AgroPortal: A Proposition for Ontology-Based Services in the Agronomic Domain

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a proposition for ontology-based services in the agronomic domain

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The challenge

Biologists have adopted ontologies (knowledge representation, annotation, data integration)... But ontologies are: spread out, in different formats, of different size, with different structures.

➡ How to enable straightforward use of agronomic ontologies?
➡ Develop and support a reference ontology repository for the agronomic domain

http://agroportal.lirmm.fr

Reuse NCBO technology

NCBO Biportal: a web repository for biomedical ontologies:
- Users can publish, download, browse, search, comment, align ontologies and use them for annotations both online and via a web services API.
  - [http://bioportal.bioontology.org](http://bioportal.bioontology.org)
  - Domain independent & open source
  - Fully semantic web compliant
  - Focus on biomedicine
  - Many plant/agronomy related ontologies are not covered

Driving Uses-Cases

- IBC Rice Genomics & AgroLD project ([http://agrol.org](http://agrol.org)):
  RDF data integrated from a variety of plant resources and ontologies
- RDA Wheat Data Interoperability working group: common framework for describing, representing, linking and publishing wheat data with respect to open standards
- INRA Linked Open Vocabularies, ([http://lovinra.inra.fr](http://lovinra.inra.fr)): publish vocabularies produced or co-produced by INRA scientists and foster their reuse beyond the original researchers
- The Crop Ontology ([www.cropontology.org](http://www.cropontology.org)):
  publishes ontologies required for describing crop germplasm, traits and evaluation trials

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SIFR project
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