On-Farm Experimentation Community Info No. 23

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On-Farm Experimentation Community (OFE-C)

International Society of Precision Agriculture (ISPA)

Thanks to my monthly co-editor Bruce Maxwell, Prof. of Agroecology, Montana State University

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OFE-C Survey on Social Media Usage

Please fill out the survey if you haven't done so yet

We are interested to learn how you use social media platforms, in order to plan our outreach strategy beyond the OFE-C Newsletters. To learn more, we have prepared a **very short survey** (2 multiple-choice questions) that can be completed in **a few seconds**. Please **take a moment now** to complete the survey below; we would appreciate it. https://forms.gle/b7sG4yNDCwxojVn98 Thank you for your support.

OFE keynotes at the AfPCA

Tune in for talks and discussions on OFE at the African Conference On Precision Agriculture Thursday, December 8th. It is not too late to register and attend the conference virtually. Louis Longchamps will be talking about *Decentralized Research: an Opportunity to Accelerate the Transition Towards Sustainable Food Production*; Myrtille Lacoste will be talking about *Global Renewal and Future of On-farm Experimentation*, and there will be an *On-Farm Experimentation Panel* with Louis Longchamps, Ivan Adolwa, and James Taylor. See details here.

Special Issue on OFE in Agronomy for Sustainable Development

Back in August 2021, guest editors Myrtille Lacoste, Isabelle Piot-Lepetit, Nicolas Tremblay and Simon Cook sent a call for papers for a virtual issue on OFE, which ended in March 2022. The virtual issue is titled “Farmer-Centric On-Farm Experimentation (OFE): digital tools for a scalable transformative pathway”

Papers are starting to be published online and we want to highlight them here as they are coming out:

► Laurent et al. (2022) A yield comparison between small-plot and on-farm foliar fungicide trials in soybean and maize.

► Song et al. (2022) Factors influencing intention to apply spatial approaches to on-farm experimentation: insights from the Australian winegrape sector.

Concerns about the transition from Agriculture to Agriautomation fueled by OFE

By: Montana State University On-Farm Precision Experimentation Group

We consider the potential endpoint of our research utilizing on-field experimentation to optimize crop production so that it maximizes farmer profits but minimizes pollution from crop production inputs (e.g. cover crops, fertilizers and pesticides). Our research has contributed the ability to fully automate OFE through the use of precision technologies and modern analytics.

The conundrum is that agriautomation results in a more ecologically based agriculture that can simultaneously focus on food nutritional density and minimization of pollution, but ultimately removes human and historic mechanisms of knowledge. Agriautomation, the end point of industrialized agriculture, will likely increase farm size and consolidation leading to a fully automated food system controlled by modern data analytics (primarily machine learning) not people.
We ask ourselves if there is a way to preserve the "culture" in agriculture and at the same time draw on the new and rapidly evolving data stream and analytics to envision a future that maintains an agrarian component to society. In part, we addressed this question with the concept of precision agroecology (Duff et al. 2022). However, there is much more to do as we consider the conundrum of agriculture and agriautomation. Read More

This letter was prepared by Louis Longchamps, co-chair of the ISPA OFE Community
Should you have something to share with the Community or the Community leaders, let us know here.