

Plant Pathology Seminar Series

22 July 2019, 10:00 am – 2:30 pm

Queensland Bioscience Precinct (QBP), Building 80

The University of Queensland, 306 Carmody Road, St Lucia, 4067

Room: Large Seminar Room (3.142)

10 am **Arrival and morning tea**

10:20 am **Welcome and housekeeping**

10:30 am **Session 1 keynote speaker: Shamsul Bhuiyan**

Sugarcane nematode – a knotty problem, and multifaceted mitigation

11:15 am **Lisa Kelly**

Which species is causing powdery mildew in mungbean in Australia?

11:30 am **Thomas Noble**

The use of qPCR to diagnose halo blight of mungbean seed

11:45 am **Elizabeth Worrall**

BioFood fight: a fight for sustainable agriculture against plant viruses

12 - 1 pm **Lunch break**

1:00 pm **Session 2 keynote speaker: Jay Anderson**

Adventures in Plant Pathology - Bananas in Lao PDR edition

1:45 pm **Yu Pei Tan**

Taxonomy – why it matters in plant pathology (and how to get it right)

2:00 pm **Alistair McTaggart**

Rust fungi: clones win the battle, recombination wins the war

2:15 pm **Noel Knight**

Applying quantitative PCR in plant pathology - from wheat to beet



Speakers

10:30 am - 11:15 am Keynote Presentation: ‘Sugarcane nematode - a knotty problem, and multifaceted mitigation’

Dr Shamsul Bhuiyan (Principal Research Scientist, Sugar Research Australia; Adjunct Associate Professor, School of Agriculture and Food Sciences, The University of Queensland)

Dr Shamsul Bhuiyan, Principal Research Scientist, has been working for Sugar Research Australia (SRA) (previously known as BSES) for more than 12 years. He is based at the Woodford Pathology Research Station, and leads SRA’s disease screening programs. He established the nematode research facility in SRA and pioneered research on the development of resistant sugarcane varieties for sugarcane nematodes in Australia. He made substantial contributions in research and management of other sugarcane diseases, such as pineapple sett rot and sugarcane smut in Australia, and won the SRDC Team Innovation Award in 2010 for his contribution in the development of sugarcane smut resistant varieties for the Australian sugar industry.

11:15 am - 11:30 am ‘Which species is causing powdery mildew in mungbean in Australia?’

Ms Lisa Kelly (Plant Pathologist, Queensland Government Department of Agriculture and Fisheries, DAF; PhD Candidate, University of Southern Queensland)

Ms Lisa Kelly is a Plant Pathologist with the Qld Department of Agriculture and Fisheries in Toowoomba. She has worked with fungal and bacterial diseases of broad-acre grain crops for 13 years and is currently undertaking her PhD at the University of Southern Queensland on the powdery mildew species infecting mungbean and other *Vigna* species in Australia.

11:30 am - 11:45 am ‘The use of qPCR to diagnose halo blight of mungbean seed’

Mr Thomas Noble (PhD Candidate, Centre for Tropical and Biocommodities (CTCB), Queensland University of Technology, QUT)

Mr Thomas Noble is a PhD Candidate researching bacterial diseases of mungbean on an industry scholarship from the Australian Mungbean Association. His prior work focused on the improvement of tropical pulses in Queensland where he helped develop the mungbean NAM population and assessed mungbean genetic diversity using next generation sequencing.



Speakers

11:45 am - 12:00 pm 'BioFood fight: a fight for sustainable agriculture against plant viruses'

Dr Elizabeth Worrall (PhD Graduate, Queensland Alliance for Agriculture and Food Innovation, The University of Queensland)

Dr Elizabeth Worrall is a freshly minted doctor exploring crop protection against viruses with BioClay, a spray innovation that translates crop nanotechnology. Her research has gained attention after publication in Nature Plants resulting in multiple media releases. She is currently continuing her work on BioClay at the Queensland Alliance for Food Innovation (QAAFI) institute within the University of Queensland.

12:00 pm - 1:00 pm Lunch break

1:00 pm - 1:45 pm Keynote Presentation: 'Adventures in Plant Pathology - Bananas in Lao PDR edition'

Dr Jay Anderson (Associate Lecturer, School of Agriculture and Food Sciences, The University of Queensland)

Dr Jay Anderson is a Plant Pathologist with an interest in subtropical and tropical horticultural crops and a background in field pathology. In February this year she travelled to Lao PDR for a 6 week placement with the Australian Volunteers Program as a Plant Pathologist (Tropical Horticulture). Jay worked alongside Provincial Agriculture and Forestry Office staff identifying leaf spot diseases of banana in southern Laos. She found the opportunity personally and professionally rewarding and looks forward to sharing her experiences.

1:45 pm - 2:00 pm 'Taxonomy - why it matters in plant pathology (and how to get it right)'

Dr Yu Pei Tan (Senior Scientist, Biosecurity Queensland, Queensland Government Department of Agriculture and Fisheries, DAF)

Dr Yu Pei Tan is a Senior Scientist with Biosecurity Queensland. She uses her skills in molecular biology and mycology to identify and classify plant pathogenic fungi. She is the manager of the living culture and DNA collection at the Queensland Plant Pathology Herbarium (BRIP) based at the Ecosciences Precinct in Dutton Park.



Speakers

2:00 pm - 2:15 pm 'Rust fungi: clones win the battle, recombination wins the war'

Dr Alistair McTaggart (UQ Development Fellow, Queensland Alliance for Agriculture and Food Innovation (QAAFI), The University of Queensland)

Dr Alistair McTaggart is a Research Fellow at the University of Queensland. He uses genomics to study long-standing questions on evolution and reproduction in rust fungi. Currently he collaborates with scientists at DAF (Queensland), SCION (New Zealand) and FABI (South Africa) to determine whether myrtle rust reproduces sexually in invasive populations from Australia and New Zealand.

2:15 pm - 2:30 pm 'Applying quantitative PCR in plant pathology - from wheat to beet'

Dr Noel Knight (Adjunct Research Fellow, University of Southern Queensland)

Dr Noel Knight completed his PhD at the University of Southern Queensland in 2011. He has predominantly worked on disease evaluation of Fusarium crown rot of cereals, along with other cereal pathogens including *Bipolaris sorokiniana* and *Pyrenophora teres*. He recently finished a post-doc at Cornell University examining population genetics and pathogen detection for *Cercospora* leaf spot of beet.

2:30 pm Seminar day concludes



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