

Rémy Beugnon

Curriculum vitae

Synthesis of past activities

I am exploring the impact of plant diversity on ecosystem functioning, with a specific focus on microclimate modulation. This research sits at the intersection of microclimate and biodiversity-ecosystem functioning research, pushing the boundaries of our understanding in these domains.

I began my academic career as a trainee in agricultural engineering, where I joined a master's program in ecology and evolution during the final year. My master's thesis focused on modeling species interactions (ISEM, Montpellier, France), setting the stage for my Ph.D. on tree-tree interactions at iDiv (Leipzig, Germany). In my doctoral research, I explored the impact of tree species richness on the forest carbon cycle, with a particular focus on litterfall dynamics, litter decomposition, soil carbon storage and soil microbial functioning.

Recognizing the pivotal role of microclimate as a major driver of ecosystem functions during my Ph.D., I decided to shift my focus towards microclimate sciences. In response to a call from the SoilTemp project, I undertook the analysis of the effects of plant diversity on microclimate at global scale. This endeavor led me to collaborate with the Leipzig Institute of Meteorology (LIM) in Leipzig (Germany), where I continue to explore the intricate interactions between plant diversity and microclimate.

As the microclimate research community is still emerging, I have dedicated the past few years to its development. This includes joining the SoilTemp steering committee, contributing to tool development for the field (e.g., De Frenne et al. 2024, Eliah Gross master's thesis, SoilTemp database development), and advancing theoretical frameworks (e.g., Beugnon et al. 2021, 2024; Kemppinen et al. 2024).

1. **Publications (2019-2025):** I published 28 peer-reviewed articles, including 11 as first author and prestigious outlets such as Science Advances (Impact Factor: 15) and Ecological Monographs (IF: 10) and Ecology Letters (IF: 9). In addition, one first author article was recently accepted in Nature Communications (IF: 17).
2. **Supervision (2019-2025):** I supervised 2 PhD, 4 master's students, 2 bachelor's students, 1 gap year student from ENS Lyon, and 2 final-year student at the Perpignan University Institute of Technology (IUT).
3. **Lectures:** I delivered university lectures to bachelor's and master's students in Ecology (2023-2025), Biodiversity (2023-2025), and statistics (2021-2023), including the coordination of a bachelor module.
4. **Expertise:** Technical report for the European Commission on the Soil Monitoring Law (project led by Carlos Guerra).
5. **Network:** I am leading an international panel of experts on decomposition in terrestrial ecosystems for the How-to-decompose project (<https://remybeugnon.netlify.app/project/how-to-decompose/>). This long-term project implies the interaction with the panel of collaborators, organization and animation of bi-annual online workshops, and preparation of funding proposals.
6. **Network:** I was elected to the Microclimate DataBase (MDB, previously SoilTemp) steering committee. This current involvement implies the participation in the network organization, animation and development, committee meetings every semester, participation of the recruitment and supervision of

students and postdocs.

7. **Outreach:** I was interviewed as an expert on Biodiversity-Ecosystem Functioning for EOS, a journal from the AGU (Sidik, S. M. (2023), Diverse forests store more carbon than monocultures, *Eos*, 104 10.1029/2023EO230464. Published on 5 December 2023).
8. **Outreach:** I edited "Soil Biodiversity," a collection eBook in Frontiers for Young Minds, combining 33 articles on soil biodiversity from 50 scientists for kids and teenagers, and coordinated the translation of this collection in about 22 languages (see Beugnon, R., Jochum, M., & Phillips, H. R. P., 2022; Beugnon, R., Zeiss, R., et al., 2024 10.25674/413).

Education

- 2018 - 2021 **PhD. in Life Sciences:** Leipzig University, Leipzig, Germany.
- 2017 - 2018 **MSc. Ecology and Evolution:** Université Montpellier II, Montpellier, France.
- 2014 - 2018 **Agricultural engineering diploma:** Montpellier SupAgro, Montpellier, France.

Work history

2025-present

Postdoctoral researcher: German Center for Integrative Biodiversity Research (iDiv), Centre d'Ecologie Fonctionnelle et Evolutive (CEFE), Montpellier, France. Project: "Vegetation diversity effects on microclimate: phenomenon and mechanisms" (supervision: Prof. Dr. Nico Eisenhauer, Dr. Stephan Hättenschwiler)

2022-2024

Postdoctoral researcher: Leipzig Institute for Meteorology (LIM), German Center for Integrative Biodiversity Research (iDiv), Centre d'Ecologie Fonctionnelle et Evolutive (CEFE), Montpellier, France. Project: "Vegetation diversity effects on microclimate: phenomenon and mechanisms" (supervision: Prof. Dr. Johannes Quaas, Dr. Stephan Hättenschwiler)

2018-2022

Ph.D. researcher: German Center for Integrative Biodiversity Research (iDiv) Halle-Jena-Leipzig, Leipzig, Germany. Ph.D. thesis: "From trees to soil: microbial and spatial mediation of tree diversity effects on carbon cycling in subtropical Chinese forests." (supervision: Prof. Dr. Nico Eisenhauer, Dr. Simone Cesarz)

2018

Master's student: Institut des Sciences de l'Evolution de Montpellier (ISEM), Montpellier, France. MSc thesis: "Modelling non-trophic interactions effects on community dynamics." (supervision Dr. Sonia Kéfi, Dr. Vasilis Dakos)

2017

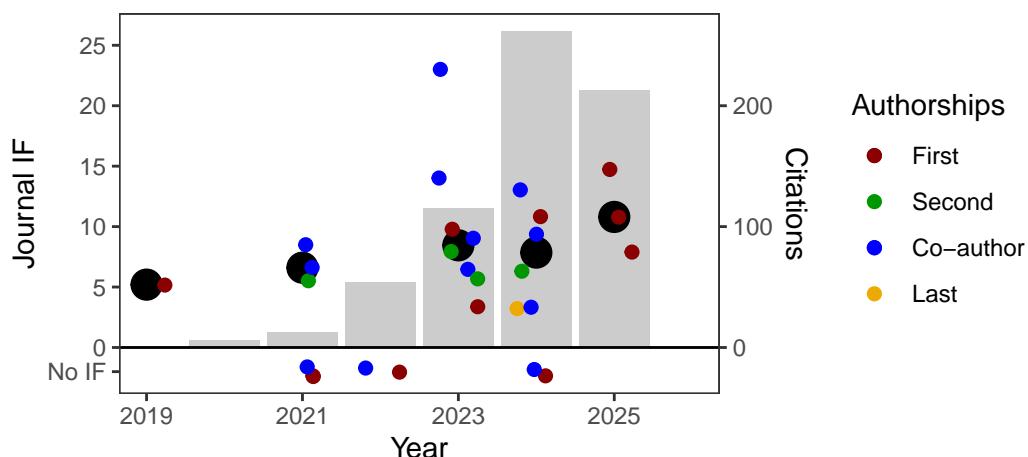
Intern: Swedish University of Agricultural Sciences (SLU), Umeå, Sweden. Internship: "Root trait effects of alpine plant communities on plant-soil feedback effects performed in two greenhouse experiments." (supervision Dr. Paul Kardol)

Publications

I prioritize interdisciplinary and collaborative approaches in my research, emphasizing the inclusion of diverse collaborators to integrate expertise across fields. Most of my work results from genuine collaboration, with co-authors contributing unique perspectives, and often results in synthesis work across research fields. I actively engage in data collection, analysis, visualization, and/or manuscript writing for articles I am co-authoring. To ensure fairness among co-authors, I have implemented a practice of randomizing co-author order, except for key roles (e.g., first, second, senior authors).

Publication decisions are made collectively, favoring open-access outlets for visibility and avoiding predatory journals. Committed to transparency, I publish data and analysis scripts in public repositories and support science communication. For example, I developed a virtual lab exhibition, co-edited a “Soil Biodiversity” article collection for *Frontiers for Young Minds*, and contributed to translating these articles into 22 languages (see Beugnon, Zeiss et al. 2024). My goal is to make research accessible to the broader community.

Publication summary



Publications and citations summary. Black dots depict the median journal impact factor, while colored dots represent individual publications (colored per authorship position, left axis). New outlets without impact factor are annotated “No IF”. Barplots illustrate the total number of citations per year (source: Google Scholar, right axis).

2019 - 2024 (OA: Open Access)	Total	First author	Senior author (corresponding author)
		(co-author)	
Advances in Ecological Research	1	1	(1)
Communications Biology (OA)	1	(1)	0
Comm. Earth & Environement (OA)	1	(1)	0
Ecological Monographs (OA)	1	1	(1)
Ecology and Evolution (OA)	1	0	1
Ecology Letters (OA)	1	1	0
Environmental Microbiology	1	(1)	0
Frontiers for Young Minds (OA)	1	1	0
Frontiers in Cellular and Infection Microbiology	1	(1)	0
Frontiers in Plant Science (OA)	1	(1)	0
Global Change Biology (OA)	2	2	(1)
Global Ecology and Biogeography (OA)	1	(1)	0

2019 - 2024 (OA: Open Access)	Total	First author (co-author)	Senior author (corresponding author)
ISME Communications (OA)	1	1	(1)
Journal of Sustainable Agriculture and Environment (OA)	3	1 (2)	(1)
Microbiology Spectrum (OA)	1	(1)	0
National Science Review (OA)	1	(1)	0
Nature Communications (OA)	1	1	0
Oikos (OA)	1	1	(1)
Plant and Soil	1	(1)	0
Science Advances (OA)	1	(1)	0
Scientific data (OA)	1	(1)	0
Soil Organisms (OA)	2	1 (1)	(1)

Selected publications

Beugnon, R.⁺, Albert, G., Haehn, G., Haider, S., Hättenschwiler, S., et al. (2025). Improving forest ecosystem functions by optimizing tree species spatial arrangement. *Nature Communications*. 10.1038/s41467-025-61389-7 Lead author of this mathematical modeling-based manuscript showing the importance of tree species spatial organization in optimizing ecosystem functioning.

Beugnon, R.⁺, Bu, W., Bruelheide, H., Davrinche, A., Du, J., et al. (2023). Abiotic and biotic drivers of tree trait effects on soil microbial biomass and soil carbon concentration. *Ecological Monographs*. 10.1002/ecm.1563. Lead author of this synthesis paper revealing the mechanisms underlying the impact of tree species richness on soil microbial communities and carbon concentration.

Beugnon, R.⁺, Du, J., Cesarz, S., Jurburg, S. D., Pang, Z., et al. (2021). Tree diversity and soil chemical properties drive the linkages between soil microbial community and ecosystem functioning. *ISME Communications*. 10.1038/s43705-021-00040-0. Lead author of this synthesis paper revealing the effects of tree species richness and soil quality on soil microbial facets and the consequences for ecosystem functioning.

Beugnon, R.⁺, Eisenhauer, N., Bruelheide, H., Davrinche, A., Du, J., et al. (2023). Tree diversity effects on litter decomposition are mediated by litterfall and microbial processes. *Oikos*. 10.1111/oik.09751. Lead author of this publication investigating the mechanisms underlying the impact of tree diversity on leaf litter decomposition. The study explores the mediation of these effects by soil microbial communities through various field decomposition experiments.

Beugnon, R.⁺, Ladouceur, E., Sännemann, M., Cesarz, S., & Eisenhauer, N. (2021). Diverse forests are cool: Promoting diverse forests to mitigate carbon emissions and climate change. *Journal of Sustainable Agriculture and Environment*. 10.1002/sae2.12005. Lead author of this perspective piece emphasizing the potential benefits of diversifying forest plantations to optimize reforestation projects benefits and sustainability.

Beugnon, R.⁺, Le Guyader, N., Milcu, A., Lenoir, J., Puissant, J., et al. Microclimate modulation: an overlooked mechanism influencing the impact of plant diversity on ecosystem functioning. *Global Change Biology*. 10.1111/gcb.17214. Lead author of this perspective piece emphasizing the potential of plant diversity to affect ecosystem functioning through the modification of microclimate, thus to mitigate the impact of climate change on ecosystem functioning.

De Frenne, P.⁺, **Beugnon, R.**, Klings, D., Lenoir, J., Niittinen, P., et al. (2024). Ten practical guidelines for microclimate research in terrestrial ecosystems. *Methods in Ecology and Evolution*. 10.1111/2041-210X.14476. Second author and section leader of this methods paper aims to provide a practical guidelind for microclimate researcher from project design toward publication.

Kemppinen, J.⁺, Lembrechts, J. J., Van Meerbeek, K., Carnicer, J., Chardon, ... **Beugnon, R.**, et al. (2024). Microclimate, an important part of ecology and biogeography. *Global Ecology and Biogeography* 10.1111/geb.13834. Co-author of this perspective and review paper synthesizing the current state and futur of microclimate research, where I focused on modeling technique sections.

Schnabel, F.⁺, **Beugnon, R.**⁺, Yang, B.⁺, Richter, R., Eisenhauer, N., et al. (2023). Tree Diversity Increases Forest Temperature Buffering via Enhancing Canopy Density and Structural Diversity. *Ecology Letters*. 10.1111/ele.70096. Co-lead authors of this data paper exploring the effects on tree species richness on forest microclimate. We highlighted the tree species richness buffering effect on air temperature and its functional drivers over time.

Data & codes

Datasets and databases

- SoilTemp database: <https://www.soiltempproject.com/> - **elected to the Steering Committee in 2023**, responsible of the database technical development, manuscript in preparation (Beugnon, Cheneka et al. in prep.)
- Phillips, H. R. P., Bach, E. M., Bartz, M. L. C., Bennett, J. M., **Beugnon, R.**, et al. (2021). Global data on earthworm abundance, biomass, diversity and corresponding environmental properties. *Scientific Data*. 10.1038/s41597-021-00912-z.

Codes & softwares

- **Beugnon, R.** (2023). remybeugnon/Beugnon-et-al-2023-Oikos: Beugnon et al 2023 - Oikos (Article) [Computer software]. *Zenodo*. 10.5281/ZENODO.8039140
- **Beugnon, R.**, Bu, W., Bruelheide, H., Davrinche, A., Du, J., et al. (2022). remybeugnon/Beugnon-et-al-2021_Soil-carbon-and-microbial-biomass-drivers: Major revision of the analyses during review process [Computer software]. *Zenodo*. 10.5281/zenodo.7225739
- **Beugnon, R.** (2024). remybeugnon/Beugnon-et-al-2024-GCB_Climate-modulation-an-overlooked-mechanism: Code and data publication (Version simulations) [Computer software]. *Zenodo*. 10.5281/ZENODO.10686528
- Lutrat, C., & **Beugnon, R.** (2023). Celia-Lutrat/Lutrat-et-al_2023_GSS: Release version 1.1.0 (v1.1.0) [Computer software]. *Zenodo*. 10.5281/ZENODO.8032932
- Sünnemann, M., & **Beugnon, R.** (2023). Mariesuenemann/Suennemann-et-al-2023_Multifunctionality (publication-scripts) [Computer software]. *Zenodo*. 10.5281/ZENODO.8386710

Talks & posters

2024

- **Talk:** “Microclimate and Soil Ecology” *MonSol* 04.11.2024, Montpellier, France.
- **Talk:** “SoilTemp database” *Microclimate Ecology and Biogeography* 26-29.08.2024, Helsinki, Finland.

- **Poster:** “Biodiversity - Microclimate - Ecosystem Functioning nexus” *Microclimate Ecology and Biogeography* 26-29.08.2024, Helsinki, Finland.
- **Talk:** “Tree diversity increases forest temperature buffering” *World Biodiversity Forum* 15-21.06.2024, Davos, Switzerland.

2023

- **Poster:** “Forest spatial heterogeneity & leaf litter dynamics” *Modeling in Ecology and Evolution* 24-26.05.2023 Montpellier, France.

2022

- **Talk:** “Tree diversity increases air temperature buffering in forests” *Microclimate Ecology & Biogeography* 29.08-01.09.2022 Antwerp, Belgium.
- **Poster:** “Vegetation diversity buffers soil microclimatic extremes: phenomenon and mechanisms” *Microclimate Ecology & Biogeography* 29.08-01.09.2022 Antwerp, Belgium.
- **Poster:** “Vegetation diversity buffers soil microclimatic extremes: phenomenon and mechanisms” *World Biodiversity Forum* 26.06-01.07.2022 Davos, Switzerland.

2021

- **Talk:** “Tree diversity - litterfall - decomposition” *EU Soil Observatory Conference* 21.10.2021 Online.
- **Talk:** “Tree diversity - litterfall - decomposition” *GfO conference* 31.08-03.09.2021 Online.

2020

- **Talk:** “Biotic and abiotic mediations of scale dependent tree trait effects on soil carbon concentration” *BES Conference* 14.12-18.12.2020 Online.

Reviews

Reviewer of scientific papers in Diversity and Distribution (2024), Journal of Applied Ecology (2024), Ecological Applications (2023), Ecology Letters (2023, 2024), Functional Ecology (2023), Global Change Biology (2023), Nature Communications (2022), Pedobiologia (2020), Scientific Reports (2020), Soil Organisms (2019).

Teaching

2025

- **Leipzig University** (WS 2024, 70h) - Module coordination “Introduction to Ecology” bachelor: seminar, practicum and lectures.

2024

- **Leipzig University** (WS 2024, 70h) - Module coordination “Introduction to Ecology” bachelor: seminar, practicum and lectures.
- **Leipzig University** (SS 2024, 30h) - Seminar series in “Introduction to Biodiversity” master.

2023

- **Leipzig University** (SS 2023, 30h) - Seminar series in the “Introduction to Ecology” bachelor.
- **Leipzig University** (SS 2023, 30h) - Seminar series in “Introduction to Biodiversity” master.
- **German Center for Integrative Biodiversity research (iDiv) Halle-Jena-Leipzig** (SS 2023, 8h) - Introduction to Structural Equation Modeling

2022

- German Center for Integrative Biodiversity research (iDiv) Halle-Jena-Leipzig (SS 2022, 15h) - Introduction to Statistics in R
- Martin Luther University Halle-Wittenberg (WS 2022, 8h) - Introduction to Structural Equation Modeling in the Introduction to scientific analyses master

2021

- Martin Luther University Halle-Wittenberg (WS 2021, 8h) - Introduction to Structural Equation Modeling in the Introduction to scientific analyses master

Supervision

2025

- Amelie Fournier: M1 internship (4 months) - *ECOSYSTEMES master program, Montpellier University*, “Tree species richness effects on microclimate and decomposition”

2024

- Elisabeth Boenisch: PhD Student - *Leipzig University*, “Tree species richness and mycorrhizal association effects on litterfall dynamics”. Supervision of Elisabeth Boenisch final PhD chapter.
- Eliah Grooss: master thesis (9 months) - *Leipzig University*, “Methods to quantify microclimate modulation in ecological contexts.”
- Anika Walter: bachelor thesis (6 months) - *Martin Luther University Halle-Wittenberg*, “Tree diversity effect on spatial and temporal temperature stability”
- Laura Deloffre: Second year DUT (4 months) - *Technology in Data Sciences IUT Perpignan*, “Application Shiny - Data Exploration: Conception d'une application Shiny permettant de filtrer et de synthétiser les données de la base de données SoilTemp”

2023

- Aurore Moulin: M1 internship (4 months) - *ECOSYSTEMES master program, Montpellier University*, “Tree species richness effects on leaf nutrient resorption”
- Lucas Rey-Torrecillas: Second year DUT (4 months) - *Technology in Data Sciences IUT Perpignan*, “Application utilisateur de validation des données”
- Nolwenn Le-Guyader: ENS internship (3 months) - *ENS Lyon*, “Mise en place d'une expÃ©rience de terrain en Ste Baume”

2021

- Henriette Christel: master thesis (1 year) - *Martin Luther University Halle-Wittenberg*, “Tree species identity and tree-tree interaction effects on soil microbial biomass and basal respiration”

2019

- Georg Haehn: bachelor thesis (6 months) - *Martin Luther University Halle-Wittenberg*, “Litter quality and tree species richness effects on litter decomposition in subtropical forest”

Thesis and defense presentation can be found on <https://remybeugnon.netlify.app/people/>

Science communications

- eBook editor: Beugnon, R., Jochum, M., & Phillips, H. R. P. (2022). SOIL BIODIVERSITY collection. Frontiers Media S. <https://www.frontiersin.org/research-topics/11796/pdf>

- **Interview for Eos:** Sidik, S. M. (2023), Diverse forests store more carbon than monocultures, *Eos*, 104, 10.1029/2023EO230464
- **Article:** Beugnon, R., Zeiss, R., Boenisch, E., Phillips, H. R. P., & Jochum, M. (2024). Communicating soil biodiversity research to kids around the world. *Soil Organisms*, 96(2), Article 2. 10.25674/413.
- **Press release** by the CNRS followed by several interviews of Stephan Hättenschwiler about Beugnon et al. 2024 (GCB). Impact study from the CNRS: 40 press articles in France, Belgium, Switzerland, and Canada, including AFP, Le Point, France Culture, Ouest France, Science et Avenir, 20minutes, RFI.

Awards

2024 Werner und Inge Grüter-Preis für Wissenschaftskommunikation 2025. Awarded for the collection “Soil Biodiversity” in *Frontiers for Young Minds* and its translation in 22 languages (15,000e).

2021 Science Communication Prize (iDiv). Awarded for the collection “Soil Biodiversity” in *Frontiers for Young Minds*, the lab Instagram channel, a lab virtual gallery (500e).

Complete publication list

2025

Beugnon, R., Albert, G., Hähn, G., Yu, W., Haider, S., Hättenschwiler, S., Davrinche, A., Rosenbaum, B., Gauzens, B., & Eisenhauer, N. (2025). Improving forest ecosystem functions by optimizing tree species spatial arrangement. *Nature Communications*, 16(1). <https://doi.org/10.1038/s41467-025-61389-7>

Beugnon, R., Eisenhauer, N., Lochner, A., Blechinger, M. J., Buhr, P. E., Cesarz, S., Farfan, M. A., Ferlian, O., Rompeltien Howard, A. J., Huang, Y., Kuhlmann, B. S., Lienicke, N., Mählmann, S., Nowka, A., Petereit, E., Ristok, C., Schädler, M., Schmid, J. T. M., Schulte, L. J., ... Sünemann, M. (2025). Sustainable Land Use Enhances Soil Microbial Respiration Responses to Experimental Heat Stress. *Global Change Biology*, 31(4), e70214. <https://doi.org/10.1111/gcb.70214>

Schnabel, F., Beugnon, R., Yang, B., Richter, R., Eisenhauer, N., Huang, Y., Liu, X., Wirth, C., Cesarz, S., Fichtner, A., Perles-Garcia, M. D., Hähn, G. J. A., Härdtle, W., Kunz, M., Castro Izaguirre, N. C., Niklaus, P. A., von Oheimb, G., Schmid, B., Trogisch, S., ... Bruelheide, H. (2025). Tree Diversity Increases Forest Temperature Buffering via Enhancing Canopy Density and Structural Diversity. *Ecology Letters*, 28(3), e70096. <https://doi.org/10.1111/ele.70096>

2024

Beugnon, R., Le Guyader, N., Milcu, A., Lenoir, J., Puissant, J., Morin, X., & Hättenschwiler, S. (2024). Microclimate modulation: An overlooked mechanism influencing the impact of plant diversity on ecosystem functioning. *Global Change Biology*, 30(3), e17214. <https://doi.org/10.1111/gcb.17214>

Beugnon, R., Zeiss, R., Bönisch, E., Phillips, H. R. P., & Jochum, M. (2024). Communicating soil biodiversity research to kids around the world. *Soil Organisms*, 96(2), Article 2. <https://doi.org/10.25674/413>

Christel, H., Bruelheide, H., Cesarz, S., Eisenhauer, N., Hähn, G. J. A., & Beugnon, R. (2024). The spatial distribution of tree-tree interaction effects on soil microbial biomass and respiration. *Ecology and Evolution*, 14(6), e11530. <https://doi.org/10.1002/ece3.11530>

De Frenne, P., Beugnon, R., Klinges, D., Lenoir, J., Niittynen, P., Pincebourde, S., Senior, R. A., Aalto, J., Chytrý, K., Gillingham, P. K., Greiser, C., Gril, E., Haesen, S., Kearney, M., Kopecký, M., le Roux, P. C., Luoto, M., Maclean, I., Man, M., ... Van Meerbeek, K. (2024). Ten practical guidelines for microclimate research in terrestrial ecosystems. *Methods in Ecology and Evolution*, n/a(n/a). <https://doi.org/10.1111/2041-210X.14476>

Eisenhauer, N., Frank, K., Weigelt, A., Bartkowski, B., Beugnon, R., Liebal, K., Mahecha, M., Quaas, M., Al-Halbouni, D., Bastos, A., Bohn, F. J., de Brito, M. M., Denzler, J., Feilhauer, H., Fischer, R., Fritzsche,

I., Guimaraes-Steinicke, C., Hänsel, M., Haun, D. B. M., ... Quaas, J. (2024). A belowground perspective on the nexus between biodiversity change, climate change, and human well-being. *Journal of Sustainable Agriculture and Environment*, 3(2), e212108. <https://doi.org/10.1002/sae2.12108>

Guo, L., Chang, P., Deng, M., Yang, S., Yang, L., Peng, Z., Beugnon, R., Saadani, M., Wang, Z., Jia, Z., Wang, B., Liu, C., Cesárz, S., Eisenhauer, N., Brügelheide, H., & Liu, L. (2024). Tree species diversity modulates the effects of fungal pathogens on litter decomposition: Evidences from an incubation experiment. *Plant and Soil*. <https://doi.org/10.1007/s11104-024-06780-x>

Kemppinen, J., Lembrechts, J. J., Van Meerbeek, K., Carnicer, J., Chardon, N. I., Kardol, P., Lenoir, J., Liu, D., Maclean, I., Pergl, J., Saccone, P., Senior, R. A., Shen, T., Ślowińska, S., Vandvik, V., von Oppen, J., Aalto, J., Ayalew, B., Bates, O., ... De Frenne, P. (2024). Microclimate, an important part of ecology and biogeography. *Global Ecology and Biogeography*, n/a(n/a), e13834. <https://doi.org/10.1111/geb.13834>

Singavarapu, B., ul Haq, H., Darnstaedt, F., Nawaz, A., Beugnon, R., Cesárz, S., Eisenhauer, N., Du, J., Xue, K., Wang, Y., Brügelheide, H., & Wubet, T. (2024). Influence of tree mycorrhizal type, tree species identity, and diversity on forest root-associated mycobiomes. *New Phytologist*, 242(4), 1691–1703. <https://doi.org/10.1111/nph.19722>

2023

Beugnon, R., Le Guyader, N., Milcu, A., Lenoir, J., Puissant, J., Morin, X., & Hättenschwiler, S. (2024). Microclimate modulation: An overlooked mechanism influencing the impact of plant diversity on ecosystem functioning. *Global Change Biology*, 30(3), e17214. <https://doi.org/10.1111/gcb.17214>

Beugnon, R., Zeiss, R., Bönisch, E., Phillips, H. R. P., & Jochum, M. (2024). Communicating soil biodiversity research to kids around the world. *Soil Organisms*, 96(2), Article 2. <https://doi.org/10.25674/413>

Christel, H., Brügelheide, H., Cesárz, S., Eisenhauer, N., Hähn, G. J. A., & Beugnon, R. (2024). The spatial distribution of tree-tree interaction effects on soil microbial biomass and respiration. *Ecology and Evolution*, 14(6), e11530. <https://doi.org/10.1002/ece3.11530>

De Frenne, P., Beugnon, R., Klinges, D., Lenoir, J., Niittynen, P., Pincebourde, S., Senior, R. A., Aalto, J., Chytrý, K., Gillingham, P. K., Greiser, C., Gril, E., Haesen, S., Kearney, M., Kopecký, M., le Roux, P. C., Luoto, M., Maclean, I., Man, M., ... Van Meerbeek, K. (2024). Ten practical guidelines for microclimate research in terrestrial ecosystems. *Methods in Ecology and Evolution*, n/a(n/a). <https://doi.org/10.1111/2041-210X.14476>

Eisenhauer, N., Frank, K., Weigelt, A., Bartkowski, B., Beugnon, R., Liebal, K., Mahecha, M., Quaas, M., Al-Halbouni, D., Bastos, A., Bohn, F. J., de Brito, M. M., Denzler, J., Feilhauer, H., Fischer, R., Fritsche, I., Guimaraes-Steinicke, C., Hänsel, M., Haun, D. B. M., ... Quaas, J. (2024). A belowground perspective on the nexus between biodiversity change, climate change, and human well-being. *Journal of Sustainable Agriculture and Environment*, 3(2), e212108. <https://doi.org/10.1002/sae2.12108>

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