



## **JEAN CHRISTOPHE GLASZMANN**

Born in 1957 in France

CIRAD, Centre de Coopération Internationale en Recherche Agronomique pour le Développement, Avenue Agropolis, 34398 Montpellier Cedex 5, France

### **Positions held**

2007 – 2010                      Cirad, Scientific Director & Department Director  
In charge of a research department on Biological systems (Bios) at Cirad with 350 scientists working on biological systems in an agricultural context. The scientific domains covered include description and analysis of genetic diversity, functional analysis of genotype \* environment interactions, parasitic and symbiotic interactions and ecological dynamics. The main integrative drivers are crop improvement and management of sanitary risks for plants and animals.

2004 – 2010                      CGIAR Generation Challenge Programme, SubProgramme Leader  
In charge of a SubProgramme (SP1) on crop genetic diversity within the GCP. Five main themes are covered: creation of an improved understanding of the structure of the diversity for the major world food crops; development of a range of flexible high-throughput genotyping techniques accessible in reference laboratories; establishment and implementation of a scientific and organisational framework to describe tolerance to drought; identification of favourable genes and superior alleles through association studies; development of novel population approaches for relating genotypes to phenotypes.

1999-2006                      Cirad, Director of a Mixed Research Unit  
In charge of a research unit (Cirad, Inra, SupAgro, Montpellier University 2) including 40 scientists, focussed on the search for genetic variation which has value for crop breeding; this included genetic diversity analysis, comparative genomics, marker-assisted breeding and bioinformatics on a broad range of tropical crops such as rice, sorghum, wheat, sugarcane, banana, coconut, rubber tree, cacao, coffee, cotton, oil palm, etc

1997-2004                      Cirad, Program Leader  
In charge of a scientific platform on plant biotechnology and genetic resources, comprising laboratories of genome analysis, tissue culture, genetic transformation and cyto-histology.

1996-1997                      Cirad, Head of Research Unit  
In charge of a Cirad research unit conducting plant breeding on rice, sorghum, cotton, sugarcane, yam and taro

**Education and distinctions**

1982                      Docteur-ingénieur in plant ecological genetics, INAPG  
1993                      Habilité à Diriger des Recherches, University of Paris XI (Orsay)  
1995                      Qualified University Professor (National)  
**2008                      Jean Dufrenoy Award, Académie d'Agriculture de France**

## Representative publications

### Most recent

- Risterucci A.M., Hippolyte I., Perrier X., Xia L., Caig V., Evers M., Huttner E., Kilian A., Glaszmann J.C., 2009. Development and assessment of diversity arrays technology (DArT) for high-throughput DNA analyses in *Musa*. *Theoretical and Applied Genetics*, 119: 1093-1103.
- Foncéka D., Hodo-Abalo T., Rivallan R., Faye I., Ndoeye Sall M., Ndoeye O., Favero A.P., Bertoli D.J., Glaszmann J.C., Courtois B., Rami J.F., 2009. Genetic mapping of wild introgressions into cultivated peanut: a way toward enlarging the genetic basis of a recent allotetraploid. *BMC Plant Biology* 2009, 9:103
- Cochard B., Adon B., Rekima S., Billotte N., Desmier de Chenon R., Koutou A., Nouy B., Omere A., Purba A.R., Glaszmann J.C., Noyer J.L., 2009. Geographic and genetic structure of African oil palm diversity suggests new approaches to breeding. *Tree Genetics and Genomes*. 5: 1093-1103.
- Figueiredo de Alencar L.F., Calatayud C., Dupuits C., Billot C., Rami J-F., Brunel D., Perrier X., Courtois B., Deu M., Glaszmann J-C. 2008. Phylogeographic evidence of crop neo-diversity in sorghum. *Genetics*, 179:997-1008.
- Lecunff L., Garsmeur O., Raboin L.M., Pauquet J., Telismart H., Atthiapan S., Grivet L., Philippe R., Begum D., Deu M., Costet L., Wing R., Glaszmann J.C., D'Hont A., 2008. Diploid/polyploid syntenic shuttle mapping and haplotype-specific chromosome walking toward a rust resistance gene (*Bru1*) in highly polyploid sugarcane ( $2n=12x=115$ ). *Genetics* 180, 649-660.
- Lescot M., Piffanelli P., Ciampi A.Y., Ruiz M., Blanc G., Leebens-Mack J., da Silva F.R., Santos C.M.R., D'Hont A., Garsmeur O., Vilarinhos AD., Kanamori H., Matsumoto T., Ronning CM., Cheung F., Haas BJ., Althoff R., Arbogast T., Hine E., Pappas G.J., Sasaki T., Souza M.T., Miller R.N. G., Glaszmann J.C., Town CD. 2008. Insights into the *Musa* genome: syntenic relationships to rice and between *Musa* species. *BMC Genomics*, 9:58.
- Raboin L.M., Pauquet J., Butterfield M., D'Hont A., Glaszmann J.C. 2008. Analysis of genome-wide linkage disequilibrium in the highly polyploid sugarcane. *Theoretical and Applied Genetics*, 116 (5): 701-714.
- Jannoo N., Chantret N., Garsmeur O., Glaszmann J.C., Arruda P., D'Hont A. 2007. Orthologous comparison in a gene-rich region among grasses reveals stability in the sugarcane polyploid genome. *Plant Journal*, 50 (4): 574-585.
- Marcano M., Pugh T., Cros E., Morales S., Portillo E., Courtois B., Glaszmann J.C., Engels J.M.M., Phillips W., Astorga C., Risterucci A., Fouet O., Gonzalez V., Rosenberg K., Vallat I., Dagert M., Lanaud C. 2007. Adding value to cocoa (*Theobroma cacao* L.) germplasm information with domestication history and admixture mapping. *Theoretical and Applied Genetics*, 114 (5): 877-884.

Ming, R., Moore P. H., Wu K. K., D'Hont A., Glaszmann J. C., Tew T. L., Mirkov T. E., da Silva J., Jifon Rai J. M., Schnell R. J., Brumbley S. M., Lakshmanan P., Comstock J. C., Paterson A. H.. 2006. Sugarcane improvement through breeding and biotechnology. *Plant Breeding Reviews* 27: 15-118.

### **Most cited**

Sallaud C., Gay C., Larmande P., Bes M., Piffanelli P., Piegu B., Droc G., Regad F., Bourgeois E., Meynard D., Perin C., Sabau X., Ghesquière A., Glaszmann J.C., Delseny M., Guiderdoni E. 2004. High throughput T-DNA insertion mutagenesis in rice : A first step towards *in silico* reverse genetics. *Plant Journal*, 39 (3): 450-464.

Dufour P., Deu M., Grivet L., D'Hont A., Paulet F., Bouet A., Lanaud C., Glaszmann J.C., Hamon P. 1997. Construction of a composite sorghum map and comparison with sugarcane, a related complex polyploid. *Theoretical and Applied Genetics*, (3-4): 409-418.

D'Hont A., Grivet L., Feldmann P., Rao S., Berding N., Glaszmann J.C. 1996. Characterisation of the double genome structure of modern sugarcane cultivars (*Saccharum* spp.) by molecular cytogenetics. *Molecular and General Genetics*, 250: 405-413.

Grivet L., D'Hont A., Roques D., Feldmann P., Lanaud C., Glaszmann J.C. 1996. RFLP mapping in cultivated sugarcane (*Saccharum* spp.): genome organization in a highly polyploid and aneuploid interspecific hybrid. *Genetics*, 142: 987-1000.

Glaszmann J.C. 1987. Isozymes and classification of Asian rice varieties. *Theoretical and Applied Genetics*, 74: 21-30.

