PARTNERS

GHENT UNIVERSITY

Hahn Schickard
Visions to Products

exobotic TECHNOLOGIES

TEL AVIV UNIVERSITY אוניברסיטת תל אביב

WEIZMANN INSTITUTE OF SCIENCE

CZU Czech University of Life Sciences Prague

GFZ Helmholtz Centre for Geosciences

Wallonie recherche CRA-W

Universität Rostock

Soil Protection

ena Development Consultants

IUNG

MCMXXII
VYTAUTAS MAGNUS UNIVERSITY

n|w University of Applied Sciences and Arts Northwestern Switzerland

Funded by the European Union

Funded by the European Union. Views and opinions expressed are however those of the author(s) only and do not necessarily reflect those of the European Union or the European Research Executive Agency (REA). Neither the European Union nor the granting authority can be held responsible for them.

Project funded by

Schweizerische Eidgenossenschaft
Confédération suisse
Confederazione Svizzera
Confederaziun svizra

Swiss Confederation

Federal Department of Economic Affairs, Education and Research EAER
State Secretariat for Education, Research and Innovation SERI

WHEAT WATCHER

DIGITALLY MONITORED SOIL AND CROP HEALTH

Safe wheat agriculture towards sustainable health

Innovative sensing techniques, and holistic spectroscopy traceability for improved soil, plant health and safe wheat grain

wheatwatcher.eu

OBJECTIVES

To **develop** an integrated soil monitoring system that **evaluates** nutrients and stressors affecting wheat from growth to flour production, **providing** farmers, millers, and policymakers with tools to **ensure** safe and high-quality food.



GENERAL SPECIFIC

1

DATA ECOSYSTEM

Build a sensing system with four platforms to gather comprehensive field data.

2

STRESS ANALYSIS

Study soil stressors in a controlled environment and create tools to monitor crops during growth.

3

CLOUD PLATFORM

Develop a web-based platform to store and merge soil and plant data for better insights.

4

SOIL MAPPING

Automate soil health predictions and map sampling points efficiently.

5

DECISION SUPPORT SYSTEM (DSS)

Integrate experimental data and models into a decision-making tool for soil and crop management under stress.

6

FIELD DEMONSTRATION

Test WHEATWATCHER in real fields under different stress and nutrient conditions.

7

TRACEABILITY

Track contaminants in wheat from origin to processing to ensure food safety and quality.

8

INNOVATION SCALING

Promote WHEATWATCHER's solutions across Europe to enhance the soil-food system and support upscaling efforts.