



Plantwise Diagnostic and Advisory Service



CABI UK

Tel: +44 1491 829080 Fax: +44 1491 829100

Email: diagnostic.service@cabi.org

Sending Plant Material and Soil

- If possible, please contact the Diagnostic and Advisory Service (diagnostic.service@cabi.org) before sending plant and soil samples. This will allow us to provide you with specific advice on collecting, preparing and sending your samples. It will also enable us to identify any additional information that would be required to assist a plant health diagnosis.
- You will be provided with an enquiry reference number, UK import permit ('Letter of Authority') and other relevant documentation.
- Sampling is the first important step in the diagnostic process. If the wrong type of sample is collected it will not help us diagnose the problem quickly and accurately. Diagnosis from a sample that is inappropriately collected, badly packed and/or shipped and arrives in a decayed condition may not be possible.
- Ideally, fresh plant material and soil should be dispatched to us on the day they are collected and sent by airmail or courier if possible.

1. SELECTING PLANT SAMPLES

- Ensure that you collect and send sufficient material that clearly exhibits the symptoms that you are concerned about and that we can work with.
- Also collect material from the part of plant where the cause of the problem is likely to occur, if you think this is not necessarily where symptoms are visible. For example, the cause of leaf spots is usually in or on the leaves, but general wilting of leaves or an entire plant - or gradual dieback - may indicate a problem in the roots.
- Try to collect plant material that shows early to middle stages of symptom development and not material that has severe symptoms or is badly damaged or dead. Samples should show the area between healthy and unhealthy plant tissues, as this is usually where plant pathogens are present and most active.
- Avoid collecting very damp or wet plant material as this will decay very quickly.
- Fresh samples (collected the same day) offer the best opportunity to isolate and identify pests and diseases, especially bacteria. However, please pack and send fresh samples to the UK **only** if you are able to use a courier service that can guarantee delivery within 1-2 days. Otherwise, dry samples prior to packing and dispatch as this prevents the growth of unwanted saprobes.

- Most fungi, viruses and phytoplasmas tolerate the drying process well. Samples should be air dried for up to several days depending upon their size and water content. Leaves may be pressed between sheets of newspaper to speed the drying process and to avoid leaf curling, replacing the newspaper once it becomes damp. **Do not** dry samples in an oven.
- If you suspect that a bacterium, virus, phytoplasma, nematode or insect pest is responsible for the problem, please inform us as we can provide specific advice for collecting and sending plant material and soil.
- Avoid over-handling of samples, especially those for virus or phytoplasma testing as enzymes on the fingers can interfere with the molecular testing procedure.
- If you wish to send fungal or bacterial cultures or pests as opposed to plant material and soil, please contact us for advice.

2. PREPARING AND PACKAGING PLANT MATERIAL AND SOIL

- Never wrap plant foliage in plastic. Exceptions include when nematodes are suspected to be present in the material.
- Individual samples should be wrapped separately and, where appropriate, each sample labeled with the sender's own reference number for the sample.
- **Whole plants** and samples of **stems, leaves and roots** should be wrapped individually in newspaper or placed in separate paper envelopes. Shake off excess soil from roots and ensure that they are not too damp.
- Delicate or small samples should be stuck onto stiff card before being sent by fixing with stick tape at their edges.
- **Soil** samples should be double bagged in strong plastic bags and tightly secured to prevent leakage. Each sample should be clearly labeled, preferably by placing a label between the inner and outer bag or attaching to the outside of the bags. Write labels in pencil as this is more durable than ink.
- Pack all samples carefully in an outer crush-proof container such as a strong cardboard box. Place additional paper, cardboard or polystyrene granules around the samples to cushion them against damage during shipping. Avoid thin absorbent paper like tissues as these disintegrate, become damp and become difficult to remove.
- Senders are advised to retain a duplicate of each sample, as material submitted for examination cannot be returned by the Diagnostic and Advisory Service.

3. RECORD SAMPLE DETAILS

- Always complete a sample submission form to provide as much information as possible, as this will help us to diagnosis the problem.
- Clearly describe on the submission form the symptoms you observed on the samples, as these may change markedly before we receive the material.

4. DOCUMENTATION TO INCLUDE

- The following documents should be included with each package sent to us. If already provided by us, the Diagnostic and Advisory Service **enquiry reference no.** should be marked on each document **AND** on the outside of the package(s).

✓ A completed Diagnostic and Advisory Service **sample submission form**.

✓ **Documentation** required to clear customs in your own country.

Your ministry of agriculture or national post office can provide information on export regulations, including necessary permits and where they can be obtained.

✓ Relevant UK import permits (**'Letters of Authority'**) to clear customs in the UK.

Complete **Section 1** ('Name and address of Consignor/Plant Protection Organisation') and **Section 13** ('Endorsement') of the following letters of Authority. If a phytosanitary certificate for the package has been issued by the country of origin, please also complete **Section 6** ('Plant Passport or Phytosanitary Certificate no.').

Place one copy of the UK permit inside each package and also attach one to the outside of each package. **Failure to include the necessary customs documents may result in the package and its contents being destroyed by UK Customs.**

✓ **CBD declaration**

✓ **Any other documentation** you consider relevant to the samples.

5. SENDING THE SAMPLES

- Clearly mark the outside of the package(s) with 'Perishable Biological Material. Keep in Shade. Keep material cool but do not refrigerate'.
- Packages should be addressed to:

**Plantwise Diagnostic and Advisory Service
CABI UK
Bakeham Lane
Egham
Surrey TW20 9TY
United Kingdom**

Tel: +44 (0)1491 829080

PHL: insert number from licence

- Please notify the Diagnostic and Advisory Service of the estimated date of arrival of your samples.
- Try to avoid sending samples over a weekend or at other times when CABI is closed.

Note: You are advised to retain your own copy of all documents sent with your samples as well as mailing documents.