



## **Increasing the international visibility of research data by a joint metadata schema**

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The BonaRes Project (“Soil as a sustainable resource for the bioeconomy”) was launched in 2015 to promote sustainable soil management and to avoid fragmentation of efforts (Wollschläger et al., 2016). For this purpose, an IT infrastructure is being developed to upload, manage, store, and provide research data and its associated metadata.

The research data provided by the BonaRes data centre are, in principle, not subject to any restrictions on reuse. For all research data considerable standardized metadata are the key enablers for the effective use of these data. Providing proper metadata is often viewed as an extra burden with further work and resources consumed.

In our lecture we underline the benefits of structured and interoperable metadata like: accessibility of data, discovery of data, interpretation of data, linking data and several more and we counter these advantages with the effort of time, personnel and further costs. Building on this, we describe the framework of metadata in BonaRes combining the standards of OGC for description, visualization, exchange and discovery of geodata as well as the schema of DataCite for the publication and citation of this research data. This enables the generation of a DOI, a unique identifier that provides a permanent link to the citable research data. By using OGC standards, data and metadata become interoperable with numerous research data provided via INSPIRE. It enables further services like CSW for harvesting WMS for visualization and WFS for downloading. We explain the mandatory fields that result from our approach and we give a general overview about our metadata architecture implementation.

Literature: Wollschläger, U; Helming, K.; Heinrich, U.; Bartke, S.; Kögel-Knabner, I.; Russell, D.; Eberhardt, E. & Vogel, H.-J.: The BonaRes Centre – A virtual institute for soil research in the context of a sustainable bio-economy. Geophysical Research Abstracts, Vol. 18, EGU2016-9087, 2016.