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NATIONAL AGRICULTURAL GENOTYPING CENTER

National Agricultural Genotyping Center

Palmer Amaranth Sample Collection Instructions

SAMPLE COLLECTION AND SUBMISSION INSTRUCTIONS FOR PALMER AMARANTH

Please read all directions carefully to ensure samples are submitted correctly. Molecular assays conducted on plant samples rely heavily on quality sampling procedures in order to produce quality results. We cannot test samples that are submitted incorrectly.

Leaves and Seeds Testing

01 Wear gloves or use paper towels when collecting plant material.

a. This limits contamination issues caused by direct contact of plant material with bare hands.

b. When sampling from multiple plants, be sure to change gloves or use fresh towels between collections to limit accidental contamination between the independent samples.

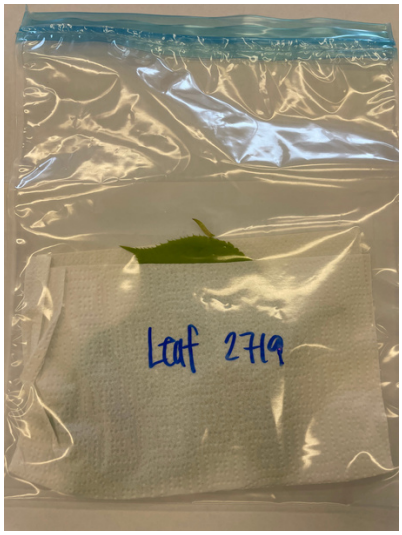
02 ## LEAVES

a. Place 2 to 3 leaves from a **SINGLE** plant into an envelope or plastic bag.

i. If the leaf is wet, dry prior to placement, or wrap in a dry paper towel to wick up moisture.

ii. Make sure only leaves from the same plant are packaged together.

1. Make sure to remove as much soil and moisture as possible before placing leaves inside the bag.
2. If leaves are very wet, dry off prior to shipping.
3. For reference, please see the image to the right for proper specimen packaging.



03 ## SEEDS

a. Place seed(s) - <u>up to 200 total</u> - into a clear, plastic tube.

i. If sending more than one (1) seed in a tube, indicate if you prefer to have all seeds pooled or not.

ii. For reference, please see the image to the right for proper specimen packaging.

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Leaves and Seeds Testing

04 Once samples are packaged, clearly label each individual tube/bag with a permanent marker for identification.

a. **Note:** The identification (ID) label on the sample container needs to match the Specimen ID # listed on the Submission Form.

05 Complete and print off the Submission Form on the NAGC website.

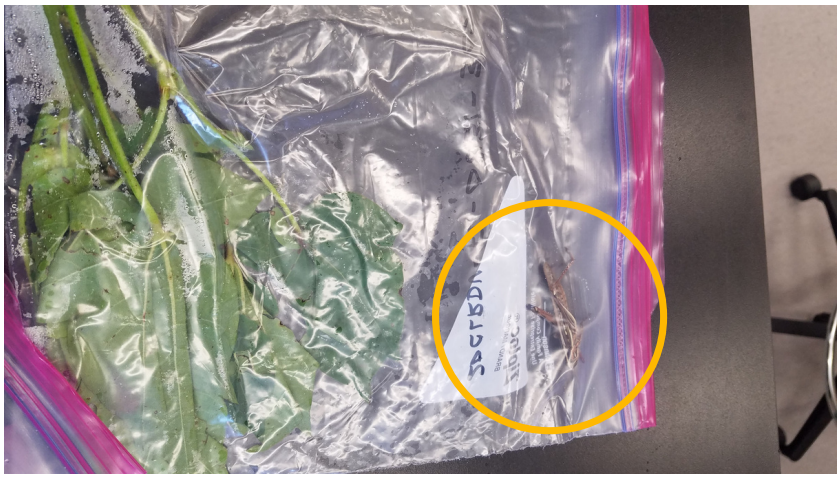
a. **Note:** All shipments must be accompanied by a Submission Form.
b. Send samples and completed Submission Form to the lab as soon as possible after collection. Testing of samples will not begin without a completed Submission Form.
c. Please DO NOT place the Submission Form inside a container that contains the plant material. Instead, place the Submission Form inside the shipping box/envelope, but outside of the sample container.

06 If the sample can not be sent on the same day, it should be kept at room temperature.

a. Samples should be **stored for no more than 1 to 2 days and PREFERABLY SHIPPED OVERNIGHT** to ensure samples arrive in good condition. Degraded samples cannot be tested.

What NOT To Send

- DO **NOT** send samples with excessive moisture or without a paper towel.
- DO **NOT** send with other unnecessary specimens/friends/travelers – like insects, as seen below:



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Leaves and Seeds Testing

- DO **NOT** send samples in containers that can easily open in transit and leak out liquids, potentially ruining outside packaging, as seen below:

If there are any questions regarding sampling and shipping procedures, please contact the National Agricultural Genotyping Center Laboratory at 701-239-1451 or research@genotypingcenter.com

Ship Samples To:
National Agricultural Genotyping Center
1616 Albrecht Blvd N
Fargo, ND 58102

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