

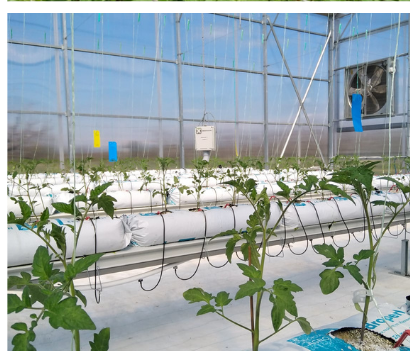
PestNu is a 3 year project that aims to revolutionise ICT technology and organic farming practices to reduce the dependence on hazardous pesticides and the losses of nutrients from fertilisers, towards zero pollution of water, soil and air and ultimately fertiliser use, and increase food safety and food affordability for all. The project uses novel Digital and Space-based technologies (DST) along with Agro-ecological and Organic practices (AOP) in systemic innovation under circular economy along the farm-to-fork food production chain. PestNu is field-testing and demonstrating its systemic innovation solutions in aquaponics, closed/semi-closed hydroponic greenhouses, and in open-field vegetable cultivation, under different conditions, soils and crops (tomato, cucumber, pepper)

INNOVATIVE TECHNOLOGIES



- AI robotic traps for real-time pest monitoring
- AI satellite imaging for agricultural anomalies monitoring
- Autonomous robots for pesticide monitoring and 3D spot spraying
- Real-time nutrient sensors
- Automated recycling system of agro-waste waters for on-site biofertiliser production

- Microalgae based biofertiliser production from organic waste streams
- Biopesticides for vegetable disease management and nutritional programmes in organic farming
- Decision support systems for integrated Nutrient Management
- Blockchain for data evidence and integrity
- Digital Platform for Agro-advisory and Business service



GOALS

- Reduce pesticide and fertiliser use by 50% by 2030
- Deliver full organic farming using precision agriculture tools and agro - ecology methods
- Improve food yield improvement by 30%
- Use a multi-actor approach along Farm to Fork with more than 150 members on PestNu Industrial Advisory Board
- Reduction of production costs by at least 30%
- Deliver healthy, nutritious, safe and affordable food for all
- Decrease organic food prices by 20%
- Evaluation of pesticide residues and creation of an ecotox catalogue on the basis of the ecotox index
- Communicate with more than 5,000 stakeholders



OUR WEBSITE



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