

DIAGNOSING DISEASES

HOW TO COLLECT, STORE & SEND PLANT SAMPLES

Fact Sheet

CORRECT COLLECTION

Properly collecting and sending of samples is crucial. If plant samples arrive mouldy, deteriorated, or with missing information, diagnosis becomes difficult or impossible. By collecting and sending samples correctly the first time, you improve the chances of a timely, accurate diagnosis, enabling you to start implementing appropriate disease management strategies sooner.

HOW TO COLLECT, STORE & SEND

- Before sending samples, contact your state pathologist to ensure they arrive in optimal condition, and someone is available to collect the sample. **State pathologists contact details are available on the CottonInfo website under *Disease Management*.**
- Collect samples early in the week and post as soon as possible via express postage, such as Australia Post or a similar service.
- If collected late in the week, refrigerate over the weekend and post on Monday.
- Remember to include a diagnostic submission form with your sample. This enables the pathologist to have a better holistic understanding of what is occurring between the pathogen and your farming system.

Ensure each bag contains samples from only one field. If you have samples from multiple fields, place them in separate, clearly labelled bags with corresponding diagnostic submission forms.

SUSPECT A VASCULAR WILT PATHOGEN?

- Collect multiple stem samples from plants showing disease symptoms
- Collect from the base of the stem (above the soil surface)
- Stem cuttings should be 10 – 15cm in length

SUSPECT A LEAF DISEASE?

Collect 5 – 10 leaves from both diseased and healthy-looking plants.

- Diseased leaves should preferably have a range of symptoms
- Have two bags, storing diseased and healthy leaves separately

When labelling your sample bags, use a ballpoint pen or felt-tipped pen. While for plastic bags, apply either a sticky label or water-proof label inside the bag. Labels should contain your name, farm and field name, and the date of the sample collection.

It is best to use paper bags for collecting fungal or bacterial diseases, and plastic bags for viruses. However, discuss the most appropriate packaging with your state pathologist.



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