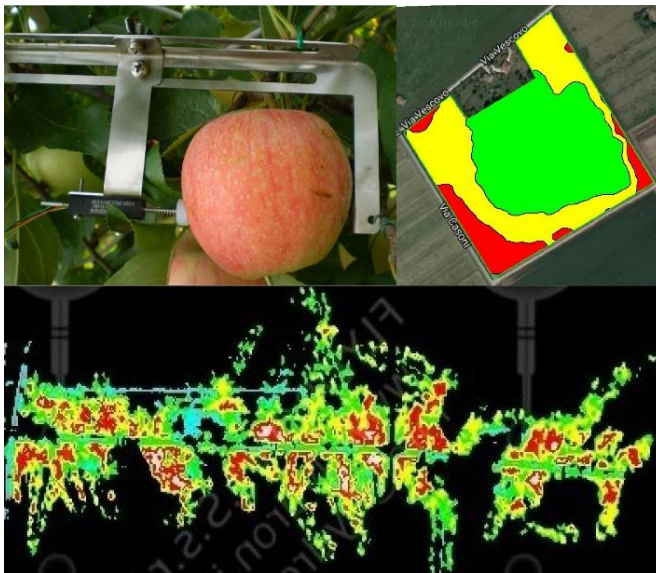# PRECISION AGRICULTURE

Improving management practices by means of precise, rapid and georeferenced measurements of quanti-qualitative variables, linked to productive performances, is the main aim. The following analyses intend to increase the sustainability and resilience of business production processes.
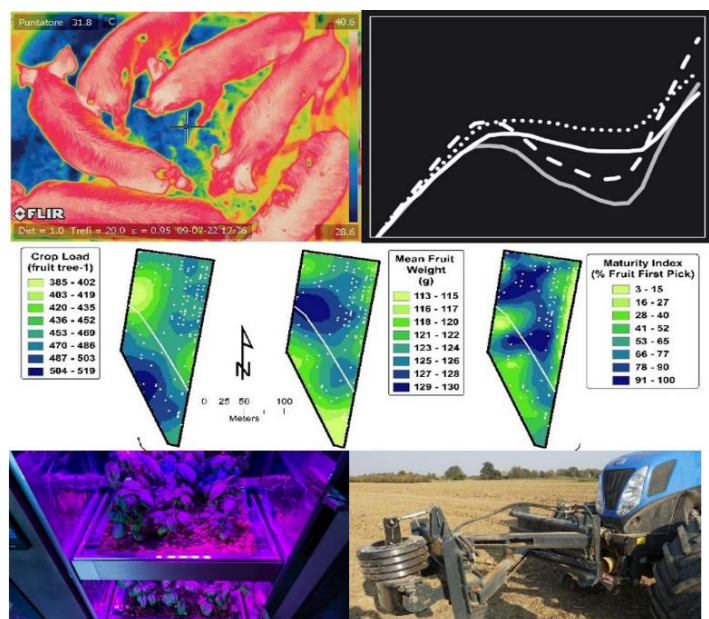
Our research objectives

- Awareness of resources use, as to improve sustainability from the EEE (environmental, economic and ethical) points of view
- Detecting strategies and indexes for properly planning and reaching goals of production processes
- Tools and methodologies application that allows to increase and improve target response forecast
- Adoption of new tools and procedures in the commercial environment to transfer knowledge at the business level
- Assessment of PA techniques on business and consumer preferences models

Our expertise

- Appraisal of quanti-qualitative characteristics of production systems
- Forecast modelling
- Biotic and abiotic stress detection
- PA cost-benefit analyses
- PA impacts on CO_2 emission and life-cycle-assessment evaluation
- Product tracing
- Analysis of businesses and production processes digitalization

AGRICULTURAL AND FOOD SCIENCES - DISTAL

Our main projects

INTERNATIONAL

- MARKTHEPIG - Applied phenomics to identify biomarkers in pigs for new concepts in precision livestock farming - H2020 Marie Sklodowska Curie (2016-2018)
- "EUFRUIT" The European Fruit Network - THEMATIC NETWORK H2020 (2016-2019)
- Smart Specialized Sustainable Orchard – Climate KIC (2018)
- Friendly Fruit – Climate KIC (2018-2020)
- Euphresco - Improvement of diagnostics of quarantine pathogens by digital PCR (2017-2020)
- SIMTAP: Self-sufficient Integrated Multi-Trophic AquaPonic systems for improving food production sustainability and brackish water use and recycling – PRIMA (2019-2022)

NATIONAL/REGIONAL

- New technical and operative solutions for the use of drones in Agriculture 4.0 – PRIN2017
- Smart dairy farming: innovative solutions to improve herd productivity – PRIN2017
- Integrazione sensori e Irrinet. PSR Emilia-Romagna (2017-2019)
- Razionalizzazione dei sistemi Irrigui nei frutteti. PSR Emilia-Romagna (2017-2019)
- Reti di Consegna Intelligenti. PSR Emilia-Romagna (2017-2019)
- In.So.Wine – PSR Emilia-Romagna (2018)
- ALADIN – AgroAlimentare IdroIntelligente - POR-FESR (2016-2018)
- S^{3}O Smart Specialized Sustainable Orchard – POR-FESR (2019-2020)