest of the box with Styrofoam packing chips and secure additional wrapped ice packs on top of the packing chips.
 11. Follow local legislation for what permit information to put inside the box. Place site information sheet inside (see below for sample site information sheet).
 12. Close Styrofoam insulated shipping box lid on top and tape up the carton for shipping.
 13. Follow local legislation for what permit information to put outside the box. Place appropriate address on outside of the cardboard box (photo not present). Plan ahead to coordinate shipping as quickly as possible following the packaging of insects. Minimizing the time that the insects are enclosed in the shipping package will increase the likelihood of a successful outcome.
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Site Information

Species*:

Crop, variety, and Crop Stage*:

Date of Collection*:

Name of Collector*:

Street:

Zip Code/Postal Code*:

City*:

State/Province/*:

Country*:

Geographical position (GPS):

Recent Chemical Applications*:

Product	Rate	Seed Treatment or Foliar	Application date	Number of applications

Additional Comments:

(*) indicates information one must fill out.