



TRAVEL, CONFERENCE or SCIENTIFIC EXCHANGE REPORT 2018

Part 1 - Summary Details

Please use your TAB key to complete Parts 1 & 2.

CRDC Project Number: CRDC1917

Project Title:

International Collaborations between Australia and the United States in Cotton Disease Management

Comparison of isolation methods and media for quantifying *Verticillium dahliae* populations in soil

Project Commencement Date: 28 August 2018

Project Completion Date: 8 September 2018

CRDC Research Program: 4 People

Part 2 – Contact Details

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Part 3 – Travel, Conference or Scientific Exchange Report

At Fuscom, I presented the structure and productivity of the collaborative relationship Dr Karen Kirkby and I have built between Texas Tech University, Texas A&M AgriLife Research, and the NSW Department of Primary Industries, ACRI in an oral presentation. At the Australasian Soilborne Diseases Symposium, I presented a poster highlighting the findings from our collaborative study on *Verticillium dahliae* inoculum levels and detection methods in a poster.

FUSCOM:

At Fuscom I gained a greater understanding of the breadth of disease issues affecting the Australian cotton industry and the priorities for researchers, agronomists, and growers for the coming season. I gave an oral presentation with Dr Karen Kirby titled “Managing Verticillium risk for cotton project update and the impact of international collaborations between Australia and the United States in Cotton Disease Management.”

ASDS:

At the 10th Australasian Soilborne Disease Symposium, I presented a poster titled “Comparison of Isolation Methods and Media for Quantifying *Verticillium dahliae* Populations in Soil” and participated in the student research poster competition. The conference, held in Adelaide, SA, featured researchers from ten countries covering a wide breadth of topics ranging from management to biosecurity.

Other:

I met many wonderful people during my stay in Griffith and Adelaide, and it was exciting to be able to put faces with names of those I’ve been in communication with via email. In Griffith, I met Dr Toni Chapman, and enjoyed learning about the molecular work her team is carrying out and how the *V. dahliae* isolates from the United States have fit into Australian cotton research initiatives.

At Fuscom I also met Todd Peach, an agronomist from whom I learned a great deal of the Australian agricultural sector. He also attended ASDS, and I appreciated having an agronomist’s perspective at a research conference to better understand how research initiatives translate to applications in the field and industry. I will be sending him information on the annual Texas International Cotton School, hosted by The Lubbock Cotton Exchange, in conjunction with The Fiber & Biopolymer Research Institute and Texas Tech University, a two-week educational course on cotton and textiles held in Lubbock, Texas.

I particularly enjoyed Dr Maria Jimenez-Gasco’s plenary presentation, “Diversity, genetics and ecology: *Verticillium dahliae* a case study” at ASDS. Dr Kirkby and I enjoyed speaking with her after the session about *V. dahliae* and the interesting aspects of the pathogen as well as the regional differences in pathogen ecology and effective lab methods. I gained some valuable perspective from Dr Jimenz-Gasco on interpreting studies from journals that will help me immensely as I continue working on my master’s thesis.

During the time between conferences, Dr Kirkby and I worked on preparing the findings of our collaborative studies for publication. Working together on these projects both abroad and face-to-face has been extremely valuable. I learned a great deal about the appropriate communication of research findings, the interpretation of results, and how to communicate the value and broader impacts of research. As this will be my first publication, I appreciated the opportunity to work alongside Dr Kirkby and receive feedback on the most effective ways to prepare results for publication. We also worked on brainstorming and planning future projects and my application for the Fulbright Program. As a master’s student, I gain an incredible amount from Dr Kirby as a researcher, committee member, and mentor.

Please email your report 30 days after travel/conference to: research@crdc.com.au