

## DR LINDA SMITH



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Dr Linda Smith's research and work at the Queensland Department of Agriculture and Fisheries over the last 15 years has had a significant impact on how diseases are managed within the cotton industry. Linda's cotton pathology research has been of significant importance to the industry with her work focusing on disease causing organisms such as Fusarium and Verticillium wilts and Reniform nematode.

Linda explained that she was inspired to pursue a career as a research scientist as a result of having 'always been curious to find out why things happen the way they do. I decided to focus on agriculture because I have always been interested in farming and food production. We travelled through the regional areas of Western Australia on family camping trips and I was always drawn to the field crops. I chose disease because I just love it.

At university, plant pathology was my best subject because I just find it fascinating, the whole intricate relationship that occurs for a pathogen to succeed is amazing.'

Known for her professionalism and leadership, Linda currently leads a national cotton industry pathology project with participants from a number of public and private organisations. This project is focused on protecting the cotton industry from the spread of new and existing diseases and developing management strategies to better deal with existing pathogen issues.

This is a challenging role that Linda has focused on for the past five years. She has shown great leadership in marshalling the time, skills and resources of various people, some of whom are employed with competing organisations, to bring them together around a series of objectives for the common good of the Australian cotton industry.



The types of people that Linda works with span a disparate range of disciplines from plant breeders, industry extension staff, fellow pathologists, private companies, farmers and consultants, all of whom she works with to develop common objectives and solutions to move the industry forward on dealing with significant plant disease issues.

Linda is a committed professional who leaves no stone unturned in her research work. Many in the industry attest to the professionalism that she brings to her cotton pathology research portfolio as well as the broader leadership and innovation that she provides within the industry regarding the management of cotton diseases.

Linda's disease diagnostic work has been critical in detecting emerging disease threats, as well as allowing growers to identify issues on farm and enact vital local management strategies. Linda goes well beyond just providing disease diagnostics, she will frequently follow up with the grower or advisor to discuss management of the problem that has been detected. More recently Linda has been involved in conducting research to develop solutions to the problems caused by Verticillium wilt, particularly in Northern NSW. This work is seeking to identify practical solutions that growers can put into place to limit the extent and spread of this disease which will buy valuable time until such time as more durable and complimentary tools, such as host plant resistance are developed.

The progress that she and her team have made in how disease surveys are tackled is an area where Linda feels a great deal of satisfaction and pride.



'The change we have undergone in enabling us to understand more about why disease is increasing and factors that contribute to disease suppression, has been significant. As a result of collaborative effort, the gains that have been made in soil health and disease suppression. This is going to greatly assist in delivering management strategies to growers that have a much stronger science base. Another area of positive change has been the strong engagement with Research Extension Officers within each region in order to bring our knowledge together to deliver integrated disease management.'

When asked what area of her research she feels most proud of, Linda explained, 'It would probably be the detection of reniform nematode in Central Queensland because of the time and effort we went to, to understand how widespread and serious the issue was.

This also goes to the heart of why I have always been drawn to the cotton industry. The growers are wonderful to work with and the industry is very supportive of research. I feel the industry is like a family and they care about all involved and they are always eager to learn and invest in quality research.'

