

RDC Launches \$13 Million project to Combat Cotton Disease

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The Cotton Research and Development Corporation (CRDC) has announced a landmark \$13 million investment in the Australian Cotton Disease Collaboration (ACDC). This collaborative initiative brings together CRDC, the University of Southern Queensland (UniSQ), and the Queensland Department of Agriculture and Fisheries (DAF) to combat the growing threat of cotton diseases.

Disease has become a significant challenge for Australian cotton growers, leading to significant yield losses and economic hardship. The ACDC aims to reduce the economic impact of cotton diseases by at least five percent by 2028.

"Disease is a critical challenge for Australia's cotton industry – contributing to significant yield losses which undermine long-term confidence in growing cotton. In extreme cases, disease pressure is forcing some growers to opt out of cotton production," said CRDC Innovation Broker, Elsie Hudson.

"Recent research commissioned by CRDC has found that across the cotton industry, disease is causing an 8 per cent reduction in yield. For growers directly affected by disease, they are seeing an average reduction in yield of 12 per cent. In some extreme cases, it can be as high as 100 per cent: their entire crop is at risk.

"While CRDC has invested in cotton disease research over several decades, the impact disease is having on growers' profitability and productivity is increasing. A new approach is needed to overcome this persistent, leading limitation in the cotton production system."



The collaboration will focus on understanding the impact of disease, enhancing pathology resources, and developing innovative management strategies. UniSQ will lead the ACDC, with Associate Professor Sambasivam Periyannan appointed as the inaugural Director.

"Through cutting-edge research and collaborative efforts, we are paving the way for effective cotton disease management strategies that will enhance industry resilience and sustainability," Professor Bell said.

"The initiative exemplifies our dedication to translating research into actionable solutions that will empower cotton growers and strengthen the future of Australian agriculture."

The ACDC will also collaborate with international cotton research partners to share knowledge and best practices.

"UniSQ is a renowned agricultural, research-intensive university, strategically located in Toowoomba on Queensland's Darling Downs – a prime cotton-growing region.

"This collaboration will enhance UniSQ's research capabilities and bring significant benefits to CRDC, training next-generation researchers and consultants for the cotton industry.

"As a nationwide collaborative project, ACDC brings multiple experts from various agencies together to tackle disease in cotton. Importantly, this project will look to extend beyond national borders, and collaborate with cotton researchers from leading cotton-producing countries overseas, namely, USA, India, China, Brazil, and Pakistan.

"Through knowledge and material sharing, this global network will ensure the Australian cotton industry's preparedness and contribution to the global cotton industry's resilience against outbreaks of new strains of cotton pathogens."

DAF's Agri-Science Queensland Executive Director Dr Wayne Hall said DAF continues to invest in cotton disease research to protect the future of the cotton industry and this collaborative approach will amplify this effort.

"This initiative demonstrates DAF's commitment to collaboration and to providing cotton growers with tactical management strategies to enhance disease resilience and sustainability," Dr Hall said.