CONFERENCE PROGRAM

MONDAY 20 NOVEMBER 2023: PRE-CONFERENCE WORKSHOPS

09:00 - 17:00	**Pre Conference Workshops (off-site)** ***The University of Adelaide, Waite Campus*** *Must register to attend*
09:00 - 17:00	**Workshop 1 - Breaking Ground in Australian Nematology** *Dr Mike Hodda - CSIRO, Canberra ACT; Dr Katherine Linsell - SARDI, Urrbrae SA; Dr Sarah Collins - DPIRD, Perth WA; Dr Rebecca Zwart - University of Southern QLD, Toowoomba QLD; Plus Guest Presenters*
10:00 - 15:00	**Workshop 2: Grapevine Virology 101** *Dr Monica Kehoe - DPIRD, South Perth WA; Dr Fiona Constable - AgVic, Bundoora, VIC*
10:00 - 16:00	**Workshop 3: New approaches for surveillance and monitoring of plant pathogens** *Dr Rohan Kimber - Crop Sciences, SARDI SA; Prof Jon West, Protecting Crops and the Environment Group, Rothamsted Research, United Kingdom; Plus Guest Presenters*
15:00 - 18:00	**Registration Open (National Wine Centre)** *For those delegates wishing to register prior to the first day of the Conference*
15:00 - 18:00	**Speaker Support Open (National Wine Centre)** *For any presenters wishing to upload their presentation with the Speaker Support AV team prior to the first day of the Conference*
18:00 - 19:30	**Welcome Reception (National Wine Centre)**

TUESDAY 21 NOVEMBER 2023: CONFERENCE DAY ONE

08:00 — **Registration**

08:30 - 08:45 — **Official Opening**

Chair: Nicole Thompson

Welcome and Welcome to Country

Uncle Rod O'Brien, Wirltu Yarlu

08:45 - 09:45 — **PRESIDENTIAL ADDRESS:**

Pioneering discoveries in plant virology from Australia (what lessons can we learn from history?)

Dr Andrew Geering, President of the Australasian Plant Pathology Society

Chair: Rohan Kimber

09:45 - 10:30 — **KEYNOTE ADDRESS 1:**

Emerging technologies for surveillance and monitoring of sporadic pathogens

Prof Jon West, Rothamsted Research

10:30 - 11:00 — **Morning Tea**

11:00 - 12:30 — **Concurrent Session 1**

	SESSION 1 A: New Technologies (Artificial intelligent (AI)) and Novel Methods in Plant Pathology and Disease Control	**SESSION 1 B: Host Resistance Breeding and Pathogenomics**	**SESSION 1 C: Diagnostics, Biosecurity**	**SESSION 1 D: Integrated Disease Management/Biological Control**
				Sponsored by GRDC Grains Research & Development Corporation
	Room: Hickinbotham Hall	**Room: The Gallery Room**	**Room: Exhibition Hall**	**Room: The Vines Room**
	Chair: Nicole Thompson	Chair: Amanda Able	Chair: Louise Croeser	Chair: Alan Little
11:00	192 **1A.1** Understanding pathogen populations using qPCR analyses of airborne spore samples to assist in the management of Eutypa dieback of grapevines Dr Rohan Kimber, SARDI	100 **1B.1** Factors contributing to the expression of blackleg disease (Leptosphaeria maculans) of canola in the context of breeding for quantitative disease resistance Dr Susan Sprague, CSIRO	146 **1C.1** Utilisation of small RNA-omics and Rapid Genome Sequencing Complementary Strategy for characterisation of novel plant viruses Dr Shamila Abeynayake, Department of Agriculture, Fisheries and Forestry	42 **1D.1** Gaining insight into the life cycle and mating system of the floral smut Ustilago quitensis, a prospective biocontrol agent against invasive pampas grass in New Zealand. Dr Chantal Probst, Manaaki Whenua - Landcare Research
11:15	179 **1A.2** Next-generation spore trapping: exploring opportunities and overcoming challenges Dr Michelle Demers, Bioscout	32 **1B.2** Exploring the wilds for resistance to banana bunchy top virus Dr Fe Dela Cueva, University of The Philippines-Institute of Plant Breeding, College of Agriculture	161 **1C.2** Biosecurity engagement in horticulture in the Virginian growing region Dr Cathryn Todd, SARDI	15 **1D.2** The benefits of breeding major food crops for durable resistance: A meta-analysis of empirical evidence Dr Abebayehu Geffersa, CSIRO
11:30	189 **1A.3** Integrated digital biosecurity systems for plant health diagnostics Dr Matt Hill, Plant Health Australia	108 **1B.3** Mining fungal pan-genomes for effector and fungicide resistance profiling for disease diagnosis and surveillance Md Mohitul Hossain, Curtin University	36 **1C.3** Exploring genomic insights into the whole genomes of Heterodera species Miss Akshita Jain, Agriculture Victoria Research	201 **1D.3** VIRTUAL: Endophytic actinobacteria as a biocontrol agent of stem canker disease of royal poinciana caused by Neoscytalidium dimidiatum Prof Khaled El-Tarabily, College of Science, United Arab Emirates University
11:45	90 **1A.4** Harnessing mobile, foliar applied double-stranded RNA for effective RNAi against plant pathogens Dr Chris Brosnan, University of Queensland	128 **1B.4** Whole genome approach to population genomics of Phytophthora cinnamomi in Australia Miss Amy Longmuir, Deakin University	98 **1C.4** Fusarium sp. [AF-18] - a friend and close confidant of polyphagous shot hole borer Mr Nicholas Pain, Department of Primary Industries and Regional Development WA	110 **1D.4** Management of chickpea Ascochyta blight using cultivar resistance, fungicide strategies and agronomy Dr Joshua Fanning, Agriculture Victoria
12:00	193 **1A.5** Optimisation of BioClay™ formulation and application to control botrytis grey mould of lentil Dr Mohsen Khani, South Australian Research and Development Institute (SARDI)		95 **1C.5** Xanthomonas euvesicatoria pv. euvesicatoria causes bacterial leaf spot of chili in Indonesia Mrs Desi Utami, The University of Queensland	13 **1D.5** Taking shortcuts: modifying harvest height to prevent colonisation of cereal stubble by Fusarium pseudograminearum Dr Toni Petronaitis, NSW DPI
12:15				66 **1D.6** Elucidation of antagonistic mechanisms of Bacillus velezensis in biocontrol of shot-hole disease in flowering cherry Mr Viet-Cuong Han, Curtin University

12:30 - 13:30 — **Lunch, Poster Displays and Exhibition**

Meet & Greet for Keynote speakers and student attendees

13:30 - 15:00	**Concurrent Session 2**														
	SESSION 2 A: Molecular Plant Disease Interactions				**SESSION 2 B:Microbiomes and Disease Complex**				**SESSION 2 C: Plant Disease Management, Chemical Resistance**				**SESSION 2 D: Integrated Disease Management/Biological Control**			
	Room: Hickinbotham Hall				**Room: The Gallery Room**				**Room: Exhibition Hall**				**Room: The Vines Room**			
	Chair: Kelly Hill				Chair: Andrew Geering				Chair: Tara Garrard				Chair: Toni Petronaitis			
13:30	67	**2A.1**	Identification of Pyrenophora teres f. teres virulence QTL with multi-parental and bi-parental mapping populations Dr Buddhika Dahanayaka, University of Southern Queensland		165	**2B.1**	Soilborne pathogens influence on plant-microbiome interactions: cause and effects Dr Gupta Vadakattu, CSIRO		121	**2C.1**	Xanthomonas campestris pv campestris: What have we learnt over the past four years Dr Toni Chapman, NSW Department of Primary Industries		68	**2D.1**	Biochemical changes in Vitis vinifera leaves and responses to Botrytis cinerea infection after the application of a yeast extract formulate Ms Giulia Scimone, University of Pisa
13:45	52	**2A.2**	How does a broad host range necrotrophic fungal pathogen trigger host cell death? Dr Toby Newman, Centre for Crop and Disease Management, Curtin University		144	**2B.2**	Metatranscriptomics captures functional dynamics between the plant and its microbiome Dr Simon Law, CSIRO		92	**2C.2**	Detecting fungicide resistance mutations in Pyrenophora teres using a portable DNA sequencer Dr Katherine G Zulak, Centre for Crop and Disease Management, School of Molecular and Life Sciences, Curtin University		103	**2D.2**	Understanding the factors influencing the efficacy of biocontrol against plant diseases for an optimal use in the field Dr Marc Bardin, Inrae
14:00	175	**2A.3**	The Effect of Endophytic Fusarium oxysporum on the rhizome quality of ginger (Zingiber officinale Roscoe) Mrs Andrea Matthews, The University of Queensland		177	**2B.3**	Measuring the impacts of deep tillage on soil biological health Dr Katherine Linsell, SARDI		173	**2C.3**	Managing the unmanageable – understanding the role of seedborne Ramularia collo-cygni as a source of disease spread in New Zealand barley crops. Ms Joanne Drummond, Foundation for Arable Research		43	**2D.3**	Uncovering soil microbial interactions during the destruction of Fusarium wilt infected banana plants Dr Tony Pattison, Department of Agriculture and Fisheries, Queensland
14:15	120	**2A.4**	A cornucopia of signaling factors in R-mediated defense against viral pathogens allows new types of regulation to fit the occasion Prof Peter Palukaitis, Jeonbuk National University		19	**2B.4**	Soil disease suppression in the omics world: From small RNA molecules to HiC genomics Dr Roshan Regmi, CSIRO		213	**2C.4**	Enhancing Hot Pepper Production in the Southwest US: Field Evaluation of Advanced Varieties for Disease Resistance Dr Soum Sanogo, New Mexico State University		202	**2D.4**	VIRTUAL: Biological control of Pythium aphanidermatum damping-off disease of cucumber using actinobacteria capable of producing cell-wall degrading enzymes Prof Khaled El-Tarabily, College of Science, United Arab Emirates University
14:30	93	**2A.5**	The ilv2 gene, encoding acetolactate synthase for branched chain amino acid biosynthesis, is required for pathogenicity in Leptosphaeria maculans Mr Nicholas Chong, University of Melbourne		61	**2B.5**	Harnessing microbial allies for successful pine growth under pathogen pressure. Dr Jamil Chowdhury, Western Sydney University						186	**2D.5**	VIRTUAL: Crop rotation reduces the outbreak of Panama disease caused by Fusarium oxysporum f. sp. cubense Tropical Race 4 in Lao PDR Mr Bounpheng Sihomchanh, Department of Agriculture and Fisheries, Queensland
14:45	78	**2A.6**	Ascochyta rabiei effector molecules in different tissue type of chickpea by using transcriptomics Ms Mahmuda Binte Monsur, Griffith University		191	**2B.6**	One vine, two diseases: Interactions of different fungal trunk pathogens associated with Botryosphaeria dieback and Petri disease complex in Australian vineyards Miss Dyanah Joy Amorio, Charles Sturt University								
15:00 - 15:30	**Afternoon Tea**														
	Chair: Gupta Vadakattu														
15:30 - 16:15	**KEYNOTE ADDRESS 2:** ***Uncovering virulence gene diversity in rust fungi*** *Dr Peter Dodds, CSIRO*														
16:15 - 17:00	**KEYNOTE ADDRESS 3:** ***Species interactions in the plant microbiome: a riddle, wrapped in mystery, inside an enigma*** *Prof Linda Kinkel, The University of Minnesota*														

WEDNESDAY 22 NOVEMBER 2023: CONFERENCE DAY TWO

08:00 — **Registration**

Chair: Nicole Thompson

08:30- 09:15 — **DANIEL MCALPINE LECTURE:**

Ascochyta blight of temperate pulses; the undefeated pathogens

Dr Jenny Davidson

Chair: Julie Pattemore

09:15 - 10:00 — **KEYNOTE ADDRESS 4:**

Using Biosecurity and Diagnostics to protect Australian cropping industries - some lessons from near-neighbour collaborations

Dr Murray Sharman, Queensland Department of Agriculture and Fisheries

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10:00 - 10:30 — **Morning Tea**

10:30 - 12:00 — **Concurrent Session 3**

	SESSION 3 A: Diagnostics, Biosecurity and Community/Industry Engagement/Extension	SESSION 3 B: Epidemiology, Ecology, Modelling and Risk Analysis	SESSION 3 C: New Diseases and Climate Change	SESSION 3 D: Taxonomy, Diversity and Evolution
	Room: Hickinbotham Hall	**Room: The Gallery Room**	**Room: Exhibition Hall**	**Room: The Vines Room**
	Chair: Lindsey du Toit	Chair: Brendan Rodoni	Chair: Julie Pattemore	Chair: Toni Chapman
10:30	113 **3A.1** National Diagnostics and Surveillance Protocols – Endorsement process and recent updates Dr Harsh Garg, Plant Health Australia	84 **3B.1** Modelling the impact of reduced primary inoculum carryover on the spatiotemporal spread of Ascochyta blight in chickpeas Dr Mohamed Cassim Mohamed Zakeel, CSIRO Agriculture and Food	198 **3C.1** Emerging diseases in macadamia: A growing concern Assoc Prof Olufemi Akinsanmi, The University of Queensland, QAAFI	56 **3D.1** The Ralstonia solanacearum species complex simplified, and what's present "down under"? Dr Jane Ray, Northern Territory Government
10:45	109 **3A.2** Advances in the molecular identification of Australian root knot nematodes (Meloidogyne spp.) Dr Dylan Corner, Department of Agriculture and Fisheries	187 **3B.2** Seed Potatoes Certification - influencing potato disease management by flattening the curve Dr Nigel Crump, Australian Seed Potato Certification Authority	154 **3C.2** Witches' broom disease of cassava is associated with a fastidious fungal pathogen in Southeast Asia Dr Warren Arinaitwe, Alliance of Bioversity International-CIAT	117 **3D.2** Exploring the diversity of Colletotrichum species infecting Australian native plants Miss Aindreeya Alcova, The University of Melbourne
11:00	148 **3A.3** Detection of viruses and identification of plant species from hive-stored pollen: guiding surveillance and weed management strategies. Mrs Joanne Mackie, Agriculture Victoria Research	26 **3B.3** Identification of Eutypa dieback pathogens from eDNA collected from Australian vineyards using high-resolution melting analysis Dr Regina Baaijens, Gulbali Institute, Charles Sturt University	80 **3C.3** Effects of drought and turnip yellows virus on canola plants Dr Piotr Trebicki, Macquarie University	47 **3D.3** A multilocus sequence typing (MLST) scheme for rapid identification of Xanthomonas citri subspecies and pathovars Miss Efenaide Okoh, Hawkesbury Institute for the Environment, Western Sydney University
11:15	130 **3A.4** Development of a loop – mediated isothermal amplification (LAMP) assay for the detection of Sweetpotato virus G (SPVG) in sweetpotato planting materials for commercial production in Papua New Guinea Ms Winnie Maso, National Agricultural Research Institute	62 **3B.4** Next Generation Crop-Pest Model: A case study on Blackleg disease (Leptosphaeria maculans) and canola (Brassica napus) Ms Jamina Gabrielle Bondad, University of Tasmania	23 **3C.4** Diversity and pathogenicity of Globisporangium and Pythium spp. associated with pyrethrum in Australia Ms Yuzhu Liu, The University of Melbourne	20 **3D.4** How field-based research can contribute to fungal taxonomy: detection of two undescribed Kordyana species in Australia during the course of a biocontrol agent release program Miss Isabel Zeil-Rolfe, CSIRO Health and Biosecurity/Australian National University
11:30	41 **3A.5** Protocol development for bulk and single plant screening of kauri (Agathis Australis) in nurseries for Phytophthora agathidicida Mrs Kiryn Dobbie, Scion	196 **3B.5** Polyphagous shot-hole borer – tracking the development of an invasive exotic beetle in Western Australia Dr Louise Croeser, Department of Primary Industries and Regional Development	132 **3C.5** Reoccurring wilt, a new disease of cotton in Australia caused by Novel Eutypella Species Dr Linda Smith, Department of Agriculture and Fisheries	30 **3D.5** Diversity of orthotospoviruses in nurseries in Victoria Mr Eyal Zeira, Agriculture Victoria
11:45	105 **3A.6** What is the reach of plant pathology information freely shared on the internet? Ms Luise Fanning, Agriculture Victoria	155 **3B.6** Updating systematics of Ganoderma spp, the causal agent of Basal Stem Rot of Elaeis guineensis Jacq. and its spectrum of aggressiveness Dr Shamala Sundram, Malaysian Palm Oil Board		71 **3D.6** Identification of Colletotrichum species associated with twig dieback of citrus in Western Australia Ms Weixia Wang, University of Melbourne

12:00 - 13:00 — **Lunch, Poster Displays and Exhibition**

13:00 - 13:45	**Poster Session, Ground Floor and Level 1 foyers**														
13:45 - 15:15	**Concurrent Session 4**														
	SESSION 4 A: New Technologies (Artificial intelligent (AI)) and Novel Methods in Plant Pathology and Disease Control and Forest and Perennial Crop Diseases			**SESSION 4 B: Epidemiology, Ecology, Modelling and Risk Analysis**			**SESSION 4 C: Diagnostics, Biosecurity**			**SESSION 4 D: Plant Disease Management, Chemical Resistance**		
	Room: Hickinbotham Hall			**Room: The Gallery Room**			**Room: Exhibition Hall**			**Room: The Vines Room**		
	Chair: Anne Sawyer			Chair: Sandra Savocchia			Chair: Cathryn Todd			Chair: Brandy Rawnsley		
13:45	150	**4A.1**	Fungi and oomycetes associated with trunk diseases in the Australian almond industry Miss Brittany Oswald, South Australian Research and Development Institute	122	**4B.1**	Effects of environmental stresses on Fusarium oxysporum f. sp. cubense subtropical race 4 in vitro Ms Janet Roberts, The University of Queensland	138	**4C.1**	Small RNA sequencing (sRNAseq) for plant virus-viroid diagnostics at Post Entry Quarantine: Journey post-deployment Dr Ruvini V. Lelwala, Department of Agriculture, Fisheries and Forestry	162	**4D.1**	Analysis of Phytophthora cinnamomi in the Great Otway National Park Mr Campbell Learmonth, Deakin Unversity
14:00	64	**4A.2**	First report of pathogens associated with shot-hole disease on flowering cherry trees (Prunus x yedoensis) and warning of their possible cross-infection with stone fruit trees (Prunus spp.) Mr Viet-Cuong Han, Curtin University	169	**4B.2**	Lenticels: the infection portal for Phlyctema vagabunda causing Bull's eye rot of apple Dr Kerry Everett, The New Zealand Institute for Plant and Food Research Ltd	133	**4C.2**	Border surveillance reveals new plant pathogen host records and geographic range extensions of Biosecurity concern for Australia Dr Aaron Maxwell, Daff	137	**4D.2**	Adavelt™ active (Florylpicoxamid) – a novel fungicide for disease management in strawberry, lettuce, fruiting vegetables and cucurbits in Australia. Mr Greg Wells, Corteva Agriscience
14:15	97	**4A.3**	New solutions to a perennial problem: curing myrtle rust with double stranded RNA Miss Rebecca Degnan, The University of Queensland	115	**4B.3**	Surveillance for vector-borne diseases – a Western Australian experience Dr Louise Croeser, Department of Primary Industries and Regional Development	24	**4C.3**	Phenotyping tan spot (Curtobacterium flaccumfaciens pv. flaccumfaciens) of mung bean using specific quantitative PCR Dr Ahmed Saad, Department of Primary Industries and Regional Development (DPIRD)	58	**4D.3**	Comparative effect of bacterial cultures and cell-free supernatants on the development of Sclerotinia sclerotiorum Margot Grimonpont, Inrae
14:30	136	**4A.4**	Finding the pathogen before the disease Dr Tracey Steinrucken, CSIRO	168	**4B.4**	Can genetic resistance to pathogens be a renewable resource? Impact of cultivar rotation on pathogen evolution and disease control Dr Luke Barrett, CSIRO	145	**4C.4**	Enhancing Plant Biosecurity Surveillance and Diagnostics capacity and capability through expertise Networks Dr Bianca Rodrigues Jardim, Plant Health Australia	141	**4D.4**	Fungicide resistance in powdery mildew in Australian vineyards Dr Ismail Ismail, South Australian Research & Development Institute / University of Adelaide
14:45	209	**4A.5**	Sniffing Phytophthora Prof David Guest, The University of Sydney	38	**4B.5**	Grapevines are at risk of infection by trunk disease pathogens during spring Dr Mark Sosnowski, South Australian Research & Development Institute / University of Adelaide	14	**4C.5**	The Diagnostic Frontier: Conquering Fusarium oxysporum with new tools Dr Saidi Achari, Agriculture Victoria	34	**4D.5**	Fungicide resistance monitoring with digital PCR – a case study in barley net blotch Dr Noel Knight, University of Southern Queensland
15:00	194	**4A.6**	Exploiting RNA-mediated silencing to induce GPGV resistance in in-vitro grown Vitis vinifera by exogenous application of dsRNA Miss Kamalpreet Kaur, Agriculture Victoria	21	**4B.6**	Field release of a host-specific biotrophic plant pathogen, Kordyana brasiliensis in NSW, Australia for the biocontrol of an environmental weed: establishment and impacts Miss Isabel Zeil-Rolfe, CSIRO Health and Biosecurity/Australian National University	87	**4C.6**	Current status of viruses infecting local garlic germplasms in Indonesia: old and new players Dr Sari Nurulita, IPB University			
15:15 - 15:45	**Afternoon Tea**											
	Chair: Mark Sosnowski											
15:45 - 16:30	**KEYNOTE ADDRESS 5:** ***Emerging diseases of fruit and nut crops in California: the effect of climate change and intensive farming practices, and new control solutions*** *Dr Florent Trouillas, University of California*											
16:30 - 17:30	**APPS AGM,** *Hickinbotham Hall*											
19:00 - 23:00	**APPS 2023 Gala Dinner (Ian McLachlan Room, Adelaide Oval)**											

THURSDAY 23 NOVEMBER 2023: CONFERENCE DAY THREE

08:00 — **Registration**

Chair: Mark Sosnowski

08:30- 09:15 — **KEYNOTE ADDRESS 6:**

Chasing spores: decision aids, fluid dynamics, GPUs, and 3D printing

Dr Walter F Mahaffee, United State Department of Agriculture – Agricultural Research Service

Chair: Michael Rettke

09:15 - 10:00 — **KEYNOTE ADDRESS 7:**

Stakeholder engagement in research and extension programming: An essential process for managing recalcitrant plant diseases

Prof Lindsey du Toit, Washington State University

10:00 - 10:30 — **Morning Tea**

10:30 - 12:00 — **Concurrent Session 5**

	SESSION 5 A: New Technologies (Artificial intelligent (AI)) and Novel Methods in Plant Pathology and Disease Control	**SESSION 5 B: Epidemiology, Ecology, Modelling and Risk Analysis**	**SESSION 5 C: Diagnostics, Biosecurity**	**SESSION 5 D: Integrated Disease Management/Biological Control**
	Room: Hickinbotham Hall	**Room: The Gallery Room**	**Room: Exhibition Hall**	**Room: The Vines Room**
	Chair: Rohan Kimber	Chair: Sara Blake	Chair: Rachel Mann	Chair: Giulia Scimone
10:30	188 **5A.1** RNA interference (RNAi): dsRNA targeting pathogen-specific genes inhibits the physiological characteristics of Botrytis cinerea in chickpea Dr Prabhakaran T Sambasivam, Griffith University	60 **5B.1** Journey to the core: black core rot in citrus Miss Zali Mahony, Queensland Alliance for Agriculture and Food Innovation	10 **5C.1** New Method for Nucleic Acid Isolation and Quantification for the Detection of Ratoon Stunting and Leaf Scald Pathogens of Sugarcane Ms Moutoshi Chakraborty, Griffith University	88 **5D.1** Current Status of Banana Bunchy Top Disease in Indonesia and Its Alternative Control Strategy Dr Sri Hidayat, IPB University
10:45	89 **5A.2** Double-stranded RNA for environmentally sustainable control of plant diseases Dr Anne Sawyer, The University of Queensland	29 **5B.2** Genetic diversity of poleroviruses and luteoviruses in cereals and grasses in south-eastern Australia Ms Narelle Nancarrow, The University of Melbourne	107 **5C.2** First report of Neopestalotiopsis spp associated with leaf spots of avocado and mango in Champasak Province, Lao Peoples Democratic Republic Dr Tara Garrard, University of Sydney	70 **5D.2** What we know and don't know about alternate host crops and Verticillium wilt of cotton. Ms Linda Scheikowski, DAF
11:00	91 **5A.3** RNAi-based mechanisms of crop protection: uptake and translocation of dsRNAs targeting Botrytis cinerea in winegrapes. Dr Victoria Clarke, Tasmanian Institute of Agriculture, University of Tasmania	46 **5B.3** Impact of sowing CMV-infected seed on growth and yield of lentil Dr Mohammad Aftab, Agriculture Victoria	96 **5C.3** National coordination of high-throughput sequencing (HTS) data for a connected diagnostics system Dr Cheryl Grgurinovic, Plant Health Australia	156 **5D.3** Seed-coating with Trichoderma atroviride based generic bio-inoculant to control soil-borne and seed-borne diseases of some vegetable crops in New Zealand. Dr Diwakar Kandula, Lincoln University
11:15	25 **5A.4** UMI-based high-accuracy full-length fungal rRNA sequencing using Oxford Nanopore Technologies platforms for accurate pathogen identification Dr Tongda Li, Agriculture Victoria Research	104 **5B.4** A century of banana disease epidemics Prof Andre Drenth, The University of Queensland	181 **5C.4** MALDI-ToF mass spectrometry is an effective tool for plant pathology Dr David Nehl, Department of Agriculture, Fisheries And Forestry	59 **5D.4** Simultaneous metabolomics and transcriptomics identifies key antifungal compounds and biosynthetic gene clusters during liquid-state fermentation of a Streptomyces biocontrol agent Dr Louise Thatcher, CSIRO
11:30	211 **5A.5** A Novel and Rapid Method of Screening Sugarcane Variety for Red Rot Resistance Dr Shamsul Bhuiyan, Sugar Research Australia	57 **5B.5** Understanding leaf wetness in Western Australian table grape production for disease modelling Dr Andrew Taylor, DPIRD WA	183 **5C.5** Modernising routine diagnostics for the management of viruses for the horticulture industry Dr Flavia Sarti Bonora, Queensland Department of Agriculture and Fisheries	65 **5D.5** Interaction between the ginger soft rot pathogen Pythium myriotylum and the biocontrol agent Pythium oligandrum Dr Paul Daly, Jiangsu Academy of Agricultural Sciences (JAAS))
11:45	50 **5A.6** Phenotyping for quantitative resistance to Leptosphaeria maculans in Brassica napus (rapeseed): A framework using machine learning and artificial intelligence (MLAI) Dr Saba Rabab, CSIRO	39 **5B.6** Grapevine trunk disease pathogen spore detection varies within and around vineyards Dr Mark Sosnowski, South Australian Research & Development Institute / University of Adelaide		

12:00 - 13:00 — **Lunch, Poster Displays and Exhibition**

13:00 - 14:30	**Concurrent Session 6**														
	SESSION 6 A: Integrated Disease Management/Biological Control				**SESSION 6 B: Microbiomes and Disease Complex and other**				**SESSION 6 C: Diagnostics, Biosecurity**				**SESSION 6 D: Plant Disease Management, Chemical Resistance**			
	Room: Hickinbotham Hall				**Room: The Gallery Room**				**Room: Exhibition Hall**				**Room: The Vines Room**			
	Chair: Brittany Oswald				Chair: Gupta Vadakattu				Chair: Cheryl Grgurinovic				Chair: Ismail Ismail			
13:00	72	**6A.1**	VIRTUAL: Potential for using rhizobacteria for biological control of barnyard grass (Echinochloa crus-galli) in rice fields Mrs Chi PT Nguyen, University of New England		31	**6B.1**	Pathogenicity and identification of a novel collar and root rot Fusarium oxysporum associated with yield decline of Australian processing tomatoes Ms Hanyue Feng, University of Melbourne		210	**6C.1**	Stop the rot: monitoring Phytophthora in nurseries Prof David Guest, The University of Sydney		178	**6D.1**	Characterization and detection of QoI resistance in Colletotrichum species associated with avocado in Australia Miss Imsubenla Nokdy, Queensland Alliance for Agriculture and Food Innovation, University of Queensland
13:15	203	**6A.2**	VIRTUAL: Biological control of dieback disease of mango caused by Lasiodiplodia theobromae using endophytic actinobacteria in the United Arab Emirates Prof Khaled El-Tarabily, College of Science, United Arab Emirates University		172	**6B.2**	Amendment effects on soilborne pathogens and microbiome diversity in calcarosol soils Dr Gupta Vadakattu, CSIRO		174	**6C.2**	Testing statistics for diagnostics, biosecurity, and general surveillance in Victoria 2020 - 2023. Dr Brendan Rodoni, Agriculture Victoria Research		33	**6D.2**	Exogenous double-stranded RNA as a biopesticide for sustainable control against soilborne pathogens Mrs Leny Jane Pame, The University of Queensland
13:30	197	**6A.3**	The focus on biocontrol in response to European constraints on fungicides Dr Brandy (Belinda) Rawnsley, Syngenta ANZ		53	**6B.3**	Evolution of the fungal and bacterial fruit microbiomes of kiwifruit (Actinidia chinensis var. deliciosa and A. chinensis var. chinensis) from pre-harvest spray to storage in a cool store. Dr Joel Vanneste, Plant and Food Research		86	**6C.3**	Improved diagnostics for Trichoderma aggressivum and Cladobotryum spp., two major fungal pathogens affecting commercial mushroom production in Australia Dr Tongda Li, Agriculture Victoria		81	**6D.3**	Can secateurs spread Grapevine Trunk Disease pathogens? Mr Colin Starkey, CSU
13:45	45	**6A.4**	Streptomyces strain improvement for crop protection applications Dr Margaret Ramarajan, CSIRO Black Mountain		112	**6B.4**	Analysis of the effect of the chitin synthase inhibitor nikkomycin Z on Phytophthora species Ms Amena Khatun, University of Adelaide		55	**6C.4**	Aetiology of banana finger-tip rot (mokillo) in Australia Dr Jane Ray, Northern Territory Government		176	**6D.4**	Emergence of resistance to succinate dehydrogenase inhibitor fungicides in Pyrenophora teres f. teres and P. teres f. maculata in Australia Mr Wesley Mair, Curtin University
14:00	77	**6A.5**	Woodchip amendment can alter banana soil microbial abundance and disease-suppressive potential Dr Hazel Gaza, DAF		44	**6B.5**	Innovation in Tertiary Agriculture Teaching: Training the Next Generation of Plant Pathologists Prof Amanda Able, School of Agriculture, Food and Wine; University of Adelaide		76	**6C.5**	Development of Highly Sensitive RT-PCR Assays for Universal Detection of Orthotospoviruses and Internal Control in Thrips Testing Mr Hsu-yao Chao, University of Queensland		170	**6D.5**	The impact of oat leaf (crown) rust on hay and grain yield and quality Dr Kylie Chambers, DPIRD
14:15	16	**6A.6**	Stem colonisation by Fusarium pseudograminearum during cereal development and after harvest Dr Toni Petronaitis, NSW DPI						190	**6C.6**	Automated air sampling for remote surveillance and high throughput processing of environmental samples for eDNA analyses Dr Rohan Kimber, SARDI				
14:30 - 15:00	**Afternoon Tea**														
	Chair: Nicole Thompson														
15:00 - 15:45	**KEYNOTE ADDRESS 8:** **Impacts and innovations of the ongoing environmental and industry threat of myrtle rust** *Dr Louise Shuey, Department of Agriculture and Fisheries*														
15:45 - 16:15	**Closing Ceremony, including Awards and Conference Wrap Up**														
16:15	**Close**														

FRIDAY 24 NOVEMBER 2023: POST-CONFERENCE WORKSHOPS

09:00 - 15:00	**Post-Conference Workshop (off-site)** **The University of Adelaide, Waite Campus** *Must register to attend*
	Workshop 5: Xylella ***Dr Toni Chapman - DPI NSW, Menangle; Dr Monica Kehoe - DPIRD, South Perth WA***
08:00 - 17:00	**Field Day (off-site)** ***Departing the National Wine Centre at 8.00am returning by 5.00pm*** *Must register to attend*
	North Tour: Vegetable Production
	South/Adelaide Hills Tour: Perennial Crops

POSTER DISPLAYS: Tuesday 21 - Thursday 23 November 2023

Posters will be displayed from Tuesday 21 November - Thursday 23 November. All poster presenters should be alongside their poster during the allocated poster session and during schedule breaktimes where possible.

Paper #	P #	Theme	
18	P1	Diagnostics, Biosecurity	Early disease detection = early farmer action Ms Aylwen Cotter, Latrobe University
28	P2	Diagnostics, Biosecurity	Achieving the Impossible in Biosecurity: The 5A's in Border Diagnostics Mrs Doris Mercado-escueta, Department of Agriculture, Fisheries and Forestry
40	P3	Diagnostics, Biosecurity	Rapid on-site detection of Phytophthora infestans using real-time loop-mediated isothermal amplification (LAMP) Dr Phillip Wharton, University of Idaho
51	P4	Diagnostics, Biosecurity	Development and validation of diagnostic assays for detection of banana wilt associated phytoplasmas Ms Cecilia O'Dwyer, Centre for Horticultural Sciences, Queensland Alliance for Agriculture and Food Innovation, University of Queensland
135	P5	Diagnostics, Biosecurity	Optimisation of RNA extraction protocols for plant virus and viroid detection Dr Pooja Sharma, Department of Agriculture, Fisheries and Forestry
143	P6	Diagnostics, Biosecurity	Traditional pathology underpins modern diagnostic advances in Post Entry Quarantine Ms Cassie McMaster, Department of Agriculture, Fisheries, and Forestry
152	P7	Diagnostics, Biosecurity	Biosecurity bacterial LAMP assays: Residential training and surveillance Dr Cathryn Todd, SARDI
159	P8	Diagnostics, Biosecurity	Biosecurity Queensland Plant Health Snapshot Sandy Watts, Biosecurity Queensland
160	P9	Diagnostics, Biosecurity	Detection and Current Status of Guava Root-knot Nematode in Queensland Mr Wayne O'Neill, Queensland DAF
63	P10	Epidemiology, Ecology, Modelling and Risk Analysis	Effective and consistent soil application methods for basal stem infection by Sclerotinia sclerotiorum Mr Viet-Cuong Han, Curtin University
127	P11	Epidemiology, Ecology, Modelling and Risk Analysis	Temperature Effects of Botrytis Grey Mould Colonisation and Growth on Lens culinaris. Miss Chloe Findlay, Agriculture Victoria
54	P12	Forest and Perennial Crop Diseases	Screening Tasmannia lanceolata for resistance against Phytophthora cinnamomi dieback Dr Kara Barry, University of Tasmania
106	P13	Forest and Perennial Crop Diseases	Ilyonectria and Dactylonectria species from Pinus radiata in New Zealand Mrs Kiryn Dobbie, Scion
147	P14	Forest and Perennial Crop Diseases	Phomopsis Husk Rot in Macadamia: Endophytes as Potential Sources of Inoculum Dr Vivian Rincon Florez, The University of Queensland
4	P15	Host Resistance Breeding	Virulence spectrum of Western Australian Parastagonospora nodorum isolates on wheat. Dr Hossein Golzar, Department of Primary Industries and Regional Development WA
129	P16	Host Resistance Breeding	Selection for Phytophthora root rot resistance in chickpea crosses affects yield potential Mr Sean Bithell, NSW DPI
166	P17	Host Resistance Breeding	Johnson grass mosaic virus: resistance of Australian maize, sweet corn and grain sorghum hybrids and germplasm Miss Eloise Martin, QLD Department of Agriculture and Fisheries
94	P18	Integrated Disease Management/Biological Control	An endophytic strain of Pseudomonas poae: Natural ally against Botryosphaeria dieback Assoc Prof Sandra Savocchia, Gulbali Institute, Charles Sturt University
101	P19	Integrated Disease Management/Biological Control	Fighting stubble-borne disease in Australian conservation agriculture farming systems Dr Kamrul Hassan, CSIRO
131	P20	Integrated Disease Management/Biological Control	Using silicon to boost the cotton resistance against reniform nematodes Dr Dinesh Kafle, Queensland Department of Agriculture and Fisheries
153	P21	Integrated Disease Management/Biological Control	Biocontrol of soilborne pathogens that cause poor root growth of Australian processing tomatoes Mr Minxiao Ma, University of Melbourne
182	P22	Integrated Disease Management/Biological Control	Suppression of Root-knot Nematode in Modified Commercial Sweetpotato Production Systems Mr Tim Shuey, Department of Agriculture and Fisheries, Ecosciences Precinct
126	P23	Microbiomes and Disease Complex	Investigating microbial-driven formation of soil organic matter from crop residues to find novel strategies for promoting carbon sequestration and soil health Dr Katia Taylor, CSIRO

75	P24	Molecular Plant Disease Interactions	Unlocking the Secrets of Potato Plant Immunity: A Journey from Lab to Field Dr Muhammad Awais Zahid, Swedish University of Agricultural Sciences
82	P25	Molecular Plant Disease Interactions	Characterisation of Genes Underlying A 3h QTL Associated with Net Form Net Blotch Resistance In Barley Ms Anh Chau Thi Cao, School of Agriculture, Food and Wine; The University of Adelaide
118	P26	Molecular Plant Disease Interactions	The inhibitor of virus replication (IVR) is derived from anaphase-promoting complex 7 (APC7) and functions in resistance to infection by TMV in N gene tobacco Prof Ju-Yeon Yoon, Jeonbuk National University
125	P27	Molecular Plant Disease Interactions	CRISPR knock-out mutants of an S gene in potato leads to increased tolerance to both biotic and abiotic stress MSc Milla Karlsson, Swedish University of Agricultural Science
164	P28	Molecular Plant Disease Interactions	Isolation and physiological characterisation of Ascochyta rabiei exosomes Ms Matin Ghaheri, Griffith University
149	P29	New Diseases and Climate Change	Prevalence and biology of rachis tip dieback in macadamia Ms Xiaoxue Xu, The University of Queensland
79	P30	New Technologies (Artificial intelligent (AI)) and Novel Methods in Plant Pathology and Disease Control	A split GAL4 RUBY assay visually shows association between the wheat Sr27 resistance protein and corresponding AvrSr27 stem rust effector proteins in planta Dr Jian Chen, CSIRO
139	P31	New Technologies (Artificial intelligent (AI)) and Novel Methods in Plant Pathology and Disease Control	Cube Bioassays: A new high-throughput method for screening multiple fungal pathogens against multiple plant hosts Dr Tracey Steinrucken, CSIRO
37	P32	Plant Disease Management, Chemical Resistance	High throughput field screening protocols for Sclerotinia stem rot disease in canola and lupin Dr Pippa Michael, CCDM, Curtin University
99	P33	Plant Disease Management, Chemical Resistance	In vitro fungicide efficacy testing against Rhizopus stolonifer the cause of hull rot of almond. Ms Simone Kreidl, Agriculture Victoria
102	P34	Plant Disease Management, Chemical Resistance	In vitro evaluation of fungicides for management of Cryphonectria parasitica Dr Tonya Wiechel, Agriculture Victoria
111	P35	Plant Disease Management, Chemical Resistance	Characterisation and management of leaf pot disease of cotton in New South Wales Dr Duy Le, NSW Department of Primary Industries
119	P36	Plant Disease Management, Chemical Resistance	In-field evaluation of products for the management of almond hull rot Ms Peta Faulkner, Agriculture Victoria
134	P37	Plant Disease Management, Chemical Resistance	New country records of fungal pathogens of persimmon (Diospyros spp.) in Australia and in vitro evaluation of fungicides against Neofusicoccum parvum and Neopestalotiopsis species Mr John Darby Taguiam, Charles Sturt University
140	P38	Plant Disease Management, Chemical Resistance	Validation of different collection methods to identify fungicide resistance in Erysiphe necator in South Australian vineyards Dr Ismail Ismail, South Australian Research & Development Institute / University of Adelaide
158	P39	Plant Disease Management, Chemical Resistance	Sclerotinia is a real issue for WA lupin growers Dr Zia Hoque, Department of Primary Industries and Regional Development (DPIRD)
163	P40	Plant Disease Management, Chemical Resistance	Unveiling the infection mechanisms of flower blight disease pathogens in macadamia Mr Hariharan Ganeshamoorthy, Centre for Horticultural Science, Queensland Alliance for Agriculture and Food Innovation, The University of Queensland
180	P41	Plant Disease Management, Chemical Resistance	Crown and peduncle mould of pineapples: industry implications and next steps Miss Eloise Martin, QLD Department of Agriculture and Fisheries
199	P42	Plant Disease Management, Chemical Resistance	Fungicide resistance screening of a Botrytis cinerea population from Australian vineyards and development of an in-field detection method. Mr Ismail Ismail, Curtin University
35	P43	Taxonomy, Diversity and Evolution	Release and re-capture: tracking adaptation of clonal Ascochyta rabiei chickpea host genotype association Miss Hayley Wilson, Griffith University
49	P44	Taxonomy, Diversity and Evolution	Novel Trichoderma species indigenous to New Zealand Dr Jin-Hua Li, Lincoln Agritech Ltd
73	P45	Taxonomy, Diversity and Evolution	Discovery of Four Novel Xanthomonas Species and the First Report of Xanthomonas cannabis in Australia Mr Daniel Mcknight, NSW DPI
74	P46	Taxonomy, Diversity and Evolution	Genotypic and phenotypic characterization of Phytophthora infestans populations in Bangladesh Dr Most Begum, University of Idaho
195	P47	Taxonomy, Diversity and Evolution	New species of Colletotrichum identified on Australian native plants Miss Aindreeya Alcova, The University of Melbourne