

Draft Program Outline

Tuesday 29th October

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| 0830 - 1715 | Registration Open |
| 0930 - 1000 | Morning Tea |
| 1000 - 1200 | Session 1 Chair: Andrew Geering, with co-chair: Bao Ton |
| 1000 - 1015 | Fiona Filardo: Opening. Acknowledgement to country |
| 1015 - 1030 | Paul Campbell: Tomato spotted wilt virus resistance breaking strains in Australia |
| 1030 - 1045 | Satomi Hayashi: Exploring the source of TYLCV resistance in <i>Nicotiana benthamiana</i> : a potential novel source of resistance for combatting a major disease in the field |
| 1045 - 1100 | Solomon Maina: Pea seed-borne mosaic virus genomes, reveals distinct lentil strain phylogroup; Biosecurity implications? |
| 1100 - 1200 | R.E.F Matthews Lecture: Edward Holmes: Redefining virus ecology and evolution using metagenomics |
| 1200 - 1300 | Lunch |
| 1300 - 1455 | Session 2 - Biosecurity & emerging viruses 1 Chair: Kathy Crew, with co-chair: Eyal Zeira |
| 1300 - 1330 | Andrew Geering: The untold history of banana bunchy top disease |
| 1330 - 1345 | Mignon de Jager: Is phytoplasma titre correlated with symptom development in Banana Wilt Associated Phytoplasma disease in Papua New Guinea? |
| 1345 - 1400 | Grant Chambers: Updating diagnostics for graft-transmissible citrus pathogens |
| 1400 - 1415 | Joanne Mackie: <i>Comovirus viciae</i> genomes generated from historical isolates: Step 1 in designing new molecular diagnostics |
| 1415 - 1430 | Denis Persley: Johnsongrass mosaic virus: resistance of maize in Australian and implications for preparedness for maize lethal necrosis |
| 1430 - 1445 | Ruvini Lelwala: Early detection of viruses and viroids in imported <i>Citrus</i> germplasm undergoing post-entry quarantine using a small RNA Sequencing (sRNASeq) workflow |
| 1445 - 1450 | Poster Presentation: Marilyn Apa: Distribution of begomovirus in Papua New Guinea (PNG) |
| 1450 - 1455 | Poster Presentation: Madhav Jatin Chandarana: Viruses associated with <i>Agaricus</i> mushrooms in Australia |
| 1455 - 1525 | Afternoon Tea |

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| 1525 – 1720 | Session 3 - New tools & technologies 1 Chair: Monica Kehoe, with co-chair: Manda Wang |
| 1525 – 1530 | QIAGEN 3 min talk |
| 1530 – 1545 | Lia Liefiting: The use of high-throughput sequencing for plant virus diagnostics at the New Zealand Ministry for Primary Industries |
| 1545 – 1615 | Felipe de Felippes: MicroRNA-induced gene silencing (MIGS): the tool of choice for silencing viral genes and to confer multi-virus protection in plants |
| 1630 – 1645 | Mark Jackson: An infectious clone assembly approach to rapidly develop mild cross protecting strains of citrus tristeza virus |
| 1645 – 1700 | Tonny Kinene: Tile amplicon sequencing: A comprehensive approach for potato virus Y (PVY) strain detection and characterization |
| 1700 - 1720 | Nicole Thompson: Tomato Brown Rugose Fruit Virus detection and emergency response in South Australia |
| 1800 – 2000 | Welcome BBQ |
| Wednesday 30th October | |
| 0830 – 1730 | Registration Open |
| 0900 – 1035 | Session 4 - Plant-virus interactions Chair: Anthony James, with co-chair: Madhav Chandarana |
| 0900 – 1000 | KEYNOTE: Marco Incarbone: Investigating the antiviral defences protecting plant stem cells and germline from infection |
| 1000 – 1015 | Colleen Higgins: Lettuce necrotic yellows virus subgroups elicit different responses in the model host <i>Nicotiana glutinosa</i> |
| 1015 – 1030 | Roshni Rohra: Grapevine leafroll-associated virus 3: molecular evolution, biological variation, and host response |
| 1030 – 1035 | Poster Presentation: Sinethemba Nkosi: CRISPR/Cas9 gene editing towards resistance to the Banana bunchy top virus in banana |
| 1035 – 1100 | Morning Tea |
| 1100 – 1230 | Session 5 - Plant virus diversity & detection Chair: David Lovelock, with co-chair: Wei-An (Vivien) Tsai |
| 1100 – 1115 | Ben Congdon: Clade divination phenotypic data facilitates epidemiological inferences from soybean dwarf virus sequence analysis |
| 1115 – 1130 | Flavia Sarti Bonora: Enhancing DNA and RNA extraction quality for viral detection in horticultural seeds |
| 1130 – 1145 | Eyal Zeira: Diversity of <i>Orthospovirus impatiensnecromaculae</i> (impatiens necrotic spot virus; INSV) in Australia |
| 1145 – 1200 | Julia Mulabisana: Uncovering the diversity of viruses infecting leafy vegetables in South Africa, and their impact on the fresh weight of the leaves |
| 1200 – 1215 | Ram B. Khadka: Prevalence and incidence of lentil viruses in Nepal |
| 1215 – 1220 | Poster Presentation: Nazanin Nazari: Investigating the correlation between cucumber mosaic virus (CMV) titre in narrow-leaved lupin tissues and seed transmission rates |
| 1220 – 1225 | Poster presentation: Craig Webster: Direct testing of potato tubers for plant viruses and implementation in a seed potato testing scheme |
| 1225 – 1230 | Poster Presentation: Bao Ton: A system for evaluation of transgenic turnip mosaic virus resistance in <i>Brassica napus</i> plants |
| 1230 – 1330 | Lunch |
| 1330 – 1515 | Session 6 - Virus-vector interactions Chair: Bec Roach, with co-chair: Jingfeng Liang |
| 1330 – 1430 | KEYNOTE: Veronique Brault: Polerovirus, host plants and aphid vector: in the secret of a “ménage à trois” |
| 1430 – 1445 | Narelle Nancarrow: Transmission and host range of yellow dwarf virus species recently reported in Australia |
| 1445 – 1500 | Mohammad Aftab: Viruses in canola and aphids in western Victoria |

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| 1500 – 1515 | Rebecca Gough: Unlocking biocontrol potential: Should we adopt <i>Botrytis cinerea</i> as a mycovirus model system? |
| 1515 – 1545 | Afternoon Tea |
| 1545 – 1715 | Session 7 - Biosecurity & emerging viruses 2 Chair: Solomon Maina, with co-chair: Mignon de Jager |
| 1545 – 1615 | Richard Davis & Lynne Jones: How great passion, good will and a love for the tropics creates magic - the part that plant virus and virus-like diseases have played through 35 years of Northern Australia Quarantine Strategy plant health surveys |
| 1615 – 1630 | Fiona Filardo: What do lettuce chlorosis virus, yambean mosaic virus and an unknown cogu virus have in common? |
| 1630 – 1645 | Shamila Abeynayake: Small RNA-omics and Long-Read Sequencing Integrated Strategy for Characterisation of Novel Plant Viruses |
| 1645 – 1700 | Candace Elliott: Preparing for the transition of banana quarantine and diagnostics to Mickleham |
| 1700 – 1715 | Mohammad Ansar: Adaptation of mono and bipartite Begomovirus species in cucurbit crops: an emerging concern of Northern India |
| 1800 – 2100 | APVW Dinner Kurrawa Surf Club |
| Thursday 31st October | |
| 0830 – 1500 | Registration Open |
| 0930 – 1030 | Session 8 - Plant virus ecology, disease epidemiology & management 1 Chair: Robin McDairmid, with co-chair: Nora Derbal |
| 0930 – 0945 | Benjamin Congdon: Field effectiveness of foliar systemic insecticides, a neonicotinoid-based seed treatment, and partial resistance to control turnip yellows virus in canola |
| 0945 – 1000 | Wei-An (Vivien) Tsai: Investigating resistance breakdown and alternative management strategies for tomato yellow leaf curl virus |
| 1000 – 1030 | APVW Panel: Where to from here? |
| 1030 – 1100 | Morning Tea |
| 1100 – 1230 | Session 9 – New tools and technologies 2 Chair: Flávia Bonora, with co-chair: Narelle Nancarrow |
| 1100 – 1115 | Joshua Linn: Digital PCR in plant virus detection: Advancing precision, sensitivity, and efficiency |
| 1115 – 1130 | Chris Brosnan: Nanoparticle-mediated delivery of VIGS vectors for protecting citrus from HLB |
| 1130 – 1145 | Marie-Emilie Gauthier: ONTViSc: a customisable nextflow pipeline for the identification and detection of viral genomes from Oxford Nanopore sequencing |
| 1145 – 1200 | Dawit Kidanemariam: Development of badnavirus infectious clones for research in taro and banana |
| 1200 – 1205 | Poster Presentation: Nandita Pathania: Exploring phages as promising biocontrol agents for managing bacterial diseases in plants |
| 1205 – 1220 | Rebecca Roach: Genome sequencing of phages infecting plant associated <i>Enterobacter</i> species |
| 1230 - 1330 | Lunch |
| 1330 – 1500 | Session 10 – Plant virus ecology, disease epidemiology & management 2 Chair: Nicole Thompson, with co-chair: Roshni Rohra |
| 1330 – 1345 | Roger Jones: Seed transmission of turnip mosaic virus to seedlings of <i>Brassica juncea</i> |

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| 1345 – 1400 | Jingfeng Liang: Spray application of dsRNA targeting the CP of ZYMV reduces mechanical and aphid transmitted infection incidence in glasshouse grown <i>Cucurbita pepo</i> |
| 1400 – 1405 | Poster presentation: Mianmian Wang: RNA interference against the Green Peach Aphid, <i>Myzus persicae</i> (Hemiptera) |
| 1405 – 1420 | Eloise Martin: Managing potyviruses in cucurbit crops by host resistance |
| 1420 – 1440 | Closing remarks |
| 1500 | Close |

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