

Scientific Program of World Soybean Research Conference VIII

Tuesday, August 11, 2009

Room: **Convention Hall NO.1 (2F)**

09:00 - 10:00 Opening Ceremony

Room: Convention Hall NO.1 (2F)

Plenary 1-1: Safe, Secure and Sustainable Supply of Soybean.

Chairs: Gai, Junyi. Soybean Research Institute of Nanjing Agricultural University/ National Center for Soybean Improvement / National Key Laboratory for Crop Genetics and Germplasm Enhancement, China

Ablet, Gary. Ridgetown Campus University of Guelph, Canada

10:00 - 10:40 The challenge of soybean industry in China: its status and strategy.
Wang, L.Z., China

10:40 - 11:20 Developing a global soy blueprint for a safe secure and sustainable supply.
**Kueneman, E.A.; Hallam, D., Italy (FAO)*

11:20 - 12:00 Strategies for demand of modern logistics and trade of soybean in China.
Wang, B.W., China

Room: Convention Hall NO.1 (2F)

Plenary 2-1: Soybean Industry in Major Producing Countries and Regions.

Chairs: Han, Tianfu. National Key Facility for Crop Gene Resources and Genetic Improvement / Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, China

Srisombun, Somsak. Field Crops Research Institute, Thailand

13:00 - 13:40 Advance of soybean research in China. *Chang, R.Z., China*

13:40 - 14:20 The U.S. soybean industry: production and processing to meet world demand. *Lapérouse, P., USA*

14:20 - 15:00 Trends and scenarios for the Mato Grosso State soybean industry.
**Monteiro, M.D.; Paludo, S.K., Brazil*

Room: Convention Hall NO.1 (2F)

Plenary 2-2: Soybean Industry in Major Producing Countries and Regions.

Chairs: Shu, Qingyao. IAEA-Zhejiang University Collaborating Center, Institute of Nuclear Agricultural Sciences, Zhejiang University, China

James, Andrew T.. CSIRO Plant Industry, Australia

15:20 - 16:00 The Argentine agroindustrial soy complex. *Rossi, R.L., Argentina*

16:00 - 16:40 Towards doubling soy protein intake in the Indian platter: what can the soy industry, policy makers and the civil society do? **Gulati, A.; Khanna, P.; Soundararajan, V., India*

16:40 - 17:20 European soybean production and market: current situation and future trends. **Daydé, J.; Chibarie, J.C.; Labalette, F., France*

17:20 - 18:00 The status of soybean production and utilization in Southern Africa.
*Tichagwa, J.S.; Rusike, J., Zimbabwe

Room: Conference Hall 5B (1F)

08:00-18:00 Posters from P001 to P253 (for titles, please refer to the abstracts)

Wednesday, August 12, 2009

Room: Convention Hall NO.1 (2F)

Plenary 3-1: Exploiting Yield Potential of Soybean.

Chairs: Lee, Suk-Ha. Seoul National University, South Korea

Harada, Kyuya. National Institute of Agrobiological Sciences, Japan

08:30-09:10 A new approach of soybean improvement: hybrid soybean. Sun, H., China

09:10-09:50 Functional genomics of soybean nodulation control: plant stem cell biology biotechnology. *Gresshoff, P.M.; Lin, Y.H.; Hayashi, S.; Reid, D.; Oakes, M.; Lin, M.H.; Ferguson, B; Indrasumunar, A; Djorjdevic M., Australia

Room: Conference Hall 5B (1F)

08:00-18:00 Posters from P254 to P487 (for titles, please refer to the abstracts)

Room No. 307 (3F)

Symposium: A1-1 Germplasm Collection, Conservation and Evaluation.

Chairs: Lu, Baorong. Institute of Biodiversity Science, Fudan University, China

Ford-Lloyd, Brian V.. School of Biosciences, University of Birmingham, Birmingham
B15 2TT UK

10:15-10:35 Genetic bases for effective *in situ* conservation of wild soybean (*Glycine soja*) germplasm. *Lu, B.R.; Zhao, R., China

10:35-10:55 Gap analysis for soybean as an aid to complementary genetic conservation. *Maxted, N.; Ford-Lloyd, B.V., UK

10:55-11:15 Gene flow from GM soybean to wild soybean under field conditions: its implication in conservation. *Yoshimura, Y.; Mizuguti, A.; Ohigashi, K.; Matsuo, K., Japan

11:15-11:35 Collection and evaluation of germplasm for soybean development in Pakistan. *Ashraf, M.; Ghafoor, A., Pakistan

11:35-11:55 Collection, conservation, and evaluation of soybean germplasm. Nelson, R., USA

11:55-12:15 Conservation and management of soybean [*Glycine max* (L.) Merr.] genetic resources at National Gene Bank, New Delhi, India. Radhamani, J., India

Room: 307 (3F)

Symposium: A1-2 Germplasm Collection, Conservation and Evaluation.

Chairs: Dong, Yingshan. Jilin Academy of Agricultural Sciences, China

VanToai, Tara T.. USDA-ARS, Soil Drainage Research Unit, USA

- 13:30-13:50 Tolerance of soybean (*Glycine max*) germplasm from Southeast Asia to soil waterlogging. *Tran, C.H.T.; *VanToai, T.T.; Nguyen, N.H.T.; Nguyen, H.; Shannon, G., USA*
- 13:50-14:10 Identification of drought tolerant genotypes of soybean [*Glycine max* (L.) Merrill]. *Arunkumar, N.P.; *Swamy, M.; Chandrappa, M.; Manja, N.C., India*
- 14:10-14:30 Nutritional, antinutritional and antioxidative properties of vegetable-type soybean. **Kumar, V.; Rani, A.; Goyal, L.; Pratap, D.; Billore, S.D.; Dixit, A. India*
- 14:30-14:50 Identification of low linolenic acid genotypes and its validation by linked molecular markers in soybean [*Glycine max* (L.) Merrill]. **Manjaya, J.; Mondal, S., India*
- 14:50-15:10 Exploration of new soybean related wild species in South Asia. **Hirata, Y.; Kobayashi, Y.; Yu, L., Japan*
- 15:10-15:30 Introduction and utilization of the foreign soybean germplasm in Hebei Province. **Yang, C.Y.; Zhang, M.C., China*
- 15:30-15:50 Inheritance of protein components and their subunit groups of soybean. **Liu, S.H.; Zhou, R.B.; Gai, J.Y., China*

Room: 307 (3F)

Symposium: A2-1 Genetic Diversity and Allele Mining.

Chairs: Yi, Jinxin. Jiangsu Academy of Agriculture Science, China

Hyten, David. USDA-ARS, USA

- 16:00-16:20 Creation of a 50,000 SNP infinium assay and two high resolution maps for soybean. **Hyten, D.; Song, Q.J.; Nelson, R.; Specht, J.; Shoemaker, R.; Cregan, P., USA*
- 16:20-16:40 Identification of elite alleles in released cultivar population for marker assisted breeding by design in soybeans. **Zhang, J.; Zhao, T.J.; Gai, J.Y., China*
- 16:40-17:00 Establishing a soybean germplasm core collection. **Oliveira, M.; Nelson, R.; Geraldi, I.; Toledo, J.F.; Arias, C.; Panizzi, M.; Pipolo, A.; Carneiro, G.; Moreira, J.U., Brazil*
- 17:00-17:20 Using SSR markers for association mapping of fatty acid QTLs and identification of their elite alleles in released soybean cultivars. **Li, H.W.; Zhao, T.J.; Zhang, J.; Zhou, R.B.; Gai, J.Y., China*
- 17:20-17:40 Polymorphisms of *IFS* and *F3H* genes are associated with isoflavone concentrations in soybean seeds. **Cheng, H.; Yu, O.; Yu, D.Y., China*
- 17:40-18:00 Evolutionary differentiation of soybean Kunitz trypsin inhibitor (SKTI) in wild soybean (*Glycine soja*). **Wang, K.J.; Li, X.H.; Takahata, Y., China*

Room: 311 (3F)

Symposium: B1-1 Genetics and Breeding - Quality.

Chairs: Jeong, Soon-Chun. Korea Research Institute of Bioscience and Biotechnology, Korea

- Ablett, Gary. Department of Plant Agriculture, Ridgetown Campus, University of Guelph, Canada
- 10:15-10:35 Soybean isoflavones -- understanding the impact of the environment. *Murphy, S.; Rajcan, I.; Bowley, S.; Woodrow, L.; Poysa, V.; *Ablett, G., Canada*
- 10:35-10:55 Development of soybean population with extremely high isoflavone content by an interspecific cross between *G.max* and *G.soja*. **Hwang, Y.H.; Lee, J.D.; Jeong, Y.S.; Dhakal, K.H.; Lee, C.H.; Seo, S.M., South Korea*
- 10:55-11:15 Recent progress in soybean breeding for nutritional and functional qualities in China. **Sun, J.M.; Han, F.X.; Yan, S.R.; Yang, H., China*
- 11:15-11:35 Effects of two low phytic acid mutations on seed quality traits in soybean [*Glycine max* (L.) Merr.]. **Yuan, F.J.; Zhu, D.H.; Deng, B.; Fu, X.J.; Dong, D.K.; Zhu, S.L.; Li, B.Q.; Shu, Q.Y.; China*
- 11:35-11:55 Identification and validation of a solid quantitative trait locus regulating contents of isoflavones in soybean seeds detected across environments. **Jeong, S.C.; Yang, K.; Chun, H.K.; Moon, J.K., South Korea*
- 11:55-12:15 Evaluation and development of vegetable soybean for yield and nutritional quality to varied agro-climatic regions in India. **Swamy, M.; Chandrappa, M.; Nuthan, D.; Roopa, V.; Veena, M.G., India*
- 12:15-12:30 Fatty acid composition of some soybean varieties (*Glycine max* L.) in Thrace region of Turkey. **Yaver, S.; Önemli, F.; Pasa, C.; Saglam, C.; Atakisi, A., Turkey*

Room: 311 (3F)

Symposium: B2-1 Genetics and Breeding - Yield.

Chairs: Wang, Shuming. Soybean Research Center, Jilin Academy of Agricultural Science, China

Soper, John F. Pioneer Hi-Bred International, Inc., USA

- 13:30-13:50 Soybean trait development and integration, a commercial perspective. **Soper, J.F.; Schmidt, D.H.; Lightner, J.E.; Schnebly, S.R.; Streit, L.G.; Foley, T.C.; Thompson, J.A.; Stephens, P.A.; Prado, L.C., USA*
- 13:50-14:10 Soybean breeding for high photosynthetic efficiency. **Man, W.Q.; Du, W.G.; Hao, N.B., China*
- 14:10-14:30 Application of Co⁶⁰ in breeding soybean variety DT22 for the rainfed lands in Northern Vietnam. *Tran, D.L.; *Tran, T.T.; Tran, V.D., Vietnam*
- 14:30-14:50 Variety improvement and production of vegetable soybean [*Glycine max* (L.) Merr.] in China. **Zhu, D.H.; Chen, Y.Z.; Dong, D.K.; Zhu, S.L.; Yuan, F.J.; Fu, X.J.; Li, B.Q., China*
- 14:50-15:10 A historical summarization of genetic bases of improved soybean cultivars released in China. **Xiong, D.J.; Zhao, T.J.; Gai, J.Y., China*
- 15:10-15:20 Inheritance and QTL mapping of yield related traits in soybean. **Wang, X.Z.; Zhou, R.; Zhang, X.J.; Shan, Z.H.; Sha, A.H.; Chen, H.F.; Wu, X.J.; Qiu, D.Z.; Zhou, X.A., China*

- 15:20-15:30 Effects of soybean major maturity genes under different photoperiods. *Wang, Y.; Wu, C.Y.; Zhang, X.M.; Wang, Y.P.; Han, T.F., China
- 15:30-15:40 Seed compositional characters in photo-thermo insensitive genotypes of soybean as influenced by temperature and photoperiod. *Gill, B.S.; Goyal, M.; Dhillon, S.K.; Sharma, S., India

Room: 311 (3F)

Symposium: B3-1 Genetics and Breeding - Stresses - Soybean Cyst Nemaode.

Chairs: Duan, Yuxi. Nematology Institute of Northern China, College of Plant Protection, Shenyang Agricultural University, China

Arelli, Prakash. USDA-ARS Mid-South Area, Jackson, USA

- 16:00-16:20 Studies on the genetics of SCN resistance in the U.S.A. *Diers, B.W.; Kim, M., USA
- 16:20-16:40 QTL mining for SCN resistance in *Glycine soja*: challenges and opportunities. Winter, S.; Shelp, B.J.; Anderson, T.R.; Welacky, T.W.; *Rajcan, I.; Acosta, M., Canada
- 16:40-17:00 *Heterodera glycines* and soybean in Argentina. *Doucet, M.E.; Lax, P.L.; Coronel, N., Argentina
- 17:00-17:20 Resistance to soybean cyst nematode: genetics and breeding in Brazil. *Arias, C.A.A.; Dias, W.P.; Carneiro, G.E.S.; Oliveira, M.F.; Toledo, J.F.F.; Panizzi, M.C.C.; Pipolo, A.E.; Moreira, J.U.V.; Kaster, M., Brazil
- 17:20-17:40 Status of genetics and breeding in soybean for resistance to cyst nematode in China. *Li, Y.H.; Yuan, C.P.; Ma, Y.S.; Wang, W.H.; Liu, Z.X.; Chang, R.Z.; Qiu, L.J., China
- 17:40-18:00 Molecular characterization and genetic marker discovery of soybean cyst nematode resistance. Slepser, D.A.; Shannon, J.G.; Nguyen, H.T.; *Vuong, T.D.; Wu, X.L., USA

Room: Convention Hall NO.1 (2F)

Symposium: C1-1 Genomics.

Chairs: Luo, Da. School of Life Science and Biotechnology, Shanghai JiaoTong University / National Key Laboratory of Plant Molecular Genetics, Institute of Plant Physiology and Ecology, Shanghai Institutes for Biological Sciences, Chinese Academy of Sciences, China

Que, Qiudeng. Syngenta Biotechnology Inc., 3054 Cornwallis Road, Research, USA

- 10:15-10:35 Comparative and evolutionary genomics of soybean. *Jackson, S.A.; Shoemaker, R.; Cregan, P.; Doyle, J.; Ma, J.X.; Schmutz, J., USA
- 10:35-10:55 Functional genomics of soybean tolerance to water deficit. Pereira, S.D.S.; Sena, J.A.D.; Felipes, J.; Stolf, R.; Fuganti, R.; Marin, S.R.R.; Binneck, E.; Abdelnoor, R.V.; *Nepomuceno, A.L.; Marcelino, F.C., Brazil
- 10:55-11:15 Parallel comparative analyses of resistance pathways of *Arabidopsis thaliana* and soybean (*Glycine max*) to *Fusarium Virguliforme* and to deoxynivalenol of *Gibberella zeae*. *Yuan, J.Z.; Zhu, M.X.; Meksem, K.; Iqbal, M.J.; Hart, P.; Lightfoot, D.A., USA

- 11:15-11:35 Comparative genomics of legume ABC transporters. *Wang, Y.J.; *Guo, D.J., Hong Kong, China*
- 11:35-11:55 Polyploidy, genome dynamics and the soybean genome. **Schlueter, J.; Gonzales, M.; Schmutz, J.; Mitros, T.; Rokhsar, D.; Cannon, S.; Hyten, D.; Cregan, P.; Shoemaker, R.; Jackson, S., USA*
- 11:55-12:15 Cloning the key regulators in the control of zygomorphic flower development through comparative genomic approach in legumes. *Li, X.; He, S.B.; Zhuang, L.L.; Shusei, S.; Satoshi, T.; Mike, A.; Catherine, R.; Hu, X.H.; Yang, J.; *Luo, D., China*

Room: Convention Hall NO.1 (2F)

Symposium: C2-1 Molecular Marker.

Chairs: Li, Wenbin. Soybean Research Institute, Northeast Agricultural University, China

Cregan, Perry. Soybean Genomics and Improvement laboratory, USDA-ARS, USA

- 13:30-13:50 Development and application of a 1,536 single nucleotide polymorphism (SNP) Universal Soy Linkage Panel 1.0 (USLP 1.0). *Hyten, D.L.; Choi, I.Y.; Song, Q.J.; Specht, J.E.; Carter, T.E.; Shoemaker, R.C.; Hwang, E.Y.; Nelson, R.L.; Matukumalli, L.K.; *Cregan, P.B., USA*
- 13:50-14:10 Status of MAS of soybean in Northeastern China. **Li, W.B.; Han, Y.P.; Teng, W.L.; Sun, D.S.; Du, Y.P.; Zhang, Z.C.; Zhao, G.Y.; Yang, L.; Zeng, G.L.; Sun, M.M.; Dong, L.M.; Lu, S.Y.; Liu, H.C.; Zheng, Y.H.; Li, D.M.; Wang, Z.Z.; Zhao, X.; Chang, W.; Zhang, H.; Guan, R.X.; Wang, J.; Qiu, L.J., China*
- 14:10-14:30 The abundance of SSR motifs in soybean vs. other plant genomes and development of a database containing 30,557 candidate polymorphic SSR markers (BARCSOYSSR_1.0) in the soybean genome. **Song, Q.J.; Jia, G.F.; Zhu, Y.L.; Hyten, D.; Cregan, P., USA*
- 14:30-14:50 Tagging and mapping of YMV resistance gene (S) in soybean [*Glycine max* (L.) Merrill]. **Rani, A.; Gill, B.S.; Maharolia, N.; Khasdeo, K.; Singh, R.K.; Kumar, P.; Hussain, S.M., India*
- 14:50-15:10 Development of a codominant SCAR marker linked to salt tolerant gene in soybean. **Guan, R.X.; Tian, L.; Liu, Z.X.; Chang, R.Z.; Ren, S.X.; Qiu, L.J., China*
- 15:10-15:30 Development of a multiplex SNP assay for soybean mosaic virus resistance genes. *Shi, A.N.; *Chen, P.Y.; Cervantes, I.; Shakiba, E., USA*
- 15:30-15:45 Using backcross lines and their derived residual heterozygous lines in QTL fine mapping -- Mapping and verification of QTL conferring days to flowering in soybean. **Su, C.F.; Lu, W.G.; Zhao, T.J.; Gai, J.Y., China*

Room: Convention Hall NO.1 (2F)

Symposium: C1-2 Genomics.

Chairs: Ma, Jianxin. Department of Agronomy, Purdue University, USA

Van, Kyujung. Department of Plant Science and Research Institute for Agriculture and Life Sciences, Seoul National University, Korea

- 16:00-16:20 The landscape of transposable elements in the soybean genome. *Du, J.C.; Tian, Z.X.; Debarry, J.; Jackson, S.; Cannon, S.; Shoemaker, R.; *Ma, J.X., USA*
- 16:20-16:40 Genome-wide identification of protein content-associated genes in soybean [*Glycine max* (L.) Merr.] based on microarray-QTL. **Yi, J.X.; Dhaubhadel, S.; Zhang, P.; Chen, X., China*
- 16:40-17:00 Comparative metabolic profiling reveals secondary metabolites correlated with soybean salt tolerance. **Wu, W.; Zhang, Q.; Zhu, Y.M.; Lam, H.M.; Cai, Z.W.; Guo, D.J., Hong Kong, China*
- 17:00-17:20 Genome-wide scan using Dop-PCR and GS FLX sequencing technology using soybean mutants. **Van, K.; Jang, H.J.; Jang, Y.E.; Choi, I.Y.; Choi, B.S.; Lee, S.H., South Korea*
- 17:20-17:40 Dissecting soybean root hair-*bradyrhizobium japonicum* symbiotic interactions using an integrated approach. *Brechenmacher, L.; Libault, M.; *Wan, J.R.; Stacey, G., USA*
- 17:40-18:00 Drought tolerance in soybean: from gene discovery to translational genomics. *Tran, S.; Hanumappa, M.; Guttikonda, S.; Quach, T.; Sharp, R.; *Nguyen, H.T.; Valliyodan, B.; Shannon, J.G., USA*
- 18:00-18:15 An integrated genetic linkage map and its utilization in soybean. *Zhou, B.; Xing, H.; Chen, S.Y.; Yu, D.Y.; Gai, J.Y., China*

Room: 305AB (3F)

Symposium: D1-1 Plant Nutrition.

Chairs: Liao, Hong. College of Natural Resources and Environment, Chinese South China Agriculture University, China

Zobiolo, Luiz Henrique Saes. State University of Maringá (UEM), Brazil

- 10:15-10:35 The effect of foliar boron application on nitrogen metabolism and seed composition in soybean under water stress. **Nacer, B.; Krishna, N.R.; Anne, M.G.; Craig, A.A., USA*
- 10:35-10:55 Genetic improvement of nutrient characters in soybean -- from basic research to application. **Liao, H.; Yan, X.L., China*
- 10:55-11:15 Effect of copper nutrition on growth, nodulation, leghaemoglobin content, nitrogen uptake and grain yield of soybean (*Glycine max*). *Barik, K.C.; *Chandel, A.S., India*
- 11:15-11:35 Seed yield of soybeans growing in various soil types. **Gao, X.F.; Liu, G.Y.; Wang, Z.Q., China*
- 11:35-11:55 Distribution of ¹⁴C- into biochemical components of nonnodulating, nodulating and supernodulating soybean (*Glycine max* L.) genotypes exposed to drought and /or potassium. *Kamel, H.A.; *Abdelhamid, M.T.; Dawood, M.G., Egypt*
- 11:55-12:15 Standard fresh pod yield and its quality of vegetable soybean using different composts cooperate with chemical fertilizers. **Sangla, L.; Suppadit, T.; Pintasen, S.; Tongplew, N., Thailand*

12:15-12:30 Effect of glyphosate on nutrient contents in glyphosate-resistant soybeans.
*Zobiole, L.H.S.; de Oliveira Junior, R.S.; de Castro, C.; de Oliveira, F.A.;
Constantin, J.; de Oliveira Junior, A., Brazil

Room: 305AB (3F)

Symposium: D1-2 Plant Nutrition.

Chairs: Yang, Wenyu. College of Agronomy, Sichuan Agricultural University, China
Kanwar, Ramesh S.. Iowa State University, USA

13:30-13:50 Effect of potassium, zinc and manganese on quantitative & qualitative characteristics of soybean in Bojnourd area of Iran. *Azizi, M.; Sorouri, D.,
Iran

13:50-14:10 Analysis of the nitrogen transfer, uptake and utilization in the two relay-planting systems. Yong, T.W.; Xiang, D.B.; Zhang, J.; Wan, Y.; Yan, Y.H.; Liu, W.G.; *Yang, W.Y., China

14:10-14:30 Impact of liquid swine manure application on soybean yield and groundwater quality. *Kanwar, R.S.; Helmers, M.; Pederson, C.; Mallarino, A.; Sawyer, J., USA

14:30-14:50 Enhancement of growth and photosynthesis in soybean [*Glycine max* (L.) Merr. var: js-335] by pre-treatment of seeds with magnetic field. *Shine, M.B; Guruprasad, K.N; Shantha, N., India

14:50-15:10 Modifications on diurnal heliotropic responses of soybean [*Glycine max* (L.) Merr.] leaflets during a plant growth. *Rakocevic, M.; Neumaier, N.; de Gouveial, W.M.; Farias, J.R.B., Brazil

15:10-15:30 Leaf area index, light interception, and harvest index of soybean growing in black soil of Northeast China. *Liu, G.; Xie, Y.; Duan, X.W.; Gao, X.F.; Feng, Y.J., China

15:30-15:45 Effect of organic manures on plant growth, seed yield and quality of soybean (*Glycine max*). Maheshbabu, H. M.; *Ravindranath, H., India

Room: 305AB(3F)

Symposium: D2-1 Yield Physiology.

Chairs: Zheng, Dianfeng. Regulation Lab ,College Of Agronomy, Heilongjiang August First Land Reclamation University, China

Daneshian, Jahanfar. Oil seeds crops department, Seed and Plant Improvement Research Institute, Iran

16:00-16:20 Determination of stage of sensitivity to photoperiod for floral transition in photoperiod sensitive [var: js335] and photoinsensitive [var: macs 330] varieties of soybean. Athale, R.; Nimmagadda, L.; Bhatia, V.; *Kadur, G., India

16:20-16:40 Effect of seed density on yield and yield components of late planted soybeans (*Glycine max* (L.) Merr.) as a double crop following canola. *Mohammadi, E.; Shakiba, M.R.; Valizade, M.; Zehtab, S.; Tarinejad, A.R., Iran

- 16:40-17:00 Plant growth substances on soybean yield and its distribution on plant.
*Zheng, D.F.; Feng, N.J.; Zhang, X.Y.; Du, J.D.; Zhang, Y.X.; Liang, X.L.,
China
- 17:00-17:20 Vegetative and reproductive developmental responses of soybean
[*Glycine max* (L.) Merr.] cultivars and lines to drought stress severities.
*Daneshian, J.; Jonoubi, P.; Hadi, H., Iran
- 17:20-17:40 Influence of pre sowing invigouration seed treatments on seed quality,
flowering and yield of soybean. *Biradarpatil, N.K.; Macha, S.B.A.; Motagi,
B.N., India
- 17:40-18:00 Seed priming for enhancing stand establishment, seed yield and quality of
soybean [*Glycine max* (L.) Merr.]. Assefa, K.M.; *Hunje, R.; Hanegave,
A.S., India
- 18:00-18:15 Sunflower-soybean intercropping: identification and evaluation of soybean
varieties with contrasting photomorphogenic response. *Cerrudo, A.;
Sadras, V.; Echarte, L.; Monzón, J.; Rizzalli, R.; Andrade, F., Argentina

Room: 201B (2F)

Symposium: D2-2 Yield Physiology.

Chairs: Liu, Xiaobing. Key laboratory of black soil ecology, Northeast Institute of
Geography and Agroecology, Chinese Academy of Sciences,
China

Upadhyay, Ambika P.. ITC R&D Centre, Spark Towers, SP Biotech Park Pvt. Ltd.,
India

- 10:15-10:35 Topsoil removal and fertilization effects on soybean growth and yield in
eroded farmland of Chinese mollisols. *Liu, X.B.; Sui, Y.Y.; Jin, J.; Zhang,
S.L.; Zhang, X.Y.; Herbert, S.J.; Ding, G.W., China
- 10:35-10:55 Improving photothermal adaptations of soybean genotypes for enhancing
soybean production in India. Upadhyay, A.P.; *Agrawal, K.K., India
- 10:55-11:15 Soybean-bacterial associations -- indirect mechanisms of plant growth
promotion. *Annapurna, K.; Govindasamy, V., India
- 11:15-11:35 Characteristics of super-high yielding soybean cultivar Zhonghuang 35.
*Wei, J.J.; Luo, G.T.; Zhang, L.; Wang, X.G.; Dong, Z., China
- 11:35-11:55 Matching soybean (*Glycine max*) phenology for optimum yield under
rainfed production system of central India. *Bhatia, V.S.; Ramesh, A.,
India

Room: 201B (2F)

Symposium: D3-1 Farming System and Management.

Chairs: Herbert, Stephen J.. University of Massachusetts, Amherst, USA

Davis, Vince M.. Department of Crop Sciences, University of Illinois, USA

- 13:30-13:50 Soybean yield assessment in different environment in Pakistan. Beg, A.,
Pakistan
- 13:50-14:10 Soybean multiple cropping patterns in South China. *Nian, H.; Cheng,
Y.B., China

- 14:10-14:30 Study on classification of soybean cultivars based on machine vision. *Quan, L.Z.; Zhu, R.X.; Du, X.H.; *Chen, H.T., China*
- 14:30-14:50 Seed growth characteristics of short season indeterminate soybean. **Herbert, S.J.; Liu, X.B.; Jin, J.; Zhang, Q.Y.; Hashemi, M., USA*
- 14:50-15:10 Soybean yield response to seeding rates in the midwestern U.S. **Davis, V.M.; Nafziger, E.D. Esgar,; R.W., USA*
- 15:10-15:30 Impact of conservation tillage on soil water and some physical properties and soybean [*Glycine max* (L.) Merrill] yields in north Songnen Plain of China. **Lin, W.G.; Wu, J.J.; Liu, L.J.; Zhong, P.; Dong, D.J.; Lin, X.F.; Sun, C.S., China*

Room: 201B (2F)

Symposium: E1-1 Diseases and Their Management.

Chairs: Wang, Aiming. Southern Crop Protection and Food Research Centre, Canada
 Jahagirdar, Shamarao. AICRP on Soybean, University of Agricultural Sciences,
 Dharwad, India

- 16:00-16:20 Soybean mosaic virus: research progress and future perspectives for disease control. *Wang, A.M., Canada*
- 16:20-16:40 Potential of *Bacillus amyloliquefaciens* KPS46 formula for disease control of green soybean. **Kasem, S.; Athinuwat, D.; Prathuangwong, S., Thailand*
- 16:40-17:00 Identification and distribution of soybean mosaic virus strains from Southern China. **Li, K.; Yang, Q.H.; Zhi, H.J.; Gai, J.Y., China*
- 17:00-17:20 Evaluation of soybean line: CM 60-10kr-71 (Chiang Mai 5). **Tepjun, V.; Dangpradub, J.; Taeja, S., Thailand*
- 17:20-17:40 Integrated management of charcoal rot of soybean caused by *Macrophomina phaseolina* (Tassi) goid. *Ansari, M.M., India*
- 17:40-18:00 Biological control of root rots caused by *Fusarium graminearum* and *Fusarium oxysporum* in soybean in Canada. **Zhang, H.J.; Xue, A.G.; Zhang, J.X.; Xu, Y.L.; Li, C.J., China*
- 18:00-18:15 Mixtures of bacterial antagonist strains enhance biocontrol efficacy and reduce fungicide use of green soybean production. **Prathuangwong, S.; Athinuwat, D., Thailand*

Room: 201A (2F)

Symposium: E2-1 Pests and Their Management - - Aphid.

Chairs: Mian, M.A. Rouf. USDA-ARS, USA

Ahmad, Irfan S.. Center for Nanoscale Science and Technology, and Department
 of Agricultural and Biological Engineering, University of Illinois,
 USA

- 10:15-10:35 Characterization of aphid resistant soybean lines, development of resistant cultivars, and soybean aphid biotypes in U.S.A.. **Mian, M.A.R.; Michel, A.; Kang, S.T.; Hammond, R., USA*

- 10:35-10:55 Advances in the genetic study of soybean aphid resistance in the U.S.A.
*Wang, D.C.; Zhang, G.R.; Liu, M.H.; Yang, Z.Y., USA
- 10:55-11:15 Molecular marker development for *Aphis glycines* population genetic analysis. *Michel, A.P.; Zhang, W.; Jung, J.K.; Kang, S.T.; Mian, M.A.R., USA
- 11:15-11:35 Natural enemy of soybean aphid (*Aphis glycines*) in Northeast China. *Liu, J.; Zhao, K.J., China
- 11:35-11:55 Population dynamics and the community structure of the natural enemies of soybean aphid (*Aphis glycines* Matsumura) in soybean field of Northeast China. *Dai, C.C.; Zhao, K.J.; Liu, J., China
- 11:55-12:15 Identification of resistance to *Aphis glycines* using *in vitro* culture soybean leaves and their micromorphological structure. *Yao, L.M.; Wang, B.; Jiang, Y.N.; Liu, X.W.; Wu, T.L., China

Room: 201A (2F)

Symposium: E1-2 Diseases and Their Management -- Soybean Cyst Nematode.

Chairs: Xu, Yanli. Northeast Institute of Geography and Agricultural ecology, CAS, China

Chen, Senyu. University of Minnesota, Southern Research and Outreach Center, USA

- 13:30-13:50 Fast loss of resistance in cultivars with current source of resistance: a challenge in soybean cyst nematode management. *Chen, S.Y.; Zheng, J.W., USA
- 13:50-14:10 Tolerance to stress and environmental adaptability of soybean cyst nematode (*Heterodera glycines*). *Duan, Y.X.; Zheng, Y.N.; Chen, L.J.; Wang, Y.Y.; Zhu, X.F., China
- 14:10-14:30 Genetic variation and molecular diagnosis of soybean cyst nematode (*Heterodra glycines*). *Peng, D.L.; Zhang, D.S.; Ou, S.Q.; Moens, M., China
- 14:30-14:50 Effect of soybean mix planting on controlling soybean cyst nematode and soybean yield. Diao, Z.; *Xu, Y.L.; Hu, X.; Li, C.J., China
- 14:50-15:10 Soybean cyst nematode (*Heterodera glycines* Ichinohe) in Canada. *Yu, Q.; Sun, F.C., Canada
- 15:10-15:30 Effects of metabolin of *Gliocladium roseum* on egg hatch of *Heterodera glycines*. *Wang, L.F.; Xu, Y.L.; Li, C.J.; Xue, A.G., China

Room: 201A (2F)

Symposium: E3-1 Weed and Its Management.

Chairs: Tao, Bo. Agricultural college of Northeast Agricultural University, China

Singh, Guriqbal. Pulses Section, Department of Plant Breeding and Genetics, Punjab Agricultural University, India

- 16:00-16:20 Novel weed management solutions in soy. van Lookeren Campagne, M.; Hacker, E.; Kraft, L.; Pelissier, B.; Allen, J.; Schrick, R.; *Schulz, A.; Stuebler, H., Germany

- 16:20-16:40 On symbiotic relationship between weed occurrence and crops in summer soybean field. *Wang, G.Q.; Li, B.H.; Fan, C.Q.; Zhang, M.C., China
- 16:40-17:00 Yield advantageous of soybean (*Glycine max*) / corn (*Zea mays* L.) intercropping in simultaneous competition of redroot pigweed (*Amaranthus retroflexus* L.) and Jimson weed (*Datura stramonium*). *Rezvani, M.; Aghaalikhani, M.; Zaefarian, F.; Mashhadi, H.R.; Zand, E., Iran
- 17:00-17:20 Technology of weed management in soybean field of Northeast China. Tao, B.; Jiang, L.X.; Ren, H. L.; Wu, J., China
- 17:20-17:40 Impresses of soybean (*Glycine max*)/corn (*Zea mays* L.) intercropping canopies in competition with redroot pigweed (*Amaranthus retroflexus* L.) and jimson weed (*Datura stramonium*). *Zaefarian, F.; Aghaalikhani, M.; Rezvani, M.; Mashhadi, H.R.; Zand, E., Iran
- 17:40-18:00 Integrated weed management in soybean (*Glycine max*). *Singh, G.; Jolly, R.S., India
- 18:00-18:15 Effect of increasing doses of glyphosate on water use efficiency and photosynthesis in glyphosate-resistant soybeans. *Zobiolo, L.H.Z.; de Oliveira Junior, R.S.; Bonato, C.M.; Muniz, A.S.; de Castro, C.; de Oliveira, F.A.; Constantin, J.; de Oliveira Junior, A., Brazil

Room: 201C (2F)

Symposium: F1-1 Storage and Logistics.

Chairs: Chang, Kow-Ching. North Dakota State University, Department of Cereal and Food Sciences, Fargo, ND, USA

Bern, Carl J. Iowa State University, USA

- 10:15-10:40 Preserving soybean quality during storage. *Bern, C.J.; Rukunudin, I.H.; Zagrebnyev, D.O.; Cogdill, R.P.; Derocher, B.D., USA
- 10:40-11:05 Effect of storage on color, biochemical composition and food quality of soybeans. Chang, K.C., USA
- 11:05-11:30 Studies on soybean quality changes during storage --a review. Bian, K., China
- 11:30-11:55 Gamma irradiation induced enhancement of antioxidant properties of soybean seeds. Dixit, A.K.; Kumar, V.; Rani, A.; *Bhatnagar, D., India

Room: 201C (2F)

Symposium: F2-1 Modern Processing Technology.

Chairs: Jiang, Lianzhou. College of Food Science, Northeast Agricultural University, China

Debruyne, Ignace. Ignace Debruyne & Associates, Izegem, Belgium

- 13:30-13:50 *Ortho*-dihydroxyisoflavone derivatives from highly aged Korean fermented soybean paste and its biological activity. *Kim, D.H.; Park, J.S.; Moon, E.J.; Yu, S.H.; Kim, D.H.; Kim, H.K.; Kang, H.H., South Korea
- 13:50-14:10 Sustainable oils and fats refining through improved degumming and oil remediation. David, C., UK

- 14:10-14:30 Multicracker use in soybean dehulling and soy grit and flour production -- a comparison with existing dehulling technology. *Debruyne, I., Belgium*
- 14:30-14:50 Influence of gamma irradiation on *in vitro* lipid peroxidation and antioxidant properties of soybean seeds. **Dixit, A.K.; Kumar, V.; Rani, A.; Bhatnagar, D., India*
- 14:50-15:10 Study on the antioxidative activity of enzymatic hydrolysates of defatted soybean meal. **Jiang, L.Z.; Xu, J.; Li, Y.; Wang, J.L., China*

Room: 201C (2F)

Symposium: F2-2 Modern Processing Technology.

Chairs: Hua, Yufei. School of Food Science and Technology, Jiangnan University, China

Biradar-Patil, Ningappa. K.. National Seed Project, University of Agricultural sciences, India

- 16:00-16:25 Effect of fungicides and polymer coating on storability of soybean. **Biradar-Patil, N.K.; Macha, S., India*
- 16:25-16:50 Some fundamental researches relating to the gelling properties of soy proteins. **Hua, Y.F.; Kong, X.Z.; Zhang, C.M., China*
- 16:50-17:15 Effect of soaking condition on the solubility of spray-dried soy milk powder. **Ren, C.G.; Tang, L.; Guo, S.T., China*
- 17:15-17:40 Relationship between extrusion texturization properties and quality properties of soybeans. **Zhang, B.; Dong, L.; Wei, Y.M.; Yang, C.M., China*
- 17:40-18:00 Soybean processing technologies for small scale agro business opportunities in India. *Patil, R.T., India*

Room: 308 (3F)

Symposium: G1-1 Soy and Aquaculture.

Chairs: Liu, Keshun. U.S. Dept. of Agriculture, Agricultural Research Services, USA

Masumoto, Toshiro. Kochi University, Faculty of Agriculture, Japan

- 10:15-10:35 Fishmeal replacement: opportunities, challenges and possible solutions. *Liu, K.S., USA*
- 10:35-10:55 A review of soybean use in United States aquaculture. *Hart, S.D., USA*
- 10:55-11:15 Applied study of soybean products in Chinese aqua-feed. *Zhou, H.Q., China*
- 11:15-11:35 Feed-based culture of snakehead carp fingerlings. *Cremer, M.; *Zhang, J.; Zhou, E.H., China*
- 11:35-11:55 Role of soy in Japanese aquaculture industry. *Masumoto, T., Japan*
- 11:55-12:15 Perspectives of extrusion technologies in processing of soya for aquafeeds in Russia. **Domoroshchenkova, M.L.; Lisitsyn, A.N., Russia*
- 12:15-12:30 Extrusion of soy based aqua feed. *Riaz, M.N., USA*

Room: 308 (3F)

Symposium: G2-1 Food, Nutrition and Health.

Chairs: Ho, Suzanne C. Department of Community and Family Medicine and Centre of Research and Promotion of Women's Health, School of Public Health, The Chinese University of Hong Kong, Prince of Wales Hospital, Hong Kong China

Weingartner, Karl. National Soybean Research Laboratory, University of Illinois at Urbana-Champaign, USA

- 13:30-13:50 Phenolics enriched-soy lecithin: novel formulations for nutraceuticals and functional foods. *Fawzy-Ramadan, M., Egypt*
- 13:50 - 14:10 Protective roles of soy phytoestrogens in colon cancer. *MacDonald, R.S., USA*
- 14:10 - 14:30 Soy protein applications for human diets in the developing world. **Owen, B.; Weingartner, K.; Jain, V., USA*
- 14:30 - 14:50 Comparative study of stability and immunoreactivity of glycinin and β -conglycinin to hydrolysis *in vitro*. *Zhao, Y.; *Qin, G.X.; Sun, Z.W.; Wang, T.; Zhang, B.; Zhang, B.L.; Wang, H.F., China*
- 14:50 - 15:10 Soy peptide lunasin lowers LDL cholesterol by reducing HMG-CoA reductase and by increasing LDL-receptor expression. *Galvez, A.F., USA*
- 15:10 - 15:30 Soy foods and health of midlife women. *Ho, S.C., Hong Kong, China*
- 15:30 - 15:50 The role of soy in international institutional feeding programs. *Weingartner, K., USA*

Room: 308 (3F)

Symposium: G3-1 Animal Feed.

Chairs: Li, Defa. State Key Lab of Animal Nutrition, China Agricultural University, China
Hart, Steven D.. Indiana Soybean Alliance, USA

- 16:00-16:20 Comparative study on the stability of soybean [*Glycine max* (L.) Merr.] β -conglycinin in pigs of different physiological stages. *Wang, T.; *Qin, G.X.; Sun, Z.W.; Zhao, Y.; Zhang, B.; Wang, H.F.; Zhang, B.L.; Wang, B., China*
- 16:20-16:40 Effects of glycinin or β -conglycinin on the growth performance and apparent crude protein digestibility of pigs at different growth phases. **Zhao, Y.; Qin, G.X.; Sun, Z.W.; Wang, T.; Wang, B.; Zhang, B.L.; Zhang, B., China*
- 16:40-17:00 Effect of different level of soybean meal on rumen fermentation and duodenal nitrogen composition in Chinese Holstein cow. **Qiao, G.H.; Shan, A.S.; Zhang, Z.Y.; Ma, Q.Q.; Sun, Z.W.; Li, W.B.; Yan, C.J., China*
- 17:00-17:20 Evaluation of an all-plant protein diet for tilapia fingerling production by replacement of fishmeal with soy protein concentrate. **Zhou, E.H.; Cremer, M.C.; Zhang, J.; O'Keefe, T., China*
- 17:20-17:40 Effects of substituting fermented soybean meal for fish meal on growth performance of weaned piglets. *Yu, B.; *Huang, M.Y.; Luo, J.C.; Fu, C.G., China*
- 17:40-18:00 Allergic responses of soybean antigenic proteins for piglets. *Ma, X.; Sun, P.; Hao, Y.; Chen, F.; Han, P.F.; *Li, D.F., China*

Room: 305C (3F)

Symposium: H1-1 Economic Analysis of Soybean Industry.

Chairs: Si, Wei. China Agricultural University, China

Ferrarotti, Julio. Member of the Executive Committee of ACSOJA, Argentina

- 10:15-10:40 Sustainability of biofuel production in Brazil: the increase of soybean areas in the pre-amazon region. *Wehrmann, M.E.S.F.; Duarte, L.M.G.; Vianna, J.N.S., Brazil
- 10:40-11:05 Productivity growth, technical efficiency change in Chinese soybean production. Si, W., China
- 11:05-11:30 The political economy of the Argentine soybean chain. Turzi, M., USA
- 11:30-11:55 Soybean production and processing in Argentina. Vilella, F.; Rossi, R.; Mogni, L.; *Barilatti, M.M.; Senesi, S.; Palau, H., Argentina
- 11:55-12:20 Motives for non-GM soybean production: from the Iowa 2006 specialty corn & soybean survey. *Masuda, T.; Goldsmith, P.D., USA

Room: 305C (3F)

Symposium: H1-2 Economic Analysis of Soybean Industry.

Chairs: Invinkelried, Horacio O..Universidad Nacional del Litoral. Facultad de Ciencias Agrarias.

Labalette, Françoise. ONIDOL, France

- 13:30-13:55 Sustainability -- the license to produce. Frans-Claassen, I., Argentina
- 13:55-14:20 Specificity and features of the soybean production in France. *Labalette, F.; Bourrel, C.; Jouffret, P.; Lecomte, V.; Quinsac, A.; Ledoux, S., France
- 14:20-14:45 The change of the main soybean producing areas in Heilongjiang Province. *Pan, Q.; Li, N.J.; Zhang, S.B., China
- 14:45-15:10 Information and early warning system for the cultivation of soybean (*Glycine max*) (Santa Fe, Argentina). *Invinkelried--Horacio, O.; Susana, G.; Mario, H.; Ignacio, D.; Marianela, P., Argentina
- 15:10-15:35 The oilseeds revolution: a model of the Argentinean soybean value chain. *Costa, R.; Sierra, E.; Cohan, L., Argentina

Room: 305C (3F)

Symposium: F1-2 Storage and Logistics

Chairs: Vaca-Garcia, Carlos. Université de Toulouse; INP; LCA (Laboratoire de Chimie Agro-Industrielle), France

Calvo, Miguel. Soybean chain association of Argentina, Argentina

- 16:00-16:20 Management practices and new technologies in storage of soybeans, meal and oil. Calvo, M., Argentina
- 16:20-16:40 PANEL: World trade flow trends: an analysis of transportation and logistics needs. *Laperouse, P.; Petry, M.; Ponton, R.; Montiero, M., USA
- 16:40-17:00 Status of storage and logistics in China. Li, F.J., China
- 17:00-17:20 Logistics needed to add value with identity-preserved soybeans. McMullen, M., Canada

17:20-17:40 European alternatives to soybean for industrial oleochemicals: some examples. *Vaca-Garcia, C., France*

Room: **Conference Hall 5A (1F)**

Forum I1-1: Health and Nutrition.

Chairs: Eisentrager, Laurence P. Vitasoy International Holdings Limited,, Hong Kong
China

Ong, Mei H. Vitasoy International Holdings Limited, Hong Kong China

10:15-10:20 Introduction

10:20-10:50 Health beliefs of soy in Chinese culture. *Zhai, F.Y., China*

10:50-11:20 Calcium-fortified soymilk supplementation on bone health in Chinese adolescent girls-a one-year prospective. *Ho, S.C., Hong Kong, China*

11:20-11:50 Recent research update and health benefits of soy. *Messina, M. USA*

11:50-12:30 Panel discussion. *Eisentrager, L.; Messina, M.; Ho, S.C.; Zhai, F.Y.*

Room: **Conference Hall 5A (1F)**

Forum I2-1: Food Safety and Quality Management.

Chairs: Winkle, Mark United Soybean Board, USA

Ong, Mei H. Vitasoy International Holdings Limited, Hong Kong China

13:30-13:35 Introduction

13:35-14:05 Developing and maintaining a safe food value chain; logistical and storage solutions for food safety. *Martin, G., USA*

14:05-14:35 Converting nutritious soybeans to good-tasting, safe and healthy soy foods and beverages. *Ong, M.H., Hong Kong, China*

14:35-15:05 Combating negative perceptions & restoring confidence in the market place. *Battaglia, R., Swiss*

15:05-15:35 Quantifying and communicating the quality of the US soybean crop. *Winkle, M., USA*

Room: **Conference Hall 5A (1F)**

Forum I3-1: Biotechnology and Its Innovation.

Chairs: **Lin, Chentao.** Institute of Crop Sciences, Chinese Academy of Agricultural Sciences,China / Department of Molecular, Cell, and Developmental Biology, University of California, USA

Cianzio, Silvia R.. Iowa State University, USA

16:00-16:05 Introduction

16:05-16:35 Role of seed genetics in meeting the challenges of a growing world. *Bowers, G. USA*

16:35-17:05 Biotechnology and the environment: are GM soybeans a sustainable choice? *Goering, D., USA*

17:05-17:35 The influence of modern biotechnology on Chinese soybean industry development. *Liu, D.G., China*

17:35-18:05 A prospective view on soybean biotechnology for Argentina in the global context. *Ferrarotti, J., Argentina*

Thursday, August 13, 2009

Room: Convention Hall NO.1 (2F)

Plenary 4-1: Safe Production and High Efficient Use.

Chairs: Liu, Keshun. U.S. Dept. of Agriculture, Agricultural Research Services, USA

Carrao-Panizzi, Mercedes C. National Soybean Research Center, Embrapa Soja,
Rodovia Carlos João Strass - Distrito de Warta, Brazil

08:00-08:40 New techniques induced from traditional soybean products and new
technology of soybean process. *Ono, T., Japan*

08:40-09:20 Soybean nutrition and health. *Chen, C.M., China*

09:20-10:00 Progress of soybean disease research in a scenario of global changes
and future challenges. **Ploper, L.D.; Giammaria, S.L.; Abney, T.S.; Huber,
D.M., Argentina*

Room: Conference Hall 5B (1F)

08:00-18:00 Posters from P488 to P693 (for titles, please refer to the abstracts)

Room: 307 (3F)

Symposium: A3-1 Evolution and Speciation.

Chairs: Lu, Baorong. Institute of Biodiversity Science, Fudan University, China

Lee, Suk-Ha. Department of Plant Science and Research Institute for Agriculture and Life
Sciences, Seoul National University, Korea / Plant Genomics and
Breeding Institute, Seoul National University, Korea

10:15-10:35 The domestication origin of cultivated soybean and the phylogeographic
analysis of wild soybean from China. **Guo, J.; Wang, Y.S.; Qiu, L.J.; Wang,
Y., China*

10:35-10:55 The genome sequencing of *Glycine soja*: molecular insights into the
soybean domestication. *Lee, S.H., South Korea*

10:55-11:15 Evolutionary changes of genetic diversity and population structure from
the wild to the cultivated soybean in China. **Wen, Z.X.; Zhang, J.; Zhao,
T.J.; Ding, Y.L.; Gai, J.Y., China*

11:15-11:35 Haplotype structure of chloroplast DNA sequences in wild and cultivated
soybean in China. *Guo, L.; Tian, X.J.; *Yan, X.; Yang, G.L.; Guan, J.; Yu,
C.; Li, S.B.; Mao, L.K.; Zhu, Y.L., China*

11:35-11:55 The first monograph on soybean written by Chinese. *Dong, Z.; *Liu, X.,
China*

11:55-12:15 A review on ancient history of soybean production, processing and related
technology. **Jiang, M.D.; Zhao, J.M.; Yang, H.; Gai, J.Y., China*

Room: 311 (3F)

Symposium: B3-2 Genetics and Breeding - Stresses.

Chairs: Zhu, Youlin, NanChang University, China

Shannon, J. Grover. University of Missouri-Delta Center, Division of Plant Sciences, USA

- 10:15-10:35 Reactions of Canadian short-season soybean varieties to three races of *Phytophthora sojae*. Zhang, S.Z.; *Xue, A.G.; Zhang, J.X.; Cober, E.; Anderson, T.R.; Poysa, V.; Istvan, R., China
- 10:35-10:55 Breeding for rust and yellow mosaic resistance in soybean [*Glycine max* (L.) Merr.] in India. *Ramteke, R.; Gupta, G.K., India
- 10:55-11:15 Characterization and mapping of *RpsYu25*, a novel resistance to *Phytophthora sojae*. *Sun, S.; Wu, X.L.; Zhao, J.M.; Wang, Y.C.; Tang, Q.H.; Yu, D.Y.; Gai, J.Y.; Xing, H., China
- 11:15-11:35 Inheritance and correlation analysis of soybean resistant to soybean pod borer (*Leguminivora glycinivolla* M.). *Yan, R.H.; Yang, Z.Y.; Wang, S.M.; Fan, X.H.; Chen, J.; Dong, L.C., China
- 11:35-11:55 QTL analysis of soybean resistance to *Lamprosema indicata* (fabricius) under multiple environments in four populations under multiple environments. *Xing, G.N.; Zhao, T.J.; Gai, J.Y., China
- 11:55-12:15 Identification and validation of QTLs associated with partial resistance to sclerotinia stem rot in soybean. Huynh, T.T.; Bastien, M.; Iquira, E.; Turcotte, P.; *Belzile, F., Canada
- 12:15-12:30 Inherence of genes resistant to soybean mosaic virus in Chinese differential soybean genotypes. *Li, D.X.; Chen, P.Y.; Shi, A.N.; Zhang, B.; Hou, A.F., China

Room: Convention Hall NO.1 (2F)

Symposium: C1-3 Genomics.

Chairs: Yu, Deyue. Soybean Research Institute, Nanjing Agricultural University, China

Abdelnoor, Ricardo V. Brazilian Agricultural Research Corporation, National Soybean Research Center (Embrapa-Soja), Brazil

- 10:15-10:35 GENOSOJA - A Brazilian soybean genome consortium. *Abdelnoor, R.V., Nepomuceno, A.L., de Barros, E. G., Grossi de Sá, M.F., Binneck, E., Marcelino, F.C., Brommonschenkel, S.H., Almeida, J., Benko-Iseppon, A.M., Schuster, I., Kido, E.A., Loureiro, M.E., Margis, R., Hungria, M., Moreira, M.A., Baracat-Pereira, M.C., Fietto, L.G., Bodanese-Zanettini, M.H., Romano, E., Zerbini, F.M., Macedo-Lemos, E.G., Guimarães-Pereira, G.A., Brazil
- 10:35-10:55 The role of circadian clock controlled gene expression in soybean seed development. Hudson, K., USA
- 10:55-11:15 Functional genomics of soybean comes of age: Development and application of high-throughput DNA-based gene silencing technology for soybeans. Zhang, C.Q.; Yang, C.L.; Graham, M.; Whitham, S.A.; *Hill, J.H., USA
- 11:15-11:35 Analysis of expression profile and construction of transcriptional regulatory network of *Glycine soja* under saline-alkaline stress. *Zhu, Y.M.; Li, Y.; Ge, Y.; Guo, D.J.; Bai, X.; Cai, H.; Ji, W., China
- 11:35-11:55 Transcription profiling and mutation detection of soybean homoeologous genes. *Stupar, R.M.; Lin, J.Y.; Jackson, S.A.; Bolon, Y.T.; Muehlbauer,

- G.J.; Naeve, S.; Orf, J.H.; Vance, C.P.; Haun, W.J., USA
- 11:55-12:15 Functional genomics of G-protein coupled receptors (GPCR) in *phytophthora sojae*. Zhao, W.; Wang, Y.L.; Wang, X.L.; Hua, C.L.; Wu, H.; Dou, D.L.; Tyler, B.; Govers, F.; *Wang, Y.C., China
- 12:15-12:30 The soybean interactome. *Lightfoot, D.A.; Jayaraman, D.K.; Natarajan, A., USA

Room: 305AB (3F)

Symposium: D3-2 Farming System and Management.

Chairs: Seguin, Philippe. McGill University, Canada

- Oikeh, Sylvester O. African Agricultural Technology Foundation (AATF), Kenya
- 10:15-10:35 Effects of field management on soybean tocopherol concentrations. *Seguin, P.; Tremblay, G.; Pageau, D.; Liu, W.C., Canada
- 10:35-10:55 Influence of planting patterns of soybean [*Glycine max* (L.) Merr.] and pearl millet [*Pennisetum glaucum*] on productivity and economics in intercropping. *Halvankar, G.; Taware, S.; Varghese, P., India
- 10:55-11:15 Tillage and nutrient management response on soil organic carbon fractions and storage under soybean-based cropping systems. *Billore, S.D.; Ramesh, A.; Sharma, S.K.; Joshi, O.P.; Vyas, A.K.; Pandya, N.; Khan, I.R., India
- 11:15-11:35 Contribution of promiscuous soybean [*Glycine max* (L.) Merr.] to upland rice-based cropping systems in West Africa. *Oikeh, S.O.; Houngnandan, P.; Abaidoo, R.; Niang, A.; Toure, A., Kenya
- 11:35-11:55 No-tillage soybean rotations in Argentina: available water and yield. *Salado-Navarro, L.R.; Sinclair, T.R., Argentina

Room:201A (2F)

Symposium: E4-1 Climate Change.

Chairs: Jarvie, J. Antony. Pannar (PTY) Ltd P.O. Box 19 Greytown 3250, South Africa

- Sierra, Eduardo. Buenos Aires Grain Exchange / School of Agronomy, University of Buenos Aires, Argentina
- 10:15-10:35 Effect of climate change on soybean production. Lin, E.D., China
- 10:35-10:55 Soybean production strategies facing global and regional climate change. *Sierra, E.; Costa, R.; López, E., Argentina
- 10:55-11:15 Positive and negative effects of global climate change on soybean production in Northeast China. Jin, Z.Q.; Chou, T.Y.; Ge, D.K., China
- 11:15-11:35 Responses of soybean cultivars to elevated CO₂ and O₃. *Nelson, R.L.; Ainsworth, E.A.; Long, S.P.; Ort, D.R., USA
- 11:35-11:55 Effect of climate on duration of vegetation period in soybean [*Glycine max* (L.) Merr.]. Onemli, F.; Yaver, S.; *Saglam, C.; Pasa, C.; Atakisi, I.K., Turkey
- 11:55-12:15 Enhancement in biomass and yield of soybean var: js-7105 after exclusion of solar UV components. *Singh, P.; Pandey, G.P.; Guruprasad, K.N., India

Room: 201C (2F)

Symposium: F3-1 Processing and Value-added Utilization of Specialty Soybeans.

Chairs: Carrao-Panizzi, Mercedes C. National Soybean Research Center, Embrapa Soja,
Rodovia Carlos João Strass - Distrito de Warta, Brazil

Tsukamoto, Chigen. Graduate School of Agriculture, Iwate University, Japan

- 10:15-10:35 Processing and value-added utilization of soybean [*Glycine max* (L.) Merr.] with modified fatty acid content. *Schnebly, S., USA*
- 10:35-10:55 Processing and utilization of soybeans modified saponin and isoflavone characteristics for functional soy-based foods. **Tsukamoto, C.; Takada, Y.; Kikuchi, A.; Ishimoto, M.; Shimada, K.; Kitamura, K., Japan*
- 10:55-11:15 The research and application of the oligosaccharides that in the further process of soybean products. *Wang, H.C.; Wei, Y.S.; Ding, S.R.; Zhang, X.R., China*
- 11:15-11:35 Breeding specialty soybean cultivars for processing and value-added utilization at Embrapa in Brazil. **Carrao-Panizzi, M.C.; Pipolo, A.E.; Mandarino, J.M.G.; Arantes, N.E.; de Toledo Benassi, V.; Arias, C.A.; Kaster, M.; de Oliveira, M.F.; Oliveira, M.A.; de Toledo, J.F.F.; Moreira, J.U.V.; de Souza Carneiro, G.E., Brazil*
- 11:35-11:55 Mechanical processing of soybeans for feed application. *Riaz, M.N., USA*
- 11:55-12:15 The development of soybean by products in Heilongjiang. **Zhao, G.X.; Liu, L.J., Chen, X.; Liu, H.F.; Zhao, C.J.; Tan, Y., China*

Room: 308 (3F)

Symposium: G2-2 Food, Nutrition and Health.

Chairs: Qin, Guixin. College of Animal Science and Technology, Jilin Agricultural University, China

Honda, Nozomi. Graduate School of Agriculture, Iwate University, Japan

- 10:15-10:35 Saonin composition of *Glycine soja* (Sieb. & Zucc.) Mutants having new soyasapogenol aglycones and geographical distribution in South Korea. **Honda, N.; Tsukamoto, C.; Maehara, Y.; Tayama, I.; Kitamura, K.; Singh, R.J.; Chung, G.H., Japan*
- 10:35-10:55 Screening reverse apoptosis inhibitors and new anticancer drugs from different soybean lines. **Fung, M.C.; Tang, H.L.; Hu, S.M.; Ooi, V.E.C.; Sun, S.M.S.; Lam, H.M., Hong Kong, China*
- 10:55-11:15 Prebiotic, probiotic and synbiotic soy based functional food products. **Shukla, S. S.; Shrivastawa, S. P.; Kumar, R., India*
- 11:15-11:35 Breast cancer and soy beyond nutrition. **Kawalkar, V.V.; Dabade, J.V., India*
- 11:35-11:55 Impact of soy intake on breast cancer risk and prognosis. *Messina, M., USA*
- 11:55-12:15 Macronutrient composition and digestibility of extruded and fermented Soya protein products. **Ojokoh, A.O.; Wei, Y.M., China*

Room: 305C (3F)

Symposium: H2-1 Trade and Marketing.

Chairs: Chianu, C. J.. TSBF-CIAT, c/o ICRAF, Nairobi, Kenya

Tuan, Francis. Economic Research Service, United States Department of Agriculture, USA

10:15-10:40 Augmenting soy-revolution in India--status and strategy. **Tiwari, S.P., India*

10:40-11:05 Market demand of soybean in China. *Sun, D.S. China*

11:05-11:30 Hypothetical commercialization of biotech soybeans in China: perverse domestic and international trade effects. **Tuan, F.; Hansen, J.; Somwaru, A.; Marchant, M.; Kalaitzandonakes, N.; Zhong, F.N., USA*

11:30-11:55 Agricultural and Rural Development in China: Situation, Challenges and Policies. *Li, X.D. China*

11:55-12:20 Model for agricultural market creation in Africa: soybean in Kenya. **Chianu, C.J.; Vanlauwe, B.; Adesina, A.; Chianu, J.; Sanginga, N., Kenya*

Room: **Conference Hall 5A (1F)**

Forum I4-1: International Trade, and Safe and Secure Supply.

Chairs: Eisentrager, Laurence P.. Vitasoy International Holdings Limited,, Hong Kong
China

Smulders, M.J.M.. Plant Research International, Wageningen UR, Netherlands

10:15-10:20 Introduction

10:20-10:50 East and west approaches to soy foods. *Eisentrager, L., Hong Kong, China*

10:50-11:20 GMO-related sustainability: impacts, risks and opportunities of soybean production in Latin America. *Smulders, M.J.M., Netherland*

11:20-11:50 China and Argentina: towards a major integration of soybean crushing. *Pontón, R., Argentina*

11:50-12:20 China's oilseed market: where do we go from here? *Wang, X.H., China*

Friday, August 14, 2009

Room: Convention Hall NO.1 (2F)

Plenary 5-1: Consevation and Utilization of Gene Resources.

Chairs: Qiu, Lijuan. The National Key Facility for Crop Gene Resources and Genetic Improvement (NFCRI) / Key Laborartory of Germplasm Utilization (MOA), Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, China

Cregan, Perry. Soybean Genomics and Improvement laboratory, USDA-ARS, USA

08:30-09:10 Conservation and sustainable utilization of genetic diversity in soybean. *Gai, J.Y., China*

09:10-09:50 Evolution of biotechnology in soybeans. *Amevic, C; Comelius, J.; *Fuchs, R., USA*

Room: **Conference Hall 5B (1F)**

08:00-18:00 Posters from P488 to P693 (for titles, please refer to the abstracts)

Room: 307 (3F)

Symposium: C3-1 Tissue Culture and Transformation.

Chairs: Wang, Piwu. Biotechnology Center of Jilin Agricultural University, China

Elshehy, Hany. Biochemistry Department, Faculty of Agriculture, Cairo University,
Egypt

- 10:15-10:35 GmCRY1a is a major regulator of photoperiodic flowering in soybean. *Zhang, Q.Z.; Li, H.Y.; Fu, Y.F.; *Lin, C.T., China*
- 10:35-10:55 A study on reducing the soybean lipoxygenase content through RNA interference manipulation. **Wang, P.W.; Ma, J.; Li, Z.; Wang, J.L.; Wei, Y.F.; Wang, P., China*
- 10:55-11:15 Enhanced level of methionine in transgenic soybean [*Glycine max* (L.) Merr.] plants over-expressing the *Arabidopsis cystathionine γ -synthase* gene. *Song, S.K., *Hou, W.S., Wu, C.X., Amir, R., Ma, F.M., *Han, T.F., China*
- 11:15-11:35 Enhancement of protein quality of legumes using genetic transformation system. *Bahgat S.; *El-Shemy, H.A., Egypt*
- 11:35-11:55 Soybean gene transfer: protein expression and product development. *Rech, E., USA*
- 11:55-12:15 Using a minimum tile path for plant transformations encompassing the entire soybean genome. *Lightfoot, D.A., USA*
- 12:15-12:30 Studies on technologies of regeneration and transformation of soybean in southern China. **Yang, C.; Zhao, T.J.; Yu, D.Y.; Gai, J.Y., China*

Room: 307 (3F)

Symposium: A4-1 Germplasm Enhancement.

Chairs: Shu, Qing-Yao. IAEA-Zhejiang university collaborating center, key laboratory of Chinese ministry of agriculture for nuclear agricultural sciences, institute of nuclear agricultural sciences, Zhejiang university, China

Nelson, Randall L. USDA-Agricultural Research Service, USA

- 13:30-13:50 Induced mutants in worldwide soybean genetic improvement: past contributions and future perspectives. *Shu, Q.Y., Austria*
- 13:50-14:10 Genotype analysis and QTL mapping of low temperature tolerance trait in germination by introgression lines in soybean. **Jiang, H.W.; Li, C.D.; Liu, C.Y.; Zhang, W.B.; Qiu, P.C.; Li, W.F.; Gao, Y.L.; Hu, G.H.; Chen, Q.S., China*
- 14:10-14:25 Introduction, evaluation and utilization of the foreign soybean germplasm in China. **Liu, Z.X.; Qiu, L.J.; Chang, R.Z.; Guan, R.X.; Li, Y.H.; Jin, L.G., China*
- 14:25-14:40 Utilization of wild soybean (*Glycine soja*) germplasms in soybean variety improvement. **Yang, G.Y.; Wang, Y.; Ma, X.P.; Wang, Y.Q.; Wang, Y.N., China*

- 14:40-14:55 The population size and marker density for CSSL development. *Yan, L.; Li, Y.H.; Qiu, L.J., China
- 14:55-15:10 Enhancement and utilization of soybean germplasm resources resistance - SCN3. Yuan, M., China
- 15:10-15:30 Wide hybridization in soybean. *Singh, R.J., Nelson R. L., USA
- 15:30-15:45 Identification of a novel soybean (*Glycine max* (L.) Merr.) mutant resistant to drought. *Ma, J.; Wang, P.W.; Zhang, J.; Zhang, Z.; Wei, Y.F.; Fu, Y.P., China

Room: 307 (3F)

Symposium: A5-1 Seed Technology.

Chairs: Hao, Zaibin. Department of Material and Chemical Engineering, Guilin University of Technology, China / College of Life Science of Northeast Agriculture University, China

Tepjun, Virasak. Chiang Mai Field Crops Research Center, Department of Agriculture, Thailand

- 16:00-16:25 Radiation for soybean seed germination and vigor improvement cv. Chiang Mai 60: preliminary yield trial-mutant soybean lines. *Tepjun, V.; Dangpradub, J.; Daungputtan, P.; Srisomboon, S., Thailand
- 16:25-16:50 Study of genetics and physiology of seed longevity in soybean. *Bhardwaj, P.M.; Pushpendra; Singh, R.K., India
- 16:50-17:15 Germinability of soybean [*Glycine max* (L.) Merr.] seeds after 30 years of storage in base collection. Radhamani, J., India
- 17:15-17:40 Characteristics of sprouting of various soybean varieties. Xiao, L.L.; *Kang, Y.F.; Tao, L.M.; Luo, S., China

Room: 311 (3F)

Symposium: B1-2 Genetics and Breeding - Quality.

Chairs: Orf, James H.. University of Minnesota, USA

Srisombun, Somsak. Department of Agriculture, Thailand

- 10:15-10:35 Soybean variety improvement for soymilk production in Thailand. *Srisombun, S.; Malipan, A.; Pa-Oblek, S.; Chinchest, A.; Sritussany, S.; Shanmugasundaram, S., Thailand
- 10:35-10:55 Protein and oil content of organic and conventionally grown soybeans. Orf, J.H., USA
- 10:55-11:15 Molecular design for a high-sulfur-containing amino acid gene and breeding of new transgenic soybean lines. *Bai, X.; Zhu, Y.M.; Zhai, H.; Ge, Y.; Yuan, M.; Li, K.L.; Cai, H.; Ji, W.; Li, Y., China
- 11:15-11:35 Recent progress on soybean breeding in Jilin Province of China. *Wang, S.M.; Zhang, W.; Fan, X.H., China
- 11:35-11:55 Genetic variances and combining ability of edamame for nutritive values. *Tadesse, M.; Ren, S.X.; Tadesse, D., USA
- 11:55-12:15 Environmental effect on yield and quality of high protein soybean. *Zhu, H.D.; Wang, C.F., China

Room: 311 (3F)

Symposium: B3-3 Genetics and Breeding - Stresses.

Chairs: Nian, Hai. College of Agriculture, South China Agricultural University, China

El-shora, Hamed. Botany Department, Faculty of Science, Mansoura University,
Egypt

- 13:30-13:50 Development of a new herbicide tolerance trait to improve weed control in glyphosate tolerant soybean. *Cui, C.; Zhou, N.; Gilles, G.; Wright, T.; Simpson, D.; Peterson, M.; Greene, T.; Thompson, S., USA
- 13:50-14:10 Soybean breeding program for Al and low P - tolerant soybeans in south China. *Nian, H.; Cheng, Y.B.; Yang, C.Y.; Ma, Q.B., China
- 14:10-14:30 Response of soybean [*Glycine max* (L.) Merr.] plants to abiotic stresses and possible methods to improve abiotic stress resistance. *El-Shora, H.M., Egypt*
- 14:30-14:50 Soybean drought tolerant traits: simulated impact on yield in Argentina. *Salado-Navarro, L.R.; Rodriguez, R., Argentina
- 14:50-15:10 Genetic studies of salt tolerance in soybean. *Xu, D.H.; Hamwieh, A., Japan
- 15:10-15:30 Inheritance of tolerance to aluminum toxin in two recombinant inbred line populations of soybean. *Korir, P.; Zhao, T.J.; Yu, D.Y.; Chen, S.Y.; Gai, J.Y., China

Room: 311 (3F)

Symposium: B4-1 Male Sterility and Hybrid.

Chairs: Zhao, Limei. Soybean Research Center, Jilin Academy of Agricultural Sciences,
China

Mebrahtu, Tadesse. Virginia State University, USA

- 16:00-16:20 Pollinator effects on the pod-setting rate of soybeans with distinct cytoplasmic male sterilities. *Zhao, L.M.; Sun, H.; Peng, B.; Li, J.P.; Wang, S.M.; Li, M.H.; Zhang, W.L.; Zhang, J.Y.; Wang, Y.Q., China
- 16:20-16:40 Genetic models and improvement approaches of cytoplasmic - nuclear male sterility and its restoration in soybeans. *Zhao, T.J.; Gai, J.Y., China
- 16:40-17:00 Anther and pollen germination of the male parent with high outcross rate for hybrid soybean. *Wei, B.G.; Zhang, R.J.; Wei, Y.C.; Zhang, H.P., China
- 17:00-17:20 The effect of different planting distribution on fertility's of male-sterile line on hybrid soybean reproduction. *Wang, Y.Q.; Zhao, L.M.; Sun, H.; Wang, S.M.; Peng, B.; Li, J.P.; Li, M.H., China
- 17:20-17:40 The influence of the timing of crossing and climatic conditions on the efficiency of crossing in soybean. *Ri, J.Y.; Ri, T.G.; *Ri, M.C., DPR Korea*
- 17:40-18:00 Heterosis, combining ability and their genetic basis of yield among key parental materials of soybean in Huang-Huai Valleys. *Yang, J.Y.; Gai, J.Y., China

Room: Convention Hall NO.1 (2F)

Symposium: C4-1 Gene and Its Function.

Chairs: Bhattacharyya, Madan. Department of Agronomy, Iowa State University, USA

Harada, Kyuya. National Institute of Agrobiological Sciences, Japan

- 10:15-10:35 Characterization of an active endogenous transposable element in soybean. *Bhattacharyya, M.; Xu, M.; Brar, H.; Grosic, S.; Palmer, R.G., USA
- 10:35-10:55 Cloning and functional analysis of genes related to photoperiod response in soybean. Li, W.B.; Zhao, L.; Luo, Q.L.; Yang, M.L.; Li, Y.G.; Gao, Y.; Hao, D.Q.; Chen, L.M.; Duan, Y.Y.; Wang, Z.X.; Zhao, J.G.; *Zhan, T., China
- 10:55-11:15 Breeding methodology with known gene information: Simultaneous selection of major genes and identified QTL to improve the genetic gain. Wang, J.K., China
- 11:15-11:35 Analysis of variation of the responsible gene for the soybean maturity locus E3. Tsubokura, Y.; Watanabe, S.; Kanamori, H.; Yamagata, H.; Hideshima, R.; Xia, Z.J.; Sato, S.S.; Nakamoto, Y.; Yamanaka, N.; Takahashi, R.; Ishimoto, M.; Anai, T.; Tabata, S.; Katayose, Y.; *Harada, K., Japan
- 11:35-11:55 The circadian system in higher plants and its implications to soybean improvement. Zhang, Z.Y.; Gai, J.Y., China
- 11:55-12:15 A soybean (*Glycine max*) conglycinin promoter-GUS reporter transgenic line of *Arabidopsis thaliana* as a model for studying the control of seed maturation genes. Tang, X.R.; Hou, A.F.; Nguyen, V.; Lu, Q.; Tsang, E.W.T.; *Cui, Y.H., Canada
- 12:15-12:30 Function of miRNAs in controlling *Gly m Bd 28K* gene expression and regulation. *Wang, L.; Fang, X.Q.; Wu, Y.M.; Jin, L.G.; Liu, Z.X.; Chang, R.Z.; Zhu, Y.L.; Qiu, L.J., China

Room: Convention Hall NO.1 (2F)

Symposium: C5-1 Proteomics.

Chairs: Lin, Chentao. Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, China / Department of Molecular, Cell, and Developmental Biology, University of California, USA

Thelen, Jay J. University of Missouri-Columbia, USA

- 13:30-13:50 Utility of proteomic technology to evaluate natural variation of soybean allergen proteins. Natarajan, S., USA
- 13:50-14:10 Investigating soybean-Phakopsora *pachyrhizi* interactions using proteomics. Park, S.J.; *Chen, Z.Y., USA
- 14:10-14:30 Identification of candidate soybean genes involved in the expression of phytophthora resistance through transcriptomic and proteomic studies. Bhattacharyya, M., USA
- 14:30-14:50 Mass spectrometry analysis of the variants of histone H3 and H4 of soybean and their post-translational modifications. Wu, T.; Yuan, T.Z.; Tsai, S.N.; Wang, C.M.; Sun, S.M.; Lam, H.M.; Yao, B.; *Ngai, S.M., Hong Kong, China

- 14:50-15:10 Proteomic analysis of differentially express proteins in soybean (*Glycine max*) petals. *Liu, S.S.; Ge, Y.J.; Liu, X.G.; Xin, H.B.; Diao, G.Z.; Li, W.B.; Hao, D.Y.; Luo, D., China
- 15:10-15:30 Global proteomics and phosphoproteomics of seed filling in soybean. Thelen, J.J., USA
- 15:30-15:45 Proteome approach as a tool for the efficient isolation of basic seed proteins from soybean (*Glycine max*). *Woo, S.H.; Cho, S.W.; Kim, T.S.; Kamal, A.H.M.; Choi, J. S.; Kim, H.S., Korea

Room: **Conference Hall 5B (1F)**

Symposium: C3-2 Tissue Culture and Transformation.

Chairs: Zhang, Zhanyuan. Performance Plants Inc., Canada

Xu, Yinong. Institute of Botany, Chinese Academy of Sciences, China

- 16:00-16:20 P_{SAG12}-IPT promotes *Agrobacterium*-mediated transformation of soybean [*Glycine max* (L.) Merr.] with side-effect. Chen, X.L.; Nguyen, H.T.; *Zhang, Z.Y.J., USA
- 16:20-16:40 Studies on somatic embryogenesis and transformation in *Glycine max* (L.) Merrill. *Tiwari, S.; Pathak, N., India
- 16:40-17:00 *Agrobacterium*-mediated transformation of soybean: organogenic callus as the target explant. Cheng, M., USA
- 17:00-17:20 Optimization of tissue culture system and genetic transformation in soybean. *Wang, G.; Wang, P.; Ji, J., China
- 17:20-17:40 Novel *Agrobacterium*-mediated immature seed transformation method for large scale transgenic soybean production. *Que, Q.D.; Dawson, J.; Yi, H.; Hill, M.; Dunlow, G.; Schuller, C.; Su, J.; Ganesan, S.; Shi, L., USA
- 17:40-18:00 *Agrobacterium*-mediated transformation of soybean hypocotyls. *Xu, Y.N.; Wang, G.L., China
- 18:00-18:15 An efficient shoot regeneration system for soybean [*Glycine max* (L.) Merrill] using thidiazuron. *Rani, A.; Verma, K.; Saini, R.K., India

Room: 305AB (3F)

Symposium: D3-3 Farming System and Management.

Chairs: Jin, Jian. Key Lab of Black Soil, Northeast Institute of Geography and Agroecology, Chinese Academy of Sciences / Key Laboratory of Soybean Biology of Ministry of Education, China

Salas, Graciela M.. Nidera S.A., Argentina

- 10:15-10:35 Soil microbial parameters to differentiate contrasting agricultural management practices followed in central India. *Joshi, O.P.; Deepika, G.; Ramesh, A.; Sharma, S.; Billore, S.D.; Kham, I.R., India
- 10:35-10:55 Bacterial community and diversity in black soil after planting soybean-corn-wheat for 27 years and applied with manure and fertilizers. *Wei, D.; Zhang, J.Z.; Wang, S.; Chen, X.L., China
- 10:55-11:15 Interorganismal signaling and plant productivity. *Smith, D.L.; Mabood, F.; Zhou, X.M.; Souleimanov, A.; He, X.F.; Schwinghamer, T.; Subramanian,

- S.; Wang, N., Canada
- 11:15-11:35 Behavior of soybean cultivars [*Glycine max* (L.) Merr.] MG IV to VIII during 8 seasons in Tucuman, Argentina. Analysis of planting dates and plant population density. *Salas, G.; Sartori, S.; Herrera, E.; Rodolfo-Rossi, C.G., Argentina
- 11:35-11:55 Technical and environmental advantage of the soybean cultivation in France. *Lecomte, V.; Jouffret, P.; Labalette, F.; Gagne, R., France
- 11:55-12:15 Studies on effect of organic and inorganic management practices on yield and economics of soybean based cropping systems in northern plain zone of India. *Gowdra, S.B.; Bandla, G.; Singh, A.I., India
- 12:15-12:30 Sustaining productivity of wheat-soybean cropping system through sole organics and integrated nutrient management in the vertisols of central India. Behera, U.K., India

Room: 305AB (3F)

Symposium: D4-1 Nodulation and Nitrogen Fixation.

Chairs: Yang, Susheng. Department of Microbiology and Immunology, College of Biological Sciences, China Agricultural University and Key Laboratory of Agro-Microbial Resources and Application, Ministry of Agriculture, China

Hungria, Mariangela. Embrapa Soja, Cx. Postal 231, CEP 86001-970, Londrina, Paraná, Brazil / Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq-MCT)

- 13:30-13:50 Biological nitrogen fixation as a key component of N nutrition for the soybean crop in Brazil. *Hungria, M.; Araujo, R.S.; Campo, R.J., Brazil
- 13:50-14:10 Application of soybean rhizobial inoculants in China. *Li, J.; Guan, D.W.; Yang, S.S.; Jiang, X., China
- 14:10-14:30 The soybean flavonoid genistein elicits multiple responses in *Bradyrhizobium japonicum* which affect symbiosis. Kathrin, L.; Susanne, Z.; Lars, W.M.F.; Tobias, G.; Jana, S.; *Michael, G., Germany
- 14:30-14:50 Efficiency of soybeans rhizobial inoculants produced in Iran. *Mitra, A.; Hadi, A.R.; Kazem, K., Iran
- 14:50-15:10 Flavonoids and Auxin-related microRNAs play critical roles in nodule and lateral root development. Subramanian, S.; Zhang, J.; Stacey, G.; *Yu, O., USA
- 15:10-15:30 Effects of nitrogen supply on soybean [*Glycine max* (L.) Merr.] nodule growth and nitrogen fixation. *Han, X.Z.; Yan, J.; Li, X.H.; Qiao, Y.F., China
- 15:30-15:45 Soil enzyme activities in rhizosphere of soybean and wheat in response to inoculation of pseudomonas strains. *Sharma, S.K.; Johri, B.N.; Ramesh, A.; Joshi, O.P., India

Room: 305AB (3F)

Symposium: D4-2 Nodulation and Nitrogen Fixation.

Chairs: Yang, Susheng. Department of Microbiology and Immunology, College of Biological Sciences, China Agricultural University and Key

Laboratory of Agro-Microbial Resources and Application,
Ministry of Agriculture, China

Ruiz-Sainz, Jose E. Department of Microbiology, Faculty of Biology, University of
Seville, Spain

- 16:00-16:20 Symbiotic significance of *sinorhizobium fredii* surface polysaccharides. Margaret, I; Crespo, J.C.; Hidalgo, A.; Buendia, A.; Rodriguez, D.N.; Rodriguez, M.A.; Ollero, J.; Vinardell, J.M.; *Ruiz-Sainz, J.E., Spain
- 16:20-16:40 Characterization of plant symbiotic genes with the help of the model legume *Lotus japonicus*. *Sandal, N.; Madsen, L.H.; Radutoiu, S.; Tirichine, L.; Krusell, L.; Yokota, K.; Cvitanich, C.; Hougaard, B.K.; Albrektsen, A.S.; Fukai, E.; Rueda, P.; Zitzenbacher, S.; Zak, K.; Bras, C.P.; Spaink, H.; Sato, S.; Tabata, S.; Stougaard, J., Denmark
- 16:40-17:00 The phylogeny and geographical distribution of soybean rhizobia in China. Chen, W.X.; *Chen, W.F.; Wang, H., China
- 17:00-17:15 Physiological response of nonnodulating, nodulating and supernodulating soybean [*Glycine max* (L.) Merr.] genotypes to potassium fertilizer under drought stress. *Abdelhamid, M.T.; Kamel, H.A.; Dawood, M.G., Egypt
- 17:15-17:30 Response of microbial soil quality indicators to soil moisture and nutrient management technologies under soybean based cropping system. *Ramesh, A.; Sharma, S.K.; Billore, S.D.; Joshi, O.P.; Bhatia, V.S.; Khan, I.R., India
- 17:30-17:45 Rhizobial determinants involved in nodule formation. *Stahelin, C.; Xie, Z.P., China
- 17:45-18:00 Functional analysis of *pha2* genes from *Sinorhizobium fredii* RT19 and construction of salt resistance engineering strain in *Bradyrhizobium japonicum* USDA110. Jiang, J.Q.; Yang, L.F.; Gu, Z.J.; Zhang, B.; Yang, S.S. *Wang, L., China
- 18:00-18:15 Selection of rhizobium strains tolerant of the toxicity of soybean seed coat for increased efficiency of the inoculation of rhizobium.; Hong, J.C.; *Kim, S.I.; Kang, Y.C., DPR Korea

Room: 308 (3F)

Symposium: D5-1 Information Technology and Mechanization.

Chairs: Chen, Haitao. Department of mechanical engineering, College of Engineer,
Northeast Agricultural University, China

Tian, Lei. Department of Agricultural & Biological Engineering, University of Illinois 360L
Agricultural Engineering Sciences Building, USA

- 10:15-10:35 Sensing systems and variable-rate technology for soybean production. Tian, L., USA
- 10:35-10:55 Study on the planter matched with the cultural technique of soybean narrow-row-flat-thick seeding. *Chen, H.T.; Xiang, D.X.; Ji, W.Y.; Yu, J., China
- 10:55-11:15 Study on working parameters of 2QXP-1 air-suction soybean seed-metering using response surface methodology. *Lai, Q.H.; Chen,

- H.T.; Wang, X.H.; Xiang, D.X.; Yu, J., China*
- 11:15-11:35 Seed coverer -- a tool to enhance field emergence and productivity of soybean. *Ramteke, R.; Khan, I.R.; *Singh, D.V., India*
- 11:35-11:55 Crop simulation models: improved strategies for soybean production on hardpan soils. *Edgardo, G.; *Santiago, M.; Carlos, H., Argentina*
- 11:55-12:15 Site-specific simulation of the CSM-CROPGRO-soybean model at Hailun county blacksoil. **Li, Y.; Zhao, J.; Ge, C.P.; Zhang, L.; Xie, Y.W.; Yang, J.Y., China*
- 12:15-12:30 The comparative research on agricultural mechanization level of main soybean production areas in China. **Qiao, J.Y.; Chen, H.T., China*

Room: 308 (3F)

Symposium: D3-4 Farming System and Management.

Chairs: Song, Shuhong. Introduction of Crop Institute of Liaoning Academy of Agricultural Science, China

Nafziger, Emerson D. University of Illinois. USA

- 13:30-13:50 Addressing yield limitations in soybean. *Ebelhar, S.A.; Davis, M.V.; *Nafziger, D.E., USA*
- 13:50-14:10 Broadbed furrow and ridge and furrow method of sowing of soybean [*Glycine max* (L.) Merr.] for high rainfall areas of Chhattisgarh plains of India. *Lakpale, R.; Tuteja, S.S.; Shrivastava, G.K.; *Swamy, S.L., India*
- 14:10-14:30 Greater understanding of how soybean has the ability to produce similar yields across a broad range of plant populations. **Madani, A.; Oveysi, M., Iran*
- 14:30-14:50 Root/shoot biomass allocation, leaf area and root morphology in high-yielding soybean [*Glycine max* (L.) Merr.] grown in mollisol of Northeast China. **Jin, J.; Wang, G.H.; Liu, X.B.; Mi, L.; Li, Y.H.; Herbert, S.J., China*
- 14:50-15:10 Impact of tillage and crop rotations on functioning of resident arbuscular mycorrhizal fungi and soil enzyme activities in soybean rhizosphere under a long-term field trial. **Sharma, M.P.; Gupta, S.; Sharma, S.K.; Vyas, A.K., India*

Room: 308 (3F)

Symposium: C4-2 Gene and Its Function.

Chairs: Li, Rugang. Eastern Cereal and Oilseed Research Centre, Agriculture and Agri-Food Canada, Canada

Gu, Weikuan. Department of Orthopedic Surgery-Campbell Clinic, University of Tennessee Health Science Center, USA

- 16:00-16:20 Identification and characterization of novel genes involved in response toward soybean mosaic virus infection. *Yang, H.; Huang, Y.P.; *Yu, D.Y., China*
- 16:20-16:40 Candidate searching and establishment of linkage between phenotype and genes using PGMapper. *Xiong, Q.; *Gu, W.K., USA*

- 16:40-17:00 Cloning and characterization for stress tolerance of two protein kinases genes *GsCRCK* and *GsPK* from *Glycine soja*. *Zhu, Y.M.; Ji, W.; Yang, L.; Cai, H.; Bai, X.; Li, Y.; Chen, Q., China
- 17:00-17:20 Soybean Trihelix transcription factors *GmGT-2A* and *GmGT-2B* improve plant tolerance to abiotic stresses in transgenic *Arabidopsis*. Xie, Z.M.; Zou, H.F.; Lei, G.; Zhou, Q.Y.; Niu, C.F.; Liao, Y.; Tian, A.G.; Ma, B.; Zhang, W.K.; *Zhang, J.S.; *Chen, S.Y., China
- 17:20-17:40 Overexpression of *Arabidopsis* transcription factor *revoluta* leads to increased seed yield in replicated field traits. *Lu, R.G.; Bancroft, B.; Lum, K.; Nguyen, T.; Rocher, J.D.; Simmonds, D., Canada
- 17:40-18:00 Evaluation of genes encoding the enzymes of the Kennedy pathway in soybeans [*Glycine max* (L.) Merr.] with altered fatty acid profiles. *Rajcan, I.; McNaughton, A.J.M.; Ablett, G.R., Canada
- 18:00-18:15 Cloning and function analysis of drought-related gene *GmPIPs* in soybean [*Glycine max* (L.) Merr.]. Wang, X.B.; *Qiu, L.J., China

Room: 201A (2F)

Symposium: E1-3 Diseases and Their Management - - Soybean Rust.

Chairs: Shan, Zihui. Oil Crops Research Institute of Chinese Academy of Agricultural Sciences, China

Ploper, L. Daniel. Estación Exp. Agroind. Obispo Colombres (EEAOC), Av. William Cross 3150, (4101) Las Talitas, Tucumán, Argentina / Facultad de Agronomía y Zootecnia, Universidad Nacional de Tucumán, Av. Roca 1900, (4000) Tucumán, Argentina

- 10:15-10:35 Breeding for resistance to rust in soybean (*Glycine max* (L.) Merrill). *Basavaraja, G.T.; Patil, P.V.; Salimath, P.M.; Shamarao, J.; Athoni, B.K.; Hosmath, J.A.; Patil, R.H., India
- 10:35-10:55 Genetic analyses of soybean [*Glycine max* (L.) Merrill] resistance to the Asian rust (*Phakopsora pachyrhizi* H. Sydow & P. Sydow). *Toledo, J.F.; Ribeiro, A.S.; Oliveira, M.F., Brazil
- 10:55-11:15 Soybean rust research in China. *Shan, Z.H.; Zhou, X.A., China
- 11:15-11:35 Evaluation of foliar fungicides for the control of soybean late season diseases and rust in Tucuman, Argentina. *Ploper, L.D.; González, V.; Ruiz, S.; Gálvez, M.R.; Devani, M.R., Argentina
- 11:35-11:55 Role of indigenous technology knowledge in the management of Asian soybean rust incited by *Phakopsora pachyrhizi* in India. Patil, P.V.; *Jahagirdar, S.; Basavaraja, G.T., India
- 11:55-12:15 Detecting severity of soybean rust using a multispectral image sensor. Cui, D.; Zhang, Q.; *Li, M.Z.; Hartman, G.L.; Zhao, Y.F., China

Room: 201A (2F)

Symposium: E1-4 Diseases and Their Management.

Chairs: Feng Feng. Department of Life Science, National Natural Science Foundation of China, China

Wasike, Victor W.. CIAT - Tropical Soil Biology and Fertility institute of International Institute of Tropical Agriculture (TSBF-CIAT), Nairobi, Kenya

- 13:30-13:50 Comparative studies on the diversity and distribution of soybean fungal diseases between China and USA. *Feng, F.; Yang, X.B., China
- 13:50-14:10 Calcium compounds that reduce phytophthora stem rot disease of soybean, and the results of scanning electron microscope analysis and field experiments using calcium format. *Sugimoto, T.; Watanabe, K.; Matoi, T.; Yoshida, S.; Aino, M.; Biggs, A.R. Shiono, M.; Furiki, M., Japan
- 14:10-14:30 Identification of pathogen causing soybean charcoal rot in China. *Zhang, J.Q.; Cui, Y.L.; Xia, C.J.; Wang, X.M.; Zhu, Z.D., China
- 14:30-14:50 Inhibiting effect of biocontrol bacteria on soybean pathogenic fungi. *Li, C.J.; Xu, Y.L.; Liu, H.L.; Pan, F.J.; Zhan, L.L.; Wang, L.F., China
- 14:50-15:10 Races of *phytophthora sojae* in Heilongjiang Province and resistance of soybean cultivars. *Zhang, S.Z.; Xu, P.F.; Wu, J.J.; Xue, A.G.; Li, W.B.; Chen, W.Y.; Zhang, J.X.; Lv, H.Y.; Chen, C., China
- 15:10-15:30 Genetic diversity of indigenous *Bradyrhizobium* nodulating promiscuous soybean [*Glycine max* (L.) Merr.] varieties in coastal sites in Kenya. *Wasike, V.W.; Mburu, H.; Lesueur, D.; Wachira, F.; Mungai, N.; Mumera, L.; Sangina, N.; Wasilwa, L.; Vanlauwe, B., Kenya

Room: 201A (2F)

Symposium E2-2 Pests and Their Management.

Chairs: Wang, Yuanchao, Nanjing Agricultural University, China

Patil, Ramanagouda H.. University of Agricultural Sciences, Dharwad, India

- 16:00-16:20 Seasonal population fluctuation of sucking insect pests on different soybean cultivars. *Mari, J.M.; Nizamani, S.M.; Lohar, M.K., Pakistan
- 16:20-16:40 Effects of chemical insecticides on arthropod communities in soybean fields. *Shi, S.S.; Gao, Y.B.; Zang, L.S.; Yang, W.; Gao, J.W., China
- 16:40-17:00 Evaluation of ITK components against major insect pests of soybean [*Glycine max* (L.) Merrill]. *Patil, R.H.; Santosh, M.N., India
- 17:00-17:20 Biotechnological approaches to manage the important lepidopterous pests of soybean. *Patil, R.H.; Hegde, R., India
- 17:20-17:40 Comparative performance of certain elite varieties of soybean to major insect pests under north Indian plain zone region. *Dey, D.; Trimohan; Mukherji, I., India
- 17:40-18:00 Development of an artificial rearing system for Soybean pod borer (*Leguminivora glycinivorella* (Mats.)). *Meng, F.L.; Li, W.B., China

Room: 201C (2F)

Symposium: F2-3 Modern Processing Technology.

Chairs: Tian, Shaojun. Faculty of Cereal and Oil Foods & Research Center for Soybean Processing, Henan University of Technology, China

Chen, Yeming. Iwate University, Japan

- 10:15-10:40 The stability mechanism of protein by heating in soymilk processing. *Chen, Y.M.; Ishiguro, T.; Ono, T., Japan
- 10:40-11:05 Effect of material properties on soy protein extrusion. *Zhu, X.Q.; Yang, S., China
- 11:05-11:30 Effects of different extract methods on functional properties of soybean proteins. Chen, F.S.; *Cheng, X.L.; Li, L.T., China
- 11:30-11:55 Preparation of ACE-inhibitory soy peptides using an enzyme membrane reactor following with macroporous adsorption resin fractionation. *Zhang, W.B.; Wang, W.J.; Wang, Z.; Yang, R.J., China
- 11:55-12:20 Hydrolysis process of soybean residue by dispase and cellulase. Wang, Y.H.; Hu, X.; Piao, C.H.; Liu, J.M.; Yu, H.S.; *Hu, Y.H., China

Room: 201C (2F)

Symposium: F2-4 Modern Processing Technology.

Chairs: Wei, Yimin. Institute of Agro-food Science and Technology, Chinese Academy of Agricultural Sciences, China

Guo, Shuntang. College of Food Science & Nutritional Engineering, China Agriculture University, China

- 13:30-13:55 Chinese soybean industry: current status in processing and research. *Tian, S.J.; Zhou, R.B., China
- 13:55-14:20 Research on the foaming property of soybean whey proteins. *Xu, H.; Yao, L.; Chen, H., China
- 14:20-14:45 Effects of dietary protein restriction during pregnancy on visceral organ mass and blood hormones in offspring pigs. *Qu, Y.; Shan, A.S.; Zhang, S.J.; Zheng, Y.B.; Zhang, H.Y.; Xu, L., China
- 14:45-15:10 Separation of antihypertensive peptides derived from soybean. *Jiang, L.Z.; Hu, S.X.; Li, Y., Pan, Y.Y., China
- 15:10-15:35 Effect of feed moisture content on chemical crosslink of soybean protein isolate during extrusion. *Chen, F.L.; Wei, Y.M.; Zhang, B., China

Room: 201C (2F)

Symposium: F3-2 Processing and Value-added Utilization of Specialty Soybeans.

Chairs: Chi, Yujie. College of Food Science, Northeast Agricultural University, Key Laboratory of Soybean Biology, Ministry of Education, China

Wang, Tong. Department of Food Science and Human Nutrition, China

- 16:00-16:20 Preparation of soluble dietary fiber from soybean insoluble dietary fiber. Lou, H.W.; *Chi, Y.J., China
- 16:20-16:40 Value-added utilization and processing of vegetable soybeans including edamame and other uses -- a good source of dietary folate intake. Masuda, R., Japan
- 16:40-17:00 Study on selection of *bacillus subtilis* and process condition with biotechnology preparing functional soybean protein. *Wu, H.B.; Jiang, L.Z.; Ju, H.W., China
- 17:00-17:20 Processing and value-added utilization of specialty null lipoxygenase

- soybean. *Hajika, M., Japan*
- 17:20-17:40 Sphingolipids in soybean and its change with seed maturity and further processing. **Wang, T.; Fehr, W., USA*
- 17:40-18:00 Optimization ingredients for development of ready to drink synbiotic soy: cow milk beverage and spray dried product. **Shukla, S. S.; Jatav, G.S., India*
- 18:00-18:15 Proteomic analysis of differentially expressed or modified plasma proteins modulated by dietary soy proteins and isoflavones in rats. **Xiao, C.W.; Wood, C.M; Weber, D., Canada*

Room: 305C (3F)

Symposium: H3-1 Extension.

Chairs: Han, Guiqing. Heilongjiang Academy of Agricultural Sciences, China

Chen, Yingzhi. National Agro-Tech Extension & Service Centre (NATESC), China

- 10:15-10:35 Farmers' problems associated with cultivation of soybean in Madhya Pradesh, India. **Dupare, B.U.; Billore, S.D., India*
- 10:35-10:55 Developing soybean industry by scientific and technological progress. *Han, G.Q., China*
- 10:55-11:15 China's meat production and soy meal demand for feed: an elasticity analysis and long-term projections. **Masuda, T.; Goldsmith, P.D., USA*
- 11:15-11:35 Soybean [*Glycine max* (L.) Merr.] variety trial systems and procedures in the USA and China. *Zhang, L.X.; *Chen, Y.Z. Wu, C.X.; Han, T.F., China*
- 11:35-11:55 Seed village--a novel strategic approach for quality soybean seed production for rural livelihood security. **Naik, L.K.; Motagi, B.N.; Hanchinal, R.R.; Nadaf, H.L.; Madhusudhan, K.; Biradar-Patil, N.K.; Hunje, R.; Shashidhar, T.R.; Mogali, S., India*
- 11:55-12:15 ISGA: international soybean growers alliance. **Prone, G.; Aapresid; Aprosoja; Capeco; APS; MTO; USSEC, Argentina*
- 12:15-12:30 The present situation, problems and countermeasures of soybean production in China. **E, W.D.; Zhang, Y.; Tang, S., China*

Room: 305C (3F)

Symposium: H3-2 Extension.

Chairs: Kauffman, Harold. University of Illinois; Chairman of World Soybean Research Conference VI Organizing Committee, USA

Senesi, Sebastián. Aapresid - Argentinean No-Till Farmers Association, Argentina

- 13:30-13:50 The soybean agrofood system in Brazil: from catching-up to technological leadership. **Castro, A.C., Brazil*
- 13:50-14:10 Certified agriculture: the sustainable production alternative. **Senesi S., Argentina*
- 14:10-14:30 Competitiveness of the soybean crushing complex and the bean, oils and the bean, oils and meals export sector of Argentina and its comparison of the soybean oil sector of Brazil and USA. *Adreani, P.G., Argentina*
- 14:30-14:50 Round table on responsible soy. *Zeehandelaar, B., Argentina*

- 14:50-15:10 Analysis of soybean R&D system in China. *Peng, Z., China*
 15:10-15:30 Practice and development of farmer field school in Beijing. *Wu, J.F, China*
 15:30-15:50 Quantifying and communicating the quality of the US soybean crop.
Naeve, S. L.; Orf, J. H., USA

Room: 305C (3F)

Symposium: G4-1 Industry Use of Soy.

Chairs: Compton, David L.. USDA-ARS-NCAUR, USA

Daziano, Marcos F.. Food & Agribusiness Program - Agronomy School -
 University of Buenos Aires, Argentina

- 16:00-16:20 Biocatalytic refining of soybean oil into cosmeceutical ingredients.
**Compton, D.L.; Laszlo, J.A., USA*
 16:20-16:40 Low-cost soybean protein products as extenders in plywood adhesives.
Hojilla-Evangelista, M.P., USA
 16:40-17:00 Processing green lubricating oils by soybean oil. *Shao, H., China*
 17:00-17:20 Modification of soybean oil for industrial lubricant applications. *Sharma,
 B.K.; *Erhan, S.Z., USA*
 17:20-17:40 Novel soybean-based plastics, composites, and coatings. *Larock, R.C.,
 USA*
 17:40-18:00 The soybean-based biofuel agribusiness in Argentina: doing business,
 keeping the environment. **Daziano, M.F.; Senesi, S.I.; Lorenzatti, S.;
 Sylvestre-Begniss, A.; Vilella, F., Argentina*
 18:00-18:15 Synthesis, characterization and use of Nb₂O₅ based catalysts in producing
 biofuels by transesterification, esterification and pyrolysis of soybean oil
 and soybean fatty acids. *Brandao, R.F.; Quirino, R.L. ; Mello, V.M. ;
 Tavares, A.P. ; Peres, A.C.; Guinhos, F.; Rubim, J.C.; *Suarez, P. A. Z.,
 Brazil*

Room: **Conference Hall 5A (1F)**

Forum I5-1: Sustainable Farming Practices.

Chairs: Hu, Guo Hua. College of Agriculture Northeast Agricultural University, China

Goldsmith, Peter. National Soybean Research Laboratory, University of Illinois at
 Urbana-Champaign, USA

- 10:15-10:20 Introduction
 10:20-10:55 PANEL: challenges and opportunities in sustainable agricultural
 production worldwide. **Goldsmith, P.; Goering, D.; Montiero, M.; Prone, G.,
 USA.*
 10:55-11:30 Addressing sustainability challenges with resource-conserving
 technologies. *Hu, G.H., China*
 11:30-12:05 Harnessing the productivity and profitability of the soybean for its
 sustainability in India. *Bhatnagar, P., India*

Room: **Conference Hall 5A (1F)**

Forum I6-1: Livestock and Aquaculture Feed Industry Needs.

Chairs: **Li, Qiang**. Institute of Crop Science, Chinese Academy of Agricultural Sciences, China

Owen, Bridget. National Soybean Research Laboratory, University of Illinois at Urbana-Champaign, Urbana

- 13:30-13:35 Introduction
- 13:35-14:05 China's current soybean meal supply and demand situation and trend forecast. *Li, Q., China*
- 14:05-14:35 The nutritional role for soy in livestock, poultry & aquaculture feedbridget. *Owen, B., USA*
- 14:35-15:05 PANEL: international trade in soy ingredients: logistics, trade standards and quality assurance. **Fortner, B.; Martin, G. Knehans. W., USA*
- 15:05-15:35 Soybean utilization in poultry and pig diets. **Schang, M.J.; Azcona, J.O., Argentina*

Room: **Conference Hall 5A (1F)**

Forum 17-1: Intellectual Property Protection.

Chairs: **Hu, Guoqun**. Syngenta Biotechnology China Co.,Ltd, D-302, Innovation Center, China

Redick, Thomas Parker. Global Environmental Ethics Counsel, USA

- 16:00-16:05 Introduction
- 16:05-16:35 The importance of safeguarding intellectual property for soy production and processing. *Sha, J., China*
- 16:35-17:05 The patent life cycle for biotech soybeans: US, Brazil and Argentina production history. *Redick, T.P., USA*
- 17:05-17:35 Intellectual property and the soybean in China. *Hu, G.Q., China*

Room: 201B (2F)

Forum 18-1: Conservation and Sustainable Utilization of Wild Soybeans

- 09:00-09:05 Introduction
- 09:05-10:15 International biodiversity conservation: status and the trend. *Tessel, P.J.M., Netherland*
- 10:15-10:45 The elite gene discovery and utilization from wild soybean (*Glycine Soja*). **Dong, Y.S.; Yang, G.Y.; Wang, Y.M.; Zhao, H.K.; Liu, X.D.; Yuan, C.P., China*
- 10:45-11:15 Wild soybean collection and utilization in Japan. **Abe, J.; Kawasaki, S.; Shibata, M.; Dwiyantri, M.S.; Kanamaru, K.; Yamada, T.; Kitamura, K., Japan*
- 11:15-11:45 *In situ* conservation of adaptive diversity in crop wild relatives: from darwin to functional genomics. *Ford-Lloyd, B.V., UK*
- 11:45-12:15 Expanding genetic diversity to increase soybean seed yield. *Nelson, R.L., USA*

Room: 201B (2F)

Forum I8-2: Conservation and Sustainable Utilization of Wild Soybeans

- 13:30-14:00 Practice of *in situ* conservation of wild soybean in China. *Li, X.H.; *Yang Q.W.; Wang, K.J., China*
- 14:00-14:30 The utilization of soybean wild relatives: how can it be effective? **Singh, R.; Nelson, R.L., USA*
- 14:30-15:00 Access and benefit sharing for biological genetic resources and associated traditional knowledge. *Xue D.Y., China*
- 15:00-15:30 Conservation and sustainable utilization of wild soybean in Bayan county of Heilongjiang Province. *Ning, Q., China*

Saturday, August 15, 2009

Room: Convention Hall NO.1 (2F)

Plenary 6-1: Global Demand and Trade.

Chairs: Chen, Shouyi. Genetics and Development Biology Institute, China Academy of Science, China

Bhatnagar, Prem. S.. National Research Centre for Soybean, Chief Advisor SOPA and Consultant Agri Business Division ITC Ltd., Indore (M.P.), India

08:00 - 08:40 The 21st century and the post modern challenges for the global soybean industry. *Goldsmith, P., USA*

08:40 - 09:50 The role and function of futures market in soybean industry development. *Liu, X.Q., China*

Room: 311 (3F)

Symposium: B2-2 Genetics and Breeding - Yield.

Chairs: Wang, Jiankang. Institute of Crop Science, Chinese Academy of Agricultural Science, China

Song, Qijian. University of Maryland, College Park, USA

10:15-10:35 Achievements in soybean breeding. **Wang, L.Z.; Wang, L.; Zhao, R.J.; Fu, Y.Q.; Ye, X.G.; Yan, Q.S.; Li, Q.; Pei, Y.L.; Xiao, W.Y., China*

10:35-10:55 Soybean [*Glycine max* (L.) Merr.] breeding: comparison of efficiency of different selection methods. **Miladinovic, J.; Burton, J.W.; Balesevic-Tubic, S.; Djordjevic, V.; Hrustic, M., Serbia*

10:55-11:15 PROVAR: a software application for the election of soybean cultivars in Argentina. **Fuentes, F.; Suárez, J.C.; Masiero, B., Argentina*

11:15-11:35 SoyBase: a comprehensive information resource for soybean genetics and genomics. *Grant, D.M., USA*

11:35-11:55 Designing of soybean breeding programmes for sustainable production in central India. *Rao, S.K., India*

11:55-12:15 The researches on soybean [*Glycine max* (L.) Merr.] variety breeding for double-cropped conditions in Turkey. **Arioglu, H.; Gulluoglu, L.; Zaimoglu, B.; Kurt, C.; Arslan, M., Turkey*

12:15-12:30 The Australian soybean improvement program. **James, A.T.; Moore, N.Y.;*

Rose, I.A.; Gaynor, L., Australia

Room: 311 (3F)

Symposium: B3-4 Genetics and Breeding - Stresses.

Chairs: Lightfoot, David A. Southern Illinois University, USA

Liu, Lijun, Soybean Research Institute of Heilongjiang Academy of Agricultural Sciences, China

- 13:30-13:50 Identification of aphid resistance genes in soybean using modified nested association mapping (MNAM). *Liu, M.H.; Yang, Z.Y.; Zhang, G.R.; Gu, C.H.; Cui, Y.H.; *Wang, D.C., USA*
- 13:50-14:10 Resistance to soybean cyst nematode: *Rhg1*. **Lightfoot, D.A.; Srour, A.; Afzal, A., USA*
- 14:10-14:30 Development and utilization of *InDel* markers based on *rhg1* candidate gene for resistance to soybean cyst nematode (*Heterodera glycines Ichinohe*). **Nan, H.Y.; Li, Y.H.; Chang, R.Z.; Qiu, L.J., China*
- 14:30-14:50 Non-GMO sources to improve soybean tolerance to drought, flooding and salt. **Shannon, J.G.; Lee, J.D.; Nguyen, H.T.; Sharp, R.E., USA*
- 14:50-15:10 Breeding of new soybean variety with high drought-resistance in China. **Ma, J.K.; Ren, D.L.; Ren, X.J.; Wang, Y.; Shi, H.; Zhao, J.Y.; Liu, X.Y., China*
- 15:10-15:30 Effect of NaCl on seed germination of soybean [*Glycine max* (L.) Merr.] cultivars). *Yaver, S.; *Pasa, C.; Onemli, F.; Atakisi, I.K., Turkey*

Room: Convention Hall NO.1 (2F)

Symposium: C4-3 Gene and Its Function.

Chairs: Hou, Wensheng. Luoyang Academy of Agricultural Sciences, China

Bhattacharyya, Madan. Department of Agronomy, Iowa State University, USA

- 10:15-10:35 Physical mapping and cloning of the aphid resistant gene *Rag1* in soybean. *Wang, J.P.; Bellendir, S.; Kim, K.S.; Fliege, C.; Diers, B.; *Hudson, M., USA*
- 10:35-10:55 MicroRNAs: novel regulators involved in the pathogenesis of phytophthora root rot of soybean [*Glycine max* (L.) Merr.]. **Wang, J.; Liu, C.Y.; Song, W.K.; Wang, J.L.; Hu, G.H.; Chen, Q.S., China*
- 10:55-11:15 Towards cloning the first *Arabidopsis* nonhost resistance gene that confers immunity against the soybean pathogen, *Phytophthora sojae*. *Sumit, R.; Sandhu, D.; Xu, M.; *Bhattacharyya, M., USA*
- 11:15-11:35 The cloning and function analysis of CNSTANS family in *Glycine max*. *Zhang, W.J.; Zhang, Q.Z.; Ma, J.H.; *Fu, Y.F.; Lin, C.T., China*
- 11:35-11:55 Constitutive over expression of AOS-like gene from soybean enhanced tolerance to insect attack in transgenic tobacco. *Wu, J.J.; Wu, Q.; Wu, Q.J.; Gai, J.Y.; *Yu, D.Y., China*
- 11:55-12:15 Cloning and characterization of *GmBFT*, a soybean BFT homologue encoding the phosphatidylethanolamine-binding protein. **Sun, H.B.; Liu, Y.K.; Hu, P.; Hou, W.S.; Wu, C.X.; Cao, D.; Han, T.F., China*

Room: Convention Hall NO.1 (2F)

Symposium: C4-4 Gene and Its Function.

Chairs: Zhang, Jinsong. Soybean Research Institute of Nanjing Agricultural University/
National Center for Soybean Improvement / National Key
Laboratory for Crop Genetics and Germplasm Enhancement,
China

Lam, Honming. Department of Biology and State Key Laboratory of Agrobiotechnology,
The Chinese University of Hong Kong, Hong Kong, China

13:30-13:50 Soybean GmPHD-type transcription factors improve stress tolerance in transgenic arabidopsis plants. *Wei, W.; Huang, J.; Hao, Y.J.; Zou, H.F.; Wang, H.W.; Zhao, J.Y.; Liu, X.Y.; Zhang, J.S.; Chen, S.Y., China

13:50-14:10 Searching for functional soybean genes to combat salinity stress. *Lam, H.M.; Shao, G.H.; Ngai, S.M.; Guo, D.D.J.; Fung, M.C.; Liao, H.; Zhang, J.H.; Sun, S.S.M., Hong Kong, China

14:10-14:30 Isolation and functional analysis of three *Glycine soja* transcription factor genes, *GsDREB1*, *GsDREB2* and *GsbZIP1*, involved in abiotic stress. *Zhu, Y.M.; Cai, H.; Wang, D.D.; Sun, X.L.; Li, Y.; Bai, X.; Ji, W.; Chen, Q., China

14:30-14:50 Overexpressing *AtPAP15* enhances phosphorus efficiency in soybean. Wang, X.R.; Wang, Y.X.; Tian, J.; Lim, B.L.; Yan, X.L.; *Liao, H., China

14:50-15:10 Soybean U box protein GmPUB1, homologous to *AtPUB22/23/24*, interacts with the *Phytophthora sojae* effector protein, Avr1b. Li, S.; Brar, H.; Dou, D.L.; Kale, S.D.; Tyler, B.; *Bhattacharyya, M.K., USA

15:10-15:30 Overexpression of soybean *GmPK* increases salinity tolerance in transgenic *Arabidopsis*. *Zhou, G.A.; Jin, L.G.; Qiu, L.J., China

Room: 201A (2F)

Symposium: E5-1 Biosafety.

Chairs: Peng, Yufa. The Institute of Plant Protection, Chinese Academy of Agricultural Sciences, China

Basavaraja, G.T. University of Agricultural Sciences, Dharwad, India

10:15-10:35 Where is transgenic soybean going in China? Peng, Y.F., China

10:35-10:55 Investigation of the genetic structure of wild soybean population in frame of the biosafety programs on Russian Far East. *Tikhonov, A.V.; Nedoluzhko, A.V.; Dorokhov, D.B., Russian Federation

10:55-11:15 Measuring and assessment of genetic erosion of soybean landraces in China. *Mathur, P.; Gai, J.Y.; Zhao, T.J.; Zhang, Z.W., India

11:15-11:35 Biosafety programs of the herbicide resistant GM soybean 40-3-2 in the center of the origin and diversity of the Russian Far East. *Dorokhov, D.B.; Nedoluzhko, A.V.; Tikhonov, A.V.; Morohovec, V.N.; Jakovec, V.P., Russian Federation

11:35-11:55 Development of transgenic herbicide-resistance soybean in China: Opportunity and challenge. *Song, X.L.; Qiang, S.; Dai, W.M., China

11:55-12:15 Gene flow from transgenic Roundup-ready soybean to wild soybean.
*Chen, X.; Gu, H.P.; Yi, J.X.; Zhang, H.M.; Gao, B.; Srinives, P., China

Room: 201A (2F)

Symposium: E1-5 Diseases and Their Management.

Chairs: Wang, Yuanchao. Qinhuangdao Leading Science and Technology Development
Co., Ltd, China

Xue, Allen G.. Eastern Cereal and Oilseed Research Centre Agriculture and
Agri-Food Canada

13:30-13:45 Resistance and tolerance to sclerotinia stem rot in selected short season
soybean cultivars in Canada. *Xue, A.G.; Rioux, S.; Morrison, M.J.; Chen,
Y.; Zhang, J.X.; Yan, W., Canada

13:45-14:00 Influence of purple seed stain disease (*Cercospora kikuchii*) on seedling
growth, yield and physicochemical parameters of soybean seeds.
*Gupta, G.K.; Sharma, S.K.; Kumar, V., India

14:00-14:15 Biosensing of soybean rust spores. *Ahmad, I.S.; Chan, L.; Zhang, W.;
Vittal, R.; Cunningham, B.T.; Hartman, G.L.; Kull, L.S., USA

14:15-14:30 Resistance to *pythium aphanidermatum* conferred by a single gene from
the soybean cultivar Archer. Rosso, M.L.; *Rupe, J.C.; Mozzoni, L.A.;
Chen, P.Y.; Rothrock, C., USA

14:30-14:45 Effect of soil application of *trichoderma viride* on sclerotinia stem rot
caused by *sclerotinia sclerotinorum* under various soils. *Zhang, J.Z.; Wei,
D.; Song, J.Z.; Chen, X.L., China

14:45-15:00 New approaches to selecting resistance or tolerance to SDS and *fusarium*
root rot. *Lightfoot, D.A.; Srour, A.; Sharma, H., USA

15:00-15:15 Identification of germplasm and genes resistant to phytophthora root and
stem rot in soybean from Jilin and Liaoning provinces of China. *Wen, J.Z.;
Huang, J.; Yang, M.X.; Li, Y.G.; Sui, Z.; Shi, X.L.; Ma, Z.C.; Li, Y.H., USA

Room: 201C (2F)

Symposium: F4-1 Traditional Processing and Its Modernization.

Chairs: Huang, Xiaolin. Yihai Kerry Institute of Food Technology, China

Sangla, Laongdown. Chiang Mai Field Crops Research Center (CMFCRC),
Department of Agriculture, Nonghan, Sansai, Chiangmai, Thailand

10:15-10:35 Development and quality evaluation of soy value added noodles.
*Sharan-Sunanda, B.V.; Chandru, P.R., India

10:35-10:55 A comparative account of antioxidative properties and antioxidants in
black and yellow soybean seeds and their retention in *tofu* and *okara*.
*Kumar, V.; Rani, A.; Pratap, D.; Goyal, L.; Dixit, A.; Chauhan, G., India

10:55-11:15 Appropriate fermentation time and storage duration for fermented soybean
food (Thua-Nao). *Sangla, L.; Suppadit, T.; Pintasen, S.; Wungdeethrum,
A., Thailand

11:15-11:35 Characterization of soybean cultivars and the influence on *tofu* quality and
yield. *Huang, X.L.; Guo, S.T., China

- 11:35-11:55 Development in soya milk processing technology. **Liew, M.H., Singapore*
 11:55-12:15 Effect of soy flour content, drying temperature and extruder temperature on spaghetti cooking quality. *Ansari, A., Iran*

Room: 201B (2F)

Forum I9-1: Farmer' Forum.

Chairs: Zhu, Yan. Division of Agricultural Technology Extension, Department of Science, Technology and Education, China

Han, Tianfu. National Key Facility for Crop Gene Resources and Genetic Improvement / Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, China

- 10:15-10:20 Introduction
 10:20-10:50 Project of science and technology promotion to household. *Zhu, Y., China*
 10:50-11:20 Large-scaled soybean production techniques and management models of state farms in Heilongjiang Province. **Shi, J.; Ma, X.T.; Wan, X.C., China*
 11:20-11:50 Soybean management practices in the United States. **Nafziger, E.D. USA*
 11:50-12:20 To be a qualified field staff. *Zhang, S.C., China*
 12:20-12:30 Panel Discussion

Room: 201B (2F)

Forum I9-2: Farmer' Forum.

Chairs: Han, Tianfu. National Key Facility for Crop Gene Resources and Genetic Improvement / Institute of Crop Sciences, Chinese Academy of Agricultural Sciences, China

Rossi, Rodolfo L., Soybean chain association of Argentina, Argentina

- 13:30-14:10 Farmers' soybean planting practices in Argentina. *Rossi R.L., Argentina*
 14:10-14:40 Farming experience and technical demand of a soybean farmer in Heilongjiang Province. *He, S.W., China*
 14:40-15:30 Discussion
 16:00-18:00 Closing Ceremony