ROTHAMSTED RESEARCH

1<sup>st</sup> & 2<sup>nd</sup> March 2022

### **Event Programme**

Day 1 To	readoy 1st March 2022
Day I - IU	esday, 1 <sup>st</sup> March 2022
09:30am	Registration/Coffee – Conference Centre Plaza
10:00am	Welcome from Andrew Mead Chair of PGC – Fowden Hall
SESSION 1	- Chaired by Mollie Langdon - Fowden Hall
10:10am	2-minute Poster Introductions
	7. Victoria Armer (BCP) - Unlocking the door: how Fusarium graminearum exploits plasmodesmata during host-tissue colonisation
	9. Erika Kroll (BCP) - Using network analysis to investigate host-pathogen interactions between wheat and Fusarium graminearum
10:15am	5-minute Poster Introductions
	11. Mahassine Arhazzal (SAS-H) - Does wheat select for beneficial soil microbiome when grown under abiotic stresses?
	13. Tadesse Gashaw Asrat (SAS-H) - Comparison of portable and bench-top soil scanning instruments and calibrations: for fertilizer decision making perspective
	15. Frank Gyan Okyere (PS) – A neural network based segmentation method for high throughput plant phenotyping
	17. Bader Oulaid (SAS-H) – Global sensitivity analysis for the calibration of AquaCrop for wheat crops in semi-arid regions
10:35am	Photo Call for all PhD students outside the Centenary Building
10:45am	Poster session and coffee – Fowden Hall and Plaza
	1. Izayana Sandoval-Carvajal (BCP) - Assessing the genetic diversity of UK strains of barley yellow dwarf virus (BYDV)
	3. Lisa Humbert (BCP) - Fungal sex factors as novel antifungal compounds for control of plant disease
	5. Sandra Lucia Cortes Patiño (BCP) - Herbivore-plant-soil microbe interactions: who is helping whom
	7. Victoria Armer (BCP) - Unlocking the door: how Fusarium graminearum exploits plasmodesmata during host-tissue colonisation
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SESSION 2	– Chaired by Dr Sarah Raffan – Fowden Hall
	Final Year Talks – <u>Ask questions here</u>
11:15am	27. Anastasia Sokolidi (BCP) - SMART Detection of airborne pathogens for improved disease management in the UK tomato industry
11:35am	29. Henry Tidd (BCP) - Characterisation of major genes mediating resistance to Septoria Tritici blotch disease in wheat
11:55am	31. Manpartik S. Gill (PS) - Regulation of canopy architecture in wheat by modulating brassinosteroid pathway genes



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12:15pm	Guest Speaker – Chaired by Claire Kanja – Fowden Hall - Ask questions here
12.136	Julian Smith – Science Director, Rothamsted Research - Science, partnerships and careers – my time in international development
13:00pm	Lunch Break
	- Chaired by Dr Maria Oszvald – Fowden Hall
14:00pm	5-minute Poster Introductions
	19. James Brett (PS) - A major QTL for high fibre in wheat
	21. Gavers Oppong (PS) - A comparative cross-omics analysis of anaerobic germination tolerance in rice
	23. William Rickard (SAS-H) - Structural and hydraulic properties of the extended soil phenotypes on highfield
	25. Munisath Khandoker (SAS-H) — Can smartphone applications revolutionise how we measure soil health?
	Final Year Talks - Ask questions here
14:20pm	33. Mesfin Kebede Desta (PS) - Linking adsorption – desorption characteristics with grain Zn concentrations and uptake by teff, wheat and maize in different landscape
	positions in Ethiopia
14:40pm	35. Petros Sigalas (PS) - Wheat tillering control in response to n supply: the case of strigolactones
15:00pm	37. Rohan Richard (PS) - Exploiting variation in grain protein content and quality to determine effects of environment on processing quality
15:20pm	Poster session and coffee – Fowden Hall and Plaza
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	25. Munisath Khandoker (SAS-H) – Can smartphone applications revolutionise how we measure soil health?
15:50pm	Session 4 – Training Session for students with Leanne Gunn - Fowden Hall
17:20pm	Close of day 1

18:00	'Pizza at the Pav' - Students only

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### **Event Programme**

Day 2 – W	Day 2 – Wednesday, 2 <sup>nd</sup> March 2022		
09:30am	Registration/Coffee – Conference Centre Plaza		
SESSION 5	– Chaired by Victoria Armer – Fowden Hall		
10:00am	2-minute Poster Introductions		
	8. Heike Rolker (SAS-NW) - A systems perspective on food waste: identifying determinants, impacts and trade-offs in low- and middle-income countries		
	10. Ed Pyne (BCP) - Leveraging antagonistic interactions of wood decay fungi as biocontrol of the destructive forest pathogen Armillaria		
10:05am	5-minute Poster Introductions		
	12. Sophia Bahddou (SAS-H) - Runoff and soil erosion under different soil surface roughness		
	14. Beth Roberts (SAS-H) - Quantifying the true costs of farming systems		
	16. Daniel Kingsley Cudjoe (PS) - Using proximal sensing parameters linked to the photosynthetic capacity to assess the nutritional status and yield potential in quinoa		
	18. Owen Thornton (SAS-H) - Bioprospecting for plant growth promoting microbes: Rich seams in long-term agricultural field experiments?		
	Final Year Talks - Ask questions here		
10:25am	28. Claire Kanja (BCP) - An 'effective' way to infect your host		
10:45am	<b>30.</b> Jesus Castillo (SAS-H) - Intensification of rice-livestock systems, how sustainable is it in terms of nitrogen		
11:05am	32. Mandy Kao (SAS-NW) - is the form (organic/inorganic) of mineral supplement to sheep a significant factor to the availability of micronutrients to grass from soil applied		
	with the sheep excreta?		
11:25am	Poster session and coffee – Fowden Hall and Plaza		
	2. Hannah Romanowski (BCP) - Is being smooth the new trend?		
	4. Aishwarya Shankhapal (PS) - Mesocotyl elongation for direct seeding of rice varieties		
	6. Leena Sarah Farhat (Bangor University) - Bringing big-data to social science		
	8. Heike Rolker (SAS-NW) - A systems perspective on food waste: identifying determinants, impacts and trade-offs in low- and middle-income countries		
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11:55am	Guest Speaker – Chaired by Mollie Langdon - Fowden Hall - Ask questions here		
	Dr Joanna Scales - Project Lead, AgriFood Africa Connect - What's next?		
12:35pm	Lunch Break		

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SESSION 6	SESSION 6 – Chaired by Dr Guillaume Menard – Fowden Hall		
14:00am	5-minute Poster Introductions		
	20. Marieme Drame (SAS-NW) - Inclusion of urease inhibitors with urea to effectively reduce ammonia emissions from soil at high temperatures		
	22. Joseph Oddy (PS) - Genetic and environmental regulation of free asparagine in wheat grain		
	24. Imane El Fartassi (SAS-H) - Agent-based modelling of crop management		
	26. Musa Kisiriko (CAS) - Agricultural bioproducts from medicinal and aromatic plants		
	Final Year Talks - Ask questions here		
14:20pm	34. Mollie Langdon (PS) - Unlocking the potential of the pod: increasing seed yields by modulating seed number and seed size		
14:40pm	<b>36. Rahul Nitnavare</b> (PS) - Identifying novel variation in nitrogen use efficiency and its physiological and genetic basis in wheat		
15:00pm	38. Tom Oliver (CAS) - The impact of novel insecticides on bumblebee flight capabilities		
15:20pm	Poster session and coffee – Fowden Hall and Plaza		
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	22. Joseph Oddy (PS) - Genetic and environmental regulation of free asparagine in wheat grain		
	24. Imane El Fartassi (SAS-H) - Agent-based modelling of crop management		
	26. Musa Kisiriko (CAS) - Agricultural bioproducts from medicinal and aromatic plants		
	40. Alexander Borg (BCP) - Elucidating the mechanisms of aphid resistance in Triticum monococcum I. (poaceae)		
16:00pm	VOTING OPENS – Students only, please vote for best in category here!		
16:00pm	Feedback and close of symposium – Andrew Mead – Fowden Hall		