

The BonaRes DOI

Towards publishing soil and agricultural research data

N. Svoboda, X. Specka, C. Hoffmann, U. Heinrich

Research Platform ‚Data‘ | ZALF

ESSI 3.6.

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BONARES
Centre for Soil Research



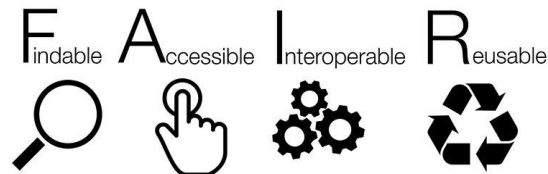
Structure

- Highlight (p3 – p7)
 - **The BonaRes DOI**
- General information (p9 – p15)
 - BonaRes
 - BonaRes Data Centre
 - Useful links



The BonaRes data publishing principles

- Research results must be **reproducible**.
- The **rights of authors** must be respected.
- Research data should be made available for **free reuse**;
especially those generated with the support of public funds, (Berlin Declaration, 2003).
- Data can be reused in a **user-friendly** way.





Strategy of data publication



Attributes (values) should be combined to **meaningful tables**

The total amount of tables to be published is reduced



The intended **level of aggregation** should match the potential reuse.

All attributes necessary for reuse should be included or available via relations to other tables.



Data/Metadata publication

- High benefit with minimal use of resources.
- **Save time and nerves**



Data reuse

- Minimize the amount of in-paper citations
- **Save time and nerves**

Citation suggestion



Final data

no changes necessary so far



Update

Minor supplements (anually yield, more LTFE)

DOI stays the same



New version

Major changes (recalculation, new structure)

New DOI



Grosse, M., & Hierold, W. (2019). Long-term Field Experiments in Germany (Version 1.0). BonaRes Data Centre (Leibniz Centre for Agricultural Landscape Research (ZALF)). <https://doi.org/10.20387/BONARES-3TR6-MG8R>



Grosse, M., & Hierold, W. (2019). *Long-term Field Experiments in Germany* (Version 1.1, **Updated 23.1.2020**). BonaRes Data Centre (Leibniz Centre for Agricultural Landscape Research (ZALF)). <https://doi.org/10.20387/BONARES-3TR6-MG8R>

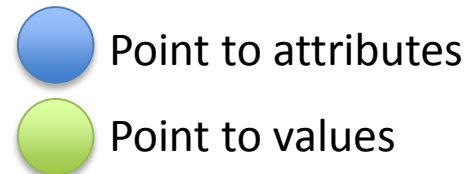


Grosse, M., & Hierold, W. (2019). *Long-term Field Experiments in Germany* (**Version 2.0**). BonaRes Data Centre (Leibniz Centre for Agricultural Landscape Research (ZALF)). <https://doi.org/10.20387/BONARES-NEW-DOI>

The BonaRes DOI citation suggestion

Subset

- Reuse only small part of a highly aggregated table
- Like a page number to be specified



	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE				
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198012052	1980	Sommerg	12052	12	7.05	44	84.35	57.6228	49.5556	5	83	41.6667	34.5833				
198012071	1980	Sommerg	12071	12	6.71	44	78.79	51.2288	44.0567	6	69	50	34.5				
198012096	1980	Sommerg	12096	12	6.995	44	75.83	51.3983	44.2026	5.8	69	48.3333	33.35				
198012119	1980	Sommerg	12119	12	6.405	44	80.62	50.036	43.0309	5.5	83	45.8333	38.0417				
198012130	1980	Sommerg	12130	12	6.605	44	86.65	55.4577	47.6936	5.2	83	43.3333	35.9667				
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198112134	1981	Zuckerrue	12134	11.26	42.4	0	22.12	342.706	83.2938	27.9	17.59	247.7798	43.58446				
198112154	1981	Zuckerrue	12154	11.26	38.6	33	23.03	319.4896	78.9483	21.5	17.44	190.9414	33.30018				
198112021	1981	Zuckerrue	12021	11.26	36.9	41	22.58	298.207	73.9966	36.8	15.99	326.8206	52.25861				
198112041	1981	Zuckerrue	12041	11.26	52.6	13	23.26	419.4558	108.6568	47.7	15.76	423.6234	66.76305				
198112061	1981	Zuckerrue	12061	11.26	50	35	24.37	408.924	108.2149	42.2	15.04	374.778	56.36661				

- Techen, A.-K. (2018). *BonaRes foresight interviews 2017 - qualitative answers* (Version 1.0), **row 10-15**. Leibniz Centre for Agricultural Landscape Research (ZALF). <https://doi.org/10.20387/BONARES-3WWY-EVT4>
- Barkusky, D. (2018). *Long-term field experiment V140 Muencheberg from 1963 to 2009 - Plots* (Version 1.0), Table: yield, **Year 1963 - 1980**. BonaRes Data Centre. <https://doi.org/10.20387/BONARES-BSVY-R418>

General informations

Boden als nachhaltige Ressource für die Bioökonomie Soil as a sustainable resource for the bioeconomy

BonaRes

Working with soils in agriculture [...] demands a great deal of patience: soils are created in long-term processes and cannot be quickly renewed or replaced. Under these conditions, it is hardly surprising that science repeatedly confronts the issue of how the serviceability of agrarian soils can be maintained and enhanced over the long run.

www.bmbf.de/upload_filestore/pub/Biooekonomie_in_Deutschland_Eng.pdf

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Soil as a sustainable resource for the bioeconomy

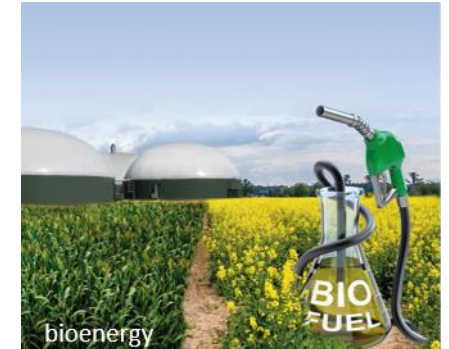
Why BonaRes?

Soils are at the very beginning of many bio-economic value chains

Need to permanently safeguard or if possible increase productivity and yields of soil as a natural resource by

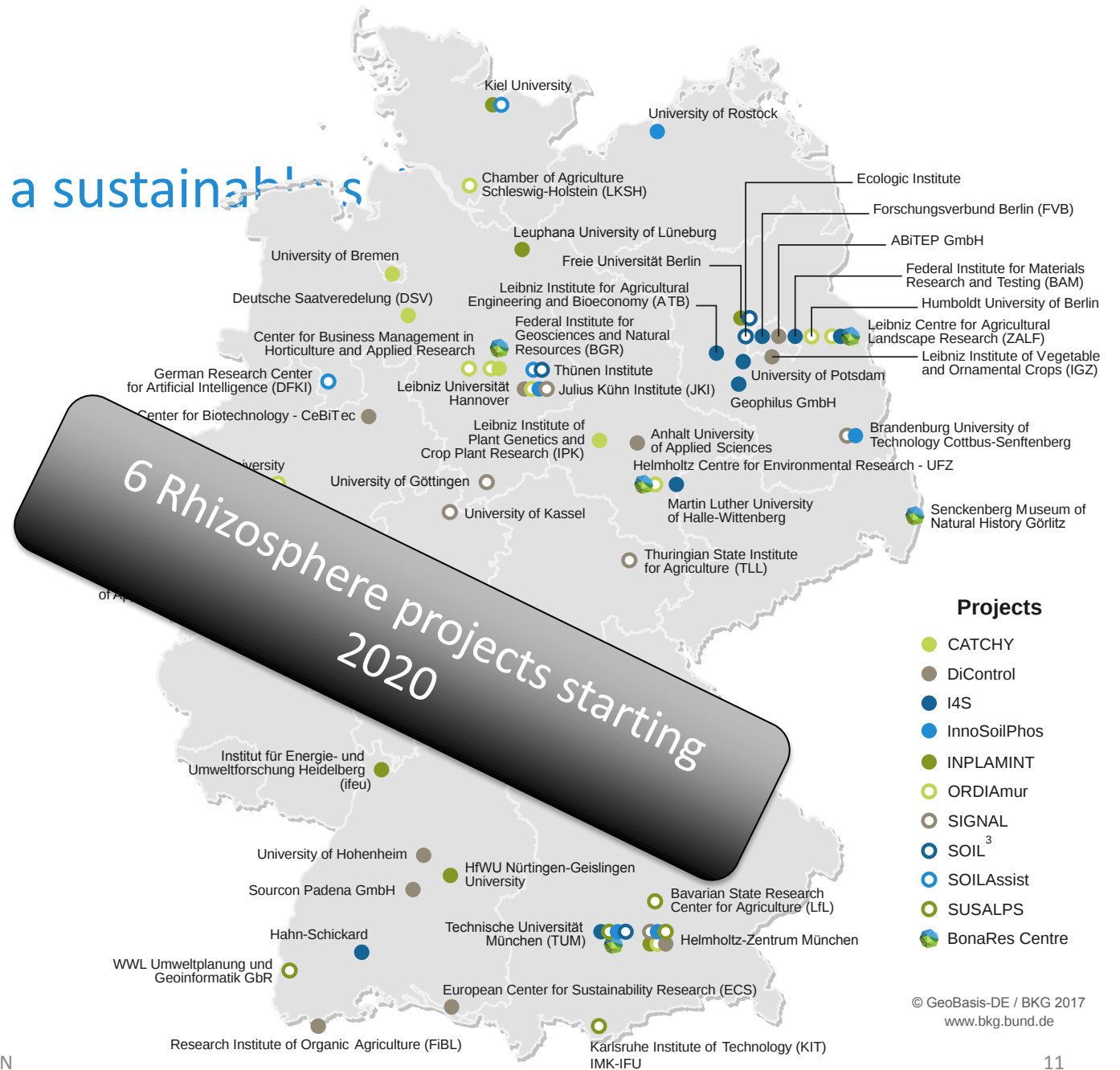
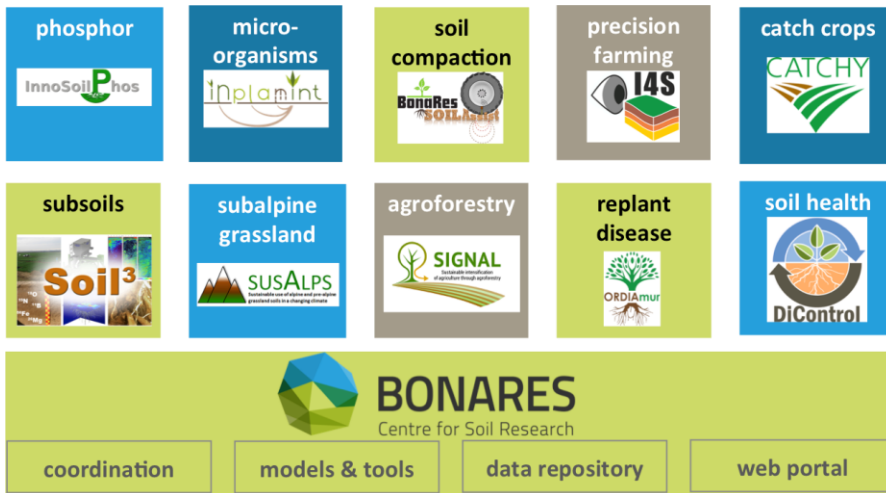
- optimizing soil functions
- efficient management of water and nutrient utilization
- optimizing farming strategies and soil use management

Increasing demand for biomass



BonaRes: Providing scientific grounds for a sustainable future

Start: 2015
Duration: 9 years – perpetuation
10 Collaborative Projects & BonaRes Centre
>50 institutions



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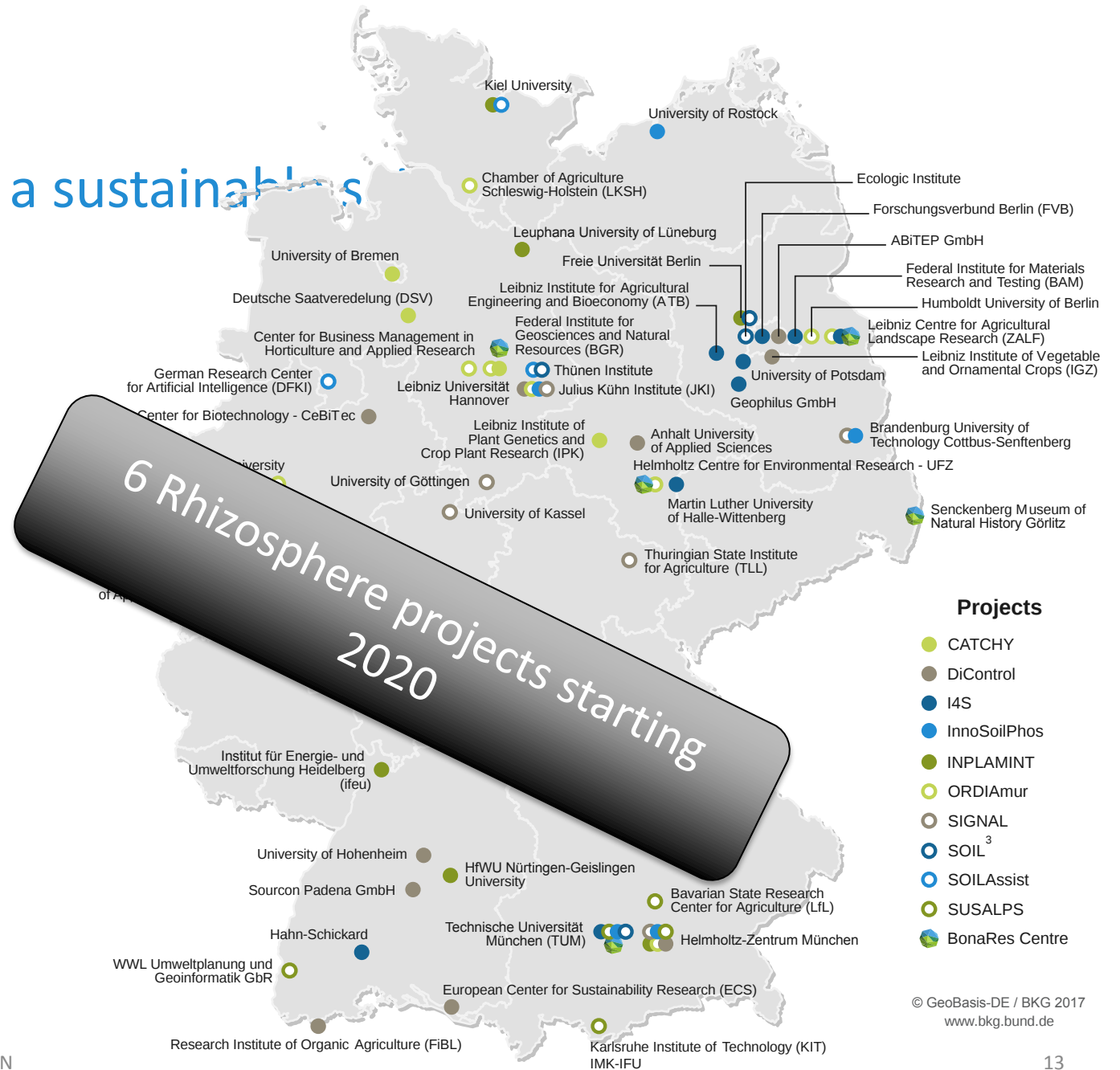
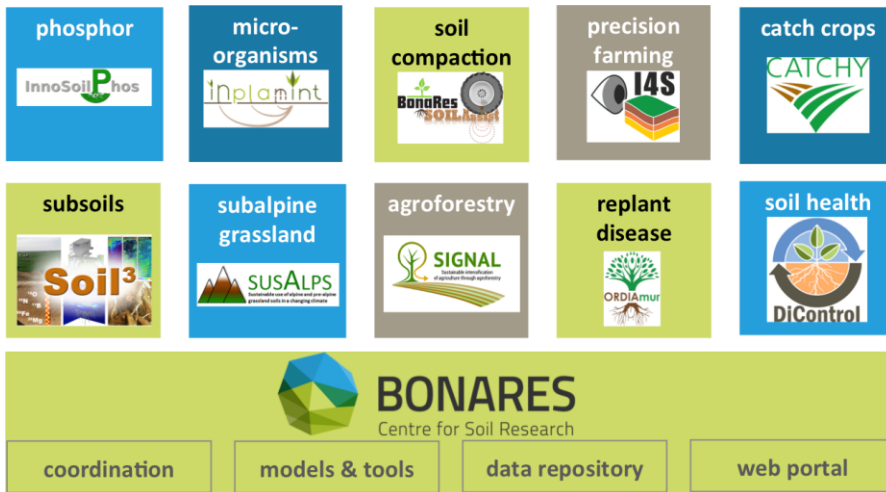
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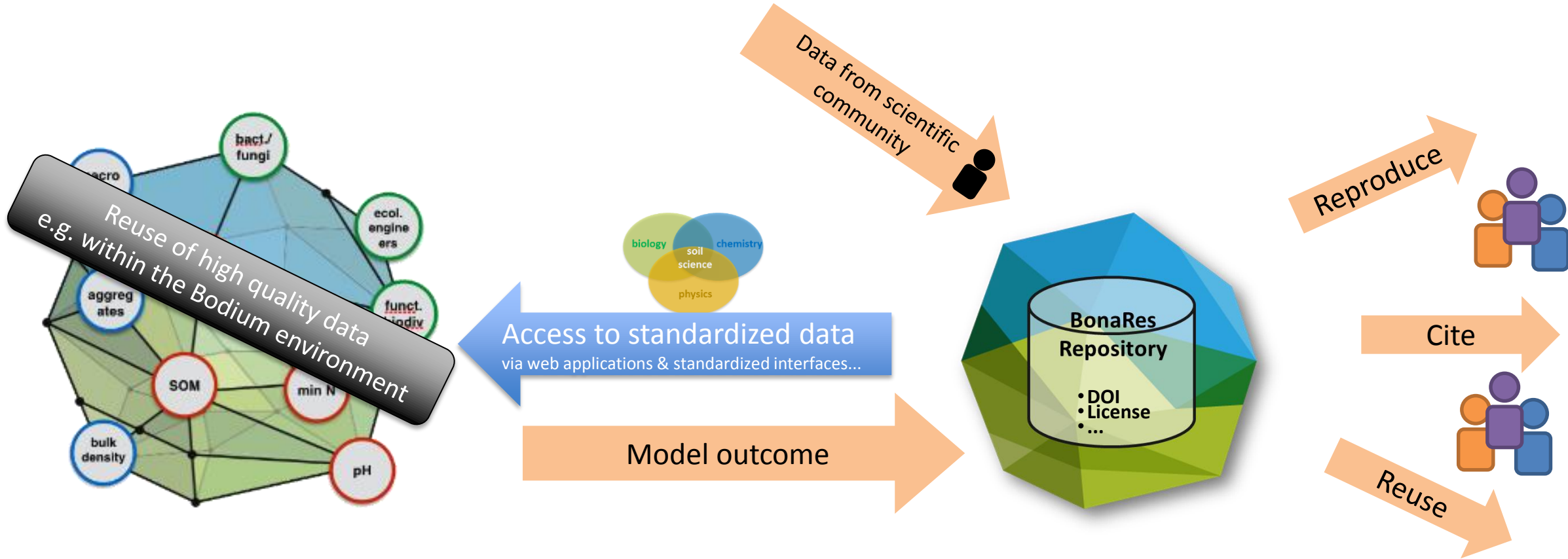


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BonaRes Repository



The **BonaRes Repository** provides access to **FAIR** soil & soil related data from:

- Scientific community
- Publicly available sources
- External databases
- Research projects
- Soil profile DB
- ...

Useful links

General information

BonaRes: <https://www.bonares.de/>

BonaRes Data Centre: <https://datenzentrum.bonares.de/>

Find and reuse data

BonaRes Repository

<https://maps.bonares.de/mapapps/resources/apps/bonares/index.html?lang=en>

Publish data

BonaRes Upload Tool

<https://upload.bonares.de/>

Describe data

BonaRes Metadata Editor

<https://metadata.bonares.de/terraCatalog/Start.do>

The BonaRes Data Centre - Team



Metadata is important

The project is funded by the Federal Ministry of Education and Research (BMBF) within the framework of the funding measure "Soil as a Natural Resource for the Bioeconomy - BonaRes" (grant number 031A608).

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