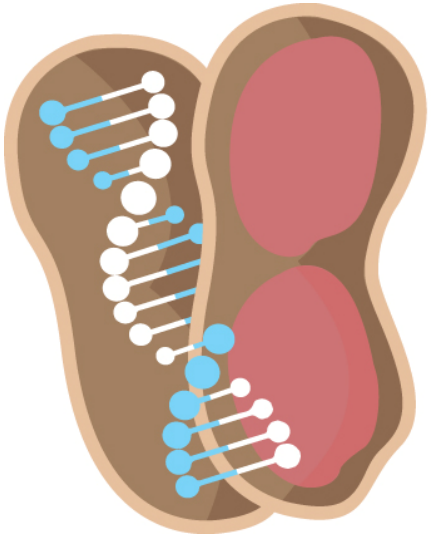
PROGRAM



NINETH INTERNATIONAL CONFERENCE of the Peanut Research Community

Advances in Arachis through Genomics & Biotechnology

AAGB-2017

Organizing Committee

Chair: Seijo Guillermo, Argentina

Co-Chairs: Richard F. Wilson, USA
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Alejandro Rago, National Institute of Agricultural Technology
Marraro Francisco Acuña, National Institute of Agricultural Technology
Graciela Lavia, Northeast Institute of Botany
German Robledo, Northeast Institute of Botany

Advances in Arachis Through Genomics & Biotechnology

AAGB-2017

Program& Abstracts

9th Internatinal Conference of the Peanut Research Community

Cordoba, Argentina

March 14-17, 2017

ORGANIZED BY:

Ministerio de Ciencia y Tecnología de Córdoba

Instituto de Botánica del Nordeste (IBONE, UNNE-CONICET)

Cámara Argentina del Maní

Fundación Maní Argentino

Instituto Nacional de Tecnología Agropecuaria

Criadero El Carmen

The Peanut Foundation

PROGRAM HIGHLIGHTS

Monday, March 13

15:00	PGI meeting, Irigoyen 111 Hotel
16:00 – 18:00	Registration, Irgoyen 111 Hotel, Lobby

Tuesday, March 14

7:30 – 12:00	Registration & poster set up
8:45 – 10:30	**Session I: Inauguration**
10:30 – 11:00	Tea/Coffee Break
11:00 – 12:10	**Session I (cont.)**
12:10 – 1:30	Lunch
13:30 – 14:50	**Session II: The Peanut Genome Project**
14:50 – 15:30	Tea/Coffee Break
15:30 – 16:50	**Session III: Genetic Trait Mapping and Gene Discovery**

Wednesday, March 15

8:30 – 9:50	**Session IV: Genetic Trait Mapping and Gene Discovery**
9:50 – 10:30	Tea/Coffee Break
10:30 – 12:10	**Session V: Germplasm Diversity and Utilization**
12:10-13:30	Lunch

Wednesday, March 15 (cont.)

13:30 – 15:10	**Session VI: Crop Improvement**
15:10 – 15:45	Tea/Coffee Break
15:45 – 17:05	**Session VII: Crop Improvement**
20:30	Banquet

Thursday, March 16,2017

8:30 – 10:10	**Session VIII: Plant Diseases – the Smut Problem in South America**
10:10 – 10:45	Tea/Coffee Break
10:45 – 12:30	**Session IX: The IPGI Summit**
12:30-14:00	Lunch
14:00 – 15:30	**Session X: The IPGI Summit & Closing Ceremonies**
16:00 – 16:15	Tea/Coffee Break
17:30	**City tour: Historic buildings and churches in downtown Córdoba**

Friday, March 17, 2017

8:00 – 18:00	**Field tour** (lunch included)

Saturday, March 18, 2017

8:00 – 18:00	**Tour to the Jesuit estancias and sightseeing**

EXPANDED PROGRAM

Monday, March 13, 2017

15:00 PGI meeting, Irigoyen 111 Hotel

16:00 – 18:00 Registration, Irigoyen 111 Hotel Lobby

Tuesday, March 14, 2017

Córdoba Cultural Center

7:30 – 12:00 Registration& poster set up

Session I: Inauguration
Chairpersons: S. Guillermo & S. Brown

8:45 **Welcome and Inaugural addresses**

9:00 **Official opening words, Dr.Walter Robledo**
Ministry of Science and Technology of Córdoba

9:15 **Argentina and the world peanut market, Dr. EdorardoFrancanzani**
Executive Director, Argentine Peanut Chamber

9:40 **The path forward for the International Peanut Genome Initiative, Dr. Richard F. Wilson**
The Peanut Foundation

10:10 **Group photograph**

10:30 – 11:00 **Tea/Coffee Break**

11:00 **Markers, genes, genomes: Present and future**
Rajeev Varshney
Internl. Crops Res.Insti.for the Semi-arid Tropics

11:45 **Production practices and challenges**
David Jordan
NC State University

12:10-13:30 **Lunch**

Session II: The Peanut Genome Project
Chairpersons: S. Jackson &B.Guo

13:30 **Gene co-expression Analysis to Characterize Pest and Disease Response in Peanut**

P. Ozias-Akins[1]*, J. Clevenger[1], Y. Chu[1], L.A. Guimaraes[1], P. Timper[2], C. Holbrook[2]
[1]Univ. of Georgia, Institute of Plant Breeding, Genetics & Genomics, Tifton, GA, USA; [2]USDA-ARS, Coastal Plain Experiment Station, Tifton, GA, USA

13:50 **Novel pipelines for marker discovery in allotetraploid *Arachis hypogaea***

J. Clevenger[1]*, W. Korani[2], P. Ozias-Akins[2], S. Jackson[1]
[1]Center for Applied Genetic Technologies and Institute of Plant Breeding, Genetics, & Genomics, University of Georgia, Athens, GA 30602; [2] Institute of Plant Breeding, Genetics, & Genomics, The Univ. of Georgia Tifton Campus, Tifton, GA 31793-0748.

14:10 **Using PeanutBase: features, examples, and tips**

S. Cannon[1]*, E.K.S. Cannon[2], W. Huang[2], S. Kalberer[1], P. Otyama[1], L. Ren[2], S. Dash[3], N. Weeks[1], A. Farmer[3]
[1]USDA-ARS, Ames, IA; [2]Iowa State University, Ames, IA; [3]National Center for Genome Resources, Santa Fe, NM.

14:30 **Genetic behavior and genome diversity in *Arachis hypogaea***

D.J. Bertioli[1,2]*, S.C.M. Leal-Bertioli[1,3], B. Abernathy[1], C. Chavarro[1], J. Clevenger[1], J.Hee Shin[1], C. Ballen[1], P. Ozias-Akins[4], S. A. Jackson[1]
[1]Center for Applied Genetic Technologies, University of Georgia, Athens, GA, 30602-6810, U.S.A; [2]University of Brasília, Institute of Biological Sciences, Campus Darcy Ribeiro, 70910-900. Brasília, DF, Brazil; [3]Embrapa Genetic Resources and Biotechnology, Brasília, DF, 70770-917, Brazil; [4]Department of Horticulture, University of Georgia, Tifton, Georgia 31973

14:50 – 15:30 **Tea/Coffee Break**

Session III: Genetic Trait Mapping &Gene Discovery
Chairpersons S. Cannon & P. Ozias-Akins

15:30 **Genetic enhancement and utilization of resistance to bacterial wilt caused by *Ralstoniasolanacearum* in peanut**

B. Liao*, Y. Lei, H. Jiang, L. Yan, X. Ren, Y. Chen, L. Huang, L. Wan, X. Zhou, N. Duan Oil Crops Research Institute (OCRI) of Chinese Academy of Agricultural Sciences (CAAS), Wuhan, Hubei, China.

15:50 **Development of SSR markers and identification of major quantitative trait loci controlling shelling percentage in cultivated peanut (*Arachis hypogaea* L.)**

H. Luo, Z. Xu, Z. Li, X. Li, X. Ren, L. Huang, X. Zhou, Y. Chen, J. Yu, W. Chen, Y. Lei, B. Liao, H. Jiang*
Oil Crops Research Institute (OCRI) of Chinese Academy of Agricultural Sciences (CAAS), Wuhan, Hubei, 430062, China.

16:10 **Characterization of a peanut resistance gene *AhqBW1*to bacterial-wilt caused by *Ralstoniasolanacearum***

W.J. Zhuang[1,2]*, C. Zhang[1,2], R.R. Zhuang[2], H. Chen[1,2], T.C. Cai[1,2], M. Gandeka[1], A. Niaz[1], R.K. Rashney[4], G.H. He[3]
[1]College of Plant Protection, Fujian Agriculture and Forestry University, Fuzhou, China; [2]Fujian Key Laboratory of Crop Molecular and Cell Biology, Fujian Agriculture and Forestry University, Fuzhou, Fujian, China; [3]Tuskegee University, Tuskegee, AL, USA.[4]International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Patancheru, India

Wednesday, March 15, 2017
Córdoba Cultural Center

Session IV: Genetic Trait Mapping & Gene Discovery
Chairpersons: B. Liao & D. Bertioli

8:30 **The repetitive landscape of *Arachis glandulifera* (Leguminosae) investigated by low-depth Illumina sequencing**

S.S. Samoluk[1]*,L. Chalup[1], C. Chavarro[1], G. Robledo[1], D.J. Bertioli[2], S. Jackson[2], G. Seijo[1]
[1]Instituto de BotánicadelNordeste (UNNE-CONICET), Corrientes, Argentina; [2]University of Georgia, Center for Applied Genetic Technologies, Athens, GA, USA

8:50 **Development of high density genetic linkage map for dissecting disease resistance quantitative trait loci in peanut**

G. Agarwal[1,2,3], H. Wang[2], M.K. Pandey[3], J.P. Clevenger[4], A.K. Culbreath[2], X. Liu[5], D.J. Bertioli[4], P. Ozias-Akins[6], S.A. Jackson[4], R.K. Varshney[3], B. Guo[1]*
[1] USDA-ARS, Crop Prot and Manage Unit, Tifton, GA;[2]University of Georgia, Depart Plant Path, Tifton, GA, USA; [3]ICRISAT, Hyderabad, India; [5]BGI-Shenzhen, Shenzhen,China; [6]Institute of Plant Breeding, Genetics and Genomics, University of Georgia, Tifton, GA, USA

9:10 **Genetic dissection of foliar disease resistance using next-generation sequencing approaches in groundnut**

M.K. Pandey[1]*, R.S. Bhat[2], J. Pasupuleti[1], B. Guo[3], R.K. Varshney[1].
[1]International Crops Research Institute for the Semi-Arid Tropics (ICRISAT), Hyderabad, India; [2]Department of Biotechnology, University of Agricultural Sciences, Dharwad, India; [3]USDA- Agricultural Research Service, Crop Protection and Management Research Unit, Tifton, GA, USA

9:30 **Differential expression of transcription factor families under salt stress in the peanut**

X.B. Zhao, C.J. Li, T.T. Zhangl, C.X. Yanr, J. Wang, S.H. Shan*

Laboratory of Genetics and Breeding, Shandong Peanut Research Institute, Qingdao 266100, P.R.China

9:50-10:30 **Tea/Coffee Break**

Session V: Germplasm Diversity and Utilization

Chairpersons: H.T. Stalker & G. Wright

10:30 **Strategies for the management of the U.S. peanut germplasm collection**

S.P. Tallury*

Plant Germplasm Resources Conservation Unit, USDA-ARS, Griffin, GA 30223-1797

10:50 **Genome-wide association study of major agronomic traits in 400 peanut accessions reveals genetic diversities and their implication in peanut breeding**

X. Zhang*, B. Huang, Z. Sun, F. Qi, Z. Zheng, Y. Wang, W. Dong, L. Miao, L. Shi,F. Tang

[1]Industrial Crops Res. Inst., Henan Academy of Agric. Sciences, Henan Provincial Key Laboratory for Oil Crops Improvement, Key Laboratory of Oil Crops in Huanghuaihai Plains, Ministry of Agriculture, P. R. China.

11:10 **Integrating the cytogenetic and molecular phylogenetic data to the analysis of karyotypic evolution of the genus *Arachis***

G. Robledo[1,2]*, M.C. Silvestri[1], A. Ortiz[1,2], S.S. Samoluk[1,2], G. Seijo[1,2], G.I. Lavia[1,2]

[1]Instituto de Botánica del Nordeste (UNNE; CONICET);[2]Facultad de Ciencias Exactas y Naturales y Agrimensura, Universidad Nacional del Nordeste, Corrientes, Argentina

11:30 **Getting bigger by starting smaller – surprises of introgression with wild relatives**

S.C.M. Leal-Bertioli[1,2]*, M.C. Moretzsohn[1], I.J. Godoy[3], C. Taborda-Ballén[2], J.F. Santos[3], J.Hee Shin[2], Y. Chu[4], J.P. Clevenger[2,4], P. Ozias-Akins[4], H.T. Stalker[5], C.C. Holbrook[6], S.A. Jackson[2], D.J. Bertioli[2,7]

[1]Embrapa Genetic Resources & Biotechnology, Brasília, DF, Brazil; [2] Center for Appl. Genetic Technologies, Univ. of Georgia, Athens, GA, U.S.A.; [3]Instituto Agronomico, Campinas, SP, Brazil; [4] Dept. Horticulture, Univ. Georgia, } Tifton, GA, U.S.A.; [5]Dept. Crop Soil Sci., NCSU, Raleigh, NC, USA; [6]USDA ARS 115 Coastal Way, Tifton, GA, U.S.A.; [7]Instit. Biological Sci. Univ. Brasília, Brasília, DF, Brazil

11:50 **Using *A. batizocoï* to move genes form wild to cultivated peanut species**

J.R. Nguepjop[1], T. Hodo-Abalo[1], D. Sane[2], J.F. Rami[3], D. Fonceka[1,3]

[1]Centre d'EtudeRégional pour l'Amélioration de l'Adaptation à la Sécheresse. Thiès Senegal; [2]Université Cheikh Anta Diop de Dakar, Dakar, Senegal; [3]CIRAD, UMR AGAP, Montpellier, France

12:10-13:30 **Lunch**

Session VI: Crop Improvement

Chairpersons: D. Jordan &S. Leal-Bertioli

13:30 **Evolution of peanut production in Argentina during the last 50 years**

J. Soave[1], A. Moresi[1], C. Oddino[2], S. Soave[1], M Buteler3*****

[1]Criadero El Carmen, Gral. Cabrera, 5809, Argentina;

[2]Facultad de CienciasAgropecuarias U.N.R.C. Río Cuarto, 5800, Argentina &Criadero El Carmen, Gral. Cabrera;

[3]Criadero El Carmen, Gral. Cabrera & Ministry of Science and Technology, 5004, Córdoba, Argentina

13:50 **Comparison of breeding approaches used to improve resistance to foliar fungal diseases in peanut**

J. Pasupuleti*, S.S. Manohar, M.K. Pandey, T.V. Murali, R.K. Varshney

International Crops Research Institute for Semi-Arid Tropics (ICRISAT), Patancheru -502324, Hyderabad, Telangana, India

14:10 **Phenotyping and genotyping of RIL populations for gene discovery and marker development**

C.C. Holbrook[1]*, P. Ozias-Akins[2], Y. Chu[2], T.G. Isleib[3], J. Clevenger[2], C. Chavarro[2], S. Jackson[2], A. Culbreath[2], T. Brenneman[2], R. Cui[2], C. Chen[4], C. Butts[1], M. Lamb[1], T. Sinclair[3], B. Tillman[5], M. Burow[6], C.K. Kvien[2], and B. Guo[1].

[1]USDA-ARS; [2]Univ. of Georgia, Tifton, GA, USA; [3]North Carolina State Univ., Raleigh, NC, USA ; [4]Auburn Univ., Auburn, AL, USA; [5]Univ. of Florida, Marianna, FL, USA; [6]Texas A&M Univ., Lubbock, TX, USA

14:30 **Breeding for improved blanchability in peanut: Phenotyping, genotype x environment interaction and selection**

G.C. Wright[1,2]*, D. O'Connor[1,2], R.C.N. Rachaputi[2], R.J. Henry[2], A. Furtado[2], M.G. Borgognone[3]& N.A. Barkley[4].

[1]Peanut Company Australia, Kingaroy, QLD, 4610; [2]Queensland Alliance for Agric. & Food Innovation, The Univ. Queensland, St Lucia, QLD, 4072; [3]Crop & Food Sci.,Agri-Science Queensland. Department of Agriculture and Fisheries, Toowoomba QLD, 4350; [4]USDA ARS Plant Genetic Resources Conservation Unit, Griffin, GA 30223 USA.

14:50 **Study on impact of farmer's participatory varietal selection in groundnut (*Arachis hypogaea* L.) improvement**

H. Khan[1]*, V.S. Patted[1], I. Shankergoud[1]& P.M.Salimath[1]

[1]Department of Genetics and Plant Breeding, UAS, Raichur.
*Scientist (Plant Breeding), AICRP on Groundnut, MARS, UAS, Raichur – 584 104, Karnataka State, India

15:10 – 15:45 **Tea/Coffee Break**

Session VII: Crop Improvement

Chairpersons: J. Pasupuleti& M. Buteler

15:45 **Phenotyping groundnut (*Arachis hypogaea*) genotypes for moisturestress in Sudan savanna**

A.S. Shaibu[1]*, B.N. Motagi[2], K.S. Muhammad[1], A.A. Adnan[1]

[1]Department of Agronomy, Bayero University, Kano, Nigeria. [2]International Crop Research Institute for Semi-Arid Tropics, Kano, Nigeria

16:05 **Association mapping of SSR markers to sweet, bitter and roasted peanut sensory attributes in cultivated peanut**

L.L. Dean[1], T. Jiang[2],Y.Y. Tang[2], P.M. Dang[3], M.L. Wang[4],G.H. He[5], M.C. Lamb[3], C.C. Holbrook[6], P. Ozias-Akins[7], and C.Y. Chen[2]*.

[1]USDA-ARS Market Quality and Handling Research Unit, Raleigh, NC 27695;[2]Department of Crop, Soil and Environmental Sciences, Auburn University, Auburn, AL 36849;[3]USDA-ARS National Peanut Research Lab, Dawson, GA 39842; [4]USDA-ARS, Plant Germplasm Resource Conservation Unit, Griffin, GA 30223; [5]Department of Agricultural and Environmental Sciences, Tuskegee University, Tuskegee, AL 36088; [6]USDA-ARS Plant Breeding and Genetics Unit, Tifton, GA 31793; [7]Department of Horticulture, The University of Georgia, Tifton, GA 31793.

16:25 **Development of early maturing drought resistant high yielding genotypes in groundnut (*Arachis hypogaea* L.)**

R.P. Vasanthi[1]*, P. Sudhakar[1], O. Venkateswarlu[1,] P. Latha[1], E.V. Ramana[1], T. Pratima[1], P.V. Reddy[1], T.C.M. Naidu[1], N.V. Naidu[2]

[1]Regional Agricultural Research Station, Acharya N G

Ranga Agricultural University, Tirupati, Andhra Pradesh, India 517502; [2]Acharya N G Ranga Agricultural University, Guntur, Andhra Pradesh, India-522509

16:45 **Response of groundnut varieties to broad bed & furrow and polythene mulching during dry seasons in Sudan savanna Nigeria**

B. Motagi[1], H. Ajeigbe[1], S. Abdulsalam[2]*, I. Haruna[2], B. Kurya[1]

[1]International Crops Research Institute for the Semi-Arid Tropics, Kano, Nigeria; [2]Department of Dryland Crops and Cropping Systems, Centre for Dryland Agriculture, Bayero University Kano

*Corresponding author email: shiyanbolaabiodun@gmail.com

20:30 **Banquet –** Ferreira Palace (3 blocks from Hotel Irigoyen 111)

Thursday, March 16,2017
Córdoba Cultural Center

Session VIII: Plant Diseases – the Smut Problem in South America
Chairpersons:S. Morichetti& A. Rago

8:30 **Biology of *Thecaphorafrezii* and peanut smut effects on the production in Argentina**

I. Cazon[1], J. Paredes[1], J. Edwards Molina[1], M. Bisonard[1], C. Conforto[1], A. Rago[2]

[1]IPAVE, CIAP – INTA. Córdoba, Argentina;[2]IPAVE, CIAP - INTA & Facultad de Agronomía y Veterinaria, UNRC, Río Cuarto, Córdoba, Argentina

8:50 **Strategies for peanut smut management**

J. Paredes[1], I. Cazon[1], J.E. Molina[1], M. Bisonard[1], C. Conforto[1], A. Rago[2]

[1]IPAVE, CIAP – INTA. Córdoba, Argentina; [2]IPAVE, CIAP - INTA & Facultad de Agronomía y Veterinaria, UNRC, Río Cuarto, Córdoba, Argentina

9:10 **Sources of smut resistance in peanut wildspecies and Bolivian landraces**

C. Oddino[2]*, J. Soave[1], S. Soave[1], M. Buteler[3], A. Moresi[1], M.Bressano [4]; F. De Blas[4], C. Bianco[1], D. Torre[1]

[1]Criadero El Carmen, Gral. Cabrera, 5809, Córdoba, Argentina; [2]Facultad de CienciasAgropecuarias U.N.R.C. Río Cuarto, 5800, Argentina &Criadero El Carmen, Gral. Cabrera; [3]Criadero El Carmen, Gral. Cabrera & Ministry of Science and Technology, Córdoba -5004-, Argentina andFacultad de CienciasAgropecuarias, U.N.C. Córdoba -5000- Argentina

9:30 **SSR markers assessed for peanut smut disease resistance**

F.J. de Blas[1,2]*, M. Bressano[2], R.S. Arias[3], B. Scheffler[4], N. Puppala[5],S. Soave[6], J. Soave[6], B. Costero[2], M. Pepermans[2], M.A. Pérez[2], M. Buteler[6], G. Seijo[7]

[1]IMBIV-CONICET-UNC, Córdoba, Argentina [2] FCA˙UNC, Córdoba, Argentina, [3]USDA-ARS-National Peanut Research Laboratory (NPRL), Dawson, GA, USA, [4]USDA-ARS-GBRU Stoneville, MS, USA,[5] University of New Mexico, [6]Criadero El Carmen, General Cabrera, Córdoba, Argentina, [7]IBONE-CONICET-UNNE, FACENA, Corrientes, Argentina.

9:50 **Development of High Oleic Cultivars Resistant to Peanut Smut**

S. Soave[1]*, C. Oddino[2], A. Moresi[1], M. Buteler[3], J. Soave[1]

[1]Criadero El Carmen, Gral. Cabrera, 5809, Argentina; [2]Facultad de CienciasAgropecuarias U.N.R.C. Río Cuarto, 5800, Argentina &Criadero El Carmen, Gral. Cabrera; [3]Criadero El Carmen, Gral. Cabrera & Ministry of Science and Technology, 5004, Córdoba, Argentina

10:10-10:45 **Tea/Coffee Break***View Posters*

Session IX: The IPGI Summit
(Interactive Breakout Discussions)
Chairpersons: Corley Holbrook & Victor Nwosu

10:45 **Group Discussions** Moderator: Rich Wilson

Sara Soave, South America
Rajeev Varshney-India
Boshou Liao-Asia
Daniel Fonceka-Africa
Graeme Wright-Australia

Interactive Discussion Questions:

1) Does the new IPGI Strategic Plan provide a relevant platform for future peanut research needs?(Changes & edits will help keep the Plan current)

2) What are the most important research priorities on a global regional basis? (Priorities will help build collaborative efforts &

identify opportunities for research funding)

12:30-14:00 **Lunch**

Session X: The IPGI Summit & Closing Ceremony
Chairpersons: C.C. Holbrook & V. Nwosu

14:00 **IPGI Summit Panel Reports** Moderator: Rich Wilson
Panel Members: Tom Stalker-North America
Sara Soave, South Americas
Rajeev Varshney-India
Boshou Liao-China
Daniel Fonceka-Africa
Graeme Wright-Australia

15:00 **Awards and Recognition** Moderator: Rich Wilson
Poster Award Recognition
Distinguished Service Awards
(Sponsored by Oilseeds & Biosciences Consulting)

15:30 **Next meeting and other business** Steve Brown

16:00 -- 16:15 **Adjourn & Tea/Coffee Break**

17:30 **City tour: Historic buildings and churches in downtown Córdoba**

Friday, March 17, 2017

One day Tour to the production area, include visit to the El Carmen Nursery and Experimental Station of INTA Manfredi. (Lunch is included)

8:00 **Departure from the Irigoyen 111 Hotel**

18:00 **Return to the Irigoyen 111 Hotel.**

Saturday, March 18, 2017

One day Tour to the Jesuit estancias and sightseen.

8:00 **Departure from the Irigoyen 111 Hotel**

18:00 **Return to the Irigoyen 111 Hotel**

POSTERS
(Alphabetical to Title)

Automated peanut smut damage assessment on intact pod bulks by using X-ray devices and proprietary software

M. Valente[1]*, F.M. Malano[1], P. Perez[1]& J. Baldessari[2]

[1]Laboratory for Research and Instrumentation of Physics in Medicine and X-ray Imaging (LIIFAMIRx), College of Mathematics, Astronomy and Physics, National University of Cordoba, Cordoba(5003), Argentina; [2]National Institute for Agricultural Technology (INTA), Manfredi Exp. Stn., Manfredi(5988), Argentina.

Breeding for improving resistance to leaf spots and rust, and oleate content in peanut (*Arachis hypogaea* L.)

R.S. Bhat[1]*, K. Shirasawa[3], R.K. Varshney[4], H L. Nadaf[2], B.N. Motagi[2], S. Lingaraju[5], P.V. Patil[1], Y.P. Khedikar[2], S. Cholin[2], V. Sujay[2], Varshakumari[2], S B. Yeri[1], M. Sukruth[1], .AA. Hake[1], M.V. Kamble[1], Venkatesh[1], S.A. Paratwagh[1], H.M. Meghashree[1], D.V. Madhumitha[1],B. Asha[1], D.B. Chougale[1], R.M. Kolekar[1], M. Gayathri[1], P. Joshi[1], H.M. Ragashree[1], M. Patil[1], A.V. Yadwad[1]& M.V.C. Gowda[2]

[1] Dept. Biotechnology, Univ. of Agricultural Sci., Dharwad - 580 005, India; [2] Dept. Genetics & Plant Breeding, Univ. Agric. Sci., Dharwad - 580 005, India; [3] Dept. Frontier Res., Kazusa DNA Res. Inst., Chiba 292-0818, Japan;[4] Center of Excellence in Genomics (CEG), Internl. Crops Res. Inst. for the Semi-Arid Tropics (ICRISAT), Hyderabad 502 324, India; [5] Dept. Plant Pathol., Univ. Agric. Sci., Dharwad - 580 005, India

Characterization of miRNAs during *Arachis stenosperma* and root-knot nematode interaction

P.M. Guimarães, L.A. Guimaraes, A.C.G. Araujo, B. Vidigal, M.M.C. Costa, R.C. Togawa, A.C.M. Brasileiro, & P. Grynberg

Embrapa Genetic Resources and Biotechnology, Brasília, DF, 70770-917, Brazil.

Cluster and principal component analysis of a morphological dataset from herbarium specimens of *Arachis hypogaea* L. originally collected in 9 countries at the centres of diversities in South and Central America

O. Royo[1]*, A Taié[1]& G. Seijo[2,3]

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Comparative analysis of NBS–LRR genes and their response to*Aspergillus flavus* in *Arachis*

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Components of late leaf spot and rust resistance in groundnut germplasm: Implications in resistance breeding

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Development of an Argentinean peanut core collection and establishment of an association mapping population

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Development and deployment of a high-density linkage map identified quantitative trait loci for plant height in peanut (*Arachis hypogaea* L.)

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Differential gene expression in leaf tissues between mutant and wild-type genotypes response to late leaf spot in peanut (*Arachis hypogaea* L.)

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Distribution profiles of genetic Diversity in China peanut cultivar (*Arachis hypogaea* L.) based on phenotypic data

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Establishment of molecular ID in peanut varieties based on fluorescently labeled SSR markers

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Genetic assessment of stem rot (*Sclerotiumrolfsii)* resistance in groundnut (*Arachis hypogaea* L.)

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Genetic variability among peanut genotypes for leaf P-content and leaf acid phosphatase activity

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Genetic variation and association mapping of seed-related traits in cultivated peanut (*Arachis hypogaea* L.) using single locus simple sequence repeat markers

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Genome-wide dissection of the heat shock transcription factor family genes in *Arachis*

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Genome-wide identification of microsatellite markers from *A. duranensis* and *A. ipaënsis* and their application in cultivated peanut

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Mapping a new source of nematode resistance from the wild relative *A. stenosperma* in allotetraploid peanut

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Niche modelling supports the origin of peanut in the orchards of ancient inhabitants

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Preliminary work in measuring peanut canopy architecture with LiDAR

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Proteome and transcription profiling to understand the responses of *Arachis duranensis* to drought

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Synthetical methods were developed to solve peanut Aflatoxin contamination in southern China

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Towards fine-mapping a major locus controlling tomato spotted wilt disease resistance in peanut

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Source-sink analysis of runner type cultivars grown in Argentina

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Stability in biomass partition to branches in peanut cultivars of different growth habit

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Identification and expression analysis of HK (histidine kinase) family receptors in peanut (Fabaceae).

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Physiological characterization of drought tolerance in groundnut (*Arachis hypogaea*L.) phenotypes

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