



Semeraro-Mieville, Sarah

University of Neuchâtel

Thesis director: Rasmann, Sergio

Supervisor: Le Bayon, Claire

Title of thesis: Establishing soil-vegetation-humus forms relationships

Start of thesis: 01.08.2019

End of thesis: xx.xx.20xx (private defense) and xx.xx.20xx (public defense)

Summary of credits

Transferable skills

EX	Mysteries of the soil, scientific workshop for children, Neuchâtel (organisation)	August 2019	1.0
DS	Beyond standard texts: writing grant proposals and review articles	November 2019	0.5
DS	Let's Create a Blog together!	November 2020	0.5
DS	Scientific Writing	January 2021	2.0
DS	Annual PhD Students Meeting 2021 (organization)	September 2021	1.0
DS	Career Compass: How to set the direction of your professional development.	November-December 2021	0.5
DS	Becoming a teacher: An Introduction to University teaching for PhD students (only 1st day)	January 2023	0.5
EX	Troisième rencontre doctorale « Changements climatiques et société » (organization)	October 2023	1.0

Accumulated credits: 7.0 (DS 5.0), minimum required: 2 credits.

Research tools

DS	Biostatistics for nonstatisticians: good practices, misuse and pitfalls	January 2020	1.5
DS	Plant Metabolomics: from plant tissue to molecules	May 2021	0.5
EX	Powder characterization and dispersion: from nanometers to millimeters and from theory to practice, EPFL	June-July 2021	2.0
DS	Trait-Based Ecology: from theory to R tools - in coll. with the WSL Biodiversity Center	October 2021	2.0
EX	ISRIC Spring school: Hands-on Digital Soil Mapping, Netherlands (online)	May 2022	1.1

Accumulated credits: 7.1 (DS 4.0), minimum required: 2 credits.

Scientific activities

DS	Open Science: improving your research workflow to increase transparency and reproducibility - joint with CUSO StarOmics	February 2020	1.0
DS	DPOB PhD Students Seminars (oral presentation)	May 2020	0.5
EX	18th Swiss Geoscience Meeting, online (poster presentation)	November 2020	0.5

DS	Annual PhD Students Meeting 2021 (talk)	September 2021	1.0
EX	20th Swiss Geoscience meeting, Lausanne (oral presentation)	November 2022	1.0
EX	Wageningen Soil conference 2023, the Netherlands (oral presentation)	August 2023	1.0
DS	Publication as 1 st author in International Peer-reviewed journals (3)	2022-23	3.0
EX	Centennial Celebration and Congress of the International Union of Soil Sciences, Florence (Oral presentation)	May 2024	1.0

Accumulated credits: 9.0 (DS 5.5), minimum required: 2 credits.

Total credits: 23.1 (DS 14.5). Required: 12 credits, minimum 6 credits within the Doctoral School program (DS).

Reports

First report (overview report): yes, received on 30.01.2020

Intermediary report (mid-thesis report): yes, received on 27.01.2021

Mid-thesis meeting (to discuss the mid-thesis report)

Mid thesis meeting: S.Rasmann & C. Le Bayon (University of Neuchâtel), Prof. Wim Van den Putten (Netherlands Institute of Ecology), Prof. Frank Hagedorn (WSL), Prof. Markus Egli (University of Zurich)

Date: 09.02.2021

Mid thesis committee report (1-3 pages): yes, received 16.02.2021

Publications

*first author

Semeraro, S., Kergunteuil, A., Sánchez-Moreno, S., Puissant, J., Goodall, T., Griffiths, R., & Rasmann, S. (2022). Relative contribution of high and low elevation soil microbes and nematodes to ecosystem functioning. *Functional Ecology*, 36(4), 974-986.

Semeraro, S., Kipf, P., Le Bayon, R. C., & Rasmann, S. (2023). Solar radiation explains litter degradation along alpine elevation gradients better than other climatic or edaphic parameters. *Frontiers in Microbiology*, 14, 1152187.

Semeraro, S.; Fazzari, M.; Kipf, P.; Rasmann, S.; Le Bayon, R.-C. Humus Forms and Organic Matter Decomposition in the Swiss Alps. *Int. J. Plant Biol.* 2023, 14, 729-745. <https://doi.org/10.3390/ijpb14030054>

other author