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

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

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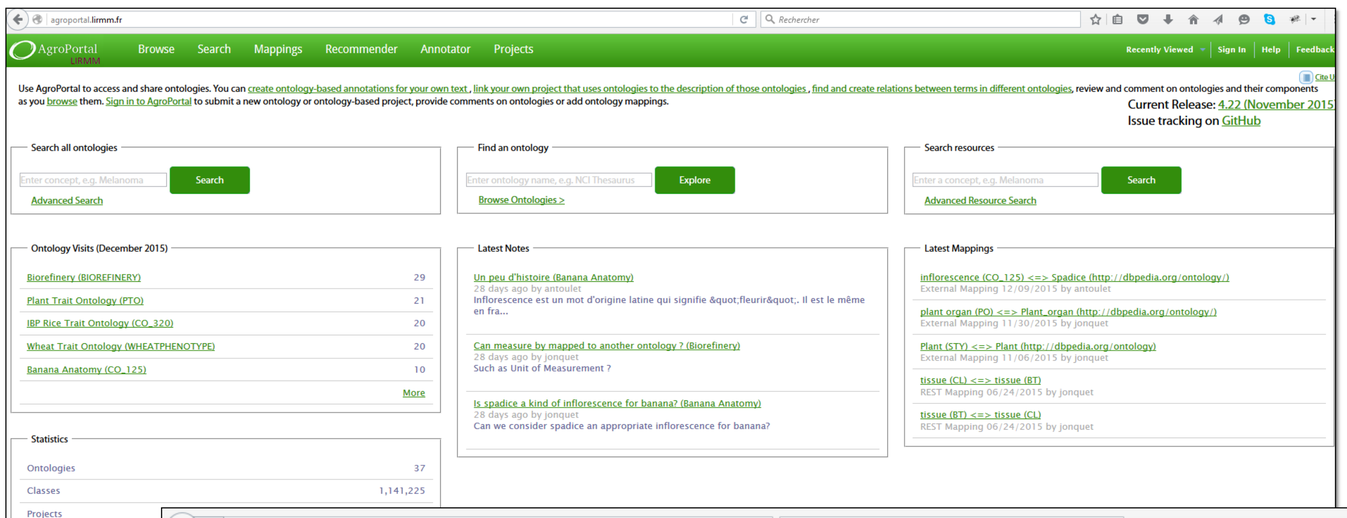
The challenge

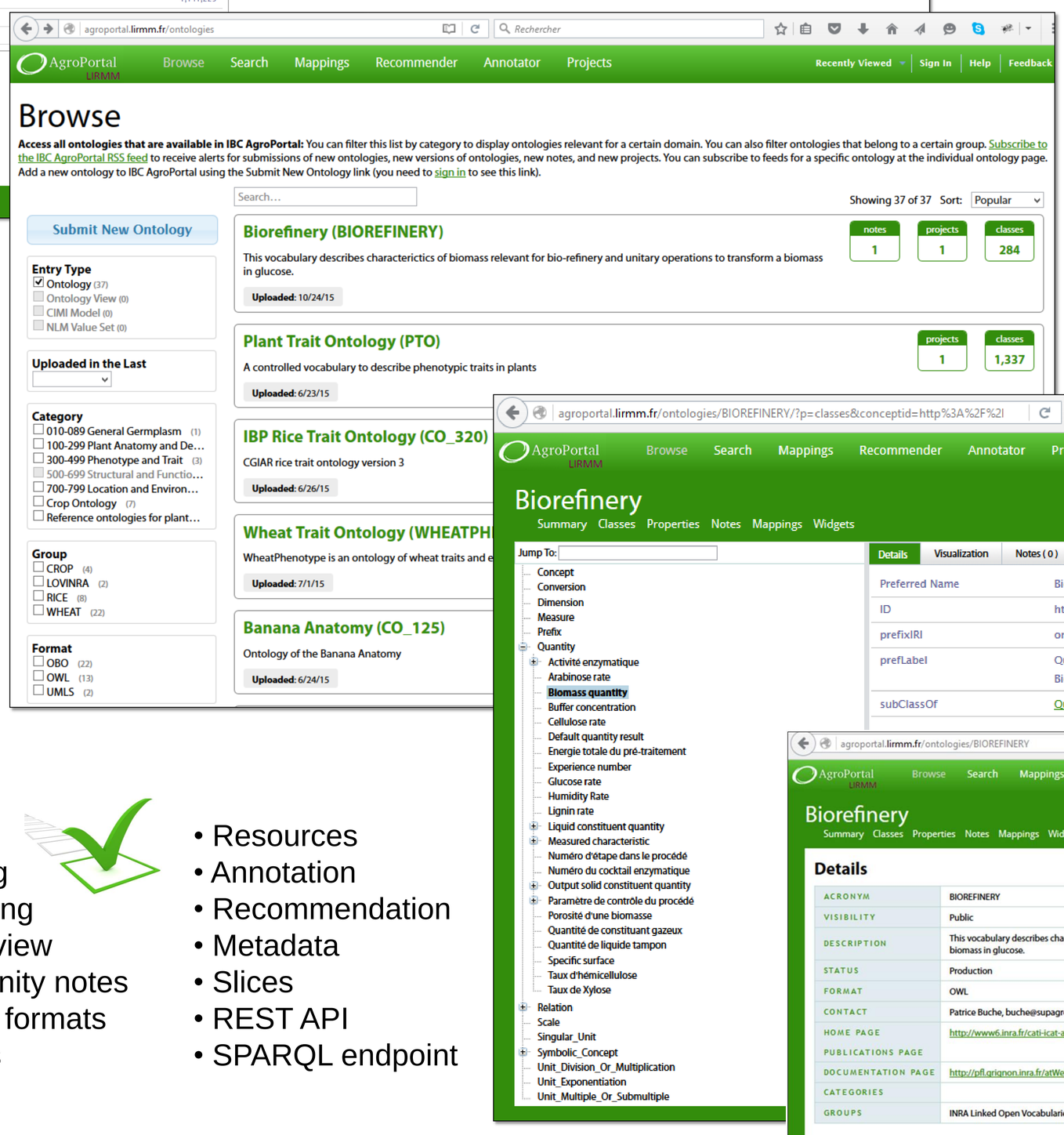
Biologists have adopted ontologies (knowledge representation, annotation, data integration)… But ontologies are: spread out, in different formats, of different size, with different structures.

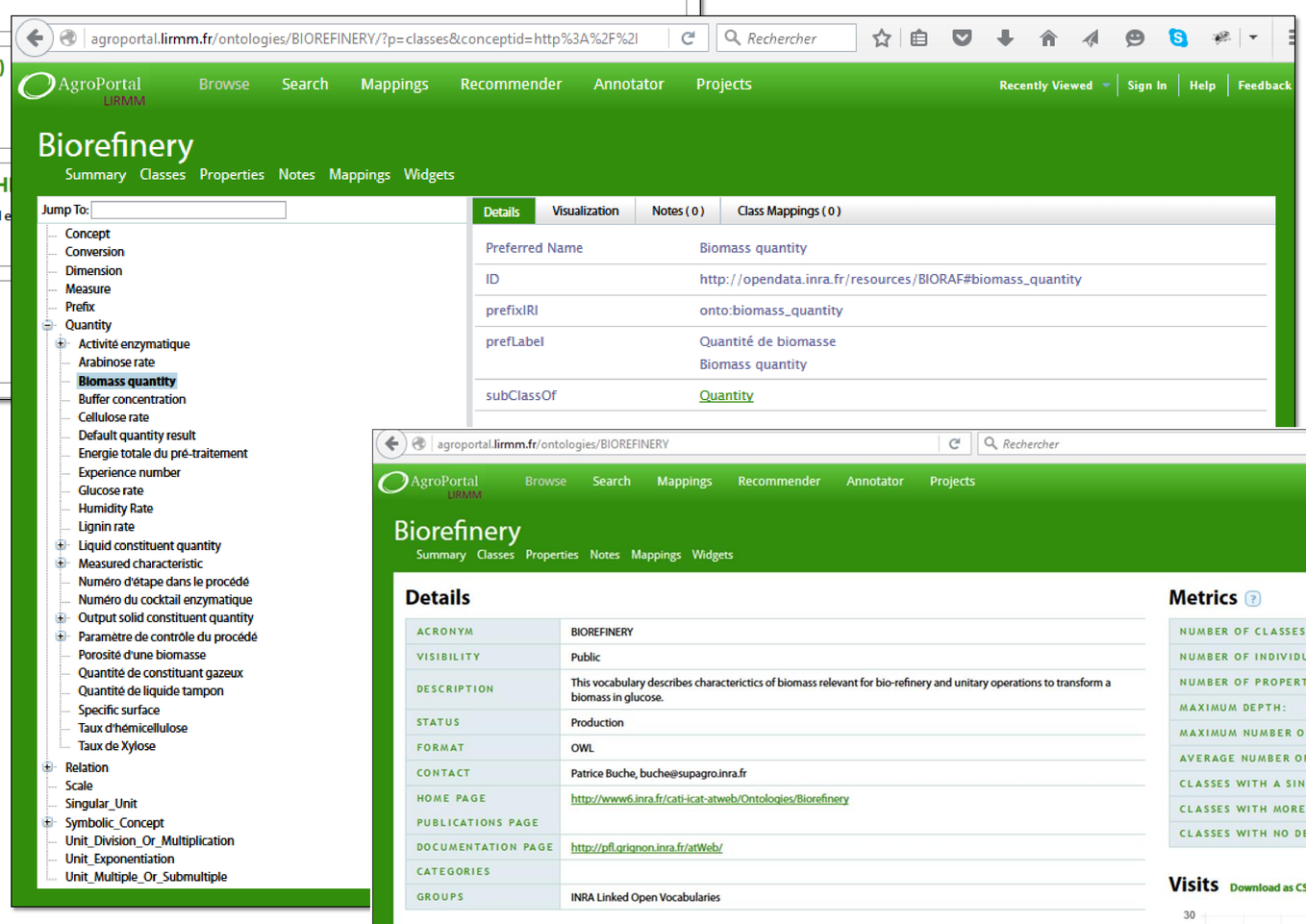
➔ **How to enable straightforward use of agronomic ontologies?**

➔ **Develop and support a reference ontology repository for the agronomic domain**

http://agroportal.lirmm.fr







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

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

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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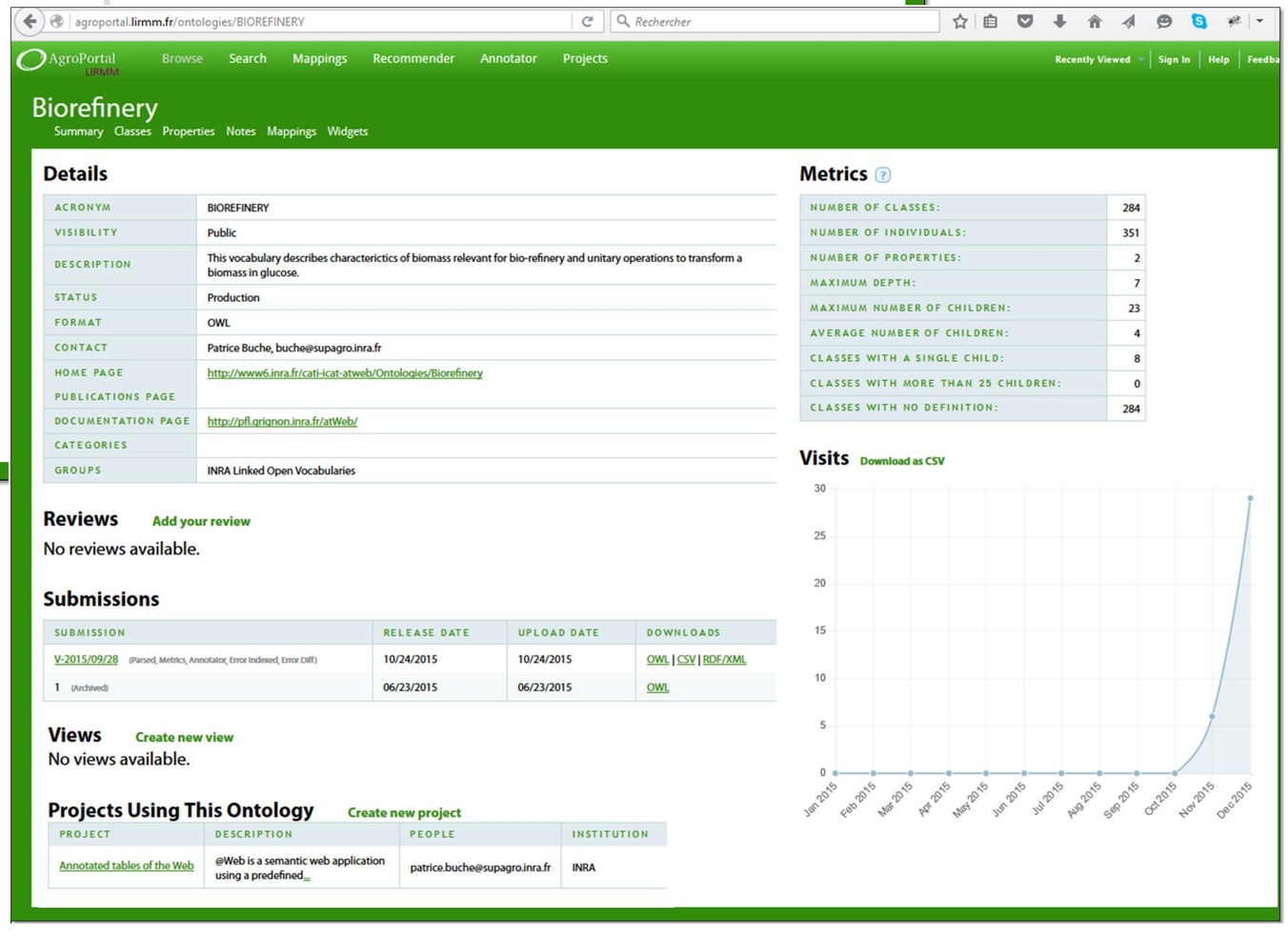

In collaboration with

SIFR project — www.lirmm.fr/sifr

THE NATIONAL CENTER FOR BIOMEDICAL ONTOLOGY

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