

# Conference Program

## Monday 1st August 2022

7.00am – 8.30pm Fieldtrip *sponsored by RAID* Departs Cairns Hilton

## Tuesday 2nd August 2022

8.00am - 5.00pm **Registration**

8.30am - 5.00pm **Workshop 1**  
Focusing the Future with Plant and Soil Nematodes Workshop

**Workshop 2**  
Microbiome Workshop: A comprehensive guide to explore microbial communities for managing soilborne pathogens and disease

6.00pm - 8.00pm **Welcome Reception Function**

*Sponsored by Department of Agriculture and Fisheries*

## Wednesday 3rd August 2022

7.30 - 5.00pm **Registration**

8.15 - 8.30am Welcome to Country / Opening

### SESSION 1: NEW PROBLEMS

Chairs: Tony Pattison / Paul Dennis

*Sponsored by JCU*

8.30 - 9.05am	<b>KEYNOTE 1:</b> Climate change and soilborne diseases	<b>Bruna Batista</b>
9.05 - 9.20am	Genomic studies on <i>Macrophomina phaseolina</i> and <i>M. tecta</i> associated with broadacre crops in Australia and implications for charcoal rot disease management	<b>Niloofar Vaghefi</b>
9.20 - 9.35am	A new disease of cotton caused by novel <i>Eutypella</i> species, its distribution and management	<b>Linda Smith</b>
9.35 - 9.50am	<i>Ilyonectria capensis</i> , <i>Dactylonectria estremocensis</i> and <i>Dactylonectria pinicola</i> are pathogens of <i>Pinus radiata</i> cuttings and seedlings	<b>Tonya Wiechel</b>
9.50 - 10.05am	Detection and impact of <i>Phytophthora cinnamomi</i> and <i>P. multivora</i> in macadamias	<b>Olumide Jeff-Ego</b>
10.05 - 10.25am	Panel discussion and questions	
10.25 - 10.55am	<b>Morning Tea</b>	

### SESSION 2: DIAGNOSTICS

Chairs: Wayne O'Neill / Lucy Tran-Nguyen

*Sponsored by Plant Health Australia*

10.55 - 11.10am	Molecular quantification of low populations of root-knot nematode ( <i>Meloidogyne spp.</i> ) in soil samples from fields to be planted to highly susceptible vegetable crops	<b>Neil Wilson</b>
11.10 - 11.25am	The current status of <i>Phytophthora spp.</i> in Australian almond orchards	<b>Brittany Oswald</b>
11.25 - 11.40am	Identification and pathogenicity of <i>Pythium</i> on pyrethrum ( <i>Tanacetum cinerariifolium</i> ) plant in Australia	<b>Yuzhu Liu</b>
11.40 - 11.55am	Diversity, pathogenicity and management of <i>Berkeleyomyces rouxiae</i> causing black root rot of cotton seedlings in New South Wales	<b>Duy Le</b>
11.55 - 12.20pm	Panel discussion and questions	
12.20 - 1.20pm	<b>Lunch</b>	

### SESSION 3: BREEDING AND GENETICS

Chair: Hazel Gaza

1.20 - 1.50pm	<b>KEYNOTE 2:</b> Speed breeding to overcome soil borne diseases	Lee Hickey
1.50 - 2.05pm	QTL mapping flavonoid accumulation in chickpea ( <i>C. aretinium</i> L. & <i>C. echinospermum</i> ) infected with Phytophthora root rot ( <i>P. medicaginis</i> )	Nicole Dron
2.05 - 2.20pm	Occurrence of fungicide resistance in <i>Rhizoctonia solani</i> and its effects on management of Rhizoctonia diseases of potato in Idaho	Phillip Wharton
2.20 - 2.35pm	Double trouble: investigating the interaction of soilborne pathogens in wheat, using three-dimensional response surfaces	Bethany Rognoni
2:35 - 2.50pm	Panel discussion and questions	
2.50 - 3.20pm	Afternoon Tea	

### SESSION 4: ENGAGEMENT

Chairs: Emily Pattison / Belinda Nielsen

Sponsored by ACIAR

3.20 - 3.50pm	<b>KEYNOTE 3:</b> Communicating soil borne disease management to land holders	Alby Marsh
3.50 - 4.05pm	The extension response to Panama Disease Tropical Race 4 in north Queensland	Shanara Veivers
4.05 - 4.20pm	Cover crops for managing soilborne diseases in vegetable production - the good, the bad and the ugly	Kelvin Montgu
4.20 - 4.35pm	Distribution and genetic diversity of the fusarium wilt disease of banana in Laos	Khonesavanh Chittarat
4.35 - 4.50pm	Pyrolysis of oil palm wastes as a possible sanitation measure against the fungal disease basal stem rot	Agnieszka Mudge
4.50 - 5.00pm	Panel discussion and questions	

### SESSION 5: . FLASH TALKS AND POSTERS (2 MINUTES EACH)

Chairs: Tony Pattison / Bruna Batista

Sponsored by APPS

5.00 - 6.00pm	QTL mapping of waterlogging tolerance traits in chickpea ( <i>C. aretinium</i> L. & <i>C. echinospermum</i> ) and the genetic relationship with QTL conferring Phytophthora root rot ( <i>P. medicaginis</i> ) resistance	Nicole Dron
	Glasshouse screening to identify rotation crops resistant to reniform nematode ( <i>Rotylenchulus reniformis</i> ) for the sweetpotato industry	Tim Shuey
	Studies of antagonist effect of <i>Trichoderma harzianum</i> (biological control agent) against <i>Fusarium oxysporum</i> (wilt disease causal agent) in laboratory condition ( <i>in vitro</i> )	Gomathinayagam Subramanian
	Investigating the microbial activity in the rhizosphere and bulk soil from declining and healthy avocado trees	Akila Devi Prabhakaran
	Disease management of <i>Fusarium oxysporum</i> and <i>Pythium irregulare</i> causing root decline of processing tomatoes	Hanyue Feng
	Molecular characterization and diversity of <i>Fusarium</i> spp. from sorghum	Niroshini Gunasinghe
	Questions & Posters	

6.00pm

Free Evening

## Thursday 4th August 2022

8.00 - 5.00pm

Registration

### SESSION 6: INTEGRATED MANAGEMENT

Chair: Jenny Cobon / Tim Shuey

8.30 - 9.05am

**KEYNOTE 4:** Exploring the soil virosphere

Joanne Emerson

9.05 - 9.20am

Suppression of carpogenic germination and viability of sclerotia of *Sclerotinia sclerotiorum* by *Perlka* and *Coniothyrium minitans*

Madhavi Dassanayaka

9.20 - 9.35am

Ecology of reniform nematodes in Australian cotton soil

Dinesh Kafle

9.35 - 9.50am

Screening *Tasmania lanceolata* for resistance against *Phytophthora cinnamomi* dieback

Chiranthika Sinhalagoda

9.50 - 10.05 am

Soilborne pests and diseases affecting both coffee and black pepper in Central Highland in Vietnam

Lambert Brau

10.05 - 10.30am

Panel discussion and questions

10.05 - 10.30am

Morning Tea

### SESSION 7: SYSTEMS

Chairs: Robert Magarey / David East

11.00 - 11.15am

Pink rot of potatoes impact of soil factors on disease expression and understanding field detection of the recalcitrant causal agent, *P. erythroseptica*

Robert Tegg

11.15 - 11.30am

Phytophthora root rot inoculum decline in Australian chickpea cropping systems

Sean Bithell

11.30 - 11.45am

Can mechanical soil amelioration reduce nematode pests and soilborne pathogens in broadacre crops?

Sarah Collins

11.45 - 12.00pm

Integrated management of root-knot nematode in sweet potato

Wayne O'Neill

12.00 - 12.20pm

Panel discussion and questions

12.20 - 1.20pm

Lunch

### SESSION 8: MICROBIOME

Chairs: Bruna Batista / Joanne Emerson

1.20 - 1.50pm

**KEYNOTE 5:** Agricultural microbiomes and pathogen ecology

Paul Dennis

1.50 - 2.05pm

Assigning function to the core microbiome of banana (*Musa spp.*) using genome-centric metagenomics

Anna-Belle Clarke

2.05 - 2.20pm

Assigning function to the core microbiome of *Musa spp.*

Olwen Paterson

2.20 - 2.35pm

Biological disease suppression: amendments affect pathogen growth and microbial communities

Gupta Vadakattu

2.35 - 2.55pm

Panel discussion and questions

2.55 - 3.25pm

Afternoon Tea

### SESSION 9: INTEGRATED MANAGEMENT

Chairs: Linda Smith / Emily Pattison

3.25 - 3.40pm

Effect of phosphonate and metalaxyl on avocado growth in the presence and absence of *P. cinnamomi*

Jacob Jose

3.40 - 3.55pm

Decontamination efficacy of cleaning agents against black root rot and *Verticillium* wilt pathogens of cotton

Chi Nguyen

3.55 - 4.10pm

Commercial application of metham sodium to produce dieback-free gravel for road construction

Elaine Davison

4.10 - 4.25pm

The correlation between soil abiotic attributes and Fusarium wilt severity of banana in Central Java

Irianti Kurniasari

4.25 - 4.35pm

Soil microorganisms in *Allium* systems

Jessie Harper

4.35 - 4.45pm

Panel discussion and questions

## SESSION 10: FLASH TALKS AND POSTERS (2 MINUTES EACH)

Chair: Tony Pattison

4.45 – 5.10pm	Woodchip amendment can alter banana soil microbial abundance and disease suppressive potential	Hazel Gaza
	A potential antagonist against <i>Macrophomina phaseolina</i> on strawberry	Apollo Gomez
	Managing pests and diseases in agricultural systems with suppressive soils	Mary Cole
	Panel discussion and questions	

7.00 - 10.30pm **Conference Dinner**

*Sponsored by Department of Agriculture, Fisheries and Forestry*

## Friday 5th August 2022

8.00 - 12.45pm **Registration**

## SESSION 11: MICROBIOME/INTEGRATED MANAGEMENT

Chairs: Linda Smith / Dinesh Kafle

8.30 - 9.05am	<b>KEYNOTE 6:</b> Innovative research BioClay for crop protection	Neena Mitter
9.05 - 9.20am	Plant-parasitic nematodes in sweetpotato production in Australia	Jenny Cobon
9.20 - 9.35am	Using biocontrol agents to alleviate Rhizoctonia bare patch in wheat production	Wajira Galhena
9.35 - 9.50am	Plant defence activation against Phytophthora root rot in phosphite primed avocado	Kelly Scarlett
9.50 - 10.05am	Susceptibility of some alternative crops to <i>Verticillium dahliae</i>	Linda Scheikowski
10.05 - 10.30am	Panel discussion and questions	

10.30 - 11.00am **Morning Tea**

## SESSION 12: ENGAGEMENT

Chair: Tony Pattison

11.00 - 11.30am	<b>KEYNOTE 7:</b> What soil borne diseases mean to the farming enterprise	Doug Phillips
11.30 - 12.30pm	<b>PANEL DISCUSSION:</b> Is soilborne disease research meeting the challenges? <b>Doug Phillips, Alby Marsh, Paul Dennis, Neena Mitter, Joanne Emerson, and Anna-Belle Clarke</b>	<b>Facilitator: Tony Pattison</b>
12.30 - 12.45pm	Close	
12.45 - 1.00pm	Lunch	

NB: This program is correct at the time of printing, please check your app for any changes.