



THE UNIVERSITY OF
SYDNEY



INTERNATIONAL YEAR OF
PLANT HEALTH

2020

Sydney Institute of Agriculture

Research Showcase - Plant Health

Wednesday 7 October, 2020



The United Nations General Assembly declared 2020 as the [International Year of Plant Health](#) (IYPH). The year is a once in a lifetime opportunity to raise global awareness on how protecting plant health can help end hunger, reduce poverty, protect the environment, and boost economic development. Australia benefits strongly from an attentive research sector who manage plant health through directed breeding, basic research, applied intervention and community education. IYPH will set the benchmark for further study, investment and practical outcomes, which helps ensure greater Plant Health can be achieved to support food production and agricultural sustainability for the greater community.

The Sydney Institute of Agriculture welcomes your attendance at our annual Research Symposium series. This year we highlight the advances in Plant Health Research at the University of Sydney and across Australia. The symposium will include the following topic sessions, which stretch across the fields of Plant Health and Plant Productivity so important to agricultural sustainability in Australia:

- National and Global Perspective on Plant Health
- Healthy Food Crops → Healthy Humans
- On-farm Plant Health Intervention
- Off-farm Plant and Environmental Health, Biodiversity and Resilience

Event details

Date: Wednesday 7 October, 2020
Time: 9.00am to 3.45pm
Register: [Eventbrite](#)
Webinar: Registration is essential so we can provide the Zoom Webinar link

Sydney Institute of Agriculture
Research Showcase - Plant Health
Program



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Time	Presentation
9.00am	<p>Welcome <i>Professor Alex McBratney</i> - Director, Sydney Institute of Agriculture</p> <p>Introduction <i>Professor Brent Kaiser</i> - Theme Leader, Plant Breeding and Production, Sydney Institute of Agriculture</p>
9.10am	<p>Reflections on plant health management and its national and global importance <i>Greg Fraser</i> - Former Executive Officer and CEO of Plant Health Australia</p>
Session 1: National and Global Perspective on Plant Health	
9.40am	<p>Protecting plants from pandemics in a world oblivious to their existence <i>Dr Brett Summerell</i> - Director, Research and Chief Botanist, Australian Botanic Gardens, Sydney</p>
10.05am	<p>Plant Health Biosecurity: Lessons learnt from when it went very pear shaped <i>Associate Professor Guy Roth</i>, Director of Northern Agriculture, Plant Breeding Institute Narrabri, University of Sydney</p>
10.20am	<p>Plant health connecting people and places <i>Tamaya Peressini</i> - Graduate Research Officer at Australian Centre for International Agricultural Research (ACIAR)</p>
10.45am	Break
Session 2: Healthy Food Crops → Healthy Humans	
11.00am	<p>Winning the battle and the war- reducing the burden of rusts in cereal production <i>Professor Robert Park</i> - Director of Cereal Rust Research, University of Sydney</p>
11.25am	<p>Facilitating evolution of new chickpea rhizobia <i>Dr Rosalind Deaker</i> - Senior Lecturer in Rhizobiology and Biological Nitrogen Fixation, University of Sydney</p>
11.40am	<p>Looking for tough chickpeas: determining mechanisms of heat tolerance <i>Cara Jeffrey</i> - PhD Student, University of Sydney</p>
11.55am	<p>Understanding the genetic basis of resistance against Vascular streak dieback disease of cacao <i>Gurpreet Singh</i> - PhD Student, University of Sydney</p>
12.10pm	<p>Resistance and tolerance to crown rot of wheat: Plant health or plant fitness? <i>Dr Philip Davies</i> - Research Fellow, University of Sydney</p>
12.25pm	Break



Time	Presentation
Session 3: On-farm Plant Health Intervention	
1.10pm	Improving sustainability in chickpea crop fungus management through population genetics and biosensor diagnostics <i>Professor Rebecca Ford - Dean (Research), Sciences Group, Griffith University, Qld</i>
1.35pm	Improving crop health by managing weeds through competitive crops <i>Dr Asad Shabbir - Postdoctoral Research Associate - Weed Ecology</i>
1.50pm	Use of microscopy to identify potential biocontrol agents of the root lesion nematode <i>Pratylenchus</i> sp. in Australian agricultural soils <i>Dr Francine Perrine-Walker - Research Fellow - Plant Pathology, University of Sydney</i>
2.05pm	Break
Session 4: Off-farm Plant and Environmental Health, Biodiversity and Resilience	
2.20pm	Decoding the myrtle rust fungus: understanding the enemy <i>Dr Peri Tobias - Molecular Plant Pathologist and Bioinformatician, University of Sydney</i>
2.35pm	Healthy plants and healthy people, animals and environments <i>Professor David Guest - Professor of Plant Pathology and SIA Theme Leader, Development Agriculture, University of Sydney</i>
2.50pm	'180-second spiel' Thesis Challenge <ul style="list-style-type: none"> - Exploring wheat progenitors to develop rust resistance and biofortified wheat <i>Deepak Baranwal</i> - How much does it cost? <i>Bahareh Bicharanloo</i> - Being a Fisher of Avr genes <i>Ching-Yu Lu</i> - Weaning so a calf reaches their full potential <i>Sarah Mac</i> - Feeding the soil data infrastructure in Africa for food security improvement <i>Andree Nenkam Mentho</i> - Pulse proteins pack a punch <i>Zainab Rahmat</i> - How phosphorus fertiliser use efficiency affected by soil available P and pH? <i>Xing Yu</i>
3.25pm	Announcement of winners of Poster Competition and 180-second spiel Thesis Challenge Wrap-up summary <i>Professor Alex McBratney - Director, Sydney Institute of Agriculture</i>