

Gramene: A Resource for Genomics and other grasses

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Hank Beachell at the Beaumont Experiment Station, TX, circa ~1955.

Breeders are concerned with the selection of favorable phenotypes. They have always endeavored to 'read' genome sequence by peering through the lens of the phenotype.

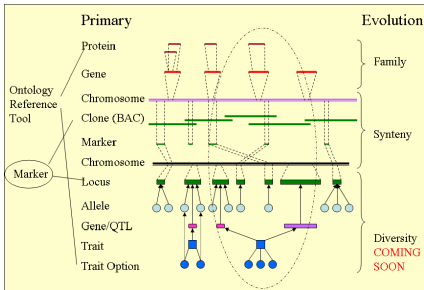
Measuring such characteristics by conventional methods is time-consuming and expensive, since it requires the organism to grow to maturity.

Molecular markers are the genetic signposts (DNA segments) that flag the presence of genes that control particular traits. Molecular markers offer a lens for identifying genes associated with phenotypes of interest.

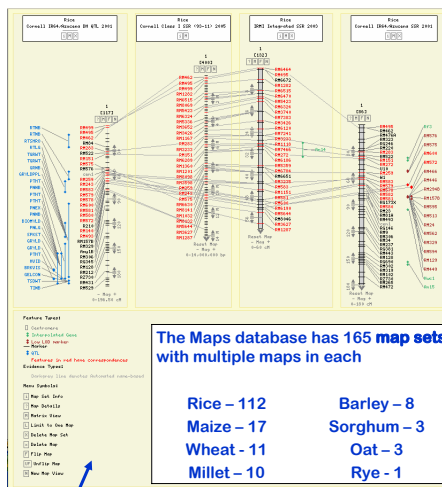
www.gramene.org

The Gramene website provides access to the Gramene databases and other online resources.

Everything that can be mapped to the genome is called a "Feature."



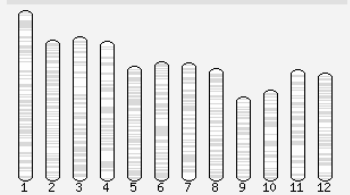
- All Feature Types-
- ALFP
- BAC
- Breakpoint interval
- Centromere
- Clone
- EST
- GenBank Marker
- MMP Unigene
- Meize Bin
- Meize EST
- Meize Marker
- Marker
- Phenotype
- QTL
- RFLP
- Rice Marker
- Rice SSR
- SOG
- SSR
- STS
- Sorghum GSS
- Sorghum Marker
- Tos17 Insertion
- Wheat EST Marker
- dd
- interpolated phenotype
- low LOD marker



Genetic maps offer an indirect estimate of the distance and order of the sequence, and they provide the framework for genome sequencing.

Physical maps provide an estimate of the true distances (in base pairs), and define the sequence between markers. Used for gene identification.

Browse a Chromosome



In the Genome Browser, the rice genome's 12 chromosomes are displayed in a mapset of 12 maps.

Use the CMap viewer to compare 2 or more maps.

Use the Genome Browser to view features from several different maps in a single detailed view.

Customize the Genome Browser Detail View to show features of interest to you!

Browse the genome to find features, base pairs and codon options.

GRAMENE Documentation

- Web Site Help Documents
 - Genomes
 - BLAST
 - Maps
 - Markers
 - Proteins
 - Ontologies
 - Genes
 - QTL
 - Literature
- FAQs
 - General
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Online tutorials, FAQ's and other help documentation assist users in navigating and using the website. List-serve and feedback links allow users to communicate with database developers.

Tutorials are available in several formats

- PowerPoint (for non-IE)
- Adobe PDF
- Webpage (for IE, Safari, Konqueror)