

## Program

Time	H 36, NW III
08:15	<b>Registration Start (Foyer NW III)</b>
09:00	<p><b>Workshop Opening &amp; Welcome Message</b></p> <p>Prof. Dr. Heike Feldhaar, BayCEER Director Prof. Dr. Stefan Leible, President of the University of Bayreuth</p>
09:15	<p><b>"Which versus how many - Some thoughts about the future of plant-centered functional biodiversity research"</b> <b>Keynote Speaker: Prof. Christian Wirth, Systematic Botany and Functional Biodiversity, University of Leipzig</b></p>
10:00	<b>Poster presentation in "Lightning Talks"</b>
10:30	<b><a href="#">Morning Poster Coffee</a> (Foyer NW III)</b>
11:15	<p><b>"Plant and soil responses to drought: Interdisciplinary approaches and views"</b> <b>Chair: <i>Andrea Carminati and Steven Higgins</i></b></p> <p><a href="#">O 1.1</a>: <b>Frank Weiser et al.</b>: Using Sentinel 2 to analyze the spatial distribution of damage after the 2018 summer drought</p>
11:30	<a href="#">O 1.2</a> : <b>Susanne Kurze et al.</b> : Annuals do not only escape, but also withstand drought: Insights on the mechanisms underlying differential drought resistance in winter annual species
11:45	<a href="#">O 1.3</a> : <b>Max Schuchardt et al.</b> : Phenological responses in a changing climate
12:00	<a href="#">O 1.4</a> : <b>Alexander Guhr et al.</b> : Drought stress memory in filamentous soil fungi
12:15	<a href="#">O 1.5</a> : <b>Tina Koehler et al.</b> : The effect of maize root hairs on transpiration and leaf water potential during soil and atmospheric drying
12:30	<a href="#">O 1.6</a> : <b>Carola Kiene et al.</b> : Does higher nutrient availability reduce drought resistance in grassland species? - Insights from a global change experiment
12:45	<b>Lunch (S 136)</b>
13:15	<b><a href="#">Afternoon Poster Coffee</a> (Foyer NW III)</b>
14:30	<p><b>"Stable isotopes in environmental research - bridging disciplines, organisms and processes"</b> <b>Chair: <i>Tillmann Lüders, Eva Lehdorff and Gerhard Gebauer</i></b></p> <p><a href="#">O 2.1</a>: <b>Stefan Bindereif et al.</b>: How climate change can help fighting fraudulent declaration of cereal grains</p>
14:45	<a href="#">O 2.2</a> : <b>Nele Meyer et al.</b> : Long-term stabilization of labile carbon in soil microbial biomass and its residues – A question of microbial nitrogen demand?
15:00	<a href="#">O 2.3</a> : <b>Yue Sun et al.</b> : Changes in carbon and nitrogen availability cause contrasting microbial mechanisms of soil organic matter priming in a temperate forest
15:15	<a href="#">O 2.4</a> : <b>Tillmann Lüders et al.</b> : Tracing functions within groundwater microbiomes by means of stable isotope probing
15:30	<a href="#">O 2.5</a> : <b>Mohsen Zarebanadkouki et al.</b> : Root water uptake and its pathways across the root: quantification at the cellular scale
15:45	<p><b>Special Talk &amp; Award Session</b> <b>Prof. Dr. Stefan Peiffer - Quo Vadis BayCEER?!</b></p>
16:30	<b>Anniversary Come together (Foyer NW III)</b>

**Posters**

**1 Plant and soil responses to drought: Interdisciplinary approaches and views**

- [P 1.1](#) **Peter Wilfahrt, Anke Jentsch**  
Examining the mechanisms underlying mountain plant community responses to increased temperature: a translocation experiment
- [P 1.2](#) **Andrea Carminati, Mathieu Javaux**  
Soil rather than xylem vulnerability controls stomatal response to drought
- [P 1.3](#) **Mirela Beloiu, Reinhold Stahlmann, Frank Weiser, Carl Beierkuhnlein**  
Drought impact on deciduous forests in Europe

**2 Stable isotopes in environmental research - bridging disciplines, organisms and processes**

- [P 2.1](#) **Sebastian Steibl, Gerrhard Gebauer, Christian Laforsch**  
Small tropical island ecosystems support two independent food webs
- [P 2.2](#) **Julienne Schweiger, Henriette Schmidt, Gregor Aas, Gerhard Gebauer, Bernhard Götz, Holger Hartmann, Claudia Lenz, Candy Pflugmacher, Markus Schmidt, Harald Schill**  
Carbon isotopes elucidate drought stress in rare native tree species in NE-Germany
- [P 2.3](#) **Manuel Vergara Sosa, Eva Lehndorff, Andrei Rodionov, Martina Gocke**  
Micro-scale mapping techniques for carbon detection and quantification in soil rhizosphere
- [P 2.4](#) **Lukas Seifert, Philipp Giesemann, Gerhard Gebauer**  
Do the elusive 'dark septate fungal root endophytes' have an influence on the 15N stable isotope abundance of Caryophyllaceae?
- [P 2.5](#) **Philipp Giesemann, Gerhard Gebauer**  
Does reduced light availability unveil an additional carbon source for plants?
- [P 2.6](#) **Judith Kehl, Vincent S. F. T. Merckx Merckx, Sofia I. F. Gomes, Gerhard Gebauer**  
Multi-element stable isotope natural abundance in 13 arbuscular mycorrhizal mycoheterotrophic plant species of different taxonomic groups and wide geographic origin
- [P 2.7](#) **Julian Brehm, Yung-I Lee, Yumi Yamashita, Gerhard Gebauer**  
Searching for mycoheterotrophy among leafy and leafless Neottia species from Japan and Taiwan: A multi-element stable isotope approach

**3 Open Poster Session**

- [P 3.1](#) **David Kienle, Severin D.H. Irl, Dagmar M. Hanz, Manuel J. Steinbauer, Carl Beierkuhnlein**  
Paradise lost? Precipitation changes in oceanic island ecosystems
- [P 3.2](#) **Bernd Berauer, Björn Reu, Anna Kühnel, Peter Wilfahrt, Max Schuchardt, Andreas Heßberg, Anke Jentsch**  
How to adapt land-use regimes of montane grasslands with ongoing climate change?
- [P 3.3](#) **Davi Jamelli, Marcelo Tabarelli**  
The influence of socio-ecological variables on Caatinga vegetation cover and provision of ecosystem services
- [P 3.4](#) **Thomas Schmitt, Andrea Kaim, Andrea Früh-Müller, Thomas Koellner**  
The multiple values of (sub-) alpine grassland ecosystem services: a 'valuescape' to investigate land-use decisions
- [P 3.5](#) **Claudia Steinacker, Carl Beierkuhnlein, Anja Jaeschke**  
Assessing future climatic suitability of Bavarian Natura 2000 sites for the conservation of EU forest habitat types
- [P 3.6](#) **L. Marie Ende, Marianne Lauerer**  
Future biogas deliverer or risky invader? – Spontaneous colonisation of Silphium perfoliatum in the Bayreuth region
- [P 3.7](#) **Cynthia Minnich, Derek Persoh, Christian Poll, Werner Borken**  
Impact of deadwood on chemical and microbial soil parameters: A multifactorial experiment with logs of 13 tree species in 30 forests
- [P 3.8](#) **Andrea Spirkaneder, Luisa Hopp, Stefan Peiffer**  
Characterization of the nitrate pollution of groundwater across Bavaria – spatial patterns, temporal development and nitrate removal capacity
- [P 3.9](#) **Felix Beulig, Hans Røy, Sean McGlynn, Bo Barker Jørgensen**  
Cryptic CH<sub>4</sub> cycling in the sulfate-methane transition of marine sediments
- [P 3.10](#) **Robin Kaule, Benjamin Gilfedder**  
Rust as a proxy for oxygen concentrations and distribution in the hyporheic zone
- [P 3.11](#) **Anna Walentowitz, Severin D.H. Irl, Aurelio Jesús Acevedo Rodríguez, Ángel Palomares-Martínez, Vanessa Vetter, Barbara Zennaro, Félix M. Medina, Carl Beierkuhnlein**  
Impacts of the invasive grass species Pennisetum setaceum on plant diversity patterns on La Palma (Canary Islands)
- [P 3.13](#) **Lisa Hennig, Sven Frei**  
Prognosis and analysis of dissolved organic carbon export in the context of local climate change
- [P 3.14](#) **Katharina Blaurock, Luisa Hopp, Ben Gilfedder, Jan Fleckenstein, Stefan Peiffer**  
DOC quality parameters suggest source changes during precipitation events in a small forested catchment in the Bavarian Forest National Park
- [P 3.15](#) **Jiajia Wang, Carolin Kerl, Shuai Zhang, Maria Martin, Daniel Said-Pullicino, Marco Romani, Britta Planer-Friedrich\***  
Can Sulfate Help Safe Rice Production?
- [P 3.16](#) **Khishigdelger Enkhtur, Boldgiv Bazartseren, Martin Pfeiffer**  
Contribution to the knowledge on the pattern of species richness and distribution of Mongolian geometrid moths
- [P 3.17](#) **Jan-Christopher Fischer, Martin Baur, Carl Beierkuhnlein**  
Global terrestrial biome classifications – overview, comparison and perspectives