



# CONFERENCE PROGRAMME

**THE FUTURE  
OF LONG-TERM  
EXPERIMENTS IN  
AGRICULTURAL  
SCIENCE**

**21–23 MAY 2018**

# MONDAY 21 MAY 2018

## Timings

## Programme

09:00–09:30

**Arrivals/Refreshments/Cloakroom/Registration**

09:30–10:15

### **Welcome**

Chair – Keith Goulding, Rothamsted Research

Aims and Objectives of the conference

*Achim Dobermann, Director and Chief Executive, Rothamsted Research*

10:15–10:45

### **Plenary**

The Rothamsted Long-Term Experiments

*Andy Macdonald, LTEs Leader, Rothamsted Research*

10:45–11:15

**Refreshments/Networking/Set Up Posters**

11:15–12:45

**Session 1:** Chair – Jonathan Storkey, Rothamsted Research

LTEs and Sustainable Intensification, Sustainable Development Goals and Agricultural Policy

*Andy Whitmore, Research Group Leader, Rothamsted Research*

*Bernard Vanlauwe, Director for Central Africa and National Resource Management, IITA*

11:15–12:15

### **Panel Discussion**

The relevance of LTEs to SI, SDGs and policy

*Panel members: Andy Whitmore and Bernard Vanlauwe*

12:15–12:45

12:45–14:00

### **Lunch**

**Sample Archive tours/electronic Rothamsted Archive (e-RA) stand/Posters/Tours of Rothamsted Museum**

14:00–17:00

**Session 2:** Chair – Andrew Mead, Rothamsted Research

The unique contributions of LTEs to agricultural science

14:00–14:20

### **Plenary**

Sustainability of intensive rice cropping systems in Asia

*Pauline Chivenge, Senior Scientist, IRRI*

14:20–15:30

### **Offered Presentations**

Achievements to date from LTEs

15:30–16:00

**Refreshments/Networking/Posters**

16:00–17:00

### **Offered Presentations**

Achievements to date from LTEs

17:00–17:45

### **Plenary**

Chair – Achim Dobermann, Rothamsted Research

Introduction: Julia Harnal, Vice President of Global Sustainability, BASF  
Long-Term Experiments as indicators of agricultural sustainability:  
the AgBalance™ model

*Markus Frank, Researcher, BASF SE*

17:45

### **Departure**

Coaches from Rothamsted Conference Centre

### **Tours**

Rothamsted's Long-Term Experiments

# TUESDAY 22 MAY 2018

## Timings

## Programme

08:30–09:00

**Arrivals/Refreshments/Cloakroom/Registration**

09:00–09:45

### Plenary

The Century Experiment: rethinking and redirecting  
*Kate Scow, Professor of Soil Science and Microbial Ecology, University of California, Davis*

09:45–12:45

### Session 3:

Chair – Bernard Vanlauwe, IITA  
Realising the potential of LTE data

09:45–10:30

FAIR data for Long-Term Experiments  
*Richard Ostler, Agri-Eco Informaticist, Rothamsted Research*  
*Ruthie Musker, GODAN Secretariat, CABI*

10.30–11.00

**Refreshments/Networking/Posters**

11:00–11:20

### Session 3 (continues):

Overview of LTEs in Uruguay  
*Andres Quincke, Research Scientist (Soil Management), INIA*

11:20–11:40

Use of LTE data for cross-scale cropping system modelling and assessment  
*Frank Ewert, Professor of Crop Science, University of Bonn*

11:40–12:30

### Offered Presentations

Design, data management and sharing, and meta-analysis for LTEs

12:30–12:45

### Plenary

Statistical design approaches for new LTEs  
*Andrew Mead, Statistician, Rothamsted Research*

12:45–14:00

### Lunch

**Sample Archive tours/electronic Rothamsted Archive (e-RA) stand/Posters/Tours of Rothamsted Museum**

14:00–15:15

**Parallel Workshops** (with opportunity to change sessions at break)

1. Soil organic carbon (including “4 per mille” and “living soil repository”)

Chair – David Powlson, Rothamsted Research

2. Design, data management and sharing

Chairs – Frank Ewert, ZALF & Richard Ostler, Rothamsted Research

3. New tools, sensors and technologies, and FAIR principles for LTEs

Chair – Andres Quincke, INIA

4. Future Farming: questions for old LTEs and for new LTEs

Chairs – Pauline Chivenge, IRRI & Andrew Mead, Rothamsted Research

15:15–15:45

**Refreshments/Networking/Posters**

15:45–17:00

### Parallel Workshops

(continue, followed by workshop reports at 17:00)

17:30–19:00

### Tours

Rothamsted’s Long-Term Experiments

19:00–22:00

### Celebration

Conference Party at Rothamsted Manor

22:00

### Departure

Coaches from Rothamsted Manor

# WEDNESDAY 23 MAY 2018

Timings	Programme
08:30–09:00	<b>Arrivals/Refreshments/Cloakroom/Registration</b>
09:00–10:30	<b>Session 4:</b> Chair -Sieglinde Snapp, Michigan State University Citizen Science approaches that link LTEs to the real-world
09:00–09:20	Keeping it real: GLTEs as learning platforms in systems science <i>Sieglinde Snapp, Professor of Soils and Cropping Systems Ecology, Michigan State University</i>
09:20–09:40	Global farm observatory networks and open science collaboration <i>Dorn Cox, Research Director, Wolfe's Neck Center for Agriculture</i>
09:40–10:00	<b>Discussion</b>
10:00–10:30	<b>Offered Presentations</b> Linking LTEs to the real-world
10.30–11.00	<b>Refreshments/Networking/Posters</b>
11:00–12:30	<b>Session 5:</b> Chair – Markus Frank, BASF Real-world practical tools informed by LTEs  Integration crop-livestock-forest in Brazil: from field to public policies and international commitments <i>Renato Rodrigues, Head of Intelligence and Strategic Relations, EMBRAPA</i>
11:00–11:20	Farming research and sustainability – making the connection <i>Markus Frank, Researcher, BASF SE</i>
11:20–11:40	<b>Offered Presentations</b> Real world practical tools informed by LTEs
11:40–12:30	<b>Offered Presentations</b> Real world practical tools informed by LTEs
12.30–13.30	<b>Lunch/Networking/Posters</b>
13:30–14:45	<b>Parallel Workshops</b> (with Offered Presentations, and opportunity to change sessions at break) 5. Progress and future viability of the Global LTEs Network Chair – Jon Storkey, Rothamsted Research 6. Use of apps to support Citizen Science and generate big data to inform agricultural science; and opportunities to interact with decision tools (informed by GLTEs) that calculate the management impacts Chair – Markus Frank, BASF 7. Agricultural systems: conventional, organic, ecological Chair – Keith Goulding, Rothamsted Research 8. Satellite session organised by the EU Nitrogen Expert Panel: NUE indicators for monitoring Chairs – Jacob Hansen, Fertilizers Europe & Patrick Heffer, IFA
14:45–15:15	<b>Refreshments/Networking/Posters</b>
15:15–17:30	<b>Parallel Workshops</b> (continue, followed by workshop reports at 16:30)
17:30	<b>Departure</b> Conference closes; coaches from Rothamsted Conference Centre