On-Farm Experimentation Community Info No. 9

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

Evidence Synthesis in Agronomy

There is a need to shift the focus from individual studies to the accumulating body of evidence concerning the agronomic and environmental benefits of innovative farming practices. Systematic reviews, evidence mapping, on-farm research, and meta-analyses are available for the integration of results but they are not yet used as frequently as one might expect. Both qualitative (systematic reviews, evidence maps, farm surveys) and quantitative syntheses (meta-analyses, modeling) have been published in a special issue of the European Journal of Agronomy. [Makowski, D. Editorial of the special issue "Evidence synthesis in agronomy". European Journal of Agronomy 122 (2021) 126183. ISSN 1161-0301. https://doi.org/10.1016/j.eja.2020.126183.]

Prediction Intervals for On-farm Network Trials

This Laurent et al. paper shows how to prevent farmers from overoptimistic expectations that a significant effect at the overall population level will lead with high certainty to a yield gain on their own farms. [Laurent, A., Kyveryga, P., Makowski, D. & Miguez, F. A Framework for Visualization and Analysis of Agronomic Field Trials from On□Farm Research Networks. Agron. J. 111, 2712-2723, doi:10.2134/agronj2019.02.0135 (2019).]

A GARDIAN of Big Data

GARDIAN is CGIAR's (Consultative Group on International Agricultural Research) flagship data harvesters. It enables the discovery of publications and datasets from across the thirty-odd institutional publications and data repositories from CGIAR Centers and beyond. Actually, most data and publications are not stored in it but in other public databases and repositories. GARDIAN a key component of the Platform's objective to establish the infrastructure, tools, and approaches to making CGIAR data Findable, Accessible, Interoperable, Reusable (FAIR). GARDIAN employs text mining to enrich the associated metadata to enhance discovery, and will soon test data mining techniques with cleaned, well-annotated datasets to enhance interoperability. Plans for GARDIAN include further demonstration of the value of interoperable data via seamless interactivity of discovered data with key analytical/visualization tools, including models and maps. Have a look also at the CGIAR Platform for Big Data in Agriculture.

Australian Farm Data Code

The Australian Farm Data Code aims to promote adoption of digital technology, by ensuring that farmers have comfort in how their data is used, shared and managed. It is intended to inform the service providers who manage data on behalf of farmers, and a tool for farmers to evaluate their policies.

ISO 19115-1:2014

A digital geographic dataset is a representation of some model of the world for use in computer analysis and graphic display of information. To ensure that data are not misused, the assumptions and limitations affecting the creation of data must be fully documented. The objective of this part of ISO 19115 is to provide a model for describing information or resources that can have geographic extents. ISO 19115-1:2014 defines the schema required for describing geographic information and services by means of metadata.

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