On-Farm Experimentation Community Info No. 27

Apr 5, 2023

On-Farm Experimentation Community (OFE-C)

International Society of Precision Agriculture (ISPA)

Co-editor of the month

Thanks to my co-editor of the month Dr. Myrtille Lacoste who is an Independent consultant in OFE, Montpellier, France

The CHACRAS system: an OFE project led by AAPRESID in Argentina

The Argentine No-Till Farmers Association (AAPRESID) is a non-profit, non-governmental organization born out of a strong desire to protect farmers' most valuable resource - the soil. The association is made up of a network of farmers who have adopted and promoted a new agricultural paradigm based on no-till practices. CHACRAS SYSTEM is a program created by AAPRESID to meet the technological needs of farmers and technician groups in their work environments, based on an integrated analysis of their production systems. Through its two spaces, CHACRAS and Thematic Networks, it serves as a platform for knowledge generation and transfer, in addition to training human resources. It combines a "learn by producing" approach, which uses real-life scenarios and solution proposals, with an interactive network that enhances farmers' experiences through scientific knowledge, entrepreneurial vision, and institutional support. Learn more here.

Using the DIFM OFE tool in Argentina to manage within-field variability.

Since 2017, a group of producers and agricultural companies in the Pampas Region of Argentina gradually started adopting technologies developed by the Data Intensive Farm Management (DIFM) project to conduct on-farm experiments and obtain a deeper learning about within-field spatial and temporal variability of crop response to ag inputs, such as nitrogen and plant population. This region-wide network, coordinated by <u>Dr. Agustin Pagani</u>, independent researcher and president of Clarion, Inc., has rapidly expanded to other regions of the country where less science-based information to support fertilizer recommendations is available. The "checkerboard design" is the base of this effort, a methodology based on precision agriculture technologies to generate affordable, scalable, and statistically robust data to help farmers maximize input use efficiency site-specifically. Learn more from Juan Martin Rompani's presentation "Conducting research along with farmers".

Open Position in OFE

One PhD research assistantship is available immediately in the Department of Plant Science and Landscape Architecture at the University of Connecticut, Storrs, CT. The project focuses on evaluating variable rate fertilizer management strategies using on-farm precision experiment, cutting-edge digital agricultural technologies, and data analytics. The applicants must have a B.S. degree (M.S. preferred) in Precision Agriculture, Mathematics, Computer Science, Soil Science, Agronomy, Environmental Science, or closely related fields. Please contact Dr. Haiying Tao

(haiying.tao@uconn.edu) for additional information.

Must read

Aare, Ane Kirstine, Søren Lund, and Henrik Hauggaard-Nielsen. "Exploring Transitions towards Sustainable Farming Practices through Participatory Research – The Case of Danish Farmers' Use of Species Mixtures." Agricultural Systems 189 (April 1, 2021):

103053. https://doi.org/10.1016/j.agsy.2021.103053.

Lunch and learn videos

If you happen to sit at your desk over lunch and are browsing Ted Talks to learn something new, you may want to watch OFE videos. A list of e-presentations from the #OFE2021 prepared by Myrtille Lacoste:

- Participatory experimentation at CETA35 N. Trubert et al. (CETA 35, France)
- <u>Using digital maps to build research questions relevant to Falkland Islands farmers</u> M. McNee et al. (Department of Agriculture, Falkland Islands)
- <u>eFields: Ohio State University's On-Farm Research Program</u> E. M. Hawkins, et al. (The Ohio State University, USA)
- Increasing the speed and uptake of innovation in the field vegetable and potato sectors: defining a new approach for delivering cost effective research - L. Sagoo et al. (ADAS, UK; INAGRO, Belgium; Arvalis, France; DELPHY, Netherlands)
- <u>Case study: Innovative Farmers, lessons from 10 years championing farmer-led on-farm research in the UK</u> H. Aldis et al. (Soil Association, UK)
- <u>From Data to Decisions: Facilitating Transformational Learning through the Nebraska On-Farm</u> <u>Research Network</u> - L. Thompson et al. (Univ. of Nebraska, USA)

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.