

*Fourth International Conference of the
Peanut Research Community*

On

**Advances in *Arachis* through Genomics
and Biotechnology (AAGB-2009)
&**

West and Central Africa Regional Peanut workshop

**ICRISAT-Bamako, Mali, Africa
19-22 October, 2009**

PROGRAM BOOKLET

Organized by



**International Crops Research Institute
for the Semi-Arid Tropics**

In collaboration with



Peanut Science Council, USA



***Institut d'Economie Rurale du Mali
(IER), Mali***



***Peanut Collaborative Research
Support Program (CRSP)***

In collaboration with



**Fourth International Conference of the
Peanut Research Community**

on

**Advances in *Arachis* through Genomics
and Biotechnology (AAGB-2009)**

&

**West and Central Africa
Regional Peanut Workshop**

19-22 October 2009

ICRISAT-Bamako, Mali



Technical Program

Monday, 19 October 2009

08:00-09:00	Registration desk open (Program copy, Abstract Book//Badge/Stationary, etc)	Grand Hotel
0900-1000	Session I: Inauguration Welcome – Farid Waliyar, Director, West and Central Africa, & Chair, AAGB–2009 Welcome message – Richard Wilson, PGI Chairman Inaugural address – Bino Teme Director General, IER	
1000-1030	<i>Tea/coffee</i>	
10:30-12:30	Session II Country/Regional Reports USA - An overview of peanut genomics in USA India - Peanut genomics research in India China - Progress on <i>Arachis</i> genomic study in China South America - Peanut genomics activities in Brazil West Africa - Peanut research in West Africa Eastern and Southern Africa - Peanut research Eastern and southern Africa	Tom Stalker, NCSU T Radhakrishnan, India/ Mike Butterfield, ICRISAT David Bertoli, Catholic University Bonny Ntare, ICRISAT E Monyo, ICRISAT
1230-1400	<i>Lunch</i>	
1400-1700	Session III: Genetics, Allelic Diversity and Germplasm Enhancement <i>Presiding Chairs:</i> Howard Valentine, Peanut Foundation and Bonny Ntare, ICRISAT	
1400-1420	Use of marker-assisted selection to develop disease resistant cultivars with high O/L ratio	Corley Holbrook USDA-ARS, USA
1420-1440	Current efforts in conventional and molecular breeding of groundnut in Ghana	JY Asibuo CSIR-CRI, Ghana
1440-1500	A survey of SSR polymorphism in 112 Indian groundnut cultivars	T Radhakrishnan DGR, India

1500-1520	Genetic diversity of peanut genotypes in mini core collection using SRAP-RGA DNA markers	M Yuan SPRI, China
1520-1600	<i>Tea / Coffee</i>	
1600-1620	Genetic diversity in global Valencia peanuts (<i>Arachis hypogaea</i> ssp. <i>Fastigiata</i> var. <i>fastigiata</i>) using SSR markers	David Kalule NaSARRI, Uganda
1620-1640	Content of some nutrients in the core of the core of the US peanut germplasm collection	LL Dean USDA-ARS, USA
1640-1700	Genetics of traits related to water use efficiency and transpiration rate in groundnut (<i>Arachis hypogaea</i> L.)	DN Savithramma UAS, Bangalore – India
1700-1730	General discussion	

Tuesday, 20 October 2009

0830-1400

Session IV: Gene Genome resources and genome analysis

Presiding Chairs: David Bertoli, University of Brazil and Mike Butterfield, ICRISAT

0830-0850	Reference genetic resources for peanut	David Bertoli EMBRAPA, Brazil
0850-0910	Developing genomic resources for cultivated groundnut	Mike Butterfield ICRISAT, India
0910-0930	Development of microsatellite, single nucleotide polymorphism and transposon markers for peanut breeding	K Shirasawa KDNARI, Japan
0930-0950	Development of two recombinant inbred lines populations for peanut genetic linkage map and QTL analysis	BZ Guo USDA-ARS, USA
0950-1010	A novel set of SSRs developed from BAC-end sequences	Guohao He Tuskegee University, USA
1010-1030	Genetic mapping and synteny analysis allowed the identification of genome rearrangements in the allotetraploid <i>Arachis hypogaea</i>	D Fonceka CIRAD, France
1030-1100	<i>Tea/Coffee</i>	
1100-1120	Transcriptome analysis of wild <i>Arachis</i> under water stress	ACM Brasileiro EMBRAPA, Brazil
1120-1140	The role of retrotransposons in evolution of the allotetraploid genome of cultivated peanut	S Nielen ERGB, Brazil
1140-1220	General discussion	

1220-1400

Lunch

1400-1830

Session IV: Abiotic/Biotic Stresses and Quality

Presiding Chairs: Leal Bertoli, EMBRAPA, Brazil and Jupiter Ndjeunga ICRISAT

1400-1420	Phenotyping groundnut mini-core collection for resistance to <i>Aspergillus flavus</i> and aflatoxin contamination, Sadore, Niger	Farid Waliyar ICRISAT, Nigeria
-----------	---	-----------------------------------

1420-1440	Disease resistance characterization in wild <i>Arachis</i> : microscopy, gene expression analyses and genetic mapping.	SCM Leal-Bertioli EMBRAPA, Brazil
1440-1500	Comparative analyses of peanut expressed sequence tag libraries	JQ Huang OCRI-CAAS, China
1500-1520	Screening of Peanut genotypes crossed at USA for leaf spot resistant and tested in field condition at Burkina Faso.	M'Bi Bertin ZAGRE INERA, Burkina Faso
1520-1540	Development and evaluation of transgenic peanut for stress tolerance	CMS Mienie ARC-GCI, South Africa
1540-1600	Assessing the cost effectiveness of pre- harvest options to Control Aflatoxin in Groundnut in West Africa: case of Mali	Jupiter Ndjeunga ICRISAT-Niger, Niger
1600-1630	<i>Tea/Coffee</i>	
1630-1650	Evaluation of five peanut (<i>Arachis hypogaea</i> L.) genotypes to determine plant response to mid- and late-season drought	Richard Wilson Oilseed and Bioscience, USA
1650-1710	Heritability Estimates for Drought Resistance Related Traits in Cultivated Peanut (<i>Arachis hypogaea</i> L.).	CY Chen USDA-ARS, USA
1710-1750	Early stages of fungi interaction with wild and cultivated of <i>Arachis</i> by scanning electron microscopy <i>and</i> Functional genomics and resistance gene discovery in <i>Arachis</i>	SCM Leal-Bertioli EMBRAPA, Brazil
1750-1830	Discussion	
1930	<i>Dinner</i>	Le Logon

Wednesday, 21 October 2009

0830-1130 Visit to ICRISAT Samanko

1230-1400 Lunch

1400-1730 **Session IV: Abiotic/Biotic Stresses and Quality continued**

Presiding Chairs: Farid Waliyar, ICRISAT and Emmanuel Monyo, ICRISAT

1400-1420	Aflatoxin occurrence and distribution in Malawi	Emmanuel Monyo ICRISAT-Malawi,
1420-1440	Test en milieu paysan de greniers traditionnels améliorés pour la Conservation de l'arachide dans la Région de Kayes	Bamory Diarra IER, Mali
1440-1500	Potential assessment for recombining resistance to aflatoxin production in groundnut (<i>Arachis hypogaea</i> L.) and related resistance mechanism	Liao Boshou OCRI-CAAS, China
1500-1520	Exploring the scope of Cost-Effective Aflatoxin Risk Reduction Strategies in Maize and Groundnut Value Chains so as to Improve Market Access of the Poor in Africa.	Clare Narrod IFPRI, USA

1520-1540	Tagging and mapping of nutritional quality in groundnut	MVC Gowda USA-Dharwad, India
1540-1600	Identification and evaluation of wild <i>Arachis</i> species with high oil content	HF Jiang OCRI-CAAS, China
1600-1630	<i>Tea/Coffee</i>	
1630-1650	Cloning and expression analysis of genes encoding ACCase enzyme subunits from <i>Arachis hypogaea</i>	XJ Wang HTRC-SAAS, China
1650-1710	Manipulation of the toxigenicity of <i>Aspergillus flavus</i> soil populations to control aflatoxin contamination in peanuts	JW Dorner (Richard Wilson???) USDA-ARS, USA
1710-1730	General Discussion	

Thursday, 22 October 2009: West and Central Africa Regional Peanut Workshop

0830-1030	<p>Session V: Country presentations <i>Presiding Chairs: JH Williams Peanut CRSP/ Sait Drammeh The Gambia</i></p> <p>Gambia, Ghana Benin Burkina Faso Mali Togo Niger Nigeria Senegal</p>
1030-1100	<i>Tea/coffee</i>
1130-12:30	<p>Session VI: Peanut Research priority setting Group 1: Gene genome resources Group 2: Biotic/abiotic stresses</p>
1230-1400	<i>Lunch</i>
1400-15:30	Plenary discussion on WCA priorities
1530-1600	<i>Tea/coffee</i>
16:00-1630	Closing remarks

Contact Addresses

Name	Address	E-mail
Organizing Committee		
Dar, William D	ICRISAT, Patancheru 502 324, Andhra Pradesh, India	w.dar@cgiar.org
Waliyar, Farid	ICRISAT,, Niger, BP 12404, Niamey, Niger	f.waliyar@cgiar.org
Wilson, Richard	Oilseeds @ Biosciences LLC 5517, Hickory Leaf Drive, Raleigh, NC27606-9502, USA	rffwilson@mindspring.com
Bertioli, David	Universidade de Brasília, Campus Universitário, Brasília, DF, Brazil	davidbertioli@unb.br
Zhang, Xinyou	Henan Academy of Agricultural Sciences, Zhengzhou, 430002, China	haasz@sohu.com
Hoisington, Dave	ICRISAT, Patancheru 502 324, Andhra Pradesh, India	d.hoisington@cgiar.org
Varshney, Rajeev	ICRISAT, Patancheru 502 324, Andhra Pradesh, India	r.k.varshney@cgiar.org
Ntare, Bonny	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), BP 320, Bamako, Mali	b.ntare@icrisatml.org
Butterfield, Mike	ICRISAT, Patancheru 502 324, Andhra Pradesh, India	m.butterfield@cgiar.org
Nwosu, Victor	Mars Inc. 800 High St., Hackettstown, NJ 078410, USA	Victor.nwosu@effem.com
Bertioli, Soraya	EMBRAPA Recursos Genéticos e Biotecnologia (Cenargen), Parque Estação Biológica Brasília, DF, 70770-900, Brazil	soraya@cenargen.embrapa.br
Guo, Baozhu	USDA-ARS PO Blx 748, Tifton, GA 31793-0748, USA	Baozhu.guo@ars.usda.gov
Holbrook, Corley	USDA-ARS Moore Highway, Tifton, GA 31793, USA	corley.holbrook@ars.usda.gov
Knapp, Steve	Crop & Soil Sciences, University of Georgia Athens, GA 30602, USA	sjknapp@uga.edu

Liang,, Xuan Qiang	Crop Science Research Institute, Guangdong Academy of Agricultural Science, Wuhan, Guangzhou 510640, China	Liang804@yahoo.com
Ndoye, Ousmane	CNRA Institut Senegalais de Recherches Agricoles (ISRA), BP 2765 Route des Peres Marists Hann Dakar, Senegal	ousndoye@refer.sn
Cook, Doug	University of California, Davis Department of Plant Pathology, 105 Robbin Hall, Davis CA 95616, USA	drcook@ucdavis.edu
Stalker, Thomas	Department of Crop Science, PO Box 7629, North Carolina State University, Raleigh NC 27695, USA	<u>Tom_stalker@ncsu.edu</u>
Valentine, Howard	Peanut Foundation, 1500 King Streeg, Suite 301 Alexandria, FA 22314, USA	<u>hvalentine@peanutusa.com</u>
Participants <i>(as per the order of Program)</i>		
Asibuo, JY	CSIR- Crops Research Institute, PO Box 3785, Kumasi, Ghana	jyasibuo@gmail.com
Radhakrishnan, T	National Research Center for Groundnut, Junagadh 362001, Gujarat, India	<u>radhakrishnan@nrcg.res.in</u>
Yuan, M	Shandong Peanut Research Institute, Qingdao 266100, Shandong, China	<u>yuanbeauty@gmail.com</u>
Kalule, David	National SemiArid Resources Research Institute (NaSARRI), Serere; P.O. Box Soroti, Uganda	
Dean, Lisa	Market Quality and Handling Research Unit, United State Department of Agriculture-Agricultural Research Service (USDA-ARS), 27695-7624, Raleigh, North Carolina, USA	<u>lisa.dean@ars.usda.gov</u>
Shirasawa, K	Kazusa DNA Research Institute, Kisarazu, Chiba 292-0818, Japan	<u>shirasaw@kazusa.or.jp</u>
He, Guo	Tuskegee University, Tuskegee, AL 36088, USA	<u>hguohao@tuskegee.edu</u>
Fonceka, Daniel	CIRAD: Centre de coopération internationale en recherche agronomique pour le développement. UMR Développement et Amélioration des plantes, TA A96/3, Avenue Agropolis, Montpellier, France	daniel.fonceka@cirad.fr

Nielen S	Embrapa Recursos Genéticos e Biotecnologia, 70770-917 Brasília-DF, Brazil	stephan@cenargen.embrapa.br
Boshou, L	Oil Crops Research Institute of Chinese Academy of Agricultural Sciences, Key Laboratory for Biological Sciences of Oil Crops, Ministry of Agriculture, Wuhan, 430062, China	lboshou@hotmail.com
Zagre, Bertin	NERA/Kamboinsé, BP 476, Burkina Faso	zbertin2002@yahoo.fr
<u>Mienie, CMS</u>	Agricultural Research Council-Grain Crops Institute, Private Bag X1251, Potchefstroom, 2520, South Africa	mieniec@arc.agric.za
Ndjeunga J [¥]	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), BP 12404, Niamey, Niger	n.jupiter@cgiar.org
Chen, CY	USDA/ARS National Peanut Research Laboratory, 1101 E. Forrester Dr. SE. Dawson, GA 39842	charles.chen@ars.usda.gov
Monyo, Emmanuel	International Crops Research Institute for the Semi-Arid Tropics (ICRISAT) Lilongwe, Malawi, and Niamey, Niger	e.monyo2@cgiar.org
Diarra B	Institut d'Economie Rurale Rue Mohamed V BP 258 Bamako Mali,	bdiarra@ier.ml
Narood, Clare	International Food Policy Research Institute (IFPRI), 2033 K Street NW, Washington DC, 20006, USA	c.narrod@cgiar.org
Gowda, MVC	Department of Genetics and Plant Breeding, University of Agricultural Sciences, Dharwad - 580005, India	mvcgowda@sify.com
Jiang H	Key Laboratory for Biological Sciences of Oil Crops of MOA, Oil Crops Research Institute (OCRI) of Chinese Academy of Agricultural Sciences (CAAS), Wuhan, Hubei Province 430062, China	peanutlab@oilcrops.cn
Wang XJ	High-Tech Research Center, Shandong Academy of Agricultural Sciences; Key Laboratory of Crop Genetic Improvement and Biotechnology, Huanghuaihai, Ministry of Agriculture; Key Laboratory for Genetic Improvement of Crop, Animal and Poultry of Shandong Province. Jinan 250100, P.R. China	xingjunw@hotmail.com