

## Building the Backbone for Better Organic Yields: The OrganicYieldsUP Database

At the heart of the OrganicYieldsUP project lies a **comprehensive database** tailored to the complexity of organic farming systems that will help to understand what drives—and limits—yields in organic cropping systems across Europe.

### A Database Built for Complexity

In the project's first phase, our partners worked together across countries to design a database that reflects **the real-world complexity of organic farming**. It captures the diversity of practices, crops, climates and systems — and makes it possible to compare, analyse and learn from them.

The result is a flexible yet rigorous structure that:

- **Merges data from multiple sources:** experimental stations, on-farm trials, monitoring studies, and published research
- Handles different **data resolutions** (plot-level to whole-farm)
- Accommodates varying **experimental designs**
- Recognises the importance of **contextual factors** like weather, soil type, and management history

### Co-created, Tested and Ready to Use

The database wasn't created in isolation, it was co-designed through an **iterative, participatory process** involving all project partners. From early brainstorming to multiple testing rounds, the structure was refined with feedback from researchers who understand both the science and the field realities.

We defined:

- A **minimum dataset** that ensures comparability while allowing flexibility
- Lookup tables based on global standards (like AGROVOC, ICASA, EPPO), adapted to reflect **the unique realities of organic systems**
- **Clear guidelines and video tutorials** so data can be entered consistently by all partners

## Why This Matters

This is not only a technical tool but also a resource to support strategic understanding. The database enables us to:

- Explore which practices appear to work best under different conditions
- Analyse why certain crops or systems may underperform
- Provide a basis for evidence-informed recommendations to farmers, advisors, and policymakers
- Identify new research questions and highlight knowledge gaps that require further study