



# ROTHAMSTED RESEARCH

## Session information

Each of our sessions have a separate Teams meeting link (10 links in total).

Please make sure you join each session with your camera and microphone turned off. These can be turned on when you are advised to do so either for your talk or if you are asking a question.

You can join/leave whenever you need to by using the correct link for that particular session.

All links can be found on the attached programme.

All sessions will be recorded and will be accessible from the PhD Intranet pages and will also be posted to Yammer.

# Virtual Rothamsted PhD Symposium

22<sup>nd</sup> to 26<sup>th</sup> February 2021

Event Programme



<b>Day 1 – Monday, 22<sup>nd</sup> February 2021</b>	
11:15am	<b>SESSION 1 - Welcome by Angela Karp and new student introductions - <a href="#">Click here to join the meeting</a> Chaired by Luca Steel</b>
11:40am	<b>Chris Stephens</b> (BCP) - Understanding the molecular basis of disease resistance against <i>Septoria Tritici</i> blotch in wheat
12:10am	<b>Harry Barrat</b> (SAS-NW) - Hot moments and warming gases: Why is so much N <sub>2</sub> O released from a dry soil when it is rewetted?
12:30pm	Lunch Break – <a href="#">Click here to enter the Gather Town space</a>
13:45pm	<b>SESSION 2 - Poster introductions – 2min talks - <a href="#">Click here to join the meeting</a> Chaired by Maiara Piovesana</b> <b>1. Alina Igna</b> (BCP) - Deciphering mechanisms of nonhost resistance against <i>Zymoseptoria Tritici</i> in model plant species <b>2. Rohan Richard</b> (PS) - MILLERS, SAVING YOU TIME AND MONEY! creating wheat varieties with consistent and high breadmaking quality <b>3. Alex Borg</b> (BCP)- Elucidating the mechanisms of aphid resistance in wheat <b>4. Jemima Ramarolahy</b> (PS) – Novel phosphate fertilizer formulation for African agriculture <b>5. Rahul Nitnavare</b> (PS) - Identifying novel variation in Nitrogen Use Efficiency (NUE) and its physiological and genetic basis in wheat
14:00pm	Guest Speaker – <b>Simon Willcock</b> - <a href="#">Senior Lecturer at Bangor University</a> – <b>Me, Myself and I</b>
<b>14:45pm</b>	<b>Tania Chancellor</b> (BCP) - Exploiting the family feud: A fungal endophyte for the control of take-all disease in wheat
15:05pm	Comfort Break
<b>15:20pm</b>	2 <sup>nd</sup> Year Poster Session for <b>Alina Igna, Rohan Richard, Alex Borg, Jemima Ramarolahy, Rahul Nitnavare</b> - <a href="#">Click here to enter the Gather Town space</a>
16:20pm	Close of day 1
19:30	Symposium Virtual Games Evening

Second year talks and poster sessions are coloured in green. Third year multi-media talks and posters are coloured in orange. Final year 15-minute presentations are coloured in blue.

Poster sessions will be held in separate areas of the GatherTown space limited to FIVE visitors at a time. All posters are displayed in the handbook, to help you choose the posters you would like to see, and they can be found in the GatherTown area which corresponds to the number beside each presenter in the programme above. There are three 20-minute sessions per poster session.

# Virtual Rothamsted PhD Symposium

22<sup>nd</sup> to 26<sup>th</sup> February 2021

## Event Programme



Day 2 - Tuesday, 23 <sup>rd</sup> February 2021	
10:00am	<b>SESSION 3 - Welcome and multi-media poster introductions - <a href="#">Click here to join the meeting</a> Chaired by Chris Stephens</b> <b>1. Claire Kanja</b> (BCP)- Functional characterisation of candidate <i>Fusarium Graminearum</i> effectors <b>2. Jesus Castillo</b> (SAS-H)- The nitrogen economy of rice-pasture-livestock systems in Uruguay <b>3. Mandy Kao</b> (SAS-NW)- Influence of supplement source (organic vs. inorganic) of selenium, copper, zinc and manganese on micronutrient excretion and partitioning between urine and faeces in sheep
10:30am	<b>Emma Bailey</b> (CAS) - Beneficial predators for integrated pest management - a genomics approach
10:50am	<b>Tessa Reid</b> (SAS-H)- Has plant breeding decoupled beneficial plant-microbiome interactions in wheat?
11:10am	<b>Timo Breure</b> (SAS-H) - A loss function approach to soil sensing
11:30am	Comfort Break
11:45am	3 <sup>rd</sup> Year Poster Session - <b>Claire Kanja, Jesus Castillo, Mandy Kao</b> - <a href="#">Click here to enter the Gather Town space</a>
12:45pm	Lunch Break - <a href="#">Click here to enter the Gather Town space</a>
13:45pm	<b>SESSION 4 - Poster introductions – 2min talks - <a href="#">Click here to join the meeting</a> – Chaired by Tanya Chancellor</b> <b>1. Tadesse Gashaw Asrat</b> (SAS-H) - Soil spectroscopy and crop modelling for precise fertilizer application <b>2. Luca Steel</b> (BCP) - Unmasking a cereal killer: what triggers 3lysm effector expression in a fungal wheat pathogen? <b>3. Sophia Bahddou</b> (SAS-H) - Technical and practical innovations to reduce soil and water losses by improving soil physical properties <b>4. James Brett</b> (PS) – Identification of novel QTIs and genes for high fibre in wheat landraces <b>5. Ika Nurzilah</b> (BCP)- Plant-based vaccines for prevention of poultry viral diseases: Newcastle Disease
14:00pm	<b>Andy Jones</b> (SAS-NW) - Redefining key performance indicators for livestock production systems: What is the value of information
14:20pm	<b>Amy Withers</b> (BCP) - How does the expression of three Toll-pathway immune response genes change following flight in fall armyworm ( <i>Spodoptera frugiperda</i> ) challenged with SfMNPV?
14:40pm	<b>Emily Masters-Clark</b> (SAS-H) - Exploiting mycorrhizal selection of beneficial rhizosphere bacteria from the soil microbiome
15:00pm	Comfort Break
15:15pm	2 <sup>nd</sup> Year Poster Session for <b>Tadesse Gashaw Asrat, Luca Steel, Sophia Bahddou, James Brett, Ika Nurzilah</b> - <a href="#">Click here to enter the Gather Town space</a>
16:15pm	Close of day 2

Second year talks and poster sessions are coloured in green. Third year multi-media talks and posters are coloured in orange. Final year 15-minute presentations are coloured in blue. Poster sessions will be held in separate areas of the GatherTown space limited to FIVE visitors at a time. All posters are displayed in the handbook, to help you choose the posters you would like to see, and they can be found in the GatherTown area which corresponds to the number beside each presenter in the programme above. There are three 20-minute sessions per poster session.

# Virtual Rothamsted PhD Symposium

23<sup>rd</sup> to 27<sup>th</sup> November 2020

## Event Programme



ROTHAMSTED  
RESEARCH

Day 3 - Wednesday, 24 <sup>th</sup> February 2021	
10:00am	<b>SESSION 5 - Welcome and multi-media poster introductions - <a href="#">Click here to join the meeting</a> Chaired by Hannah McGrath</b> <b>1. Manpartik Gill (PS)</b> - Novel brassinosteroid dwarfing genes as alternatives for improving wheat grain yields <b>2. Anastasia Sokolidi (BCP)</b> - Smart detection of airborne diseases in tomato production <b>3. Petros Sigalas (PS)</b> - Transcriptomic data and SL-deficient mutant to provide new insights into tillering control in response to nitrogen supply <b>4. Henry Tidd (BCP)</b> - Characterisation of major genes mediating resistance to <i>Septoria Tritici</i> blotch disease in wheat
10:30am	<b>Patricia Ortega Ramos (BCP)</b> - New heroes to defeat cabbage stem flea beetle ( <i>Psylliodes Chrysocephala</i> )
10:50am	<b>Nikolaos Vavlas (SAS-H)</b> - Providing satellite-based soil and crop productivity indicators to display meteorological, pedological and farm management effects
11:10am	<b>Hannah Blyth (BCP)</b> - Spotting the difference: a mutagenomic dissection of virulence and avirulence in <i>zymoseptoria tritici</i>
11:30am	Comfort Break
11:45am	3 <sup>rd</sup> Year Poster Session for <b>Manpartik Gill, Anastasia Sokolidi, Petros Sigalas, Henry Tidd</b> - <a href="#">Click here to enter the Gather Town space</a>
12:45pm	Lunch Break - <a href="#">Click here to enter the Gather Town space</a>
13:45pm	<b>SESSION 6- Poster introductions – 2min talks - <a href="#">Click here to join the meeting</a> Chaired by Joe Oddy</b> <b>1. William Rickard (SAS-H)</b> - The Why of soil measurement <b>2. Munisath Khandoker (SAS-H)</b> - Soil health metrics for sustainable agricultural systems <b>3. Musa Kisiriko (CAS)</b> - Agricultural bioproducts from medicinal and aromatic plants <b>4. Paul Rous (SIEP)</b> – An innovation ecosystem approach to the agricultural sector – Exploring innovation and co-creation of value in the context of UK ecosystem <b>5. Gavers Oppong (PS)</b> - Understanding the mechanisms of hypoxia tolerance in rice: Assessing the effect of different imbibition conditions on anaerobic germination of rice seeds- a role for ethylene priming? <b>6. Mahassine Arhazzal (SAS-H)</b> – Exploitation of beneficial root-associated bacteria in grain cereal-based cropping systems
14:05pm	<b>Maiara Piovesana (PS)</b> - A gain-of-function allele of <i>CRK10</i> causes collapsed xylem vessels and enhanced resistance to a root-infecting vascular pathogen in arabidopsis
14:25pm	<b>Xavier Albano (SAS-H)</b> - Effect of organic amendments and inorganic fertiliser application on nitrogen use efficiency and denitrification in controlled and field conditions
14:45pm	<b>Anchen Kehler (SAS-NW)</b> - The utilisation of Aminomethylphosphonic acid (AMPA) by micro-organisms as a phosphorus source in soil systems
15:05pm	Comfort Break
15:20pm	2 <sup>nd</sup> Year Poster Session for <b>William Rickard, Munisath Khandoker, Musa Kisiriko, Paul Rous, Gavers Oppong, Mahassine Arhazzal</b> - <a href="#">Click here to enter the Gather Town space</a>
16:20pm	Close of day 3

# Virtual Rothamsted PhD Symposium

22<sup>nd</sup> to 26<sup>th</sup> February 2021

## Event Programme



Day 4 - Thursday, 25 <sup>th</sup> February 2021	
10:00am	<b>SESSION 7 - Welcome and multi-media poster introductions - <a href="#">Click here to join the meeting</a> Chaired by Anastasia Sokolidi</b> <b>1. Tom Oliver (CAS)</b> - Using drones to track bees <b>2. Mesfin Kebede Desta (SAS-H)</b> - Zinc Adsorption - Desorption studies on typical soils from different landscape positions in Amhara regional state, Ethiopia <b>3. Mollie Langdon (PS)</b> - Unlocking the potential of the pod
10:30am	<b>Amber Manley (SAS-NW)</b> - Comparing extraction methods for biomarker steroid characterisation from soil and slurry
10:50am	<b>Dion Garrett (BCP)</b> - Journey to the centre of the lettuce: An aphid odyssey
11:10am	<b>Dimitra Angelopoulou (BCP)</b> - The role of photoprotection in disease resistance to <i>Septoria Tritici</i> blotch in wheat
11:30am	Comfort Break
11:45am	3 <sup>rd</sup> Year Poster Session for <b>Tom Oliver, Mesfin Kebede Desta, Mollie Langdon</b> - <a href="#">Click here to enter the Gather Town space</a>
12:45pm	Lunch Break - <a href="#">Click here to enter the Gather Town space</a>
13:45pm	<b>SESSION 8 Poster introductions – 2min talks - <a href="#">Click here to join the meeting</a> Chaired by Hannah McGrath</b> <b>1. Owen Thornton (SAS-H)</b> - Bio-prospecting for plant-growth-promoting microbes In Broadbalk soils <b>2. Daniel Cudjoe (PS)</b> - Phenotyping the nutritional status of crops using remote sensing technologies <b>3. Ruth Carter (BCP)</b> - Competition between an invasive and endemic species of armyworm in Africa <b>4. Marieme Drame (SAS-NW)</b> – Enhanced nitrogen use efficiency (nue) of urea fertilisers for sub-saharan africa <b>5. Joseph Oddy (PS)</b> - Characterising a natural deletion of the B genome ASN2 homoeolog in wheat
14:00pm	<b>Mandy Stoker (SAS-H)</b> - Adding evidence regarding the use of cover crops
14:20pm	<b>Darwin Hickman (BCP)</b> - Getting to the roots of the black-grass problem: allelopathic control of <i>Alopecurus Myosuroides</i>
14:40pm	Rest Break
15:00pm	2 <sup>nd</sup> Year Poster Session for <b>Owen Thornton, Daniel Cudjoe, Ruth Carter, Marieme Drame, Joseph Oddy</b> - <a href="#">Click here to enter the Gather Town space</a>
16:00pm	Close of day 4

Second year talks and poster sessions are coloured in green. Third year multi-media talks and posters are coloured in orange. Final year 15-minute presentations are coloured in blue.

Poster sessions will be held in separate areas of the GatherTown space limited to FIVE visitors at a time. All posters are displayed in the handbook, to help you choose the posters you would like to see, and they can be found in the GatherTown area which corresponds to the number beside each presenter in the programme above. There are three 20-minute sessions per poster session.

# Virtual Rothamsted PhD Symposium

22<sup>nd</sup> to 26<sup>th</sup> February 2021

Event Programme



Day 5 - Friday, 26 <sup>th</sup> February 2021	
10:00am	<b>SESSION 9 - Welcome and Poster introductions – 2min talks - <a href="#">Click here to join the meeting</a> Chaired by Mollie Langdon</b> <b>1. Ishbel Hayes</b> (BCP) - Flight-to-light and the decline of British moths <b>2. Frank Okyere</b> (PS) - Digital image analysis for highthroughput phenotyping of quinoa plants in a glasshouse <b>3. Beth Roberts</b> (SAS-H) - Quantifying the true costs of farming systems <b>4. Imane El Fartassi</b> (SAS-H) – Agent based modelling of crop production <b>5. Isabel Corkley</b> (BCP) – Managing concurrent evolution of resistance to fungicides <b>6. Bader Oulaid</b> (SAS-H) - The economic and environmental value of agricultural model-based decision support tools for wheat crops in Morocco
10:20am	<b>Hannah McGrath</b> (SAS-H) - Bespoke field margins for delivering multiple services to fresh produce
10:40am	<b>Jonah Prout</b> (SAS-H) - Soil organic carbon indexing and measurement system
11:00am	<b>Caitlin Willis</b> (BCP) - Investigating insecticide resistance in UK populations of cabbage stem flea beetle <i>Psylliodes Chrysocephala</i>
11:20am	Comfort Break
11:35am	2 <sup>nd</sup> Year Poster Session for <b>Ishbel Hayes, Frank Okyere, Beth Roberts, Imane El Fartassi, Isabel Corkley, Bader Oulaid</b> <a href="#">Click here to enter the Gather Town space</a>
12:35pm	Lunch Break - <a href="#">Click here to enter the Gather Town space</a>
14:00pm	<b>SESSION 10 - <a href="#">Click here to join the meeting</a> Chaired by Kim Hammond-Kosack</b> <b>Guest Speaker – Helen Brewer – Policy Advisor-Market Access at DEFRA - From Plant Pathology to Ice Cream Exports</b>
14:45pm	Conference Wrap-up

Second year talks and poster sessions are coloured in green. Third year multi-media talks and posters are coloured in orange. Final year 15-minute presentations are coloured in blue.

Poster sessions will be held in separate areas of the GatherTown space limited to FIVE visitors at a time. All posters are displayed in the handbook, to help you choose the posters you would like to see, and they can be found in the GatherTown area which corresponds to the number beside each presenter in the programme above. There are three 20-minute sessions per poster session.