Towards publishing soil and agricultural research data: the BonaRes DOI

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The German research initiative BonaRes (“Soil as a sustainable resource for the bioeconomy”, financed by the Federal Ministry of Education and Research, BMBF) was launched in 2015 with a duration of 9 years and perpetuation envisaged. BonaRes includes 10 collaborative soil research projects and, additionally, the BonaRes Centre.

Within the BonaRes Data Centre (important infrastructure in the planned NFDI4Agri), diverse research data with mostly agricultural and soil background are collected from BonaRes collaborative projects and external scientists. After a possible embargo expires, all data are made available in a standardized form for free reuse via the BonaRes Repository. Once the administrative and technical infrastructure has been established, the Data Centre provides services for scientists in all terms of data management. The focus here is on the publication of research data (e.g. long-term experiments, field trials, model results) to ensure availability and citeability and thus foster scientific reuse. Available data can be accessed via the BonaRes Repository. For instance: https://doi.org/10.20387/BonaRes-BSVY-R418.

Due to the high diversity of agricultural data provided via our repository, we have developed individually tailored strategies to make them citable for 1.) finalized data, 2.) regularly updating and 3.) data collections with related tables. The challenge is that the author's rights (license CC-BY) must be preserved and yet a user-friendly citation of even large amounts of data must be ensured. We will present our BonaRes DOI concept by means of use cases and will be looking forward to discuss it with the professional community.