



[Klimafarm](#), Germany (Sep 2025, photo by Mahshad Forghanifar).

Dear John Doe,

in our regular BayCEER newsletter, we inform you about a selection of interesting news in the BayCEER community, the University of Bayreuth, the city and region. Please forward this newsletter to others who might be interested ([sign-up link](#)).

You are very welcome to share your own news via our BayCEER newsletter, too. Please contact us at bayceer@uni-bayreuth.de!

Enjoy our newsletter!

Your BayCEER Newsletter Team

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News

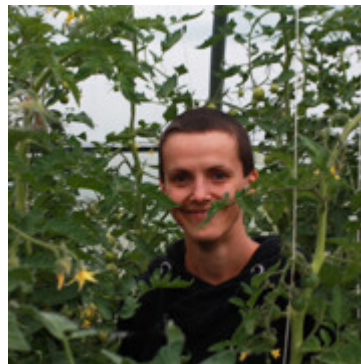
New BayCEER Member

We're excited to welcome two new members to BayCEER and the University of Bayreuth! Wishing you a wonderful start, filled with inspiring research, engaging teaching, and a warm welcome to our campus and the city!

Dr. Ulrike Schwerdtner

Agroecology

Dr. Schwerdtner is a soil biogeochemist and soil ecologist whose research focuses on the mechanisms of plant nutrient acquisition. She investigates plant–plant and plant–soil interactions using advanced imaging techniques and biogeochemical analyses.



Dr. Jos Kramer

Evolutionary Animal Ecology

Dr. Kramer's research explores how social behaviors shape animal–microbe interactions, how environmental change affects these relationships, and how parental care and social life evolve in insects. Using burying beetles as a model, he also studies microbial cooperation and predation and aims to identify general principles of social evolution across species.





Fungal Reintroduction Project Shows First Success

A pioneering species aid programme led by the University of Bayreuth's Fungal Ecology group at BayCEER is now showing promising results: one year after inoculating tree trunks with rare fungal species in the Bavarian Forest National Park, the first fruiting bodies have appeared. The project, funded by the German Federal Environmental Foundation (DBU), aims to reintroduce endangered fungi such as the knotty prickly beard and strengthen declining populations.

This innovative approach, including extensive lab cultivation and field trials, could pave the way for effective fungal conservation strategies in restored habitats. Monitoring will continue in the coming years to track the spread and success of all ten reintroduced species.

[Press Release](#)



BayCEER Researchers Honored with University Foundation Awards

Two BayCEER scientists have been recognized for their outstanding research at this year's UNIKAT summer festival. [Prof. Dr. Johanna Pausch](#), Professor of Agroecology, received the Advanced Researcher Award for her innovative project on root–fungi interactions and their role in global nutrient cycles.

[Dr. Clara Martínez-Pérez](#), Head of the Limnological Research Station in Hydrology, was awarded the Early Career Researcher Award for developing a new method to visualize the formation and breakdown of toxic cyanobacterial blooms.



[Press Release](#)



BayCEER Watering Can Kicks Off “Searching for Traces”

For UBT's 50th anniversary, the “Searching for Traces” series begins with the BayCEER watering can. First used in 2004 to inaugurate BayCEER, it has become a symbol of growth, collaboration, and environmental research. Today, BayCEER unites 30 groups and nearly 100 scientists tackling climate change and biodiversity loss, while the watering can still stands as a living reminder of this mission.

[Press Release](#)

Research

Root Traits Reveal How Plants Adapt to Stress

A new study involving the Ecological-Botanical Garden (ÖBG) at BayCEER shows that roots and shoots respond differently to drought and nutrient stress. In a greenhouse experiment, two common herb species adjusted their growth strategies: under nutrient-poor conditions, they invested more in root growth, while drought caused a reduction in root biomass. The findings highlight the importance of studying both root and shoot traits together and underline the role of root strategies for climate-smart land management and resilient ecosystems.



DOI: <https://doi.org/10.1007/s11104-025-07560-x>

[More Information](#)



Cup Plant: A Greener Alternative to Maize for Bioenergy

A new study by researchers from BayCEER, Agroecology group, and the Ecological-Botanical Garden (ÖBG) shows that the cup plant (*Silphium perfoliatum*) is a more sustainable bioenergy crop than traditional silage maize. Over four years, the cup plant produced more biomass from the second year onward, absorbed nitrogen more efficiently, and reduced nitrate leaching by up to 99%. Even under drought conditions, it remained highly productive thanks to its deep root system, which also improves soil quality. The findings highlight the cup plant's strong potential to support climate-friendly agriculture and energy production.

DOI: <https://doi.org/10.1111/gcbb.70074>

[More Information](#)

Exotic Pines vs. Native Forests: Study Challenges Old Assumptions

A new study led by the University of Göttingen with the Ecological-Botanical Garden (ÖBG) at BayCEER shows that native Patagonian forests are just as productive as exotic pine plantations, while being more resilient to drought and heat. Using tree rings and isotope analyses, the team found that exotic pines grow fast but lose more water, making them more vulnerable under climate change. The findings highlight the ecological value of native species and call for limiting pine expansion in favor of sustainable, climate-resilient forest management.

DOI: <https://doi.org/10.1016/j.foreco.2025.122966>



[More Information](#)

Retrospective



BaySISS 2025: Exploring the World of Stable Isotopes

From 21–26 September 2025, around 35 PhD and Master's students joined the Bayreuth Stable Isotope Summer School (BaySISS) for an intensive week of lectures, hands-on lab work, and field training. The program introduced key methods and applications of stable isotopes in ecology and biology, offering valuable skills and collaboration opportunities for future research.

[More Information](#)

Mouse Door Opener Day 2025 – Discover Science Together

On October 3, 2025, the University of Bayreuth opened its doors to children and families for a day full of science, experiments, and discovery. As part of the university's 50th anniversary, visitors explored interactive stations and hands-on activities.

From BayCEER, the Ecological-Botanical Garden (ÖBG), the CRC Microplastics team, and the Sports Ecology group offered exciting insights into their research, from prehistoric plants to environmental science, inspiring curiosity in visitors of all ages.

[More Information](#)

Save the dates

20. Oct 2025: Ceremony "50 years of the University of Bayreuth" in the Margravian Opera House

28. Oct 2025: CoworkingDays - Semester-Opening mit Kicker-Turnier

05. Nov 2025: Bayreuther Stadtgespräche - Prof. Heike Feldhaar, Populationsökologie

26. Nov 2025: Reference Management with Zotero – an introduction

02. Dec 2025: Stephan Heinrich - Klimaaktionsportal für Bayreuth

02. Sep 2025- 04. March 2026: Search Smarter, Not Harder – Learning to Research Successfully



17th BayCEER Workshop 2025

The annual internal BayCEER Workshop, where researchers and students in ecology and environmental sciences come together to share ideas, present research, and network across disciplines.

Whether you're a professor, postdoc, or student, this is a great chance to showcase your work and connect with the BayCEER community. Students can also compete for the Best Talk and Best Poster Awards!

Participant
registration



Climate Protection Today – Facts, Progress and Questions.

Ten years after the adoption of the Paris Climate Agreement, the University of Bayreuth, the Alliance for Climate and Species Protection Bayreuth, and their partners invite you to a public Science and Action Day.

Under the motto “Climate Protection Today – Facts, Progress and Questions,” visitors can expect a diverse program featuring exciting research, interactive exhibits, and opportunities for public dialogue, suitable for all ages.

Families can enjoy a child-friendly program with games and Peter Hofmann’s children’s circus.

Refreshments will also be provided.

Join us to discuss the future of climate action, 10 years after the Paris Agreement!

Saturday, 11 October 2025, 11:00 –17:00

Bayreuth, Stadtparkett (Maxstraße)

Forum Forest Controversies 2025

The 7th Forest Controversies Forum invites forest owners, experts, and students to discuss a key question: “How much state does the forest need?” – exploring funding, regulation, and ownership in forestry. Participants will debate current subsidy strategies, new approaches for private forests, and society’s expectations of the forest.

21–22 November 2025, Conference Centre SWO,
University of Bayreuth

More Information





BayCEER Colloquium

The BayCEER Colloquium is back for the winter semester, bringing together researchers, students, and guests to explore the latest developments in ecology, environmental science, and sustainability.

We are currently finalizing the programme, and there are still open slots available for talks!

Whether you'd like to present your own research or invite a colleague, this is a great opportunity to share your work with an engaged scientific community.

We look forward to an exciting semester of scientific exchange – and hope to see many of you on stage or in the audience!

Every Thursday, 12:00–13:30

Room H6, GEO Building

CRC 1357 Microplastic

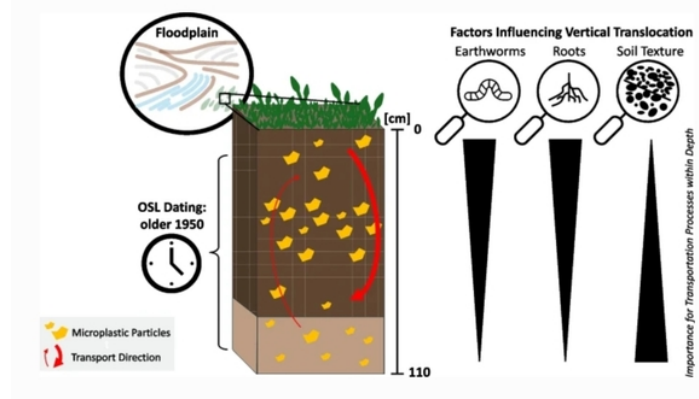


Towards Zero Plastic Pollution

A new study from the Microplastics team stresses the need for collaboration between science, industry, policymakers, and society to tackle plastic pollution. Findings from the P-LEACH project show that UV-weathered plastics release harmful chemicals and micro-/nanoplastics into water. The researchers call for simpler chemical compositions, recyclability-focused design, and better communication to advance a circular plastics economy and protect both the environment and human health.

[More Information](#)





Old Soils, New Pollutants: Microplastics Penetrate Layers Decades Before Their Existence

Researchers from the Microplastic team reveal how microplastics can migrate deep into floodplain soils, even into layers formed before the 1950s. Analyzing a 110 cm soil profile from the Rhine floodplain, researchers found MPs at all depths, mostly tiny particles (10–150 µm) transported through root and earthworm channels. The findings show that biological activity and soil structure strongly influence MP movement and warn against using small plastics as reliable markers for the Anthropocene.

[More Information](#)

Upcoming Seminars

25 October 2025

[Prof. Dr. Annika Jahnke](#), UFZ Helmholtz-Centre for Environmental Research

Talk: [Impacts on ecosystem functions and human health by environmental plastics and associated chemicals](#)

12:15, AI, H33 and Zoom

Stay tuned and join the discussion on current microplastics research!



[More Information](#)

CRC Microplastics at MICROM 2025

MICROM 2025 will bring together experts, researchers, and policymakers to explore the latest advances in microplastics research, especially in organic-rich environments like soil, compost, and sediments. The conference is a hub for knowledge exchange, innovative solutions, and collaborative strategies to tackle plastic pollution.

Key Dates:

Early registration: 20 April 2025

Abstract submission: until 15 September 2025

Notification: 30 September 2025

Conference: 26 November 2025, Novi Sad, Serbia

[More Information](#)

Ecological Botanical Garden



Majestic tropical night in the Ecological Botanical Garden

A magical summer evening unfolded at the Ecological-Botanical Garden (ÖBG) with the literary-musical reading "...the quiet majesty of those tropical nights." Around 200 visitors enjoyed captivating recitations by Wolfram Ster and classical guitar music by Constantin Strobel in a truly tropical atmosphere.

The event, organized in cooperation with the Alexander von Humboldt Cultural Forum, featured readings from Humboldt's travel writings, insights into his explorations, and guided tours highlighting South American plants he helped introduce to Europe. The evening concluded with conversations, drinks, and a shared appreciation for nature, science, and culture.

[More Information](#)



Bayreuth Mushroom Days - 11th & 12th October!

Discover the fascinating world of fungi at the 2nd Bayreuth Mushroom Days!

Enjoy a family-friendly weekend with exhibitions, workshops, lectures, guided tours, and a children's program. You can also bring your own mushrooms to be checked by experts.

Participation is free, but registration via VHS Bayreuth is required for tours, workshops, and basket checks.

Participant
registration

Other

Photo Credits

Most images in this newsletter are from the University of Bayreuth and BayCEER members, with a few taken by the editor. We appreciate all contributors for their support.

We are looking forward to your compliments, criticism - and above all your content for the BayCEER Newsletter! Please feel free to contact us if we may also present content from your area in the newsletter: bayceer@uni-bayreuth.de.

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