

2014 The 3rd International Symposium on Citrus Biotechnology  
 NOVEMBER 11 - 14, 2014 Shizuoka, Japan  
*Day-by-day timetable*

ISCB 2014			
Conference at the venue			Excursion
Start time	11-Nov (Tue)	12-Nov (Wed)	13-Nov (Thu)
	11-Nov (Tue)	12-Nov (Wed)	14-Nov (Fri)
9:00 AM			Pick-up at the Shimizu station
9:15 AM			
9:30 AM			
9:45 AM			
10:00 AM	Registration 1 hour	Registration 30 min	Visit orchard in Shimizu city, then move to Mikkabi town
10:15 AM		Plenary talk 2 <i>Dr. Minoru Sugiura</i> 45 min	
10:30 AM		Plenary talk 3 <i>Dr. Masaya Kato</i> 45 min	
10:45 AM	Opening ceremony		
11:00 AM		Oral session II <i>Physiology and Production</i> 1 hour 12 min	
11:15 AM			
11:30 AM	Plenary talk 1 <i>Dr. Fred G. Gmitter</i> 45 min		
11:45 AM			
12:00 PM			Lunch
12:15 PM	Lunch 1 hour 0 min	Lunch 1 hour 0 min	
12:30 PM			
12:45 PM			
1:00 PM			
1:15 PM			
1:30 PM	Poster hang/view 1 hour 0 min	Poster session (odd number) 1 hour 15 min	Visit orchards and packing house in Mikkabi town, then back to Shimizu station
1:45 PM			
2:00 PM		Poster session (even number) 1 hour 15 min	
2:15 PM	Group photo		
2:30 PM	Tea break	Tea break	
2:45 PM			
3:00 PM			
3:15 PM			
3:30 PM	Oral session I <i>Breeding, Genomics and Genetics</i> (1 hour 48 min)	Oral session III <i>Omics, applications and emerging technologies</i> 1 hour 48 min	
3:45 PM			
4:00 PM			Break up at the Shimizu station
4:15 PM			
4:30 PM			
4:45 PM			
5:00 PM			
5:15 PM			
5:30 PM			
5:45 PM			
6:00 PM			
6:15 PM			
6:30 PM			
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		Social event (Symposium dinner)	

Registration at the venue (Marinart) will open at 10:00 am.

This is a tentative program, and the time and order could be changed for adjustment.

Please confirm the latest schedule at <http://iscb2014-japan.org/>



# The Third International Symposium on Citrus Biotechnology

NOVEMBER 11 - 14, 2014 Shizuoka, Japan

## *Presentation schedule*

### *Plenary lectures*

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|---------------|---|---------------|
| <b>11-Nov</b> | The Battle against Huanglongbing: Genetic Strategies and Genomic Weapons<br>Dr. Fred G. Gmitter Jr.<br>Chair: Toru Iwanami  | 11:30 - 12:15 |
| <b>12-Nov</b> | Dose $\beta$ -Cryptoxanthin Prevents Lifestyle-Related Diseases?<br>- Findings from The Recent Nutritional Epidemiologic Survey -<br>Dr. Minoru Sugiura<br>Chair: Tokurou Shimizu | 10:15 - 11:00 |
| <b>13-Nov</b> | Mechanism of $\beta$ -Cryptoxanthin Accumulation in Citrus Fruits<br>Dr. Masaya Kato<br>Chair: Takehiko Shimada   | 10:15 - 11:00 |

### *Oral presentations*

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|---------------|---|---------------|
| <b>11-Nov</b> | <b>Oral session 1: Breeding, Genomics and Genetics</b><br>Chair: Wen-Wu Guo<br>Masashi Yamamoto   |               |
| A01           | <i>Exploitation of Polyploids from 39 Citrus Seedling Populations</i><br>Wen-Wu Guo   | 15:00 - 15:18 |
| A02           | <i>Genetic Diversity Assessment of Citrus Genotypes in North East India Using Nuclear Markers and TrnL-F Spacer Sequence Analysis</i><br><u>Huidrom Sunitibala Devi</u> , Sanabam Rakesh, Nandeibam Samarjit Singh  | 15:18 - 15:36 |
| A03           | <i>34 Years of Breeding---Novel Low-light Tolerant Canadian Citrus for The Greenhouse Industry and The Home Indoor Windowsill Environment</i><br><u>M.P.M. Nair</u> , Karen Tanino  | 15:36 - 15:54 |
| A04           | <i>A Reliable and Cost-Effective Method for the Early Identification of Citrus Rootstock Hybrids Using High Resolution Melting Analysis</i><br><u>Marco Caruso</u> , Gaetano Distefano, Donata Pietro Paolo, Stefano La Malfa, Giuseppe Russo, Alessandra Gentile, Giuseppe Reforgiato Recupero                                     | 15:54 - 16:12 |
| A05           | <i>High Density Linkage Maps in Two Citrus Populations Using RAD Sequencing</i><br><u>Mikeal Roose</u> , Fred Gmitter, Jr., Ed Stover, Claire Federici  | 16:12 - 16:30 |
| A06           | <i>A Genomic Approach to Select Robust and Versatile SNP Sets from NGS Data Towards GWAS Analysis of Citrus</i><br><u>Tokurou Shimizu</u> , Eli Kaminuma, Keisuke Nonaka, Terutaka Yoshioka, Shingo Goto, Toshimi Matsumoto, Yuichi Katayose, Takako Mochizuki, Yasuhiro Tanizawa, Atsushi Toyoda, Asao Fujiyama, Yasukazu Nakamura | 16:30 - 16:48 |
| <b>12-Nov</b> | <b>Oral session 2: Physiology and Production</b><br>Chair: Kwan Jeong Song<br>Avi Sadka   |               |
| A07           | <i>Profiling of Small Molecule Metabolites in Citrus Trees with Different Amounts of Fruits</i><br><u>Fumie Nishikawa</u> , Mitsunori Iwasaki, Hiroshi Fukamachi  | 11:00 - 11:18 |

- A08 *Regulatory Pathways Associated With the Control of Fruit Load on Back Flowering in Citrus* 11:18 - 11:36  
Avi Sadka, Liron Shalom, Sivan Samuels, Yasmin Levi, Naftali Zur, Lyudmila Shlizerman
- A09 *Fruit Photosynthesis in Satsuma Mandarin: Rind-fixed CO<sub>2</sub> is Accumulated as Sugars in The Juice* 11:36 - 11:54  
Shin Hiratsuka, Shohei Tamura, Mayu Suzuki, Kazuyoshi Nada
- A10 *Expression and Regulation of a Cold-responsive Key Gene, CsCBF in Citrus sinensis (L.) Osbeck under Low Temperature, High Salinity and Abscisic Acid* 11:54 - 12:12  
Ligang He, Zhonghai Sun

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### 12-Nov Oral session 3: Omics, Applications and Emerging Technologies

Chair: Eliezer Louzada  
Yann Froelicher

- A11 *Regulation of Ascorbic Acid Biosynthesis and Accumulation in Citrus Fruits* 15:00 - 15:18  
Enriqueta Alos, Joanna Lado, Maria Jesus Rodrigo, Lorenzo Zacarias
- A12 *Study on Fruit Abscission Mechanism During Physiological Fruit Drop in Citrus* 15:18 - 15:36  
Akira Kitajima, Xi Li, Keisuke Katsura, Hiroki Saito, Sota Koeda, Rihito Takisawa, Takashi Kawai, Tetsuya Nakazaki, Tokuro Shimizu
- A13 *The Evolution of The Acidification Process in Acidic and Acidless Sweet Orange Varieties During Fruit Development and Ripening* 15:36 - 15:54  
Concetta Licciardello, Giuseppina Las Casas, Paola Caruso, Marco Caruso, Maria Patrizia Russo, Donata Pietro Paolo, Giuseppe Russo, Giuseppe Reforgiato Recupero
- A14 *Extraction Method Influenced the Physical, Aroma, and Antioxidant Profiles of Essential Oil from Shiikuwasha ( Citrus depressa Hayata) Pulp* 15:54 - 16:12  
Yonathan Asikin, Ai Tomimura, Yoshikatsu Yamakawa, Goki Maeda, Naoto Hirose, Hirosuke Oku, Koji Wada
- A15 *High-resolution Digital Map Construction Aims to Support Citrus Breeding Using Autonomous Multicopter* 16:12 - 16:30  
Haris Muhammad, Kento Ishii, Liu Ziyang, Takumi Sugiura, Miao Qi, Takuya Watanabe, Seita Sukisaki, Takanari Tanabata, Sachiko Isobe, Tokuro Shimizu, Terutaka Yoshioka, Hajime Nobuhara
- A16 *Intragenic Mediated Genetic Improvement of Citrus: What Have We Learnt?* 16:30 - 16:48  
Manjul Dutt, Gary Barthe, Leonardo Soriano, Jude Grosser

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### 13-Nov Oral session 4: Stress, Pests and Diseases

Chair: Manjul Dutt  
Liu Ji-Hong

- A17 *Cloning, Functional Analysis and Mechanism Elucidation of Stress-responsive Genes in Citrus and Poncirus* 11:00 - 11:18  
Liu Ji-Hong, Jing Wang, Xiaosan Huang, Xiaoqing Gong
- A18 *Over Expression of A Calcium Signal Modifier Gene in Citrus Induces Broad-spectrum Disease Resistance* 11:18 - 11:36  
Eliezer Louzada, Madhurababu Kunta, Amanda Garcia
- A19 *RNA-Seq Analysis of Citrus Greening (Huanglongbing) Pathogen, ' Candidatus Liberibacter asiaticus' Separated from Infected Trees* 11:36 - 11:54  
Takashi Fujikawa, Shin-ichi Miyata, Toru Iwanami

- A20 *Synergistic Effects of Visual and Olfactory Stimuli in Host Finding of The Asian Citrus Psyllid, Diaphorina citri Kuwayama (Hemiptera: Liviidae)* 11:54 - 12:12  
Mamoudou Setamou

## *Poster presentations*

### Poster session 1: Breeding, Genomics and Genetics

- P01 *Increase of Broad-sense Heritabilities with Measurement Repetitions for Fruit Traits in A Citrus Cultivar Population* 12-Nov  
Hiroko Hamada, Keisuke Nonaka, Atsushi Imai, Terutaka Yoshioka, Masahiko Yamada
- P02 *Estimation of The Proportion of Offspring Having High  $\beta$ -cryptoxanthin Content in Fruit Flesh in Citrus Breeding* 13-Nov  
Keisuke Nonaka, Masahiko Yamada, Atsushi Imai, Hiroko Hamada, Terutaka Yoshioka
- P03 *Induced Tetraploid by Colchicine Treatment and Breeding of Triploid Cultivar in Citrus* 12-Nov  
Junko Kaneyoshi, Takane Furuta, Yuko Yanagimoto, Takashi Shioda, Shinji Akasaka
- P04 *Characteristics of Tetraploids and Ploidy Chimeras Induced by Colchicine Treatment in Citrus and its Use for Triploid Cultivar Breeding* 13-Nov  
Yuko Yanagimoto, Junko Kaneyoshi, Takane Furuta
- P05 *Centromere Mapping by Half-Tetrad Analysis and Genetic Recombination in Clementine* 12-Nov  
Pablo Aleza, José Cuenca, María Hernández, José Juárez, Patrick Ollitrault, Luis Navarro
- P06 *Breeding Early Ripening Triploid Pummelos With High Quality in Japan* 13-Nov  
Miwa Hakoda, Akira Wakana, Kaori Sakai, Kouhei Kajiwara, Sonoko Seto
- P07 *Investigation of Phylogeny and Species Differentiation in Citrus by Chloroplast DNA Analysis* 12-Nov  
Akira Kitajima, Masashi Yamamoto, Atsu Yamasaki, Michiharu Nakano, Tokuro Shimizu, Sota Koeda, Tsuyoshi Habu, Takashi Fudano, Sayuri Inafuku, Junko Kaneyoshi, Masahiko Fumuro, Keisuke Katsura, Hiroki Saito, Rihito Takisawa, Takashi Kawai, Yoshiki Abe, Xi Li, Li Yue, Xialing Yang, Guangyan Zhong, Xuehu Yang, Donghong Zhuang, Tungchuan Hsiung, Hcinfu Yen, Hoa Tran Thi, Chinawat Yapwattanaphun, Nasril Nasir, Keizo Yonemori, Tetsuya Nakazaki
- P08 *Application of Single Pollen Genotyping for Assessing the Mode of Unreduced Pollen Formation of 'Nishiuchi Konatsu' (Citrus tamurana hort. ex Tanaka)* 13-Nov  
Chitose Honsho, Aisa Sakata, Hikaru Tanaka, Shuji Ishimura, Takuya Tetsumura
- P09 *Clementine (Citrus clementina; S<sub>3</sub>S<sub>11</sub>) Shares S Alleles with Some Sweet Oranges (C. sinensis) and the Other Citrus Species and Cultivars: Possible Origin of Clementine* 12-Nov  
Akira Wakana, ETTY Handayani, Junh-Hee Kim, Mayumi Sato, Kaori Sakai

P10	<i>Effective Use of Precocious Flowers for Introgression Breeding of CTV-resistant Scion Cultivars</i>	13-Nov
	<u>Satoshi Ohta</u> , Hiroko Hamada, Masayuki Kita, Hirohisa Nesumi, Tomoko Endo, Takehiko Shimada, Hiroshi Fujii, Tokuro Shimizu, Mitsuo Omura, Terutaka Yoshioka	
P11	<i>Segregation of Male Sterility in Populations Derived from Progenies of Satsuma Mandarin</i>	12-Nov
	<u>Shingo Goto</u> , Terutaka Yoshioka, Masayuki Kita, Satoshi Ohta, Tokuro Shimizu	
<b>Poster session 2: Physiology and Production</b>		13-Nov
P12	<i>Self-incompatible-like Response Induces Alteration of Actin Cytoskeleton, H<sub>2</sub>O<sub>2</sub> and Calcium Content in The Citrus Pollen Tube of 'Banpeiyu' and 'Hyuganatsu'</i>	
	<u>Yiran Li</u> , Takuichi Fuse, Shota Kawano, Hisato Kunitake	
P13	<i>Citrus Accessions with Self-incompatibility Allele S<sub>4</sub> and Origin of Satsuma Mandarin with S<sub>7</sub>S<sub>4</sub> Genotype</i>	12-Nov
	<u>Mayumi Sato</u> , Jun-Hee Kim, Akira Wakana, Riko Miyazaki, ETTY Handayani, Kaori Sakai	
P14	<i>Effect of Temperature on Self-incompatibility in Citrus Pistil and Mature Pollen Culture Systems</i>	13-Nov
	<u>Shota Kawano</u> , Yiran Li, Hisato Kunitake, Masaki Yahata	
P15	<i>Evaluation of Self- and Cross-Compatibility in Jeju Old Local Citrus Species</i>	12-Nov
	Panha Pok, Eun Ui Oh, Kyunguk Yi, Jin Yeong Kim, Ho Bang Kim, <u>Kwan Jeong Song</u>	
P16	<i>The Effect of Combined Spraying of Gibberellin and Prohydrojasmon on Hand-picking in Satsuma Mandarin</i>	13-Nov
	<u>Keiko Sato</u> , Yoshinori Ikoma	
P17	<i>Understanding Partial Rootzone Drying in Citrus</i>	12-Nov
	Beatriz Contreras-Barragan, <u>Ayako Kusakabe</u> , Juan Carlos Melgar, Shad Nelson	
P18	<i>Three Types of Rind Colouring in Response To Fruit Bagging in Citrus New Cultivars</i>	13-Nov
	<u>Fumitaka Takishita</u> , Keisuke Nonaka, Atsushi Imai, Hiroko Hamada	
P19	<i>Changes of Physical Character and Quality in Satsuma Mandarin Fruit Irradiated by <math>\gamma</math>- and X-ray During Low Temperature Storage</i>	12-Nov
	<u>Sang Heon Han</u> , Yong Chull Jeun, Seong Joon Song	
P20	<i>The Effect of Combined Spraying of Gibberellin and Prohydrojasmon on Reduction of S-methylmethionine Sulfonium in Satsuma Mandarin Fruit</i>	13-Nov
	<u>Hikaru Matsumoto</u> , Yoshinori Ikoma	
<b>Poster session 3: Omics, Applications and Emerging Technologies</b>		
P21	<i>Expression of Hexokinase in Citrus Guard Cells Controls Stomatal Aperture and Reduces Transpiration</i>	13-Nov
	<u>Nir Carmi</u> , Nitsan Lugassi, Gilor Kelly, Elena Fidel, Yossi Yaniv, Ziv Attia, Asher Levi, Victor Alchanatis, Eran Raveh, David Granot	
P22	<i>Characterization of Three Linalool Synthase Genes from Citrus unshiu Marc. and Analysis of Linalool-mediated Resistance Against Xanthomonas citri subsp. citri and Penicillium italicum in Citrus Leaves</i>	12-Nov
	<u>Takehiko Shimada</u> , Tomoko Endo, Hiroshi Fujii, Ana Rodríguez, Leandro Peña, Mitsuo Omura	

- P23 *Comparative Analysis of Citrus Polyembryonic and Monoembryonic Ovule Transcriptomes Identifies Candidate Transcripts Related to Nucellar Embryony Initiation* 13-Nov  
Zheng Liu, Jian-Mei Long, Xiao-Meng Wu, Hui-Hui Jia, Wen-Wu Guo
- P24 *Biosynthesis of  $\beta$ -citraurin in The Flavedo of Citrus Fruits* 12-Nov  
Gang Ma, Lancui Zhang, Masaya Kato
- P25 *Development of Image Analysis Software for Phenotyping of Citrus Fruits* 12-Nov  
Takanari Tanabata, Naoya Sagara, Sachiko Isobe, Keisuke Nonaka, Tokurou Shimizu
- P26 *Phenolic Compound Landscape in Citrus Using A UPLC-MS Approach* 13-Nov  
Yann Froelicher, Marie Durand Hulak, Audray Dugrand, Luc Bidel, Christian Jay-Allemand, Frederic Bourgaud, Anne Laure Fanciullino
- P27 *Preliminary Data On L-Ascorbic Acid Metabolism In Juice Of Sweet Orange During Development And Maturation* 13-Nov  
Paola Caruso, Maria Patrizia Russo, Concetta Licciardello, Giuseppina Las Casas, Nicolina Timpanaro, Marco Caruso, Grazia Licciardello, Giuseppe Reforgiato
- P28 *Genome-wide Analysis of Glucosyltransferase Gene Family in Byungkyool ( Citrus platymamma Hort.ex. Tanaka)* 12-Nov  
Jae-Hoon Kim, Song-I Han, Dong-Sik Yang, Myeung-Seung Kim
- P29 *SNPs within the Glutathione S-Transferase Genes as Markers for the Identification of More or Less Stress Responsive Sweet Orange Varieties* 13-Nov  
Gaetano Distefano, Luca Lo Cicero, Stefano La Malfa, Alessandra Gentile, Marco Caruso, Guiyou Long, Angela Roberta Lo Piero
- P30 *Functional Analysis of A Citrus Transcription Factor Gene Involved in Carotenoid Metabolisms in Fruit Using Transgenic Tomato* 12-Nov  
Tomoko Endo, Takehiko Shimada, Hiroshi Fujii, Aiko Sugiyama, Michiharu Nakano, Yoshinori Ikoma, Mitsuo Omura
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- Poster session 4: Stress, Pests and Diseases**
- P31 *In vitro Evaluation of Resistance of Citrus Genotypes to Alternaria alternata pv. citri from China* 12-Nov  
Hongye Li, Yushi Fu, Junqin Luo, Jianguo Xu
- P32 *Development of Efficient and Reliable Candidatus Liberibacter asiaticus Detection Methods in Citrus Using Root Samples* 13-Nov  
Eliezer Louzada, Sandy Chavez, Omar Vazquez, Madhurababu Kunta, Evan Braswell, Manjunath Keremane, Richard Lee
- P33 *Extension of King Mandarin Cultivation Techniques for Small Sized Growers in Southern Vietnam* 12-Nov  
Kazuyoshi Yuasa, Katsuya Ichinose, Cuong Nguyen Huy, Loc Huynh Thanh, Linh Dang Tuy, Son Nguyen Van, Hieu Nguyen Thanh, Hoa Nguyen Van