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# BonaRes & Rhizo4Bio Status Seminar

Virtual, 14<sup>th</sup> – 15<sup>th</sup> March 2022





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Dear members of the BonaRes-/Rhizo4Bio-funding initiatives,

we welcome you to the BonaRes-/Rhizo4Bio Status Seminar which will again be held online. To participate please enter via Zoom:

https://us06web.zoom.us/j/82235156167?pwd=dG5pSGM1ekhZY0hrQ1k2eVNWMVkyUT09 Meeting-ID: 822 3515 6167 Code: 457658

We are looking forward to having an inspiring and productive meeting!

Kind regards, the BonaRes Status Seminar Organization Team

### MONDAY, 14<sup>th</sup> March 2022

#### Morning Program

12:30 - 12:40	Welcome Session & Introduction With Opening Remarks Klaus-Peter Michel (BMBF), Hans-Jörg Vogel (BonaRes Centre)
12:40 - 13:10	<b>The EU Mission 'A Soil Deal for Europe' and its funding opportunities</b> Rolf Stratmann (NCP Bioeconomy and Environment)
13:10 - 14:30	Highlight Presentations BonaRes Projects 1-4 Chair: Ralf Kiese (KIT IMK-IFU)
13:10 - 13:30	BonaRes Centre: "The BonaRes Repository for research data and LTE - tools, data publication & reusability" Marcus Schmidt (ZALF), Cenk Dönmez (ZALF), Hans-Jörg Vogel (UFZ)
13:30 – 13:50	inplamint: "Effect of soil organic carbon on microbial dynamics, plant performance and nutrient losses" Jessica Clayton (University of Cologne), Steffen Rothardt (University of Kiel), Rüdiger Reichel (Forschungszentrum Jülich), Nicolas Brüggemann (Forschungszentrum Jülich)
13:50 – 14:10	Catchy: "Catch crops improve soil structure and agro-ecological benefits" Jonas Schön (HS Weihenstefan-Triesdorf), Robin Kümmerer (HS Weihenstefan- Triesdorf), Diana Heuermann (IPK Gatersleben), Barbara Reinhold-Hurek (University of Bremen)
14:10 - 14:30	InnoSoilPhos: "Bone char effects in soil: from processes at the molecular scale to yield respones of arable crops" Stefanie Niedermaier (TU München), Peter Leinweber (Universität Rostock)
14:30 - 15:00	Coffee break





## 15:00 – 16:20Highlight Presentations BonaRes Projects 5-8Chair: Andrea Schnepf (FZ Jülich)

- 15:00 15:20 DiControl: "Effect of farming practice and application of beneficials on plantmicrobe interactions at field scale" Doreen Babin (JKI), Jan Helge Behr (IGZ)
- 15:20 15:40Signal: "The effects of tree age on agroforestry systems"Raphael Manu (Universität Göttingen), Lukas Beule (Julius Kühn-Institut)
- 15:40 16:00 SOILAssist: "Infield route planning, traffic intensity analysis and knowledge transfer for sustainable agricultural soil management" *Katja Augustin (Universität Kiel), Santiago Focke-Martinez (Deutsches Forschungszentrum für Künstliche Intelligenz (DFKI)), Karen Prilop (Thünen Institut), Marco Lorenz (Thünen Institut)*
- 16:00 16:20 ORDIAmur: "New insights into the plant-soil biome interactions involved in apple replant disease"
  Xorla Kanfra (Julius Kühn Institute), Belnaser Busnena (TU Braunschweig), Traud Winkelmann (Leibniz Universität Hannover)
- 16:20 16:40 Coffee break
- **16:40 17:40** Highlight Presentations BonaRes Projects 9-11 Chair: Norman Gentsch (Leibniz Universität Hannover)
- 16:40 17:00 Soil<sup>3</sup>: "Subsoil Management in Germany From local observations to national recommendations"
  Florian Schneider (Thünen Institute), Sabine Seidel (University of Bonn), Amit Srivastava (University of Bonn), Wulf Amelung (University of Bonn)
- 17:00 17:20 I4S: "I4S-Phase 3: Final integration of sensors, models and decision support system" Pablo Rosso (ZALF), Thomas Chudy (Uni Halle) und Sebastian Vogel (ATB)
- 17:20 17:40 Susalps: "Grassland soil functions from microbial to landscape scale" Diana Andrade-Linares (HGMU), Sophie Reinermann (University of Würzburg), Carolin Boos (KIT IMK-IFU)



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#### TUESDAY, 15<sup>th</sup> March 2022

- 08:30 09:30 Highlight Presentations Rhizo4Bio Projects 1-3 Chair: Doris Vetterlein (UFZ)
- 08:30 08:50 RhizoWheat: "Rhizosphere processes and yield decline in wheat crop rotations" Jessica Arnhold (IfZ Göttingen), Markus Schemmel (University of Kiel), Henning Kage (University of Kiel)
- 08:50 09:10 rhizotraits: "Rhizosphere traits expression of maize varieties with contrasting drought responses" Tina Köhler (Universität Bayreuth), Shu-Yin Tung (Bayerische Landesanstalt für Landwirtschaft)
- 09:10 09:30 CROP: "Combining root contrasted phenotypes for more resilient agro-ecosystems" Ahmet Sircan (University of Hohenheim), Adrian Lattacher (University of Hohenheim), Guillaume Lobet (Forschungszentrum Jülich)
- 09:30 10:00 Coffee break
- 10:00 11:00Highlight Presentations Rhizo4Bio Projects 4-6Chair: Holger Pagel (University of Hohenheim)
- 10:00 10:20RootWayS: "Root system and rhizosphere strategies to access top- and subsoil<br/>resources"<br/>Katja Holzhauser (Christian Albrechts University Kiel), Tobias Stürzebecher<br/>(University of Göttingen), Sandra Spielvogel (Christian Albrechts University Kiel)
- 10:20 10:40 µPlastic: "Effects of microplastics on wheat in agricultural soils, and microplastic degradation"
  Katharina Neubert (FZ Jülich), Matthias C. Rillig (FU Berlin)
- 10:40 11:00 bread and beer: "Production of wheat and barley under reduced input in organic farming"
  Santiago Quiroga (University of Giessen), Stefan Ratering (University of Giessen), Azin Rekowsky (University of Hohenheim), Christian Zörb (University of Hohenheim), Sylvia Schnell (University of Giessen)
- 11:00 11:30 Coffee break
- 11:30 12:30 Panel Discussion on Future Research Questions
- 12:30 12:45 Closing Remarks & Farewell
- 14:00 17:00 Data Publication Workshop



#### **Instructions for Authors**

Each collaborative project (i.e. InnoSoilPhos, ORDIAmur, Bread and Beer, ...) is asked to give a 15 + 5 minutes (for discussions) highlight presentation on new developments since our last Status Seminar. During the first 10 minutes, two to three postdocs or PhD students will present recent results and connections between their work (packages). During the remaining 5 minutes, the project's coordinator will put the presented results in the overall picture of the project and identify opportunities for collaboration with other projects as well as ideas for future research questions. During the presentations, all participants of the Status Seminar are invited to ask questions or make comments via a padlet or the chat function. The most relevant ones will be taken up during the plenary discussion on the second day of the Status Seminar.

#### Survey on Data Publication

A survey for the scientific community on the BonaRes Repository and your data needs will be conducted with the Status Seminar. Please take a few minutes and participate here: <u>https://survey.bonares.de/index.php/633794?lang=en</u>. Thank you!

#### **Thematic Workshops**

In addition to the Status Seminar, we are again planning various thematic workshops. However, in order to not make the virtual event too long, we will offer these later on as extra events such as webinars or workshops to interested user groups. An exception is the well-established data workshop which will be directly related to the Status Seminar:

#### Workshop "Data publication with the BonaRes Repository"

Organizers: M. Schmidt, N. Svoboda, C. Hoffmann, X. Specka

This workshop is for scientists planning to publish their research data and therefore make it available to anyone who would like to reuse and credit it. The BonaRes Repository offers the necessary infrastructure for this purpose (<u>https://datenzentrum.bonares.de/research-data.php</u>) and is your partner for any questions and needs related to data management and data publication. We will talk about what we offer: DOI and online presentation of your datasets, data collections and soil profiles as well as our current and future tools. Discuss your experiences with us so we can continuously improve our services!

#### Registration

Please register for the Status Seminar via the <u>Status Seminar website</u> <u>https://www.ufz.de/index.php?en=49065</u>.

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