

# Cotton Disease Diagnostics "Monitor to manage"

A plant disease occurs when there is an interaction between a plant host, a pathogen and the environment. Be aware of the symptoms of endemic and exotic cotton diseases. The early detection of disease outbreaks allows growers and consultants to implement management strategies which can assist with minimising the severity and spread of diseases.

### **Endemic diseases**

- Seedling diseases (Pythium, Rhizoctonia, Black root rot)
- Fusarium wilt
- Verticillium wilt
- Boll rots (Boll rot, seed rot, tight lock)
- Alternaria leaf spot
- Sclerotinia
- Cotton bunchy top
- Tobacco streak virus

#### **Exotic diseases**

- Cotton leaf curl disease
- Fusarium wilt (exotic strains)
- Texas root rot
- Blue disease
- Bacterial blight (exotic strains)
- Verticillium wilt (exotic strains)

If you see symptoms of exotic diseases, call the Exotic Plant Pest Hotline on 1800 084 881

More information about cotton diseases can be found in the Cotton Pest Management Guide.

### **Collection and Storage Methods**

When sending samples of suspected diseased plants to industry pathologists:

- Send multiple samples (e.g. more than 1 leaf, stem or plant).
- If possible include a sample from a healthy plant as well as the diseased plant material.
- When collecting seedlings dig them up rather than pull them out, including some soil.
- Several sections of stem (10 15 cm long) are usually adequate for wilt diseases.
- Wrap samples in a paper bag, envelope, or dry newspaper never use plastic. Write your name, farm name, field name/number and date on the outside of this bag.
- Each bag should contain samples from one field only.
- Keep the samples cool (placed in the fridge) and send as soon as possible after collecting.
- It is better to despatch samples early in the week rather than just before the weekend.
   Tip: take your samples on the weekend and post them on Monday while they are still fresh, this will help ensure the samples are not subjected to unnecessary delivery time.
- Please complete the diagnostic form when sending samples including information such as symptoms, field history and variety.

## Where do I send samples?

Send one plant disease diagnostic form with your sample(s):

New South Wales
Dr Duy Le
P: 0439 941 542

Note: Suspected
Fusarium samples are to
be sent to Queensland.

Queensland
Dr Linda Smith
M: 0457 547 617

Attn: Duy Le/Aphrika Gregson NSW DPI Australia Cotton Research Institute

Australia Cotton Research Institut 21888 Kamilaroi Highway

Narrabri NSW 2390

Post/small parcels Large parcel via courier (e.g. Toll)
Att: Linda Smith Att: Linda Smith

Ecosciences Precinct QLD DAF

QLD DAF Basement 3 Loading Dock
GPO Box 267 Joe Baker Street (Off Boggo Road)

Brisbane QLD 4001 Dutton Park QLD 4102