LINGUA

Lingua Franca in Agriculture and Biodiversity – LINGUA

ABSTRACT

Standards vocabularies and ontologies are a key element to achieve data interoperability. The AgroPortal project (http://agroportal.lirmm.fr) develops and supports a reference ontology repository for the agronomic domain. By reusing the Stanford National Center for Biomedical Ontology BioPortal technology, we have already designed and implemented an advanced prototype offering ontology-based services that in 1.5 year already host 50 ontologies or vocabularies and we have identified with multiple partners more than 80 candidates. One of the challenges when dealing with multiple ontologies is the overlap and mappings between these ontologies. Within the LINGUA project, we will address specifically this aspect by developing ontology mapping capabilities to align AgroPortal ontologies in order to set up the bricks of a lingua franca for agronomy and biodiversity. We will make AgroPortal the reference platform for mapping extraction, generation, validation, evaluation, storage and retrieval by adopting a complete semantic web and open linked data approach and engaging the community. We will first focus on the research topics of the Montpellier community (agronomy, food, biodiversity) and second join the international ongoing effort Global Agricultural Concept Scheme (GACS) project in partnership with INRA (national) and FAO (United Nations). This work will be implemented by a post-doctoral fellow (18 months) who will be co-hosted
• M1-M4 : work at LIRMM. This first stage will allow the postdoc to join the AgroPortal project team and work on T1 and T3. In addition, this will be the moment to handle the YAM++ technology. Supervision during that phase will be done by C. Jonquet (remotely) and K. Todorov.
• M5-M9 : work at IATE/MISTEA (on SupAgro campus). During this stage, the postdoc will work on site with the partners mainly on T3 and T4. Supervision during will be done by P. Neveu and P. Buche.
• M10-M18 : work at LIRMM with regular visit at IATE/MISTEA/CEFE. This final stage will consist in consolidating the outcomes and work on validation, dissemination of the results and education (T5). Supervision during that stage will be done by C. Jonquet and K. Todorov (both on site, as C. Jonquet will then be returned from Stanford).

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Project leader : 0
Project leader's institution : UM
Project leader's RU : IATE MISTEA DIADE

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