



## BIPAA, Bioinformatics Platform for the Agroecosystems Arthropods.

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**BIPAA**

Bioinformatics Platform for Agroecosystem Arthropods

**INRAE**

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**GO**  
GenOuest**Inria**  
IRISA

BIPAA is a bioinformatics platform from the **French National Institute for Agricultural, Food and Environment (INRAE)** to assist genomics and post-genomics programs developed on insects associated to agroecosystems. It is located in Rennes (France) and is integrated in **GenOuest** platform infrastructure (<https://www.genouest.org/>).

**Contacts :** [bipaa@inrae.fr](mailto:bipaa@inrae.fr) , <https://bipaa.genouest.org/>

### Data analysis

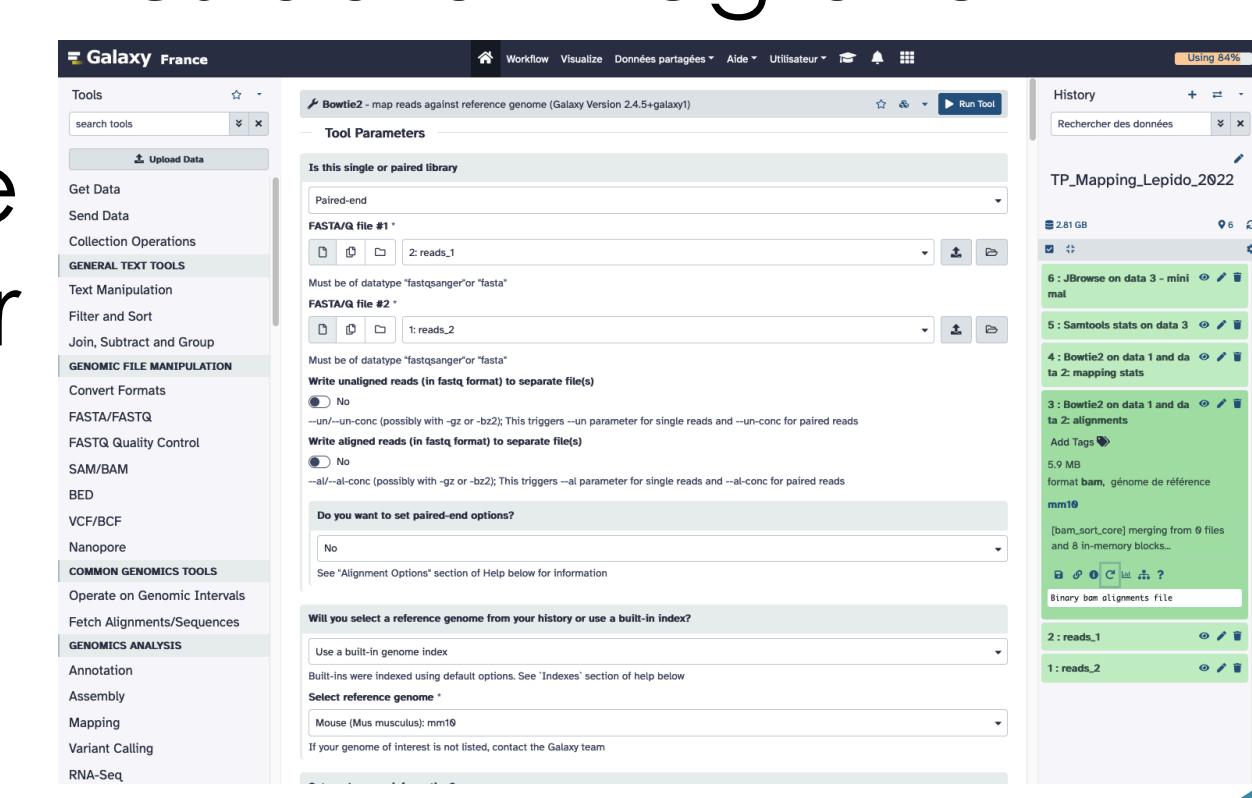
BIPAA supports a network of scientists from various french labs for analyzing their **genomics data**. BIPAA proposes personal guidance for developing scripts, running complex workflows on a computing cluster.

#### Topics :

- Genome assembly and annotation
- Transcriptomics analysis and non coding RNA
- Transposable elements
- Genomes comparison (Orthology)
- Variant identification
- Genomics and epigenomics data integration

BIPAA contributes to the national **Galaxy** server [usegalaxy.fr](http://usegalaxy.fr)

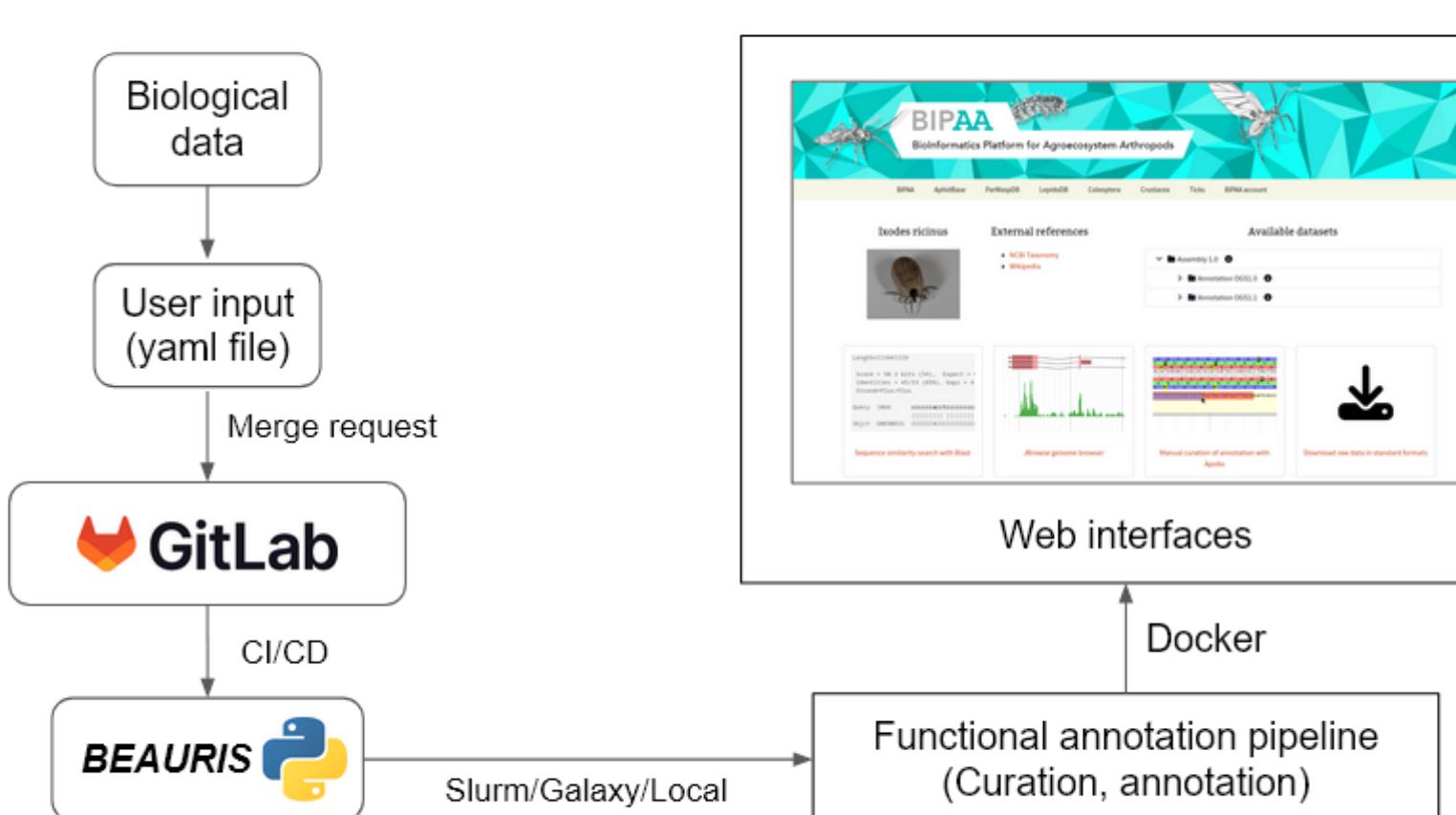
**Galaxy**  
PROJECT



### Information systems

BIPAA Information systems are based on the **BEAURIS project** <https://gitlab.com/beauris/beauris> and **Galaxy Genome Annotation** <https://galaxy-genome-annotation.github.io/>

BEAURIS: How does it works?



- Each genome is a multi-container application.
- This system permits automatic deployment of new genome and update.
- This is a reproducible, re-usable, modular and extensible system.

It organizes and manages genomics data generated by various international groups and offers **textual and graphical tools** for browsing and querying genomics data.

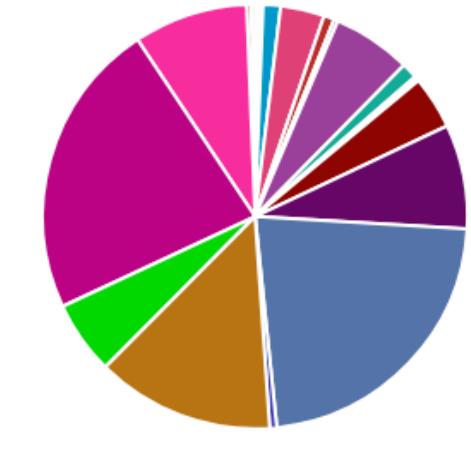
### BIPAA hosts multiple arthropod genomes



**LepidoDB** Lepidopterans

**Aphidbase** Aphids

17 lepidopterans 12 aphids



**Gene Ontology**

