



Tuesday, 8:30am – 4pm
26 September 2023

Plain Farm
46970 Warrego Hwy
Roma, Queensland

Lunch, morning and afternoon tea provided.
Please bring a hat, water bottle, chair, pen,
notepad, and your soil.

RSVP HERE 20 September 2023

By confirming your attendance we can
ensure everybody is properly catered for.

Johannes Biala

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Building Drought Resilience through Improved Soil Health and Management

Since 2019, Craig Miller has been hosting a trial to tackle three big issues in farming – maintaining soil fertility and productivity, reducing fertiliser inputs, and increasing drought resilience. Experimenting with 36 large plots, the trial monitors the impact of different rates of compost and fertiliser on plant growth and soil properties. Apart from assessing the fertiliser replacement capacity of compost, the trial looks also at finding solutions that overcome soil constraints and increase drought resilience. This field day will present not only trial outcomes but offer also hands-on learning opportunities and practical tips to help land managers assess and improve the soil health status of their land.

Those attending are encouraged to bring a block of soil from their property (approx. 30 cm x 30 cm x 30 cm deep) for assessment during the workshop. The guest presenters will help attendees learn and test a range of simple tools and techniques to visually assess and monitor soil health criteria.

The field day will cover:

- ✓ The compost use trial – what it is and what we have found
- ✓ Soil structure, soil health and soil properties (aided by a soil pit)
- ✓ Reading soil and understanding sub soil constraints
- ✓ Improving water infiltration to enhance drought resilience
- ✓ Assessment of your own soil with simple visual methods



Supported by The University of Queensland, through funding from the Australian Government's Future Drought Fund

Also supported by AgForce Queensland, Southern Queensland Landscapes and Nutrien Ag Solutions

Presenters



Craig Miller

Farmer & Agronomist (Nutrien Ag Solutions)

Craig Miller graduated from Charles Sturt University in 1996 with honours. Since 1997 he worked as an agronomist, first in Central and North-western NSW, and after moving to Roma in 2004 in the Maranoa. Craig has extensive experience in broadacre dryland farming and has a personal interest in improving long term soil health. He is a passionate agronomist and part-time farmer, growing oaten hay, backgrounding cattle, and using compost to improve soil properties.



Johannes Biala

Director – Centre for Recycling of Organic Waste & Nutrients
The University of Queensland

Equipped with degrees in Agriculture and Environmental Science, Johannes has worked in organics recycling, composting and the use of recycled organics products for over 30 years. He has extensive experience as a consultant and researcher in all key areas of the organics recycling supply chain, including the use of recycled organic products in agriculture and horticulture.



Cameron Leckie

Southern Queensland and Northern NSW (SQNNSW) Innovation Hub,
University of Southern Queensland

Cameron is the Regional Soil Coordinator for the SQNNSW Innovation Hub, whose positions supports the implementation of the National Soil Strategy. An Agricultural Engineer and Registered Soil Practitioner, Cameron is also studying a PhD in soil science that aims to change the discussion amongst farmers from “how much rain fell” to “how much rain infiltrated”.



Dr Gunnar Kirchof

Research Academic – The University of Queensland

Dr Kirchof specialises in soil and water management in tropical and subtropical agroecosystems. He has worked on many projects to assess and improve soil fertility and soil water management. At the University of Queensland, he is responsible for organising and delivering dryland farming, irrigation and water management, and conservation agriculture training programs. To investigate and assess soils potential, Gunnar loves digging holes to discover what lies beneath our feet.

Agenda

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| 8:30 – 9:00 | Arrival and cup of tea |
| 9:00 – 9:15 | Welcome and introductions |
| 9:15 – 9:30 | Cameron Leckie; The National Soil Strategy |
| 9:30 – 9:45 | Craig Miller; What I have seen on my patch |
| 9:45 – 10:15 | Johannes Biala; Using organic amendments for improving soil properties, incl: results of the Roma compost use trial |
| 10:15 – 10:45 | Morning tea |
| 10:45 – 13:00 | Gunnar Kirchof; Assessing soil properties with simple methods |
| 13:00 – 13:45 | Lunch |
| 13:45 – 15:30 | All participants; Assessing properties of the soil you have brought |
| 15:30 – 16:00 | Afternoon tea with Q & A and wrap-up |