

Sample Preparation and Shipping Guide for Plant Tissue

—Dried Leaf Sample

The following document is offered to give guidance as to the preferred method for packing and shipping fresh plant leaf tissue to preserve DNA quality when transporting.

- Young fresh leaf tissue is preferred, as well as freeze-dried/lyophilized leaf tissue.
- We require minimum of 10mg of leaf tissue per sample for our extraction protocol.
- Fresh young leaf or freeze-dried tissues can be shipped at room temperature without refrigerants to avoid moisture buildup in the leaf tissues, which will lead to low DNA quality.

Please use the following instructions to prepare the leaf tissue samples for shipment:

Step One. Dried Leaf Sample Preparation

1. Sample Collection (Figure 1.):
 - Arrange samples in a 96-well format (deepwell or tube rack)..
 - Leave wells H10, H11, and H12 empty for controls.
 - Seal the 96-well deep well plate with a cover to prevent cross-contamination.
 - Use a punch or cutter to take **6-8 pieces of leaf tissue (5-6mm in diameter)**, dry/freez dry young leaves.
2. Other Preparation Method:
 - If available, place one or two 5mm steel beads in each well for grinding.
3. Timelines:
 - Mail the prepared samples as soon as possible to prevent issues from prolonged sealed storage.
4. Important Notes:
 - when fresh samples are shipped, please seal with desiccant to dry the materials during shipping.
 - Ensure room temperature conditions during the shipping process

Step Two. Mailing Samples

1. Pack the Box:
 - Neatly place the prepared sample plates into the shipping box.
 - Include the sample information sheet in a self-sealing bag.
 - Fill the box with shock-absorbent bubble wrap for protection.
2. Sample Information Sheet:
 - Verify the Sample Name and Plate Number before submission.
 - Provide a unique name for each sample to facilitate downstream bioinformatics analysis.



or



or



Figure 1. Sample Preparation Work Flow

3. Shipping Conditions:
 - All leaves tissues can be mailed at room temperature.
 - For backup samples, use a paper bag inside a plastic sealed bag with a desiccant to prevent moisture.

Step Three. Sample Shipping Guide

1. Email Notification:
 - Email the Sample Information Sheet and the Express Tracking Number to the business manager or cs@molbreeding.com
2. Sample receiving address:
 - If needed, please contact the Project Manager or cs@molbreeding.com for your correct shipment address