Gramene

RRID:SCR_002829
Type: Tool

Proper Citation

Gramene (RRID:SCR_002829)

Resource Information

URL: http://www.gramene.org

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Description: A curated, open-source, integrated data resource for comparative functional genomics in crops and model plant species to facilitate the study of cross-species comparisons using information generated from projects supported by public funds. It currently hosts annotated whole genomes in over two dozen plant species and partial assemblies for almost a dozen wild rice species in the Ensembl browser, genetic and physical maps with genes, ESTs and QTLs locations, genetic diversity data sets, structure-function analysis of proteins, plant pathways databases (BioCyc and Plant Reactome platforms), and descriptions of phenotypic traits and mutations. The web-based displays for phenotypes include the Genes and Quantitative Trait Loci (QTL) modules. Sequence based relationships are displayed in the Genomes module using the genome browser adapted from Ensembl, in the Maps module using the comparative map viewer (CMap) from GMOD, and in the Proteins module displays. BLAST is used to search for similar sequences. Literature supporting all the above data is organized in the Literature database. In addition, Gramene now hosts a variety of web services including a Distributed Annotation Server (DAS), BLAST and a public MySQL database. Twice a year, Gramene releases a major build of the database and makes interim releases to correct errors or to make important updates to software and/or data. Additionally you can access Gramene through an FTP site.

Abbreviations: GR

Synonyms: Gramene: A Resource for Comparative Grass Genomics, GR GENE, GR PROTEIN, GR QTL, GR REF, RiceGenes
Resource Type: database, analysis service resource, service resource, data or information resource, production service resource, data analysis service

Defining Citation: PMID:21076153, PMID:17984077, PMID:16381966

Keywords: crop, plant genome, genetic, blast, gene, genome, genetic diversity, pathway, protein, marker, quantitative trait locus, comparative map, phenotype, genomics, physiology, comparative, grain, expressed sequence tag, trait, mutation, environment, taxonomy, web service, bio.tools, FASEB list

Funding Agency: USDA IFAFS, USDA, USDA, NSF, NSF, NSF

Availability: Acknowledgement required, Open unspecified license

Resource Name: Gramene

Resource ID: SCR_002829

Alternate IDs: nif-0000-02926, biotools:gramene, nlx_65829, SCR_000532, SCR_000532, nlx_65829

Alternate URLs: https://bio.tools/gramene

Ratings and Alerts

No rating or validation information has been found for Gramene.

No alerts have been found for Gramene.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 699 mentions in open access literature.

Listed below are recent publications. The full list is available at RRID.

Ahmadi N, et al. (2023) Genome Scan of Rice Landrace Populations Collected Across Time Revealed Climate Changes’ Selective Footprints in the Genes Network Regulating Flowering Time. Rice (New York, N.Y.), 16(1), 15.


Ma M, et al. (2023) Genetic Diversity and Association Mapping of Grain-Size Traits in Rice Landraces from the Honghe Hani Rice Terraces System in Yunnan Province. Plants (Basel, Switzerland), 12(8).

Lu Y, et al. (2023) Does night-time transpiration provide any benefit to wheat (Triticum aestivum L.) plants which are exposed to salt stress? Physiologia plantarum, 175(1), e13839.

Zampieri E, et al. (2023) Marker-Assisted Pyramiding of Blast-Resistance Genes in a japonica Elite Rice Cultivar through Forward and Background Selection. Plants (Basel, Switzerland), 12(4).

Zhang L, et al. (2023) OsCCRL1 is Essential for Phenylpropanoid Metabolism in Rice Anthers. Rice (New York, N.Y.), 16(1), 10.


Zhou H, et al. (2023) Identification and analysis of the genetic integrity of different types of rice resources through SSR markers. Scientific reports, 13(1), 2428.


Guan X, et al. (2023) Genome-Wide Identification and Characterization of Aldo-Keto


