



THEROS - Transparency and trust in organic food supply chain & GI products

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THEROS Concept



THEROS aims to apply a scalable and integrated toolbox, being formulated on the basis of a multi-actor approach, that will address the different cases of adulteration that strike quality labelled food products (organic and GIs) whilst at the same time ensure increased traceability, trust and security.

Project Information

THEROS
Grant agreement ID: 101083579

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[10.3030/101083579](https://doi.org/10.3030/101083579)

EC signature date
17 October 2022

Start date 1 January 2023 **End date** 31 December 2025

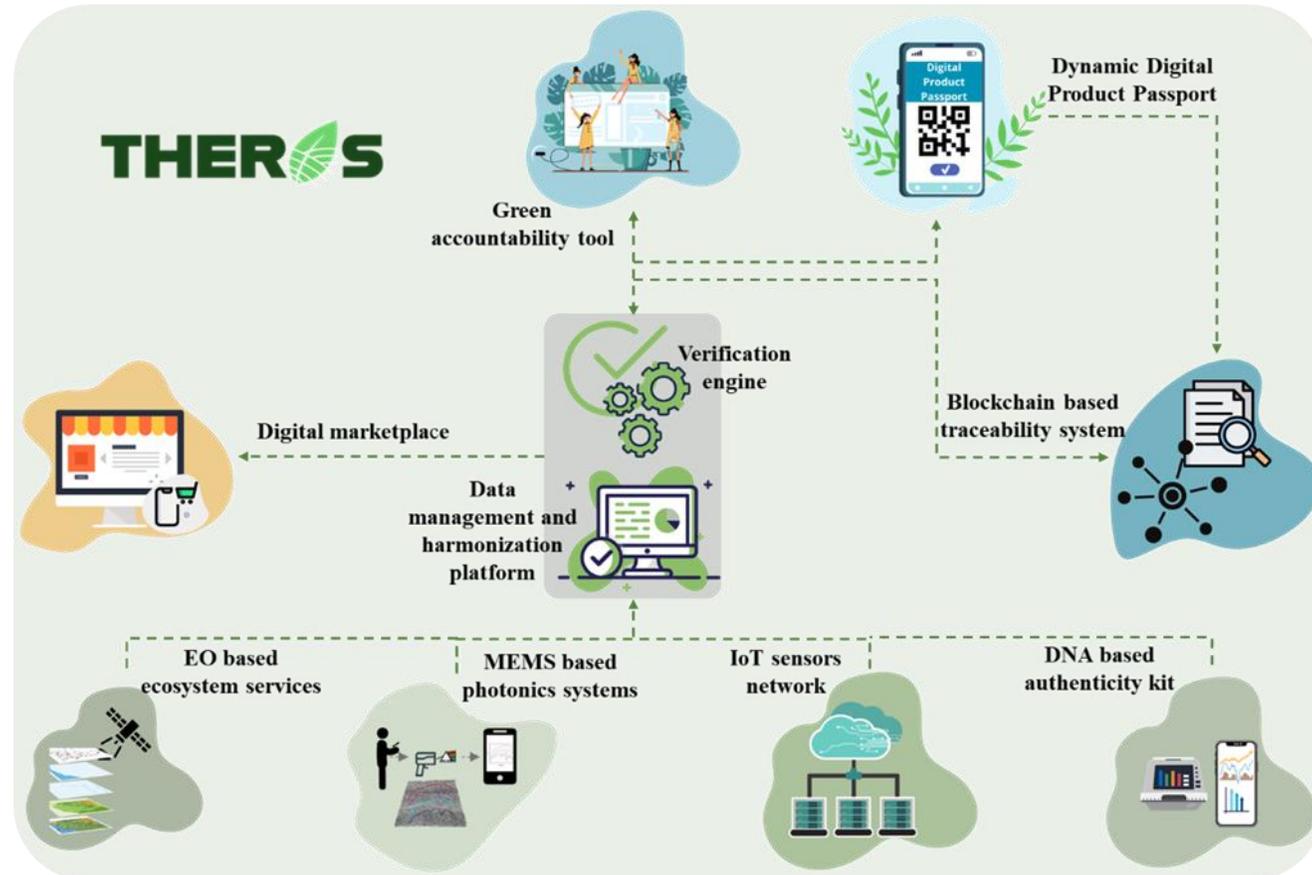
Funded under
Food, Bioeconomy Natural Resources, Agriculture and Environment

Total cost
€ 4 739 281,75

EU contribution
€ 3 999 691,00



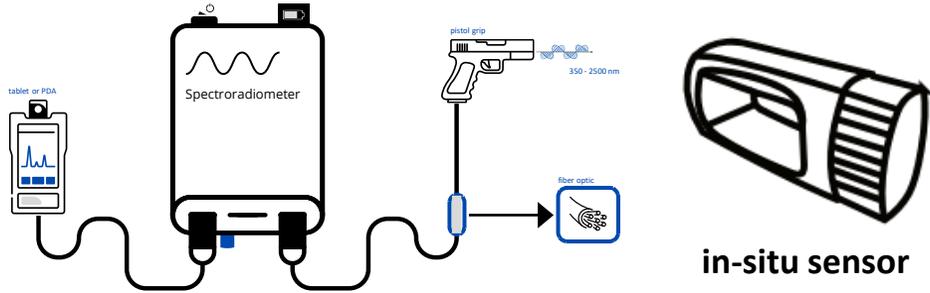
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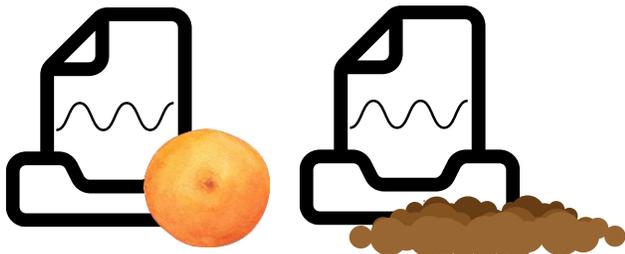
THEROS MEMS based photonics system



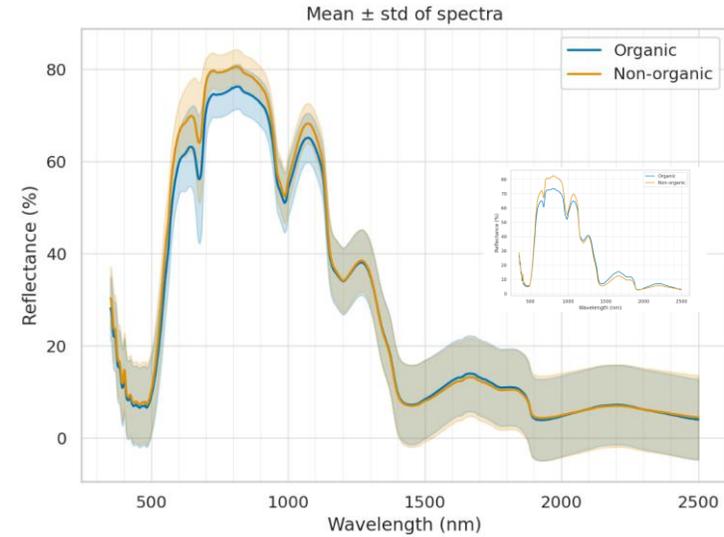
laboratory sensor



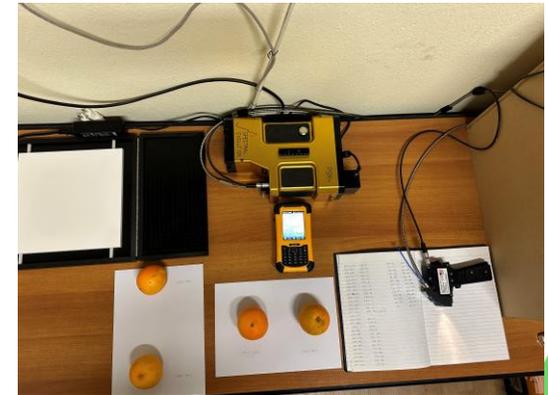
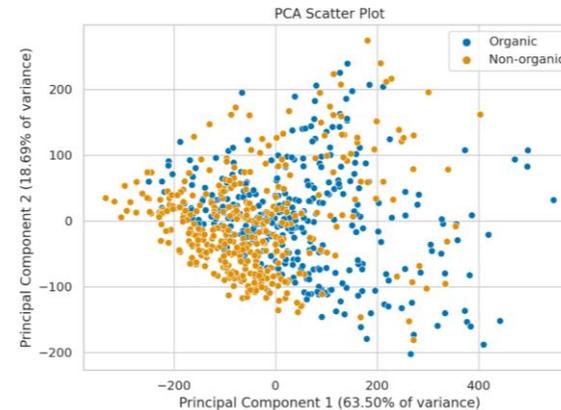
determination of substances prohibited by organic farming.



Food (Orange) & Soil Spectral Libraries



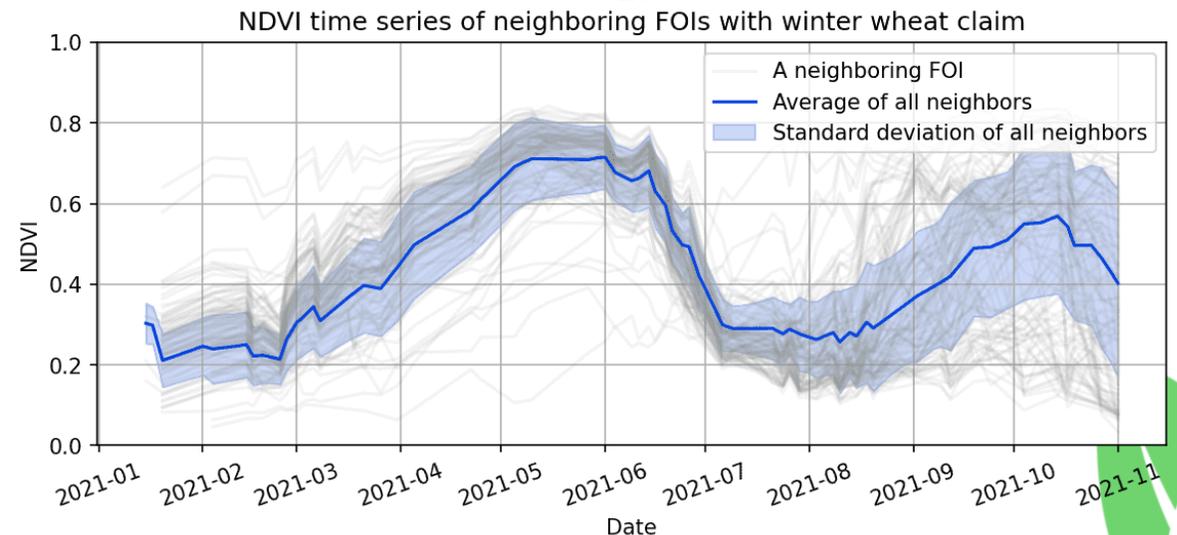
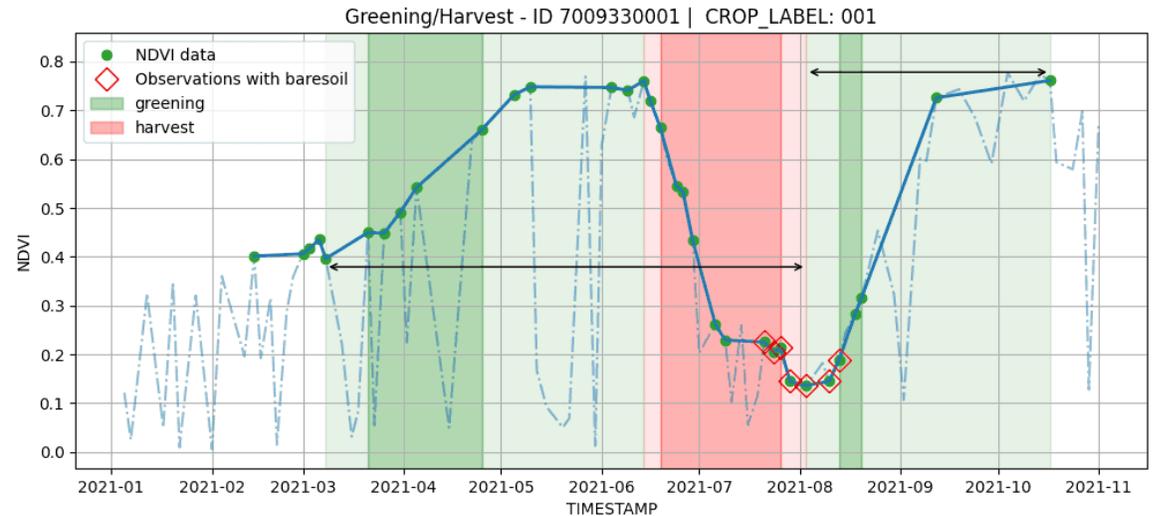
Raw spectra of organic and non-organic orange samples



THEROS Earth Observation component



- **Discrimination between organic and conventional agricultural practices**
- Deep neural network with Sentinel-2 timeseries to try and distinguish between organic. vs. conventional farming parcels
- Apply methodology using super-resolved imagery
- Investigate the applicability of rules that use existing markers to try and differentiate using greening / harvest period, vegetation prominence etc.
- Carbon footprint assessment, ensuring that the organic agriculture practices act as a carbon sink, rather than the producer of greenhouse gasses.





www.theros-project.eu



[THEROS_project](https://www.linkedin.com/company/theros-project)



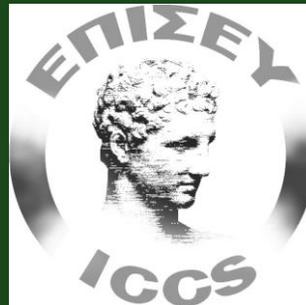
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Thank you for your attention!



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