



MULTIFUNK

CONSORTIUM
2021-2021

Coordination

Adrien Rusch,
UMR SAVE
adrien.rusch@
inrae.fr

Keywords

Multifunctionality
Biodiversity
Ecosystem
services
Packages of functions

Assessment of the multifunctionality of agroecosystems within the context of the spatial expansion of organic agriculture

Biodiversity provides agroecosystems with a multitude of ecological services. The effects of organic agriculture (OA) and the benefits it brings in terms of biodiversity are still poorly known. Ecological, agronomical and economic performances in OA vary widely, and few studies have focused on quantifying the synergies and antagonisms between these performances.

The aim of this project is to test and to develop, on the basis of data collected at the national scale, an analysis framework of the effects of the spatial expansion of OA on different components of biodiversity and services provided, in order to evaluate the relationships between ecological, economic and agronomic performances in OA.

METABIO



Contact METABIO
metabio@inrae.fr

**Participating
INRAE units**
Agroecology, Dijon
Agronomy, Grignon
BAGAP, Rennes
DYNAFOR, Toulouse
IGEPP, Rennes
PSH, Avignon
SAVE, Bordeaux



More specifically, it involves:

- the proposal of a common framework for the analysis and quantification of performances, explicitly integrating the functions and services provided by biodiversity;
- an assessment of the ability of this analysis framework to evaluate the synergies and antagonisms between performances along a gradient of the proportion of OA in the landscape;
- the identification of other landscape characteristics that make it possible to promote synergies between performances and to optimize multifunctionality.

This consortium brings together ecologists, agronomists and economists, and uses datasets resulting from long-term studies in a hands-on production context (approximately 200 plots throughout France) for several types of crops: cereals, rape, grapevines and apples.

METABIO



Contact METABIO
metabio@inrae.fr