University Academic Curriculum Vitae

Personal information Céline Laurent

Education since leaving school

- 2014 Bachelor in Biology of organisms and ecosystems; Université de Bordeaux (France)
- 2016 Master degree in Agronomy and Agroecology; Université Paris-Saclay (France)
- 2019, PhD in Environmental Sciences, PhD title: Bioavailability of copper and zinc to plants and earthworms: interactions between long term effects of organic fertilization and organisms on the evolution of soil physico-chemical properties; Université Paris-Saclay (France)

Present appointment

- Postdoctoral position in the ECHO project: Engaging Citizens in soil science: the road to Healthier sOils
- Since 03/06/2024
- UNIBZ, Competence Centre for Plant Health

Professional experience

From / to	Job title	Name of academic Institution	Academic level	Publications
3/10/2016-30/09/2019	Bioavailability of copper and zinc to plants and earthworms: interactions between long term effects of organic fertilization and organisms on the evolution of soil physico-chemical properties	Cirad (French Agricultural Research Centre for International Development)	PhD student	https://pastel.archives-ouvertes.fr/tel03276302 https://doi.org/10.1016/j.scitotenv.2019.135927 https://doi.org/10.1007/s11356-022-23404-y
1/06/2020-28/04/2022	Assessment of nickel and chromium phytoavailability to market garden crops and fodder crops in organic fertilization context – funded by French agency for ecological transition (ADEME) –	Cirad (French Agricultural Research Centre for International Development)	Postdoctoral position	https://doi.org/10.1016/j.scitotenv.2023.167771 Laurent C., Doelsch E., Legros S., Tella M., Bravin M. 2024. Evaluation des risques écotoxicologique et sanitaire dans les agro-écosystèmes maraîchers et fourragers de l'île de La Réunion fertilisés avec des amendements organiques dépassant les seuils réglementaires en nickel et en chrome. Projet PhytAO-Ni/Cr, Ademe, Conseil régional de la Réunion, Ministère de l'agriculture et de la souveraineté alimentaire, Union Européenne

	PhytAO-Ni/Cr project			
09/05/2022-07/05/2024	Assessment of soil-plant transfer of mineral and organic pollutants in urban agriculture-funded by French agency for ecological transition – PlantEval2.0 project	Université de Lorraine, Laboratoire Sols et Environnement (LSE)	Postdoctoral position	https://doi.org/10.1038/s41597-025-05033-5 https://doi.org/10.1038/s41597-025-05085-7

Publication and conferences under the Competence Centre for Plant Health

Publications

1. Caggiano, M., Capri, C., Cappello, C**., Laurent, C.**, Mimmo, T. (2024). Training and citizen engagement to tackle soil health challenges. Open Access Government. https://doi.org/10.56367/OAG-045-11504-01

2. Peiro, A., Cappello, C., **Laurent, C.**, San, F., Papadopoulou, E., Mimmo, T. (2024). Echo's citizen science initiatives for soil literacy take off. Open Access Government. https://doi.org/10.56367/OAG-045-11504-02

3. Tiziani, R.; Fracasso, I.; Heiss, D.; Bouaicha, O.; **Laurent, C.**; Chibesa, M.C.; Mimmo, T. Citrate vs. malate: an assessment of plant cost-adjusted micronutrient solubilisation efficiency in three soils. Plant Soil 2026, https://doi.org/10.1007/s11104-026-08579-4.

ECHO Deliverables

Deliverable 2.2 – Citizen science soil health toolbox. This document is the collection and integration of field guidelines, protocols for soil sampling, analysis, on-site assessments, sample storage and shipping to ECHO laboratories for off-site assessment. Tanja Mimmo (UNIBZ), Claudia Cappello (UNIBZ), **Céline Laurent** (UNIBZ), Manuel Pulido (UEX), Wiktoria Witek (AgroHorti Media).

Deliverable 2.3 – Handbook of agreed methods to assess soil health. This document is a handbook including methodologies for assessing soil biodiversity and heavy metals. **Céline Laurent**, Claudia Cappello and Tanja Mimmo (UNIBZ), Wiktoria Witek (AgroHorti Media).

Deliverable 2.4 - Training module for Citizen Science toolbox. It consists of an online training course for toolbox use and soil health understanding. Tanja Mimmo, Claudia Cappello, **Céline Laurent** and Maximilian Carl Stahl (UNIBZ). The online training are 13 public videos available on Zenodo (see below) and the ECHO project YouTube channel (https://www.youtube.com/@ECHOsoilproject).

1. https://zenodo.org/records/14778680
2. https://zenodo.org/records/14778751
3. https://zenodo.org/records/14778795
4. https://zenodo.org/records/14778848
5. https://zenodo.org/records/14778893
6. https://zenodo.org/records/14778933
7. https://zenodo.org/records/14778959
8. https://zenodo.org/records/14778991
9. https://zenodo.org/records/14779007
10. https://zenodo.org/records/14779030
11. https://zenodo.org/records/14779052
12. https://zenodo.org/records/14779077
13. https://zenodo.org/records/14779088

Deliverable 2.5 – ECHO citizen science mobile app. This document shortly explains the development of the ECHO citizen mobile app suitable for displaying toolbox and learning materials in a gamified manner. The mobile app contains an easy-to-use platform to collect soils health assessment performed by citizens under ECHO and the Citizen Science soil health toolbox to guide them through the entire soil sampling process. Jose Sánchez (Ninvus), Oleg Osychenko (QUANTA), Federico Julian (AMBIENTA), **Céline Laurent** (UNIBZ), Claudia Cappello (UNIBZ), Tanja Mimmo (UNIBZ)
Deliverable 2.6 – Instructions for use the ECHO App. This document is a comprehensive and easy-to-use instruction manual for the ECHO App. **Céline Laurent** (UNIBZ), Tanja Mimmo, Claudia Cappello, and Roy Neilson (HUTTON).

Conferences

Mimmo, T., Tiziani, R., Borruso, L., Cappello, C., **Laurent, C**; "Engaging Citizens in soil science: the road to healthier soils"; 19th International Symposium on Microbial Ecology (ISME); Cape Town (ZA), 18th-23rd August 2024.

Laurent, C., Cappello, C., Mimmo., T; "ECHO Engaging Citizens in soil science: the road to Healthier sOils", SOILL start up event: "Soil Literacy: Empowering Communities for Healthy Soils", Torino, IT, 11th June 2025

Laurent, C., Cappello, C., Breure, T., Jones, A., Mimmo, T; "Bridging Citizen Science generated data and soil lab analyses: understanding the variability and insights"; EUROSOIL, Seville (ES), 8th-12th September 2025.

Peiro, A., Capello, C., **Laurent, C.**, Sanz, F., Huerta-Salinas, O., Schaal, J., Mimmo, T; TOWARDS HEALTHIER SOILS THROUGH ECHO: CITIZEN ENGAGEMENT, PROGRESS AND PRELIMINARY RESULTS; EUROSOIL, Seville (ES), 8th-12th September 2025.

Third Missions under the Competence Centre for Plant Health

- Mission Soil week and in-person cluster event (Brussels, BE, 12th-14th November 2024)
  - Communication cluster event: facilitation of the "Use art to communicate on soil health" group.
  - Soil indicators and monitoring.

- FUTURES: exhibition at the Grassi Museum, Leipzig, DE, 21.11.2024–24.08.2025 van Bezooijen, A., Stahl, M.C., Cappello, C., **Laurent, C.**, Borruso, L., Mimmo, T.

- Mission Soil Week and in-person Soil pollution cluster event (Aarhus, Denmark, 4th-6th November 2025)

- Science Live, Free University of Bolzano, 14th November, Bolzano, Italy

- Le 1000 e una Scienza, 15th November, Bolzano, Italy