D2KAB project taking off: Data to Knowledge in Agronomy and Biodiversity

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Agronomy/agriculture and biodiversity (ag & biodiv) communities face several major societal, economic, and environmental challenges that data science approaches will help address. To achieve their goals, researchers of these communities must be able to rapidly discover, aggregate, integrate, and analyse different types of data and information sources. Semantic technologies, combined with open, FAIR data and services, is one of the answers to fully knowledge-driven, and transparent science and innovation.

The D2KAB project aims to create a framework to turn agronomy and biodiversity data into knowledge – semantically described, interoperable, actionable, open – and investigate the scientific methods and tools to exploit this knowledge for applications in agriculture and biodiversity sciences.

This project funded by French ANR (2019-2023), will provide the means –ontologies and linked open data– for ag & biodiv to embrace semantic Web technologies in order to produce and exploit FAIR data and services.

A national component of an international ecosystem

1. Develop state-of-the-art methods and technologies for ontology lifecycle and alignment (AgroPortal project).
2. Build the ag & biodiv Linked Open Data cloud.
3. Enable new semantically driven ag & biodiv science.

Five driving scenarios with expected significant impact and concrete outcomes for scientific communities and socio-economic stakeholders.

D2KAB’s work is starting from the recommendations of several RDA WG and IG already published or in progress: Agrisemantics WG, Vocabulary Services IG, Wheat and Rice Data Interoperability WGs, Agricultural Data IG, SHARC IG.