

Instructions for submitting plant samples for disease diagnosis

Ball Horticultural Company

1. Email (kshazer@ballhort.com and sbec@ballhort.com) to alert us that you will be sending a sample(s) for diagnosis. We will contact you when the sample arrives.

2. Select 3-5 symptomatic plants and/or plant parts. Select plant material that demonstrates a developmental range of symptoms. Do not send dead or nearly dead plants. Roots should be included if the plant exhibits wilting, stunting, dieback, or nutrient deficiency symptoms.

3. Double seal plant samples in heavy plastic bags (such as two Ziplock bags) (required for permit compliance).

Leaf and/or stem samples:

Place plant material directly into a plastic bag and seal. If the leaves have moisture on them, allow the surface to dry before placing in bags. Place the plant (or plants) into a second sealed bag (=double-sealed). **Do NOT** place paper towel in the bags.

Root and/or entire plant samples:

- Wrap the roots separately from the foliage to prevent soil from getting on the stems or foliage. This is critical for accurate diagnosis of foliar pathogens.
 - Shake off as much soil from the roots as possible.
 - Place the roots into a plastic bag and tie off (tape or rubber band) at the base of the stem. Alternatively, cut roots and plant base off, and place roots and foliage in separate bags.
- Place another plastic bag around the foliage and secure.
- Place the entire plant (or plants) inside a second plastic bag (so it is double-sealed).

4. Place the bagged plant samples inside a sturdy, crushproof shipping container. Anticipate that the box will be turned upside down. Pack crumpled newspaper around samples to keep them from moving. Do not ship in cardboard envelopes as the samples will arrive flattened.

5. Fill out the sample submission form and place INSIDE the box or container

6. Include your name and return address on the OUTSIDE of box (required for permit compliance)

7. Ship samples overnight to arrive on a weekday. Avoid shipping samples over a weekend. Keep samples cool or refrigerated until shipping, except for cold sensitive plants. Shipping address is on submission form. Provide adequate insulation during the winter months to protect samples from freezing during shipment.

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