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<http://urgi.versailles.inra.fr/siregal>

Abstract

The French National Institute for Agricultural Research (INRA) manages **genetic resource collections** [1] for more than 50 species (model species and crops). These genetic resources are regularly used for research programs of INRA or its partners, and are also widely distributed to the scientific community. The objectives of the Genetic Resources Centers (GRC) are to gather, conserve, and provide high quality materials for the scientific community. In order to do that, the GRCs have to be able to trace their actions and to assure the community of a high degree of quality.

URGI (Unité de Recherche Génomique-Info) is an INRA bioinformatics lab dedicated to plant and pest genomics. It hosts a **bioinformatics platform** included in the French ReNaBi bioinformatics platform network and certified Ibis in 2009. One of the missions of the platform is to develop and maintain a genomic and genetic information system called GnpIS, for plants of agronomical interest and their bio-aggressors.

Siregal, the **INRA Plant Genetic Resource Information System**, fulfills the essential need to manage the collections and associated data following the recommendations of the Biological Resource Centers (OECD). Siregal is suitable for **all plant species** and is used by INRA staff and its partners. It respects community standards, and it makes the integration of existing and future genetic data possible. Siregal is one of the GnpIS applications.

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Definitions

Accession: virtual genetic entity = *germplasm, genotype*

Lot: physical representation of an accession = *plant material* (ex. *seed lot, tree*)

Accessions

#	Accession number	Accession name	Taxon	Biological status	Country
61	1092	AUCHY-CAMBER	Triticum aestivum aestivum	Advanced/improved cultivar	-
62	1094	AUGUSTE-TEDEB	Triticum aestivum aestivum	Traditional cultivar/landrace	-
63	1096	AUGUSTE-TEDEB	Triticum aestivum aestivum	Traditional cultivar/landrace	-
64	1111	AUSTERLITZ	Triticum aestivum aestivum	Advanced/improved cultivar	-
65	1117	AUTOMNE-ROUGE-BARBU	Triticum aestivum aestivum	Traditional cultivar/landrace	-
66	1120	AUREMANT	Triticum aestivum aestivum	Advanced/improved cultivar	-
67	1120	AUREMANT	Triticum aestivum aestivum	Advanced/improved cultivar	-
68	1133	AZUR	Triticum aestivum aestivum	Advanced/improved cultivar	-

Accession: AUSTERLITZ

Identification

Accession number: 1111
Accession name: AUSTERLITZ
Synonyms: ECPGR: GVS 4770 [G]
Subspecies: Triticum aestivum aestivum
Pedigree: US(0)A3/CAPESTIC/COURTOT/ARGENT
Biological status: Advanced/improved cultivar
Comment: -

Origin

Geographical origin: France
Holding institution: Unité Mixte de Recherche Amélioration et Santé des Plantes, INRA

Evaluation data

Days to heading (Counted as days from sowing to 50% of panicles fully emerged)	147
Scale of days to heading	7
Wheat awnness	3
Plant height (cm)	85
Scale of plant height	5
Scale of 1000 kernels weight	3
Susceptibility to Puccinia striiformis f. sp. hordei (Yellow rust) - Year 2000	4
Susceptibility to Puccinia recondita (Leaf rust) - Year 2000	2
Growth class	Hard - Winter
Chromosome number	6X

Distribution

Presence status: Maintained
Available: Yes, with restrictions
Distributor(s): Unité Mixte de Recherche Amélioration et Santé des Plantes, INRA

Collections

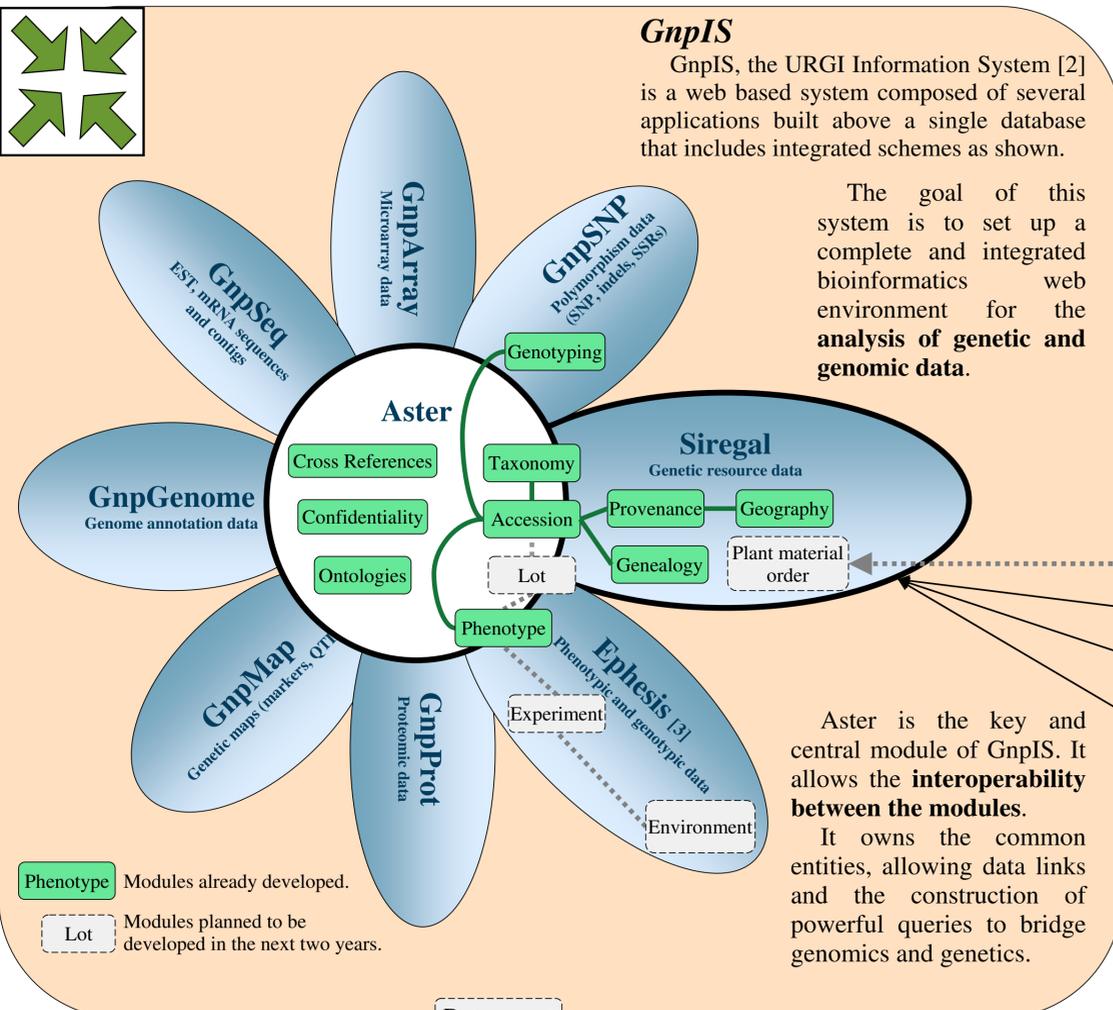
Part of: WHEAT INRA COLLECTION
WHEAT NATIONAL COLLECTION

Genotyping

No data

Data

Grapevine	<i>Vitis</i> genus 4,451 taxons and cultivars 7,862 accessions 51,558 phenotypes
Cherry	<i>Prunus</i> genus 115 taxons 178 accessions
Chestnut	<i>Castanea</i> genus 29 taxons 25 accessions 160 phenotypes
Bread wheat	<i>Triticum</i> genus 32 taxons 1,744 accessions 16,201 phenotypes
Pea	<i>Pisum</i> genus 17 taxons 240 accessions
TOTAL	4,644 taxons and cultivars 10,049 accessions 67,919 phenotypes



Site: France

Site details

Site type: Origin location
Coordinates precision: -
Latitude: -
Longitude: -
Elevation: -
Location: France ; Western Europe ; Europe
Distance to city: -
Direction from city: -
Environment type: -
Topography: -
Comment: -

Associated information

No accession has been collected or bred here.
1744 accessions come from here.

Taxon: Triticum aestivum aestivum

Taxon details

Scientific name: Triticum aestivum aestivum
Authors: -
Rank: Subspecies
Comment: -
Other scientific names: -
Common names: Blé tendre (Français)
Bread wheat (English)
Soft wheat (English)

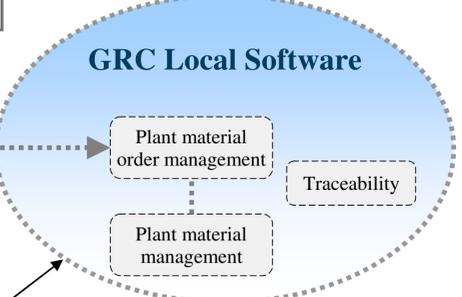
Associated information

1721 accessions are available for this taxon.

Taxonomy tree

The following tree may be not complete, particularly some genus can be missing.

- Triticum aestivum
 - Triticum aestivum aestivum



References

- [1] The plant genetic resource collections at INRA
http://www.international.inra.fr/research/scientific_resources/collections/plant
- [2] GnpIS: Plant and pest genomic and genetic Information System
<http://urgi.versailles.inra.fr/projects/Softwares/> (project description)
<http://urgi.versailles.inra.fr/gnpis> (software)
- [3] Ephesis: Environment and Phenotypes Information System, a GnpIS module
<http://urgi.versailles.inra.fr/projects/Ephesis>, see Poster

Acknowledgements

Siregal is realized in close cooperation with the **resource managers, bioinformaticians** and **researchers** of the INRA Genetic Resource Centers: F. Balfourier, E. Balsemin, T. Barreche, JP. Bouchet, A. Cadic, F. Curk, M. Delalande, A. Didier, L. Feugey, S. Gaillard, N. Guilhot, A. Guyader, A. Label, T. Lacombe, G. Lassalle, F. Lechevallier, L. LeDantec, F. Luro, JB. Magnin-Robert, M. Pitrat, JM. Prosper, JP. Sampoux, C. Tromeur, A. Zanetto.

Siregal is carried out under cover of a **steering committee** made up of experts of the field: A. Charcosset, C. Christophe, A. Gauffreteau, JY. Lorendeau, H. Quesneville, JM. Prosper, P. Roumet.

Siregal is developed and maintained by experienced **bioinformatics engineers** at URGI: S. Durand, E. Kimmel, C. Pommier, I. Luyten, S. Reboux, E. Karsenty.

The development is funded by INRA and the code is **open source** and available by request.

- ### Data analysis
- Variety identification
 - Extraction of core collections (subset of a large germplasm collection, maximizing the genetic variability)
 - Statistical analysis
 - Population genetics
 - Quantitative genetics

- ### International databases
- Data exchange
 - Cross references exchange
 - International visibility
- Ex: *EURISCO, GBIF*