



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

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AgroPortal

a proposition for ontology-based services in the agronomic domain



Clement Jonquet, Anne Toulet, Esther Dzalé-Yeumo, Marie-Angelique Laporte, Elizabeth Arnaud, Pierre Larmande

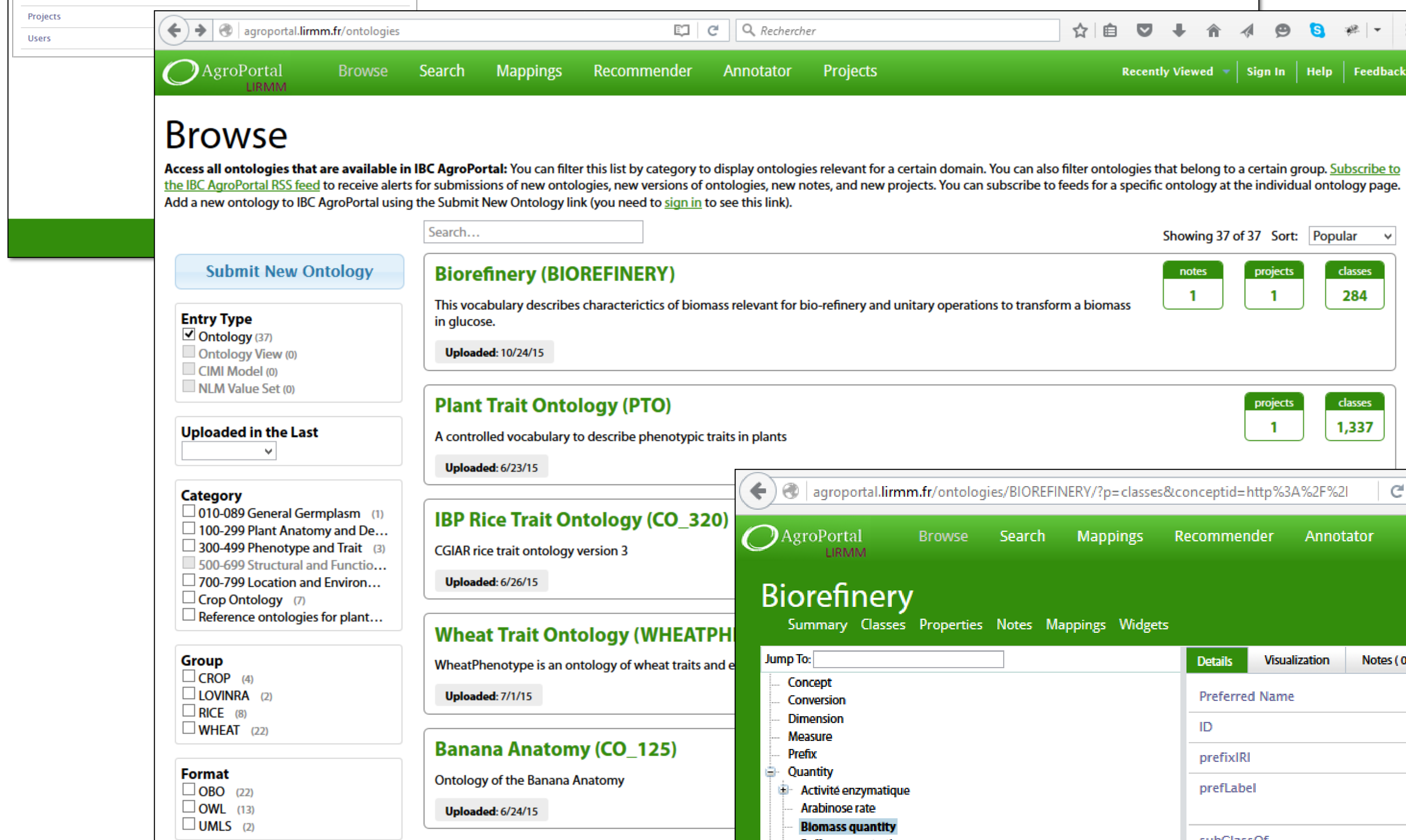
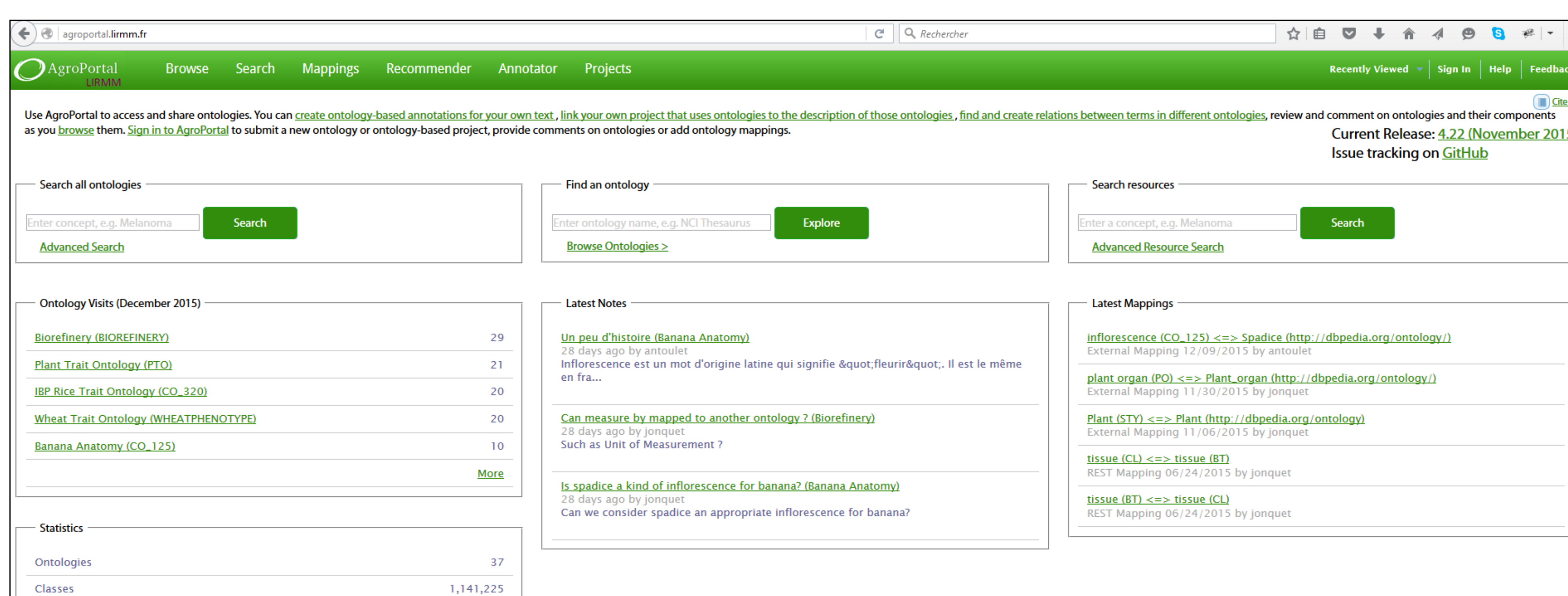
The challenge

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>



- Search
- Mapping
- Versioning
- Peer review
- Community notes
- Multiple formats
- Projects



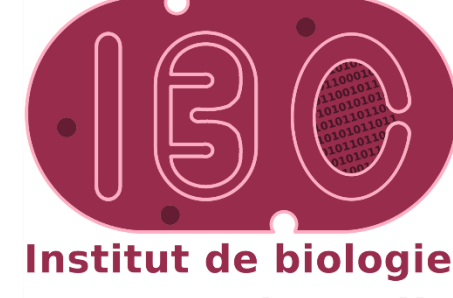
- Resources
- Annotation
- Recommendation
- Metadata
- Slices
- REST API
- SPARQL endpoint

In collaboration with



THE NATIONAL CENTER FOR
BIOMEDICAL ONTOLOGY

With support of



Reuse NCBO technology

NCBO Bioportal : 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>
- 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://agrold.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>): *publish vocabularies produced or co-produced by INRA scientists and foster their reuse beyond the original researchers*

- **The Crop Ontology** (www.cropontology.org): *publishes ontologies required for describing crop germplasm, traits and evaluation trials*



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