On-Farm Experimentation Community Info No. 11

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On-Farm Experimentation Community (OFE-C) of the International Society of Precision Agriculture (ISPA)

Recordings of the #OFE2021 Webinar Series are Available

The four OFE2021 webinars recordings are now available at https://www.ispag.org/Events/OFE

1. **Value Creation**. OFE creates value for varied stakeholders, value is shared, and scientific disciplines can contribute. *May 10, 2021.*
2. **People and Processes**. People are the real key to digital transformation. Transformation occurs when individual changes scale up through their networks and their organizations. *May 12, 2021.*
3. **Data and Analytics**. Appropriate procedures and well-targeted analytics can be deployed to exploit the valuable data and metadata collected on the farm. *May 17, 2021.*
4. **Policy Linkages**. Currently, initiatives around OFE are happening in spite of funding mechanisms, career paths and norms favoring traditional experimentation. Harnessing the transformational potential of OFE for agricultural sciences and innovation requires more strategic institutional alignment. *May 19, 2021.*

An Efficient Geostatistical Analysis Tool for On-farm Experiments

A new paper proposes a spatially varying local cokriging method for large on-farm experimentation data which could lead to high-resolution site-specific farming treatment recommendations. Its accuracy of spatial prediction is compared with five other techniques. The open source code is accessible via a user-friendly interface of Quantum GIS. [Huidong Jin, K. Shuvo Bakar, Brent L. Henderson, Robert G.V. Bramley, David L. Gobbett. 2021. An efficient geostatistical analysis tool for on-farm experiments targeted at localised treatment. Biosystems Engineering 205:121–136, ISSN 1537–5110.]

Farmer-Led Research Webinar

A Farmer-Led Research Webinar was conducted last month by the School of Environmental Design and Rural Development, University of Guelph. The webinar mentioned the need for scientific rigor, yet keeping a balance between practical and robust protocol, on the one hand, and keeping data collection and research flexible, on the other hand.
The recording is now available.

Specific Treatment Responses in On-Farm Precision Experimentation

Site-specific information about crop responses to agronomic treatments is needed. Geographically weighted regression was applied to generate local regression coefficients, which were used to delineate response zones in fields. This is a way to reevaluate expectations on variable rate prescriptions guided largely by soil and variability. Trevisan, R.G., Bullock, D.S., Martin, N.F. Site-Specific Treatment Responses in On-Farm Precision Experimentation. Preprints 2019, 2019020007 (doi: 10.20944/preprints201902.0007.v1).

Proceedings from the 1st African Conference on Precision Agriculture

The proceedings from the 1st African Conference on Precision Agriculture (AfCPA) are now available for download as a PDF (29 MB). The 1st AfCPA was held from 8-10 December 2020 under the hospices of the African Plant Nutrition Institute (APNI) in partnership with Mohammed VI Polytechnic University (UM6P) and the International Society of Precision Agriculture (ISPA).

Should you have something to share with the Community or the Community leaders, let us know here.