

# Ad hoc support : 1st OFE conférence

## 1st Farmer Centric On-Farm Experimentation Conference

### ABSTRACT

How can we encourage the adoption of innovations, be it new agro-ecological practices, new technologies, or both? By experimenting! This is the vision of many researchers and practitioners who believe that On-Farm Experimentation (OFE) can meet this challenge.

Indeed, with digital technology, a new form of On-Farm Experimentation (OFE) is possible: it is centred on the farmer's problems with the aim of improving production (better knowledge of soil potential, heterogeneities) but also of trying more disruptive agroecological experiments (mixed or associated crops, etc.). The strong point of the approach is that the data can be reused by research to accelerate the creation of new knowledge (this is the concept of "large-scale phenotyping", see below). A worldwide movement is emerging around this concept.

OFE is a process of deliberate, iterative and evolutionary exploration of innovations by farmers, in combination with expert knowledge, in a social learning context. By facilitating data collection, digital technology is an essential tool for OFE: OFE could thus become a "large-scale phenotyping" approach [1] accelerating agronomic knowledge, but also changing the role of the farmer in innovation (open innovation). An international scientific community is being built on the subject, with a first workshop in 2018 in Canada and a second in 2019 in Montpellier[1]. The Montpellier team of #DigitAg, the Convergences Agriculture Numérique Institute, was asked in September by the OFE consortium (Australia, Canada, USA, China, Brazil, France...) to host this first international and interdisciplinary conference, coupling OFE and digital. A cycle of conferences of this format will be set up in the future.

A publication is currently being reviewed in Nature Food.

**Keywords :** Open innovation, Agroecological transition, Digital technologies, Farmer-centric approach, Co-learning

**Year :** 2021

**Project number :** 2100-010

**Type of funding :** SP

**Project type :** PC

**Research units in the network :** TETIS AGAP ABSYS MISTEA EMMAH AIDA GECO INNOVATION LEPSE

**Start date :** 2021-03-01

**End date :** 2021-12-31

**Flagship project :** no

**Project leader :** Véronique Bellon-Maurel

**Project leader's institution :** INRAE

**Project leader's RU :** ITAP

**Budget allocated :** 15000 €

**Total budget allocated ( including co-financing ) :** 15000 €

**Funding :** Labex

### GOAL

OFE can be a means of advancing both :

- the agro-ecological transition, for a society that is more respectful of the environment: experiments are carried out to gain a better understanding of the potential of one's farm (e.g., the potential of the soil, of certain crops, etc.), but also to test new practices that are more economical in terms of inputs or more

disruptive (mixed crops, combined crops);

- the digital transition: digital tools will facilitate these experiments and farmers will be encouraged to use them (within a framework supported by research) and to assess their usefulness for their daily work.

A double process of open innovation is thus made possible: on agricultural practices and on digital tools. The conference will present the opportunities and new challenges of OFE: How to share the value of (open) innovation? How to build real user-centric systems? What are the opportunities for knowledge creation through the processing of this massive data? What public policies should be put in place to accelerate digital and agro-ecological transitions, by promoting on-farm experimentation?