Wheat3BMine
a data warehouse dedicated to wheat 3B chromosome data

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URGI-GnPIS

URGI is a research unit in genomics and bioinformatics dedicated to plants and crop parasites.

https://urgi.versailles.inra.fr/

GnPIS is the URGi information system dedicated to genetic and genomic data for plant and especially for wheat.

http://wheat-urgi.versailles.inra.fr/

transPLANT

transPLANT is a European-Union funded e-infrastructure to support computational analysis of genomic data from crop and model plants.

http://www.transplantdb.eu/

➢ Wheat3BMine: robust data warehouse centered on wheat genomics

The transPLANT project is funded by the European Commission within its 7th Framework Programme, under the thematic area "Infrastructures", contract number 283496.

Why InterMine?

➢ Open source data warehouse
➢ Dedicated to integration and analysis of complex biological data
➢ Fast, flexible and user friendly access to integrated data

http://intermine.github.io/intermine.org/

Data types

Wheat3BMine contains:

➢ Genomic annotation data (genes, mRNA, transposable elements...)
➢ Genetic mapping data (QTL, metaQTL)
➢ Polymorphisms data (markers)
➢ Phenotyping data (Germplasm, evaluation data)
You can get data using:

- A powerful QuickSearch with wildcard and operators (AND, OR...)
- AQueryBuilder which allow you to make complex queries
- A Region form using genomic positions
- Templates which facilitates data querying
- A dedicated API (Java, Python...)
- Store and analyse your favourite features with Lists

Easy data querying:

- An online documentation
- A dedicated account to store your favourite queries/lists.

Online demonstration

http://urgi.versailles.inra.fr/Wheat3BMine/

Use cases:

1. Search for a Dart marker in the QuickSearch
2. Find genes located on strand 1 with a function coverage > 80 thanks to the QueryBuilder
3. Get all features located on genomic regions of interest and export results in the Region form
4. Create and analysis lists

Find more use cases into the online documentation.

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