

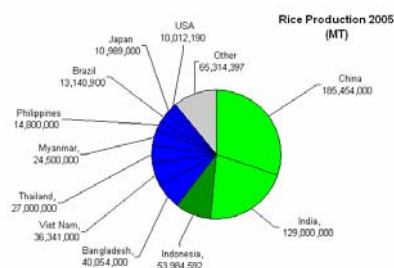
December 2006 Gramene News

Come see us at:

- December 4-6, 2006 [Data Warehouse Technologies in Bioinformatics](#), Leucorea, Wittenberg, Germany. Gramene: a community resource for plant comparative genomics
- January 13-17, 2007 [Plant and Animal Genome XV Conference](#), San Diego, CA, USA. Gramene demo/workshop, Posters on Gramene Updates, Biochemical Pathways, Genetic Diversity, Ontologies, and the Species pages.

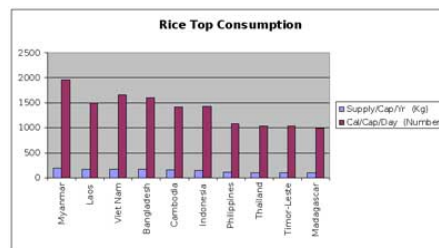
Did you know . . . ?

2005 Rice Production



In 2005 China and India combined produced over half of the world rice supply. The US ranked 11th for rice production. See Gramene's [Species Pages](#) for similar information on other grains.

2005 Rice Production



Gramene Workshop at PAG XV

Plan now to attend the Gramene Workshop on Tuesday - January 16, 2006, 3:50 pm - 6:00 pm. This workshop is geared for the beginning or intermediate cereal researcher or breeder who may or may not be familiar with Gramene. In this workshop you will get an overview of the Gramene Website, data, and tools, including a formal introduction to the new Diversity and the new Pathways datasets. Learn about the updates to the datasets, including quicker CMap retrieval, Genome browser development, ontology associations, and species Gramene-data summary pages.

Recommended Reading from the Gramene Literature Database

- Genetic Diversity and Origin of Weedy Rice (*Oryza sativa* f. *spontanea*) Populations Found in North-eastern China Revealed by Simple Sequence Repeat (SSR) Markers. Cao et al. *Annals of Botany* (Lond). 2006 Dec;98(6):1241-52. Epub 2006 Oct 20 [[PubMed](#)]
- AgBase: a unified resource for functional analysis in agriculture McCarthy et al. *Nucleic Acids Res.* 2006; 0:gkl936v1-D5.
- Comparative Mapping of Growth Habit, Plant Height, and Flowering QTLs in Two Interspecific Families of *Leymus*. Larson et al. *Crop Sci.* 2006; 46:2526-2539.
- Functional Classification, Genomic Organization, Putatively cis-Acting Regulatory Elements, and Relationship to Quantitative Trait Loci, of Sorghum Genes with Rhizome-Enriched Expression. Jang et al. *Plant Physiol.* 2006; 142:1148-1159.

Gramene FAQ. Gramene users are encouraged to contact Gramene for assistance in using the database. In addition to attending workshops, users contact Gramene through the "Feedback" link at the top of any page, or join the Gramene listserve.

Q. In Genomes, where are the SNP from?

A. We display SNPs from two sources; NCBI's dbSNP, which are currently variations between the indica and japonica subspecies reported by BGI, and the OMAP project, which are pseudo-SNPs between *O. sativa japonica*, and several other closely related *Oryza* species.

Q. A few months ago the genomes database contain Loc-OS7g26970 and Loc-OS7g26980 but now these two loci are gone. Now you have OS7g26974. Why?

A. For gene names, we take annotations directly from TIGR. When we update to the newest TIGR some gene locii are lost, and others gained. An explanation of TIGR's gene nomenclature can be found [here](#).

Community News

Opportunities:

■ **Assistant/Associate Professor** (Wetland Plants Breeder/Ecologist) Department of Agronomy and Environmental Management, LSU Agricultural Center, Baton Rouge, Louisiana. Full-time, 12-month, tenure-track position as part of the LSU Agricultural Center's Coastal Plants Improvement Program. The scientist in this position is expected to develop a creative, productive and competitive research program that applies plant breeding methods to native Louisiana coastal wetlands species in order to enhance their usefulness in coastal preservation and conservation activities. This person will work with other scientists to identify, develop and evaluate genetic and breeding populations of diverse wetland species for use in coastal stabilization and wetlands reclamation. Members of the research faculty are expected to secure extramural funding, publish in refereed journals, and direct graduate student research programs, as a member of the Louisiana State University graduate faculty. Qualifications: Ph.D. in Plant Breeding/Genetics/Ecology or related field. Training and/or experience in management of plant eco-systems, and knowledge of the use of molecular markers and related techniques in plant breeding is desirable. Strong organizational, written and verbal communication skills are required. The ability to work in a team environment is essential. If interested, call Dr. Freddie Martin (225-578-2110) as soon as possible

■ **Professor/Associate Professor/Senior Lecturer of Applied Biotechnology**, 5-year appointment. African Center for Crop Improvement, School of Biochemistry, Genetics, Microbiology and Plant Pathology. Faculty of Science and Agriculture. Pietermaritzburg Campus, University of Kwazulu-Natal. Ref # SA63/2006 Qualifications: PhD or equivalent degree, in an appropriate field of plant breeding; Experience of supervision of postgraduate students or mentoring of junior staff; Experience in modern molecular techniques. For further information contact the Director, Professor MD Laing, at laing@ukzn.ac.za or visit the website at <http://www.acci.org.za>

■ **Employment** opportunities posted on the [RiceCAP jobs page](#).

■ **ISMB Calls** for **SIGs** and **demonstrations** (due 12/15/06) and **tutorials** (due 5/11/07)

■ **Monocots IV**. The deadline for symposium proposals is 1st June 2007. The deadline for submission of abstracts for oral contributions and posters will be 31st May 2008.

Check out the latest news:

■ [MaizeSequence.org](#) is now available!

■ [Scientists Unlock Gene in Wheat, Boosting Nutrition Value](#)

■ **Worldwide Rice News**, from IRRI - definitely worth checking out.

■ The **Community Sequencing Program** : The next deadline for letters of intent for CSP proposals is January 12, 2007. Proposals will be due by March 2, 2007. A letter of intent is required and must be submitted online, beginning December 1, 2006. Submitters whose letters of intent are approved will receive instructions and a proposal template via email.

■ **Letter from Dr. Andrew Paterson (20 Nov 2006)**

TO: Anyone interested in the sorghum genome sequence

As you may know, the US Department of Energy Joint Genome Institute, under its 'Community Sequencing Program' has made rapid progress toward its commitment to provide 8X sequence coverage of the genome of *Sorghum bicolor* L. genotype, BTx623. These data will be combined with publicly available sequences, assembled into 'contigs' (contiguous sequences without gaps) and 'scaffolds' (reconstructed stretches with any gaps spanned by at least two end-sequenced clones), and integrated with extensive physical and genetic maps to yield genetically-oriented pseudomolecules that are anticipated to substantially cover most sorghum chromosomes.

Sorghum sequence assemblies will be made available in advance of publication, under the principles of the '**Ft Lauderdale** agreement' to protect the interests of scientists who wish to share pre-publication data with the community, i.e. with a request that users defer publication of any whole-genome scale analyses until the sequencing group has published its primary analysis. Leading scientific journals are also being notified. A 4x assembly is now available at https://www.jgi.doe.gov/downloads/Sorghum_bicolor. Use Sorghum_bicolor and ^ico@hgr as login and password, respectively. We anticipate that the genetically- oriented 8x assembly will be available in early 2007, barring unexpected delays.

A team has been assembled to conduct initial annotation and analysis of the sequence for publication in a leading refereed journal. Although many dimensions of the planned analysis are covered, inquiries about possible participation in this effort should be directed to Dr Paterson (paterson@uga.edu). Team members are responsible for providing their own funding to support their participation.

Since the primary publication of the sequence will only be able to succinctly describe a few key features, two leading journals have offered to consider companion papers that address specific features in detail, for coordinated publication shortly following the primary sequence, in a 'special section' or perhaps 'special issue'.

■ Genome Research (www.genome.org/) has agreed to consider large-scale genomic studies that present novel data of biological significance.

■ The Plant Genome (www.crops.org/genome/) has agreed to consider research that shows clear potential for translating genomic technology into agronomic advancement.

Both journals will review sorghum genome-related submissions according to their established mechanisms and standards. At an appropriate time, the respective journals will provide further details. We hope that this information is useful in planning for engagement of these new genomic resources for sorghum in your work. We also hope that you share our excitement about these new resources, which promise to add new dimensions to our understanding of botanical and genomic diversity, as well as new opportunities for improvement of leading food, feed, forage & turf, and biofuels crops. We encourage you to consider how the sorghum sequence might fit into your research plans, to submit manuscripts to the coordinated reviews as appropriate, and to contact us with any questions.

Andrew H. Paterson
Lead Proposer, CSP Sorghum Sequencing Project
Chair, Sorghum Genomics Executive Committee

Daniel S. Rokhsar
Program Head for Computational Genomics
Joint Genome Institute

Upcoming Meetings

- December 4-6, 2006.** [Data Warehouse Technologies in Bioinformatics](#) Leucorea, Wittenberg, Germany
- December 9-13, 2006.** [ASCB 46th Annual Meeting](#)
- Dec 15-17, 2006.** [International Symposium on Computational Biology & Bioinformatics \(ISBB\)](#),
Bhubaneshwar, India
- January 3-7, 2007.** [Pacific Symposium on Biocomputing](#), Wailea, Maui.
- January 11, 2007.** [Conference in Systems Biology, Bioinformatics and Synthetic Biology](#). Manchester, UK.
- January 13-17, 2007.** [Plant and Animal Genome XV Conference](#)
- January 21-24, 2007.** [5th European Conference on Computational Biology](#), Israel.
- January 25-27, 2007.** Genis International Conference 2007: "[Governing Genomics - Interdisciplinary Perspectives on the Regulation of the Biosciences](#)". University of Exeter, UK.
- February 1-2, 2007.** [Beneath the Hull: Exploiting the Health-Beneficial properties of the Rice Grain](#). New Orleans. A rice utilization workshop.
- February 7-9, 2007.** [National Plant Breeding Workshop](#). Raleigh, NC, USA
- March 23-27, 2007.** [2nd International Conference on Plant Molecular Breeding](#). Sanya City, Hainan, P. R. China.
- April 11-13, 2007.** [5th European Conference on Evolutionary Computation Machine Learning and Data Mining in Bioinformatics](#). Valencia, Spain.
- May 31- June 3, 2007.** 9th Annual Plant Sciences Institute Symposium on [Epistasis: Predicting Phenotypes and Evolutionary Trajectories](#). Ames, Iowa, USA.
- July 21-25, 2007.** [15th Annual International Conference on Intelligent Systems for Molecular Biology \(ISMB\) & 6th European Conference on Computational Biology \(ECCB\)](#). Vienna, Austria: July 21-25, 2007
- August 13-17, 2007.** [Computational Systems Bioinformatics](#), UC San Diego.
- January 12-16, 2008.** PAG-XVI
- August 11-15, 2008.** [The Fourth International Conference on The Comparative Biology of the Monocotyledons & The Fifth International Symposium on Grass Systematics and Evolution](#). Copenhagen, Denmark
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