



**Third International Conference for  
Peanut Genomics and Biotechnology**  
on  
**Advances in *Arachis* through Genomics  
and Biotechnology (AAGB-2008)**



**Technical Program**

**Tuesday, 4 November 2008**

0830 – 1000	Registration desk open (Program booklet, Abstract Book/CD/Badge/Stationary)	B Manjula
0930 – 1000	Tea / Coffee – Academic Court	
<b>1000 - 1200</b>	<b>Session I: Inauguration</b> <i>Presiding Chairs: Shyam Nigam / Howard Valentine</i>	
1000 – 1100	Welcome – Dave Hoisington, Deputy Director General - Research, ICRISAT & Chair, AAGB–2008 Inaugural address – William Dar, Director General, ICRISAT & Chief Patron, AAGB–2008 Address by PGI Chairman – Richard Wilson, Co-Chair, AAGB–2008 Peanut genomics meeting in India – Rajeev Varshney, Secretary, AAGB–2008	
1100 – 1200	<i>Address by Country Representatives</i>	
1100 – 1110	<b>USA-</b> An overview of peanut genomics in USA	Douglas Cook, UC-Davis
1110 – 1120	<b>India-</b> Peanut genomics research in India	A Bandhyopadhyay, NAIP-ICAR
1120 – 1130	<b>China -</b> Progress on <i>Arachis</i> genomic study and biotechnology in China	Xinyou Zhang, Henan Academy Agricultural Sciences
1130 – 1140	<b>South America-</b> Peanut genomics activities in Brazil	David Bertoli, Catholic University
1140 – 1150	<b>Africa-</b> Peanut research in Senegal	Ousmane Ndoye, ISRA
1150 – 1200	General Discussion	
1200 – 1300	Lunch – 204 Banquet Hall	
<b>1300 – 1700</b>	<b>Session II: Genetics, Allelic Diversity and Germplasm Enhancement</b> <i>Presiding Chairs: Corley Holbrook and Hari Upadhyaya</i>	
1300 – 1325	Strides in groundnut crop improvement and new challenges	Shyam Nigam ICRISAT, <i>India</i>
1325- 1350	DART-based whole genome profiling and novel information technologies in support system of modern breeding of groundnut	Andrzej Kilian DART Pty Ltd, <i>Australia</i>
1350 – 1415	An example of marker assisted breeding in peanut and an illustration of the need for more markers	Corley Holbrook USDA-ARS, <i>USA</i>
1415 – 1440	Synthetic Groundnut: How important are they?	Nalini Mallikarjuna ICRISAT, <i>India</i>
1440 – 1500	Integration of mutation with recombination breeding for genetic improvement of cultivated groundnut ( <i>Arachis hypogaea</i> L.)	Anand Badigannavar Bhabha Atomic Research Center, <i>India</i>
1500 – 1530	Tea / Coffee – Academic Court	
1530 – 1555	Using genetic and genomic resources to broaden the genetic base of cultivated groundnut	Hari Upadhyaya ICRISAT, <i>India</i>

1555 – 1620	Genetic enhancement of Valencia core collection and molecular characterization of U.S. peanut mini core collection using SSR markers	Naveen Puppala New Mexico State University, <i>USA</i>
1620 – 1640	RAPD based diversity among released cultivars and advanced breeding lines in groundnut ( <i>Arachis hypogaea</i> L.)	R P Vasanthi ANGRAU, <i>India</i>
1640 – 1700	Report on presence of transposable elements (TEs) in groundnut and their possible use in creating novel genetic variation	H L Nadaf UAS-Dharwad, <i>India</i>
1900	Dinner – Academic Court	

### Wednesday, 5 November 2008

#### 0830 – 1200 **Session III: Gene Discovery and Genome Analysis**

*Presiding Chairs: Douglas Cook and Sachiko Isobe*

0830 – 0855	The use of wild <i>Arachis</i> for genetics, genomics, and improvement of cultivated peanut	David Bertoli EMBRAPA, <i>Brazil</i>
0855 – 0920	Development of microsatellite, SNP and AFLP markers in cultivated peanut	Sachiko Isobe Kazusa DNA Research Institute, <i>Japan</i>
0920- 0940	Large-scale sequencing of a seed full-length cDNA library and bioinformatic analysis in peanut	Weijian Zhuang Fujian Agriculture and Forestry University, <i>China</i>
0940 - 1000	Application of SRAP-RGH markers in peanut	Mei Yuan Tuskegee University, <i>USA</i>
1000- 1030	Tea / Coffee – Academic Court	
1030 – 1055	Developing genetic and genomic resources in cultivated and wild peanut species: A focus on gene-based SNP and disease resistance genes	Douglas Cook UC-Davis, <i>USA</i>
1055- 1120	Towards an integrated SSR/RFLP map of tetraploid peanut	Mark Burow Texas Agricultural Experiment Station, <i>USA</i>
1120 – 1145	Toward physical mapping of resistance gene homologs (RGHs) in peanut	Guohao He Tuskegee University, <i>USA</i>
1145 – 1200	High-frequency origin of disease resistant mutants in peanut is associated with MITE transposition	Ramesh Bhat UAS-Dharwad, <i>India</i>

1200 - 1300 Lunch – 204 Banquet Hall

#### 1300 - 1700 **Session IV: Abiotic/Biotic Stresses**

*Presiding Chairs: Vincent Vadez and Ousmane Ndoye*

1300 – 1325	Groundnut ( <i>Arachis hypogaea</i> L.) breeding in Senegal: A long tradition of research to overcome stresses	Ousmane Ndoye ISRA, <i>Senegal</i>
1325 – 1350	Rosette and early leaf spots resistant groundnut varieties for Eastern and Southern Africa	Emmanuel Monyo ICRISAT, <i>Malawi</i>
1350 – 1410	Enhancing biotic stress tolerance in groundnut: A journey from conventional breeding to genomics, the Indian scenario	T Radhakrishnan NRCG, <i>India</i>
1410 - 1435	Genetic enhancement of resistance to foliar diseases - strategies and prospects	M V C Gowda UAS-Dharwad, <i>India</i>
1435 – 1500	Genetic engineering of groundnut for crop improvement: Current status and future prospects	Kiran Sharma ICRISAT, <i>India</i>

1500 - 1530	Tea / Coffee –Academic Court	
1530 – 1555	Phenotypic assessment of groundnut response to key abiotic stress	Vincent Vadez ICRISAT, <i>India</i>
1555 – 1615	Evaluation and characterization of transgenic groundnuts expressing the At DREB1A gene for various drought tolerance traits	Pooja Bhatnagar-Mathur ICRISAT, <i>India</i>
1615– 1630	Identification of water use efficient genotypes of groundnut for rainfed conditions of Southern Karnataka	D Savithramma UAS – Bangalore, <i>India</i>
1630 – 1645	Differences in biochemical and molecular responses of peanut genotypes to drought stress	K S S Naik, ARS-Kadiri , <i>India</i>
1645 – 1700	Development of <i>Spodoptera litura</i> resistant transgenic peanut ( <i>Arachis hypogaea</i> L.) and expression of constitutive and wound inducible promoters	S Tiwari National Botanical Research Institute, <i>India</i>
1730 - 1930	Poster Session – Academic Court	

#### Thursday, November 6 2008

##### 0830 – 1200 Session V: ICRISAT Visit

0800 – 1000	SAT Ventures/AGL/Gene Bank
1000 – 1030	Tea / Coffee – Academic Court
1030 – 1200	Rain out Shelter/Field and Lab.
1200 – 1300	Lunch – 204 Banquet Hall

##### 1300 – 1700 Session VI: Product Quality and Safety

*Presiding Chairs: Victor Nwosu/Farid Waliyar*

1300 – 1325	Quality and safety of peanut products: Research focus for the genomic community?	Victor Nwosu MARS, <i>USA</i>
1325 – 1350	Searching for the solution to prevention of aflatoxin contamination and diseases in cultivated peanuts: A genetic and genomic approach	Baozhu Guo USDA/ARS, <i>USA</i>
1350 – 1415	Identification of differentially expressed proteins in peanut in response to <i>Aspergillus flavus</i> attack under drought stress through proteome analysis	Xuan Qiang Liang Guangdong Academy of Agricultural Science, <i>China</i>
1415 – 1440	Probing into the molecular mechanism of a typical nodulation strategies in <i>Arachis</i>	M Das Gupta University of Calcutta, <i>India</i>
1440 – 1500	Biological Control of <i>Aspergillus flavus</i> in groundnut ( <i>Arachis hypogaea</i> , L.) through compost isolated bacteria	G Harini ICRISAT <i>India</i>
1500 – 1530	Tea / Coffee – Academic Court	
1530 – 1555	Cloning and expression analysis of genes encoding fatty acid synthesis enzymes from peanut	Xing Jun Wang Shandong Peanut Research Institute, <i>China</i>
1555 – 1620	Potential of recombining high oil content with resistance to aflatoxin in groundnut ( <i>Arachis hypogaea</i> L.)	Liao Boshou OCRI, <i>China</i>
1630 – 1800	Poster Session – Academic Court	
1830	Dinner – Mary Cummings Park	

**Friday, 7 November 2008**

**0800 – 1000**

**Parallel Sessions**

Session I: Genetic Resources and Germplasm  
Enhancement (*Venue: 306 Conference Hall*)

Coordinators  
Hari Upadhayaya/Corley Holbrook

Session II: Genomic Resources and Genome analysis  
(*Venue: 212 Conference Hall*)

Coordinators  
Dogulas Cook/David Bertoli

Session III: Abiotic/Biotic Stresses  
(*Venue: 212 Classroom A*)

Coordinators  
MVC Gowda/Vincent Vadez

Session IV: Product Quality and Safety  
(*Venue: 302 Conference Hall*)

Coordinators  
Farid Waliyar/Victor Nwosu

1000 -1030

Tea / Coffee Break – Academic Court

1030 -1050

Summary from Group I Parallel Session

1050 -1110

Summary from Group II Parallel Session

1110 -1130

Summary from Group III Parallel Session

1130 -1150

Summary from Group IV Parallel Session

1150 -1230

**Closing Ceremony**

Dave Hoisington  
Howard Valentine  
Richard Wilson  
Rajeev Varshney

1230 - 1315

Lunch – 204 Banquet Hall

**Saturday, 8 November 2008**

0900 -1500

Tour to City (Historical monuments in Hyderabad)

**Sunday, 9 November 2008**

Departures