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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>

Reuse NCBO technology

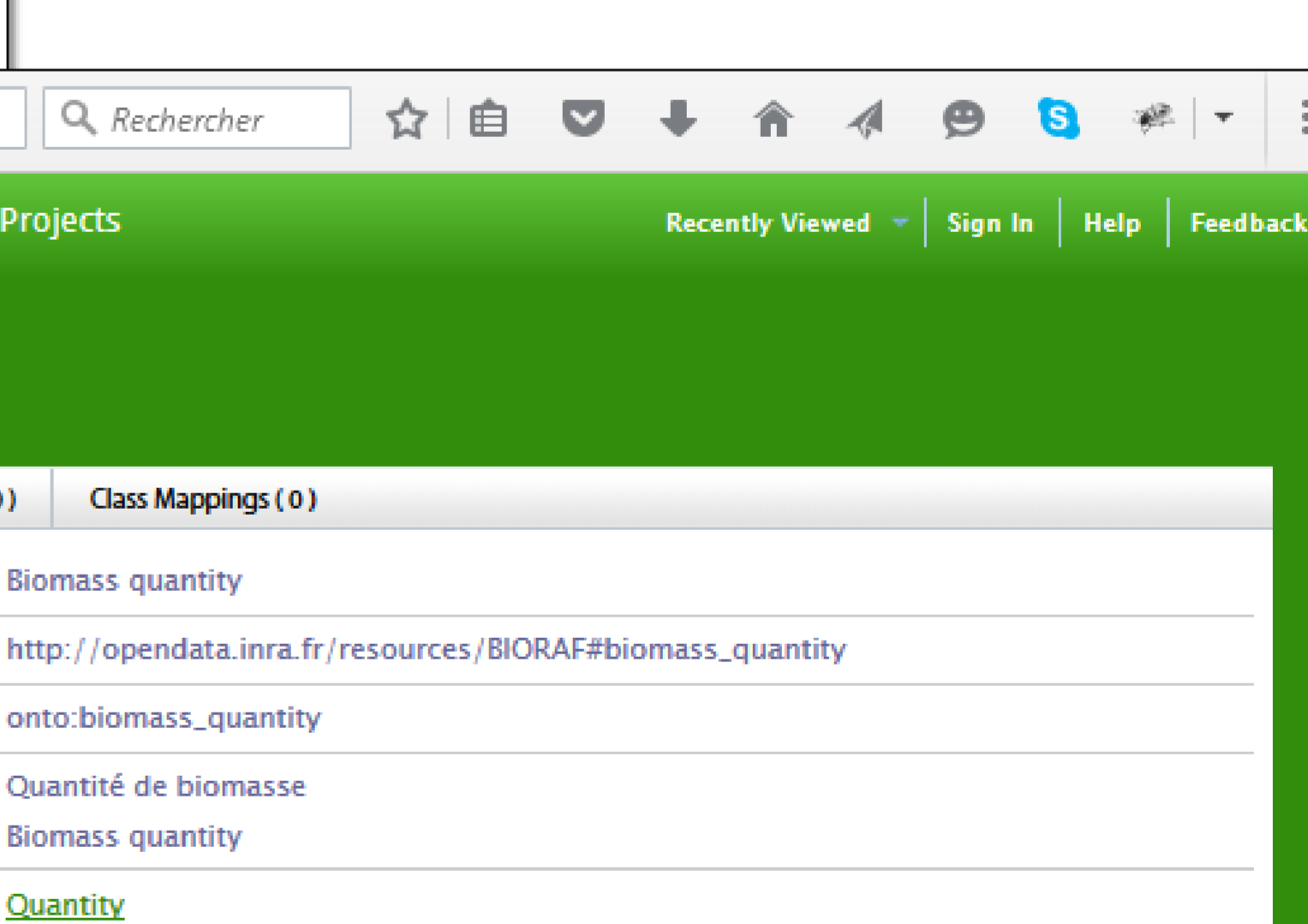
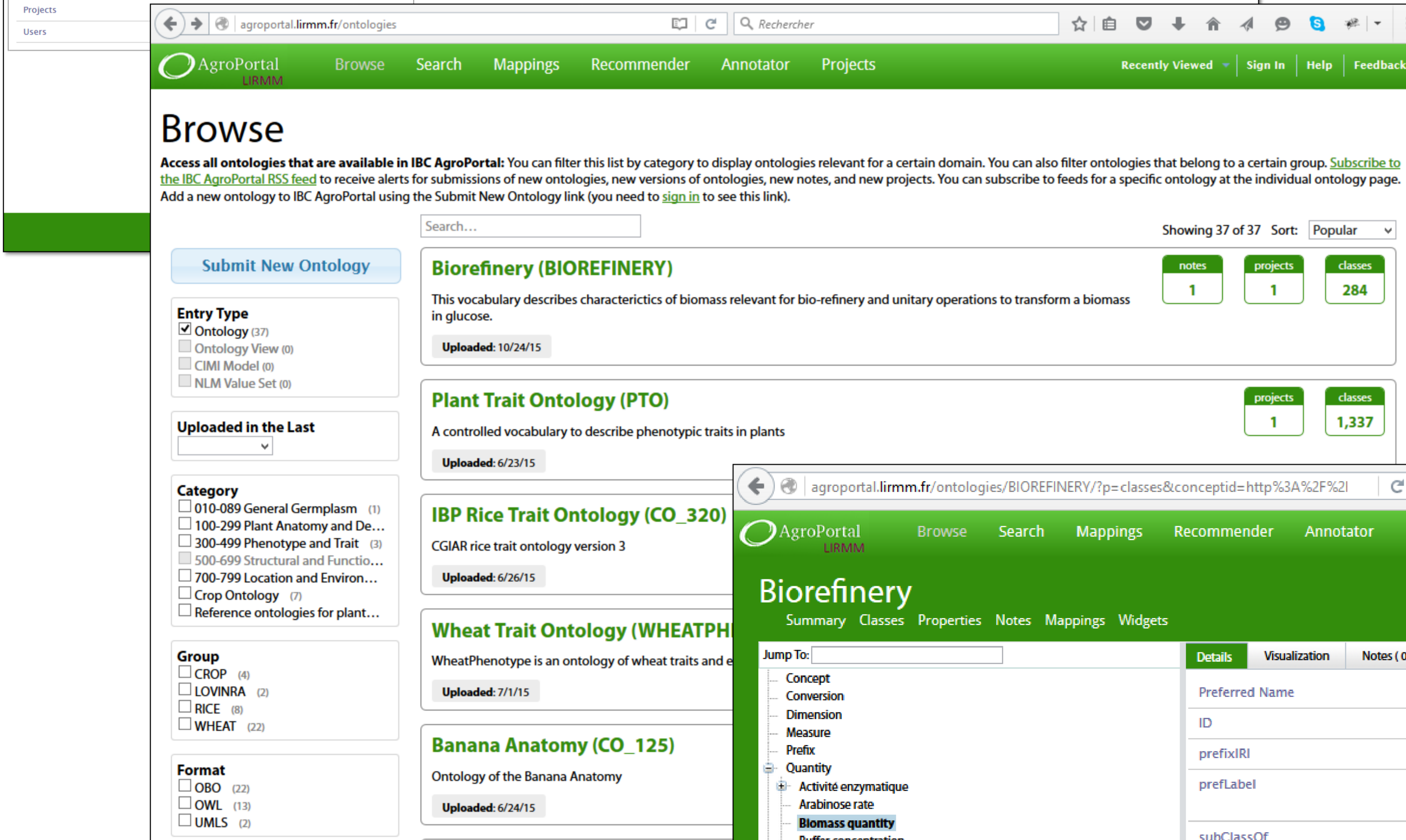
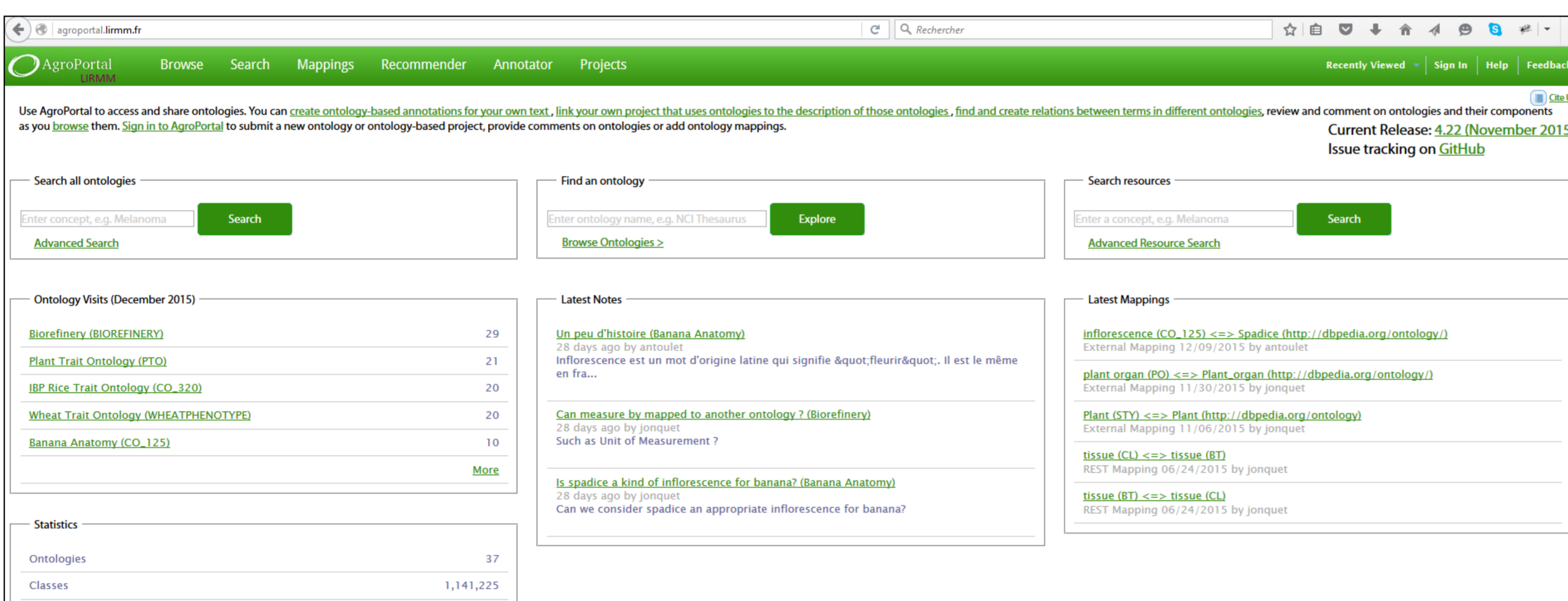
NCBO Bioportal : a web repository for biomedical ontologies:


- 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.croponontology.org): *publishes ontologies required for describing crop germplasm, traits and evaluation trials*




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- 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 

www.lirmm.fr/sifr

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ACRONYM	BIOREFINERY
VISIBILITY	Public
DESCRIPTION	This vocabulary describes characteristics of biomass relevant for bio-refinery and unitary operations to transform a biomass in glucose.
STATUS	Production
FORMAT	OWL
CONTACT	Patrice Buche, buche@supagro.inra.fr
HOME PAGE	http://www6.inra.fr/cati-icat-atweb/Ontologies/Biorefinery
PUBLICATIONS PAGE	
DOCUMENTATION PAGE	http://pdf.lirmm.inra.fr/atWeb/
CATEGORIES	
GROUPS	INRA Linked Open Vocabularies

Metrics	Value
NUMBER OF CLASSES:	284
NUMBER OF INDIVIDUALS:	351
NUMBER OF PROPERTIES:	2
MAXIMUM DEPTH:	7
MAXIMUM NUMBER OF CHILDREN:	23
AVERAGE NUMBER OF CHILDREN:	4
CLASSES WITH A SINGLE CHILD:	8
CLASSES WITH MORE THAN 25 CHILDREN:	0
CLASSES WITH NO DEFINITION:	284

Visits