

Cotton bunchy top disease

Murray Sharman 1, Cherie Gambley 1, Susan Maas 1, Lewis Wilson 2, Linda Smith 1

1. DAFF-Qld, Murray.Sharman@daff.qld.gov.au; Cherie.Gambley@daff.qld.gov.au; Susan.Maas@daff.qld.gov.au; Linda.Smith@daff.qld.gov.au
2. CSIRO, Narrabri, NSW, Lewis.Wilson@csiro.au

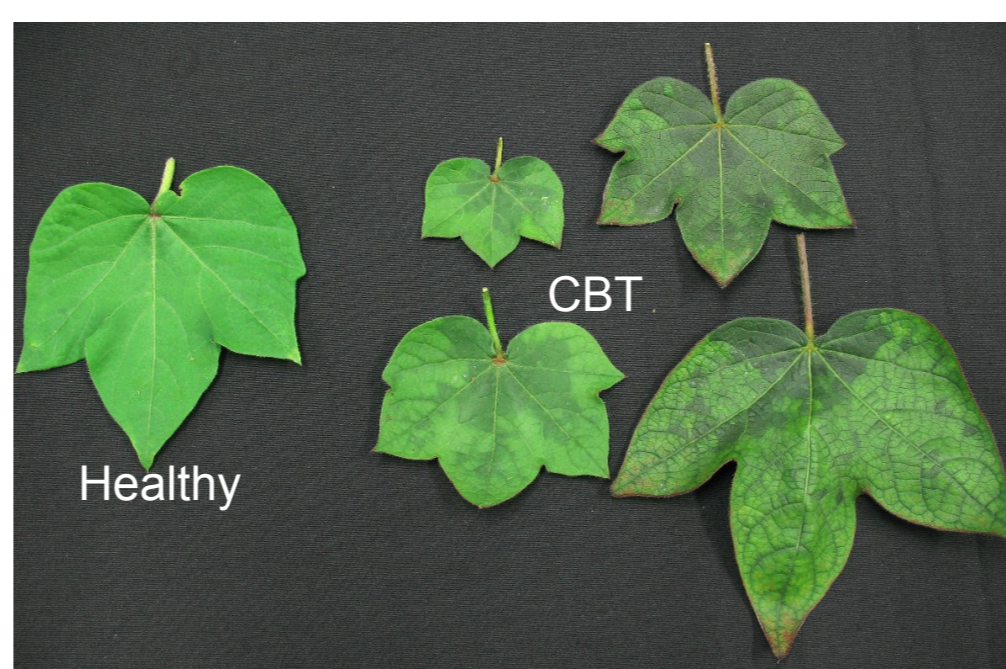
CBT is the most serious viral disease of cotton in Australia and is transmitted by cotton aphids (*Aphis gossypii*). CBT symptoms include reduced, plant height, leaf size, petiole length, internode length and boll size. Stunted, bunchy plants are common. Usually a period of 3–8 weeks lapses between when the infection occurs and when symptoms first appear. Affected plants often occur in patches or on crop edges and are associated with areas of highest aphid activity. The extent to which yield is affected depends on the proportion of plants infected and how early infection occurs.

The most critical alternative host plant is CBT-infected ratoon volunteer cotton. They survive between cropping seasons, retaining leaves through winter and supporting infected aphid populations from one season to the next. Marshmallow (*Malva parviflora*) is also a commonly infected weed host for CBT which has been found to be infected from many different growing regions. It is possible that other weeds are also hosts of CBT. Good crop destruction and control of ratoons, volunteers and weeds is critical for reducing your risk of CBT and cotton aphid.

CRDC funded research is investigating the diversity of CBT strains and what alternative hosts CBT survives in near crops, and developing detection assays for screening samples. Two strains of CBT have been found from all major cotton regions with one strain always being associated with CBT.



Severe outbreaks of CBT occur when cotton aphid numbers are high and a source of CBT (in ratoons or weeds) is nearby at the start of the season.



CBT leaf symptoms in cotton include angular patterns of pale green patches. Ratoon cotton and Marshmallow are known major hosts of CBT. Other weeds may also host CBT.

BREAK THE GREEN BRIDGE!

- To reduce your risk of CBT next year,
- Don't give the virus & it's vector a home for the winter.
- Plan for good crop destruction to reduce ratoons.
- Control all ratoons & volunteers & other hosts.



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