

# IRCHLB IV

International Research Conference  
on Huanglongbing

Caribe Royale  
Orlando, Florida, USA

February 9 -13, 2015

<b>Sunday February 8:</b>		
12:00 PM	9:00 PM	Registration
12:00 PM	9:00 PM	Poster Setup
7:00	9:00 PM	<b>Welcome Reception</b>
<b>Monday February 9: Scientific Session</b>		
7:00 AM	5:00 PM	Registration
7:00	8:00 AM	<b>Continental Breakfast</b>
8:00	8:40 AM	Welcome and Introductions Jim Graham – Chair Organizing Committee – Welcome and recognitions Jackie Burns – UF-IFAS Dean for Research – Welcome from UF Mike Sparks – Executive Vice President/CEO – Florida Citrus Mutual (Host) Lukasz Stelinski – Instructions for presentations Tim Gottwald – IRCHLB Publications
8:40	8:45AM	<b>Introduction of Speaker presented by Tim Gottwald</b>
8:45	9:45 AM	<b>Opening Keynote Address</b> <b>An epidemiological perspective for the integrated management of Huanglongbing disease</b> <b>Professor Chris Gilligan, University of Cambridge</b>
9:45	10:15AM	<b>Break</b>
		● <b>Session 1: Cultural Control and Epidemiology 1</b> <b>Moderators: Evan Johnson / Lukasz Stelinski</b>
10:15	1.1	<b>Simulation of the impact of Huanglongbing in the production of citrus groves under disease management scenarios, disease incidences and grove ages at the beginning of the epidemic</b>  Monica Bernardo Neves, Renato Beozzo Bassanezi
10:30	1.2	<b>A census-travel predictive model for introduction sites of HLB to inform and optimize detection surveys</b>  <b>T. Gottwald, W. Luo, T. Riley</b>
10:45	1.3	<b>HLB epidemics in well managed groves result from primary dissemination from external sources</b>  <b>José Belasque, Josicléa H. Arruda, Gressa A. Chinelato, Mathaus A. E. Mandro, Pedro T. Yamamoto, Rodrigo V. Ferreira, Nelson A. Wulff, Armando Bergamin Filho</b>

11:00	<b>1.4</b>	Excess bicarbonate in soil and irrigation water increases fibrous root loss and decline of Huanglongbing-affected citrus trees in Florida  Jim Graham, Kayla Gerberich, Diane Bright, Evan Johnson
11:15	<b>1.5</b>	Canine assisted early detection of HLB and integrated strategies for optimized control  T. Gottwald, Poole, G. H., Taylor, E.
11:30	<b>1.6</b>	Costs and benefits of foliar nutritional amendments – evidence from a 5-year trial  Robert Rouse, Fritz Roka, University of Florida, Immokalee, FL USA
11:45	<b>1.7</b>	Field trial of Penicillin G trunk injection of commercial citrus for huanglongbing control  Sun, X., Hodges, G., Jones, D., Schubert, T., Dixon, W., Gaskalla, R.
12:00	<b>1.8</b>	Efficiency of chemotherapy coupled with thermotherapy against citrus HLB  Muqing Zhang, Chuanyu Yang, Yongping Duan, Roberts Shatters, Charles A. Powell
12:15	<b>1.9</b>	Soil-applied controlled release fertilizer (CRF) treatments impact the health and growth of HLB-infected trees – Results from greenhouse and field experiments  Grosser, J.W., G.A Barthe
12:30	<b>1:30 PM</b>	<b>Lunch</b>
1:30	<b>1.10</b>	Economic analysis of orange groves in the State of Sao Paulo under the impact of the Huanglongbing  Gilberto Tozatti
1:45	<b>1.11</b>	Geospatial mapping platform: an approach for tracing the HLB and risk analysis  Galindo Mendoza, M. G., Aguilar Hernández, M. A., Contreras Servín, C., Olvera Vargas, L. A., Casiano Domínguez, M., Vallejo Pérez, M. R.
2:00	<b>1.12</b>	Demographic and socioeconomic influences on citrus species preference: Influence on residential tree populations and potential influence on ACP population and HLB epidemics  W. Luo, T. Gottwald, G. McCollum
		<b>Contributed Posters Session 1</b>
	<b>1.13</b>	Survey and detection of ' <i>Candidatus Liberibacter asiaticus</i> ' in a citrus nursery facility in South Texas  Olufemi J. Alabi, Madhurababu Kunta, Jon Dale, Mamoudou Sétamou
	<b>1.14</b>	HLB infected citrus tree physiology and plant growth regulator effects on preharvest fruit drop  Gene Albrigo

	<b>1.15</b>	<b>Strategies for monitoring of plant epidemics in trade networks</b>  <b>Vasthi Alonso Chavez</b> , Frank van den Bosch, Stephen Parnell
	<b>1.16</b>	<b>Effects of postharvest treatments on survival of <i>Diaphorina citri</i> nymphs on infested curry leaves</b>  <b>Dan Anco</b> , Gavin Poole, Tim Gottwald
	<b>1.17</b>	<b>Tracing infection sources from psyllids to natal trees using isotopic signatures</b>  <b>Evan Braswell</b> , Dan Flores
	<b>1.18</b>	<b>Spectroradiometry for detection of HLB (<i>Candidatus Liberibacter asiaticus</i>) at field level: an alternative to visual detection methodology</b>  Casiano Domínguez, M., <b>Galindo Mendoza, M.G.</b> Contreras Servín, C., Vallejo Pérez, M.R.
	<b>1.19</b>	<b>Identification of semiochemicals in host and non-host plants associated with <i>Diaphorina citri</i> Kuwayama (Hemiptera, Liviidae) behaviour</b>  <b>Marilene Fancelli</b> , Maria C. Blassioli-Moraes, Sarah Y. Dewhirst, Miguel Borges, Raul A. Laúmann, John A. Pickett, Michael A. Birkett
	<b>1.20</b>	<b>Evaluating biological control of the Asian citrus psyllid in the Lower Rio Grande Valley of Texas using the biological control agent, <i>Tamarixia radiata</i></b>  <b>Dan Flores</b>
	<b>1.21</b>	<b>CAPACIF: Training, application and public awareness of phytosanitary impacts. The case of HLB in Mexico</b>  <b>Galindo Mendoza, M. G.</b> , Hernández Hernández, C. L.
	<b>1.22</b>	<b>Antibiotic treatment of the Florida Citrus Arboretum for Huanglongbing</b>  <b>Dixon, W.</b> , Sun, X., Hodges, G., and Schubert, T.
	<b>1.23</b>	<b>Data-driven mathematical models for HLB: Testing interventions in a virtual world</b>  <b>Leah Johnson</b> , Jason ROHR
	<b>1.24</b>	<b>Rapid deployment of best practices from global collaboration on zebra chip disease in potatoes when applied to HLB – A case study</b>  <b>Kirk S. Kealey</b> , Joseph E. Munyaneza, Gerhard Bester
	<b>1.25</b>	<b>Projecting the potential climate suitability of HLB using a presence-only model (MaxEnt)</b>  <b>Narouei-Khandan, H.A.</b> , Halbert, S.E., van Bruggen, A.H.C.
	<b>1.26</b>	<b>Incidence, spread, and current Huanglongbing situation in Texas</b>  <b>Madhurababu Kunta</b> , Mamoudou Sétamou, John V. Da Graça, Olufemi J. Alabi, David W. Bartels

	<b>1.27</b>	<b>Optimizing intra- and inter-orchard sampling for early detection of citrus Huanglongbing</b>  <b>Francisco F. Laranjeira</b> , Renato B. Bassanezi , Tim R. Gottwald, Suely XB Silva, Frank van den Bosch, Stephen Parnell
	<b>1.28</b>	<b>Field evaluation of tolerance to Huanglongbing (HLB) in <i>Citrus x Poncirus trifoliata</i> hybrids</b>  <b>Qibin Yu</b> , Ming Huang, Cuiming Tang, Yanbo Wang, Ed Stover, Fred Gmitter
		 <b>Session 2: Host / Host-Pathogen Interactions 1</b> <b>Moderators: YongPing Duan / Nian Wang</b>
2:15	<b>2.1</b>	<b>Control of <i>Diaphorina citri</i> by citrus tristeza virus (CTV) expressing dsRNA against the psyllid's key physiological pathways</b>  Shatters, R.G., Jr., Powell, C.A., Dawson, W. , Gowda, S., <b>Borovsky, D.</b>
2:30	<b>2.2</b>	<b>Breeding rootstocks to prevent or mitigate HLB in commercial trees</b>  <b>Grosser, J.W.</b> , F. G. Gmitter, W.S. Castle
2:45	<b>2.3</b>	<b>Comparative metabolomics of <i>Citrus</i> phloem sap to explore the nutrition needs of <i>Candidatus Liberibacter asiaticus</i></b>  <b>Shelley Jones</b> , Nabil Killiny
3:00	<b>2.4</b>	<b>Citrus endophytic phytobiome and Huanglongbing</b>  James Borneman, Wenbo Ma, Philippe Rolshausen, Caroline Roper, <b>Georgios Vidalakis</b>
3:15	<b>3:30</b>	<b>Break</b>
3:30	<b>2.5</b>	<b>Effects of reciprocal grafting rootstocks and scions on tree tolerance to Huanglongbing</b>  <b>Bowman, K.D.</b> , Albrecht, U.
3:45	<b>2.6</b>	<b>Multidisciplinary approaches for early detection of Huanglongbing</b>  <b>Elizabeth Chin</b> , Darya Mishchuk, Carolyn Slupsky, Mitchell McCartney, Daniel J. Peirano, Joachim D. Pedersen, Alberto Pasamontes, Jason Simmons, Jeffrey L. Ware, Sierra Spitalski, Joshua F. Brown, Malinda C. Cheung, Yuriy Zrodnikov, Alexander G. Fung, Michael J. Schirle, Alexander A. Aksenenov, Cristina Davis, Jessica Franco, Gitta Coaker, Hailing Jin, Jinxia Shi, Deborah Pagliaccia, Eva Hawara, Wenbo Ma, John Ramsey, Jaclyn Mahoney, Mariko Alexander, Jared Mohr, Michelle Cilia, Juan Chavez, Jim Bruce, Brian Bue, Glenn Sellar, Cynthia LeVesque, John Morgan, MaryLou Polek, Elizabeth Foster, Kris Godfrey
4:00	<b>2.7</b>	<b>Thermotherapy trials and the molecular mechanism behind the success of heat treatment for the control of citrus Huanglongbing</b>  <b>Melissa S. Doud</b> , Feng Luo, Yunsheng Wang, Lijuan Zhou, Ed Stover, Yongping Duan

<b>4:15</b>	<b>2.8</b>	<b><i>Candidatus Liberibacter asiaticus</i> progression in graft-inoculated oranges using DNA and protein detection methods</b>  Jessica Franco, Jinxia Shi, Deborah Pagliaccia, Gang Yu, Wenbo Ma, Gitta Coaker
<b>4:30</b>	<b>2.9</b>	<b>Bactericides as HLB therapy: Getting them where they need to go, when they need to be there</b>  Robert G. Shatters Jr, Ed Stover, J. Kent Morgan, Taw Richardson, Mark Trimmer
<b>4:45</b>	<b>2.10</b>	<b>Evaluating the likelihood of phloem mobility and using <i>Liberibacter crescens</i> to assess efficacy of possible treatments for citrus greening</b>  Kristin T. Rusoff, Janelle F. Coyle, Jennie R. Fagen, Eric W. Triplett
<b>5:00</b>	<b>2.11</b>	<b>Distribution of <i>Candidatus Liberibacter asiaticus</i> in roots of Sour orange rootstock grafted with Valencia Sweet orange in Texas</b>  Omar Vazquez, Sandy Chavez, Madhurababu Kunta, Evan Braswell, Manjunath L. Keremane, Richard F. Lee, Eliezer S. Louzada
		<b>Contributed Posters Session 2</b>
	<b>2.12</b>	<b>Environmental fate of dsRNA in a citrus field environment</b>  Wayne Hunter, Eduardo Andrade, Liz Baldwin, Edward Stover
	<b>2.13</b>	<b>Construction of citrus gene coexpression networks from microarray data using random matrix theory</b>  Dongliang Du, Fred Gmitter
	<b>2.14</b>	<b>Alternative hosts for citrus diseases of quarantine concern in Florida: <i>Severinia buxifolia</i> (Poir.) Ten. and <i>Swinglea glutinosa</i> (Blanco) Merr.</b>  H. D. Gómez, T. Riley, D. Robl
	<b>2.15</b>	<b>Chemical composition of phloem sap from <i>Citrus sinensis</i> L. Osbeck (Sweet Orange)</b>  Faraj Hijaz, Nabil Killiny
	<b>2.16</b>	<b>Developing exchange/recombinase founder lines to introduce HLB resistance genes into Citrus</b>  Maria Luiza Oliveira, Ed Stover, James Thomson
	<b>2.17</b>	<b>Modifying citrus genome using Cas9/sgRNA</b>  Hongge Jia, Nian Wang
	<b>2.18</b>	<b>Use of acibenzolar S-methyl to delay infection of <i>Ca. L.</i> infection in sweet orange</b>  Nelson A. Wulff, Adriano Agnelli, Murilo L. Bazon, Josiane C. Darolt, Renato B. Bassanezi, Camila J. Fassini, Elaine C. Martins

	<b>2.19</b>	Engineering mobile RNA in Carrizo to enhance plant defense responses in both rootstocks and nontransgenic mature scions to control citrus greening  Shujian Zhang, Giovana Perazzo, Dean W. Gabriel
5:15	7:00 PM	<a href="#">Posters Session 1 and 2</a>
7:00		<i>Dinner – On Your Own</i>
<b>Tuesday February 10: Scientific Session</b>		
7:30 AM	5:00 PM	Registration
7:30	8:30 AM	<i>Continental Breakfast</i>
8:40	8:45AM	Introduction of Speaker presented by Tim Gottwald
8:45	9:45 AM	<b><u>Opening Keynote Address</u></b> <b>Embedding epidemiology and technology in their socio-economic context to assist with strategic planning of HLB management</b> <b>Professor Neil McRoberts, UC-Davis</b>
9:45	10:00	<b><i>Break</i></b>
		● <i>Session 3: Host-Pathogen Interactions 2</i> <i>Moderators: Jude Grosser / Evan Johnson</i>
10:00	<b>3.1</b>	Transcriptional response of tolerant rough lemon and susceptible sweet orange to Huanglongbing highlights differences in plant defense mechanisms  Fred Gmitter Jr., Antoine Gady, Qibin Yu, Dongliang Du, Ronald H. Bransky
10:15	<b>3.2</b>	RNAi-mediated gene knock-down of ' <i>Candidatus Liberibacter asiaticus</i> ' induced citrus transcriptome, Cal7 and PP2, with CTV-based silencing vector to prevent phloem plugging in HLB affected citrus  Sulley K. Ben-Mahmoud, Subhas Hajeri, Kiran Fnu, William O Dawson, Siddarame Gowda
10:30	<b>3.3</b>	Relationship between HLB-induced fruit drop, fibrous root loss and the interaction with <i>Phytophthora</i> spp.  Jim Graham, Kayla Gerberich, Diane Bright, Jian Wu, Evan Johnson, John Taylor
10:45	<b>3.4</b>	Molecular basis of Citrus Greening and related diseases gleaned from genome analyses of hosts and pathogens  Lisa N. Kinch, Qian Cong, Shouyong Shi, <b>Nick V. Grishin</b>
		<a href="#"><b>Contributed Posters Session 3</b></a>
	<b>3.5</b>	Gene expression patterns in leaves and roots of citrus trees composed of different scion and rootstock genotypes to elucidate control of tolerance to HLB  Bowman, K.D., Albrecht, U.
	<b>3.6</b>	Metabolomic analysis of citrus huanglongbing indicates contrasts in asymptomatic and symptomatic trees  Deisy dos S. Freitas, <b>Eduardo F. Carlos</b> , Helvecio D. Coletta Filho, Luiz G. E. Vieira, Glauca B. Alcantara

	<b>3.7</b>	The FLS2 from potato ( <i>Solanum tuberosum</i> ) interacts with the flagellin Fla <sub>Las</sub> of ' <i>Candidatus Liberibacter asiaticus</i> '  Yiping Cui, Guodong Liu, Charles A Powell, Yongping Duan
	<b>3.8</b>	<b><i>Citrus sinensis</i> transgenic plants for resistance to <i>Candidatus Liberibacter asiaticus</i></b>  <b>Eveline Carla Da Rocha Tavano, Bianca Aluisi, Ligia Erpen, Ricardo Harakava, Francisco De Assis Alves Mourão Filho, Beatriz Madalena Januzzi Mendes</b>
	<b>3.9</b>	<b>Production of mandarin + <i>Citrus latipes</i> somatic hybrid citrus rootstocks with potential for improved tolerance/resistance to citrus greening</b>  <b>Ahmad A. Omar, Sadaf Altaf, Jude W. Grosser</b>
	<b>3.10</b>	<b>PAMP-Triggered Immunity is differentially induced in 'Sun Chu Sha' mandarin by <i>Candidatus Liberibacter asiaticus</i> and <i>Xanthomonas citri</i> subsp. <i>citri</i> flagellin 22</b>  Qingchun Shi, <b>Vicente J. Febres</b> , Gloria A. Moore
	<b>3.11</b>	<b>Low-cost, user-friendly solutions for VOC sampling of citrus for early detection of HLB</b>  <b>Richard Fink, Leif Thuesen, Igor Pavlovsky, Jose Selistino</b>
	<b>3.12</b>	<b>RNA-Seq analysis of <i>Candidatus Liberibacter asiaticus</i> separated from infected trees</b>  Takashi Fujikawa, Shin-Ichi Miyata, Toru Iwanami
	<b>3.13</b>	<b>Citrus seedlings from infected, huanglongbing-symptomatic trees are not infected but express HLB-like symptoms: a possible model for understanding aspects of HLB pathogenesis</b>  Mark E. Hilf
	<b>3.14</b>	<b>Psyllid and graft transmissions to <i>Murraya paniculata</i> seedlings indicate seedling populations segregate for resistance and susceptibility</b>  Mark E. Hilf, David G. Hall
	<b>3.15</b>	<b>Tolerance to citrus Huanglongbing in Australian citrus relatives, <i>Microcitrus</i> and <i>Eremocitrus</i></b>  <b>Chandrika Ramadugu, Manjunath L. Keremane, Ed Stover, David G. Hall, Mikeal L. Roose, Richard F. Lee</b>
		 <b>Session 4: Host-Pathogen Interactions 3</b> <b>Moderators: Kirsten Pelz-Stelinski / Nian Wang</b>
11:00	<b>4.1</b>	<b>Production of Transgenic Citrus Resistant to Citrus Canker and Huanglongbing Diseases</b>  <b>Guixia Hao, Goutam X. Gupta, Yongping Duan, Ed Stover</b>
11:15	<b>4.2</b>	<b>Citrus huanglongbing stimulates root growth while causing overall root loss</b>  <b>Evan G. Johnson, Kayla M. Gerberich, Jian Wu, James H. Graham</b>

11:30	<b>4.3</b>	<b>Seasonal variation in '<i>Candidatus Liberibacter asiaticus</i>' titers in new flushes from citrus trees growing in locations with distinct climates</b>  <b>Silvio Lopes</b> , Fernanda Luiz, Hermes Oliveira, Walter Mendonça, Edson Furtado, José Scarpellini, Erivaldo Scaloppi, José Barbosa
11:45	<b>4.4</b>	<b>Salicylic acid mediated defenses in Huanglongbing pathosystem</b>  Tiago Silva Oliveira, Luciane Fender Coerini, Michèle Claire Breton, João Paulo Marques, Juliana Freitas-Astua, <b>Marcos Antonio Machado</b>
12:00	<b>4.5</b>	<b>Expression of the LasAI effector of '<i>Candidatus Liberibacter asiaticus</i>' induced proliferation of root hair and trichome in transformed plants</b>  <b>Marco Pitino</b> , Giuxia Hao, Yongping Duan
12:15	<b>1:30 PM</b>	<b>Lunch</b>
1:30	<b>4.6</b>	<b>Variables in Screening for Resistance to Huanglongbing</b>  <b>Ed Stover</b> , Gloria Moore, Jude Grosser, Ron Bransky, Barrett Gruber, Robert Shatters
1:45	<b>4.7</b>	<b>Development of novel control strategy to citrus HLB by targeting critical traits of <i>Candidatus Liberibacter asiaticus</i></b>  Jinyun Li, Jiahui Hu, Pankaj Trivedi, Nagaraju Akula, Xiaobao Ying, <b>Nian Wang</b>
2:00	<b>4.8</b>	<b>High incidence of pre-harvest colonization of <i>Diplodia</i> in HLB-symptomatic orange, its exacerbation of postharvest fruit decay and implication for HLB-associated pre-harvest fruit drop</b>  <b>Wei Zhao</b> , Jinhe Bai, Elizabeth Baldwin, Greg McCollum, Tim Gottwald
		<b>Contributed Posters Session 4</b>
	<b>4.9</b>	<b>Determining the effects of citrus genotypes on CLas transmission via root grafting</b>  <b>Prem Kumar</b> , Barrett Gruber, Ed Stover
	<b>4.10</b>	<b>Validation of early detection technologies using droplet digital polymerase chain reaction amplification</b>  <b>Cynthia LeVesque</b> , Jennifer Hutchison, Greg McCollum, Kris Godfrey, MaryLou Polek
	<b>4.11</b>	<b>Proteomics analysis reveals novel host molecular mechanisms that could be associated with heat-induced resistance to '<i>Ca. Liberibacter asiaticus</i>' in lemon plants</b>  Chika C. Nwugo, Melissa S. Doud, Yong-ping Duan, <b>Hong Lin</b>
	<b>4.12</b>	<b>The development of a babaco papaya-<i>Liberibacter crescens</i> interaction as a model system for citrus greening disease</b>  <b>Connor M. McCullough</b> , Jennie R. Fagen, Kin-Kwan Lai, Eric W. Triplett
	<b>4.13</b>	<b>Early detection of Huanglongbing using mass spectrometry-based proteomics and transcriptomics</b>  <b>Jared Mohr</b> , Juan Chavez, John Ramsey, Jaclyn Mahoney, Ted Thannhauser, Kevin Howe, Mariko Alexander, Suzy Strickler, Noe Fernandez, Kris Godfrey, Elizabeth Chin, Carolyn Slupsky, Lukas Mueller, James E. Bruce, Michelle Cilia

	<b>4.14</b>	<b>Comprehensive meta-analysis, gene co-expression and miRNA nested network analysis of genes differentially expressed in citrus-HLB interactions</b>  <b>Nidhi Rawat, Fred Gmitter, Zhanao Deng</b>
	<b>4.15</b>	<b>Can the molecular characterization of the citrus tristeza virus resistance gene locus shed light on <i>Poncirus</i> resistance to Huanglongbing?</b>  <b>Nidhi Rawat, Fred Gmitter Jr, Zhanao Deng</b>
	<b>4.16</b>	<b>Use of neonicotinoid insecticides to promote vigor and early productivity of citrus trees for management of HLB</b>  <b>José A A Silva, Thales Barreto, Marcos Pozzan, Fernando B Miguel, Regina K Grizotto</b>
	<b>4.17</b>	<b>Neonicotinoids for induction of vigor in young citrus trees to attain productivity before HLB</b>  <b>José A A Silva, Thales Barreto, Marcos Pozzan, Fernando B Miguel, Walter Maldonado</b>
	<b>4.18</b>	<b>Molecular identification and distribution of <i>Candidatus Liberibacter asiaticus</i> in citrus species in Mexico</b>  Manuel De Jesus Bermudez-Guzman, <b>José Joaquín Velázquez-Monreal</b> , Miguel Angel Manzanilla-Ramírez, Mario Orozco-Santos, Emiliano Loeza-Kuk, Claudia Yared Michel-López, Edgardo Cortez-Mondaca, Ma. Del Carmen Lucero-Pulido
	<b>4.19</b>	<b>Genes related to huanglongbing tolerance from transcriptome profiles of tolerant 'Jackson' grapefruit hybrid and susceptible 'Marsh' grapefruit</b>  <b>Yunsheng Wang, Lijuan Zhou, Xiaoyue Yu, Feng Luo, Ed Stover, Yongping Duan</b>
	<b>4.20</b>	<b>The interaction between <i>Phytophthora nicotianae</i> and '<i>Candidatus Liberibacter asiaticus</i>' damage to citrus fibrous roots</b>  <b>Jian Wu, Evan Johnson, Diane Bright, Kayla Gerberich, Jim Graham</b>
	<b>4.21</b>	<b>Transcriptional analyses of mandarins seriously infected by "<i>Candidatus Liberibacter asiaticus</i>"</b>  <b>Meirong Xu, Zheng Zheng, Xiaoling Deng</b>
		 <b>Session 5: Infection Consequences 1 / Pathogen 1</b> <b>Moderators: Nian Wang / Lukasz Stelinski</b>
2:15	<b>5.1</b>	<b>Use of qPCR to predict quality of orange juice affected by HLB</b>  <b>Elizabeth Baldwin, Wei Zhao, Jinhe Bai, Anne Plotto, Mike Irey</b>
2:30	<b>5.2</b>	<b>Have the HLB associated production losses in Florida bottomed out or are we in for harder times?</b>  <b>Mike Irey, Greg McCollum</b>
2:45	<b>5.3</b>	<b>Functional validation of SC2 prophage encoded peroxidase (SC2_gp095) gene in <i>Candidatus Liberibacter asiaticus</i></b>  <b>Mukesh Jain, Laura A. Fleites, Dean W. Gabriel</b>

3:00	<b>5.4</b>	<b>Effect of the control of <i>Diaphorina citri</i> on the incidence of huanglongbing disease and yield of Mexican lime in the state of Colima, Mexico</b>  <b>José Joaquín Velazquez-Monreal</b> , Marciano Manuel Robles-González, Miguel Ángel Manzanilla-Ramírez, Mario Orozco-Santos, Manuel De Jesús Bermúdez-Guzmán
3:15	<b>3:30</b>	<b>Break</b>
3:30	<b>5.5</b>	<b>An innovative approach to defining components necessary for the growth of <i>Candidatus Liberibacter asiaticus</i></b>  <b>Cheryl Armstrong</b> , Yongping Duan
3:45	<b>5.6</b>	<b>Whole genome sequencing of "Candidatus Liberibacter asiaticus" Strain A4 from Guangdong, China, and Strain HHCA from California</b>  Zheng Zheng, Xiaoling Deng, <b>Jianchi Chen</b>
4:00	<b>5.7</b>	<b>Evolving diversity and dynamics of 'Candidatus Liberibacter asiaticus' populations</b>  <b>Yongping Duan</b> , Lijuan Zhou, Marco Pitino, Bo Wu, Ed Stover, Robert Shatters
4:15	<b>5.8</b>	<b>Genetic modification of citrus to create consumer friendly HLB tolerant plants</b>  <b>Manjul Dutt</b> , Gary A. Barthe, Jude W. Grosser
		<b>Contributed Posters Session 5</b>
	<b>5.9</b>	<b>Effect of Huanglongbing on volatile components in peel oil of 'Valencia' oranges</b>  Huqing Yang, Elise Bourcier, Wei Zhao, <b>Jinhe Bai</b> , Anne Plotto, Elizabeth Baldwin, Mike Irey
	<b>5.10</b>	<b>Nutritional sprays to manage huanglongbing (HLB) in the field: can they mitigate orange juice HLB-induced off-flavor?</b>  <b>Anne Plotto</b> , Elizabeth Baldwin, Jinhe Bai, John Manthey, Jan Narciso, Bill Widmer, Sophie Deterre, Sharon Dea, Smita Raithore, Wei Zhao, Gary Luzio, Randy Cameron, Mike Irey
	<b>5.11</b>	<b>Current status of huanglongbing disease affecting Mexican lime in the state of Colima, Mexico</b>  M. Manuel Robles-González, José Joaquín Velázquez-Monreal, Miguel Ángel Manzanilla-Ramírez, <b>Mario Orozco-Santos</b>
	<b>5.12</b>	<b>Analysis of a phytosanitary policy to control HLB within Key lime in Tecoman in the Mexican state of Colima (<i>Citrus aurantifolia</i> Swingle)</b>  <b>Elena Vera Villagran</b> , Myriam Sagarnaga Villegas, Fritz Michael Roka
	<b>5.13</b>	<b>No evidence of the huanglongbing transmission on young King mandarin trees by using scissor-shears for pruning infected trees</b>  <b>Kazuyoshi Yuasa</b> , Hoa Nguyen Van, Katsuya Ichinose
		 <b>Session 6: Pathogen 2 / Pathogen-Vector Interactions</b> <b>Moderators: Lukasz Stelinski / Nian Wang</b>

4:30	<b>6.1</b>	<b>Transmission of <i>Candidatus Liberibacter asiaticus</i> by the Asian citrus psyllid: a proteomic perspective</b>  <b>Michelle Cilia</b> , Richard Johnson, John Ramsey, Jaclyn Mahoney, Jared Mohr, Wayne Hunter, David Hall, Robert Shatters, Michael J. MacCoss
4:45	<b>6.2</b>	<b>Ten-year screening and confirmatory PCR tests of citrus huanglongbing – performance, challenges and improvements</b>  <b>Wenbin Li</b> , Madhurababu Kunta, Lucita Kumagai, Cheryl Blomquist, Craig A. Webb, John Rascoe, Zonghe Yan, Laurene Levy, Mark K. Nakhla
5:00	<b>6.3</b>	<b>Drug repurposing: New chemicals and targets to combat Citrus Greening Disease</b>  Christopher Gardner, Fernando Pagliai, Janelle Coyle, Brandon Alford, Eva Vitucci, Danielle Kling, Graciela Lorca, <b>Claudio Gonzalez</b>
		<b>Contributed Posters Session 6</b>
	<b>6.4</b>	<b>Divergence of cultured <i>Liberibacter</i> strains with prolonged cultivation under laboratory conditions</b>  Jennie R. Fagen, <b>Ronald J. Canepa</b> , Kristin T. Rusoff, Caitlin Lach, Austin G. Davis-Richardson, Michael J. Davis, Eric W. Triplett
	<b>6.5</b>	<b>Protein-based detection systems in <i>Liberibacter asiaticus</i></b>  <b>Maritsa Cruz-Munoz</b> , Kin-Kwan Lai, Eric W. Triplett
	<b>6.6</b>	<b><i>Candidatus Liberibacter caribbeanus</i>, a new citrus associated <i>Liberibacter</i> from Colombia, South America</b>  <b>Manjunath L. Keremane</b> , Chandrika Ramadugu, Adriana Castañeda, Jorge E.A. Diaz, Emilio A. Peñaranda, Richard F. Lee
	<b>6.7</b>	<b>Surveys to determine HLB presence in Asian citrus psyllids and citrus samples from Barbados</b>  <b>Madhurababu Kunta</b> , John Da Graça, Matthew Ciomperli, Ian Gibbs, Michael James
	<b>6.8</b>	<b>Identification of essential genes of the Huanglongbing (HLB) model bacterium <i>Liberibacter crescens</i> BT-1</b>  <b>Kin-Kwan Lai</b> , Eric W. Triplett
	<b>6.9</b>	<b>Bio-products effective against the citrus huanglongbing bacterium “<i>Candidatus Liberibacter asiaticus</i>” in Mexican lime trees</b>  Ángela Paulina Arce-Leal, María Elena Santos-Cervantes, Jesús Méndez-Lozano, Jesús Alicia Chávez-Medina, Erika Camacho-Beltrán, Marco Antonio Magallanes-Tapia, Héctor San Martín-Matheis, Martín Tucuch-Cauich, Gabriel Rincón-Enríquez, <b>Norma Elena Leyva-López</b>

	<b>6.10</b>	<b>Genetic analysis of Huanglongbing pathogen from sweet orange "Hongjiangcheng" in Guangxi</b>  <b>Huihong Liao</b> , Hongming Huang, Xi Wang, Ruihong Luo, Yuying Lu, Ning Xu, Yiwei Li
	<b>6.11</b>	<b>A model system for analyzing expression of <i>Ca.Liberibacter asiaticus</i> gene expression</b>  <b>Sharon Long</b> , Melanie Barnett
	<b>6.12</b>	<b>Antibody-based detection of HLB using CLas-specific secreted proteins</b>  Jinxia Shi, Deborah Pagliaccia, Eva Hawara, Jessica Franco, Gitta Coaker, Georgios Vidalakis, <b>Wenbo Ma</b>
	<b>6.13</b>	<b>Analysis of starch accumulation and phloem structure by confocal laser scanning microscopy in Mexican limes trees affected by <i>Candidatus Liberibacter asiaticus</i> (CLas) after bio-products treatments</b>  Paulina Gámez-Rosas, Cindy Anayeli López-Luque, María De Jesús Perea-Flores, Erika Camacho-Beltrán, Norma Elena Leyva-López, María Elena Santos-Cervantes, Marco Antonio Magallanes-Tapia, Héctor San Martín-Matheis, Martín Tucuch-Cauich, Gabriel Rincón-Enríquez, <b>Jesús Méndez-Lozano</b>
	<b>6.14</b>	<b>The Citrus Greening (HLB) bibliographical database</b>  <b>P. Vanaclocha, P. A. Stansly</b>
	<b>6.15</b>	<b>Spectroscopic analysis for the rapid prediagnosis of citrus Huanglongbing in México</b>  <b>Vallejo Pérez M. R.</b> , Galindo Mendoza M. G., González Contreras F. J., Navarro Contreras, H.R., Casiano Domínguez M., Ramírez Elías M. G.
	<b>6.16</b>	<b>Development of a reliable and highly sensitive, digital PCR-based assay for early detection of HLB</b>  Shanshan Shi, Katelyn R. Kremer, Yongping Duan, <b>Zhongguo Xiong</b>
	<b>6.17</b>	<b>Sensitive quantification of <i>Candidatus Liberibacter asiaticus</i> in HLB-infected citrus</b>  <b>José-Abrahán Ramírez-Pool</b> , Rebeca Zecua-Nájera, Miguel-Angel Guerra-Lupián, Andrea Gómez-Felipe, José-Abel López-Buenfil, Oscar Morales-Galván, Claudio Chavarin-Palacio, Domingo Colmenares, Roberto Ruiz-Medrano, Beatriz Xoconostle-Cazares
	<b>6.18</b>	<b>Systems Biology Approach to Rapid Solution Development for Agricultural Problems- {Psyllid-HLB}</b>  <b>Wayne B. Hunter</b> , Joe Cicero, Javier Alba-Tecedor
	<b>6.19</b>	<b>Hemipteran Cell Cultures Support <i>Wolbachia</i> {Psyllids and Leafhoppers}</b>  <b>Wayne B. Hunter</b> , Blake R. Bextine

	<b>6.20</b>	<b>Detection of Huanglongbing-associated bacteria using diverse DNA extraction methods and RCR primers for roots of 'Valencia' sweet orange on sour orange rootstock</b>  <b>Madhurababu Kunta, Zenaida Viloria, Hilda S. del Rio, Eliezer S. Louzada</b>
	<b>6.21</b>	<b>Association of <i>Candidatus Phytoplasma asteris</i> with Citrus Huanglongbing disease in Mexico</b>  Alda Alejandra Arratia-Castro, María Elena Santos-Cervantes, Ernesto Fernández-Herrera, Jesús Alicia Chávez-Medina, Gabriela L. Flores-Zamora, Erika Camacho-Beltrán, Jesús Méndez-Lozano, <b>Norma Elena Leyva-López</b>
	<b>6.22</b>	<b>LuxR solo quorum sensing mediates plant virulence and insect transmission of <i>Candidatus Liberibacter asiaticus</i></b>  <b>Nabil Killiny, Siddarame Gowda</b>
<b>5:15</b>	<b>7:00 PM</b>	<b>Posters Session 3, 4, 5, and 6</b>
<b>7:00</b>		<b>Dinner – On your own</b>
		<b><u>Wednesday February 11: Scientific Session</u></b>
<b>7:00 AM</b>	<b>5:00 PM</b>	Registration
<b>7:00</b>	<b>8:00 AM</b>	<b>Continental Breakfast</b>  <b>Session 7: Cultural Control and Epidemiology 2</b> <b>Moderators: Megan Dewdney / Evan Johnson</b>
<b>8:00</b>	<b>7.1</b>	<b>Epidemic modeling and surveillance design for early warning of an HLB epidemic</b>  <b>Parnell, S., Gottwald, T.R., Cunniffe, N.J., Gilligan, C.A., van den Bosch, F.</b>
<b>8:15</b>	<b>7.2</b>	<b>Cost-benefit analysis of severe pruning to rejuvenate HLB infected trees</b>  <b>Robert Rouse, Fritz Roka</b>
<b>8:30</b>	<b>7.3</b>	<b>Within-grove edge effects of the azimuth of the sun on <i>Diaphorina citri</i> adults</b>  <b>Dan Anco, Tim Gottwald</b>
<b>8:45</b>	<b>7.4</b>	<b>Modeling the impact of RNAi treatments on the spread of HLB among asymptomatic trees</b>  <b>Jo Ann Lee, Susan Halbert, William O. Dawson, Ross Ptacek, Burton Singer, James Keesling</b>
<b>9:00</b>	<b>7.5</b>	<b>HLB on a small scale - what can we learn from a “model” system</b>  <b>G. McCollum, M. Hilf, M. Irey, W. Luo, T. Gottwald, D.G. Hall</b>
<b>9:15</b>	<b>7.6</b>	<b>Alternative method of thermotherapy application in citrus</b>  <b>Gottwald, T. R., Poole, G. H., Taylor, E., Kainz, J.</b>
<b>9:30</b>	<b>7.7</b>	<b>Optimization of an efficient transcuticular delivery system for control of citrus huanglongbing</b>  <b>Chuanyu Yang, Muqing Zhang, Yongping Duan, Roberts Shatter, Charles A. Powell</b>

9:45	<b>7.8</b>	Oral Delivery of Double-Stranded RNAs shows mortality in the Asian citrus psyllid, <i>Diaphorina citri</i>  Diogo M. Galdeano, Michele C. Breton, João Roberto Spotti Lopes, Bryce W. Falk, Marcos Machado
10:00	<b>7.9</b>	Direct sequencing to obtain whole 16S rRNA gene sequence of ' <i>Candidatus Liberibacter asiaticus</i> ' from environmental samples affected by citrus huanglongbing  Zonghe Yan, Wenbin Li, John Rascoe, Mark K. Nakhla
10:15	10:35	<b>Break</b>
10:40	10:45	Introduction of Speaker presented by Tim Gottwald
10:45	11:45AM	<b>Keynote Address</b>  Half a century on HLB: learning about the disease, trying to control it <b>Professor Josy Bové</b>
12:00	1:00 PM	<b>Lunch</b>
		<b>No scientific sessions in the afternoon</b>
		<b>Dinner – On your own</b>
		<b>Thursday February 12: Scientific Sessions</b>
7:00 AM	5:00 PM	Registration
7:00	8:00 AM	<b>Continental Breakfast</b>
		● Session 8: Cultural Control and Epidemiology 3 Moderators: Evan Johnson / Megan Dewdney
8:00	<b>8.1</b>	Effect of internal and external inoculum control practices on HLB epidemic progress in a commercial citrus grove  Felipe Antonio Baldini Michigami, Luiz Fernando Girotto, Renato Beozzo Bassanezi
8:15	<b>8.2</b>	CHMA design and construction for the Central Valley in California  W. Luo, T. Gottwald
8:30	<b>8.3</b>	Surprising results and implications of the Florida psyllid testing project  Halbert, S.E., Keremane, M., Ramadugu, C., Dawson, W.O., Lee, J. A., Keesling, J.E., Singer, B.H., Lee, R.F.
8:45	<b>8.4</b>	Nutritional status of citrus trees in relation to HLB infection: a case of deficiency or toxicity?  Mamoudou Sétamou, Olufemi J. Alabi, John L. Jifon
9:00	<b>8.5</b>	Huanglongbing reduces the effectiveness of Phytophthora fungicide control  Evan G. Johnson, Jian Wu, Diane B. Bright, James H. Graham
9:15	<b>8.6</b>	Using Monte Carlo Simulation to Examine the Economic Cost and Impact of HLB  Taylor, E.L., Gottwald, T. R.
9:30	<b>8.7</b>	Identification of traits involved in rhizosphere competence of beneficial bacteria isolated from HLB infected citrus trees  Li J., Wang N.

9:45	<b>8.8</b>	<b>Spatial point pattern analysis of diagnostic CT-values from Asian citrus psyllid samples: utility in predicting infected host locations</b>  <b>David Bartels, Gericke Cook</b>
10:00	10:15	<b>Break</b>
10:15	<b>8.9</b>	<b>New orchards of Mexican lime (<i>Citrus aurantifolia</i>) in a scenario of high incidence of huanglongbing</b>  Miguel A. Manzanilla-Ramírez, M. Manuel Robles-González, <b>J. Joaquín Velázquez-Monreal</b> , Mario Orozco-Santos, Silvia H. Carrillo-Medrano
10:30	<b>8.10</b>	<b>HLB epidemics and orange yield after three years of nutritional programs</b>  <b>Renato Beozzo Bassanezi, Luiz Henrique Montesino, Dirceu Mattos Jr., José Antonio Quaggio, Rodrigo M Boaretto, Joseph Marie Bové</b>
	<b>8.11</b>	<b>Contributed Posters Session 8</b>  <b>Assessment of Citrus Health Management Areas and their performance in Florida</b>  <b>W. Luo, T. Riley, T. Gottwald</b>
	<b>8.12</b>	<b>Modeling ACP spread within mixed residential and commercial landscape</b>  <b>W. Luo, T. Gottwald</b>
	<b>8.13</b>	<b>Assessment of the supply of metal micronutrients on HLB infected trees</b>  Fausto Veiga De Alvarenga, Helvécio Della Coletta Filho, João Roberto Spotti Lopes, Rodrigo Marcelli Boaretto, José Antonio Quaggio, <b>Dirceu Mattos Jr.</b>
	<b>8.14</b>	<b>Novel tetracyclines designed specifically for activity against the causative agent of HLB</b>  <b>Mark L. Nelson, Jianxing Zhang, Eric W. Triplett, Kristen Russolf, Jennie Fagen, Robert Shatters</b>
	<b>8.15</b>	<b>Nationwide survey and strain identification of Huanglongbing (HLB) disease of citrus in the Philippines</b>  <b>Juliet Ochasan, Nancy Aspuria, Amelia Cimafranca, Rogelio Custodio, Arlene Celo</b>
	<b>8.16</b>	<b>Field cage production system for <i>Tamarixia radiata</i> in California</b>  <b>Raju Pandey, Greg Simmons, Brian Taylor, Ruth Henderson</b>
	<b>8.17</b>	<b>First steps to survive Huanglongbing in Puerto Rico</b>  <b>Rivera, Dania</b>
	<b>8.18</b>	<b>Contributions from "Estación Experimental Agroindustrial Obispo Colombres" (EEAOC- Tucumán – Argentina) to the National Prevention Program of HLB in Argentina</b>  Gerardo Gastaminza, Gabriela M. Fogliata, Marcelo Lizondo, Lucrecia Augier, M. Eugenia Acosta, C. Valeria Martínez, Alejandro Rojas, L. Daniel Ploper, Eduardo Willink, <b>Hernán Salas</b>

	<b>8.19</b>	Removed from agenda
	<b>8.20</b>	<b>Systemic insecticides and reflective mulch for Asian citrus psyllid (<i>Diaphorina citri</i>) control in new citrus plantings</b>  <b>Scott Croxton, Phil Stansly</b>
	<b>8.21</b>	<b>HLB in Southern Paraguay. Current status of the outbreak</b>  <b>Wlosek-Stangret, C., Bogarin, C., Venialgo, C., Sanchez, G., Ojeda, J., Cantero, A., Batte, L., Vega, F., Gimenez, L., Canteros, B.I.</b>
	<b>8.22</b>	<b>Genetically-modified Citrus plants with potential to control HLB disease</b>  <b>Beatriz Xoconostle-Cazares, Miguel-Angel Guerra-Lupián, Rebeca Zecua-Nájera, José-Abrahán Ramírez-Pool, Andrea Gómez-Felipe, José-Abel López-Buenfil, Oscar Morales-Galván, Claudio Chavarin-Palacio, Domingo Colmenares, Roberto Ruiz-Medrano</b>
	<b>8.23</b>	<b>Extension project for improvements of King mandarin cultivation with severe Huanglongbing in southern Vietnam</b>  <b>Kazuyoshi Yuasa, Hoa Nguyen Van, Katsuya Ichinose</b>
	<b>8.24</b>	<b>Field trials of the integrated approach to control citrus huanglongbing in Florida</b>  Muqing Zhang, Chuanyu Yang, Yongping Duan, <b>Charles A. Powell</b>
		 <b>Session 9: Vector 1</b> <b>Moderators: Steve Lapointe / Lukasz Stelinski</b>
10:45	<b>9.1</b>	<b>Exploring the innate immune system of the Asian citrus psyllid, <i>Diaphorina citri</i>, through genomics and controlled bioassays</b>  <b>Alex Arp, Wayne Hunter, Kirsten Pelz-Stelinski</b>
11:00	<b>9.2</b>	<b>Small RNA deep sequencing and transcriptome profile analysis to identify viruses in worldwide populations of <i>Diaphorina citri</i></b>  Shahideh Nouri, Nida Salem, Thao Nguyen, Donald Coyle, <b>Bryce W. Falk</b>
11:15	<b>9.3</b>	<b>Psyllid management in the San Joaquin Valley of California</b>  <b>Elizabeth Grafton-Cardwell</b>
11:30	<b>9.4</b>	<b>Color morph and infection with <i>Candidatus Liberibacter asiaticus</i> influence flight capability and dispersal of the Asian citrus psyllid</b>  <b>Xavier Martini, Mark Hoffmann, Kirsten Pelz-Stelinski, Lukasz L. Stelinski</b>
11:45	<b>9.5</b>	<b>Endosymbiotic control of the Asian Citrus Psyllid (ACP, <i>Diaphorina citri</i> (Hemiptera: Liviidae)): Diversity and Ecology of <i>Wolbachia</i> in Florida ACP populations</b>  Mark Hoffmann, Calum Russell, Monique R. Coy, <b>Kirsten S. Pelz-Stelinski</b>
12:00	1:00	<b>Lunch</b>
1:00	<b>9.6</b>	<b>Edge effects in the spatial distribution of Asian citrus psyllid in citrus groves: Consequence for the development of best management practices</b>  <b>Mamoudou Sétamou, David W Bartels</b>

1:15	<b>9.7</b>	<b>Productivity of HLB infected trees enhanced by vector control of ACP and foliar nutrition</b>  Pilar Vanaclocha, Moneen M. Jones, César Monzó, James. A Tansey, Fritz Roka, <b>P. A. Stansly</b>	
1:30	<b>9.8</b>	<b>Characterizing the colonization and distribution of Asian citrus psyllid in an urban landscape: Role of roads and spatio-temporal patterns of occurrence</b>  <b>Shyam Thomas</b> , Matthew Daugherty	
		<b>Contributed Posters Session 9</b>	
	<b>9.9</b>	<b>Spectral sensitivity of the Asian citrus psyllid, <i>Diaphorina citri</i></b>  <b>Sandra A. Allan</b>	
	<b>9.10</b>	<b>Asian citrus psyllid behavior in dsRNA-treated versus not-treated plants</b>  Hava Stenn, Wayne Hunter, <b>Eduardo Andrade</b>	
	<b>9.11</b>	<b>Sivanto™, a new tool for control of Asian citrus psyllid in citrus</b>  <b>Amanda Beaudoin</b> , Frank Rittemann	
	<b>9.12</b>	<b>Subtle differences in the insecticidal response in field populations of the Asian citrus psyllid</b>  Monique R. Coy, <b>Lukasz L. Stelinski</b>	
	<b>9.13</b>	<b>Experimental psyllid traps</b>  Dickens, A. A., <b>Halbert, S. E.</b> , Mizell, R. F., III, and Smith, T. R.	
	<b>9.14</b>	<b>Regional Fluctuation of <i>Diaphorina citri</i> in Central Veracruz, México</b>  <b>Lizbeth Hernández-Landa</b> , José López-Collado, Martha E. Nava-Tablada, Mónica Vargas-Mendoza, Francisco Osorio-Acosta, Héctor González-Hernández	
	<b>9.15</b>	<b>Using the complexome analysis to explore the interactions between <i>Candidatus Liberibacter asiaticus</i> and Asian citrus psyllid</b>  <b>Hao Hu, Nabil Killiny</b>	
	<b>9.16</b>	<b>Validating the safety of RNAi products- Keeping honey bees safe</b>  <b>Wayne Hunter</b> , Eduardo Andrade, Jay D. Evans	
	<b>9.17</b>	<b>Pathogenicity of two entomopathogenic fungi isolated on <i>Diaphorina citri</i> and their potential of reducible effect on the vector population</b>  Susumu Shimizu, Nguyen Minh Chau, Nguyen Van Hoa, Nguyen Van Huynh, Trieu Quoc Duong, Thuy, Nami Uechi, Takefumi Hayashi, <b>Katsuya Ichinose</b>	
	<b>9.18</b>	<b>Vibration lures for monitoring and mating disruption of psyllids in citrus tree canopies</b>  <b>Richard Mankin</b> , Seth McNeill, Barukh Rohde, Nina Zagvazdina, Avraham, Mechael, Brun-Kestler, Daniel Fialkovsky, Mary Kate Sirianni, Milda Stanislauskas, Ethan Hartman, Sylvia Lujo, Morgan Hull, Inbar Aberman, Byul Hur	

	<b>9.19</b>	<b>Three year results of the area wide management program for the Asian Citrus Psyllid, <i>Diaphorina citri</i> Kuwayama (Hemíptera: Psyllidae), in southern Sonora, Mexico</b>  <b>Jose L. Martinez-Carrillo</b> , Javier Valenzuela-Lagarda, Alejandro Suarez-Beltran, Bernardo Pérez-López
	<b>9.20</b>	<b>Absence of windbreaks and solid set plantings increase density of Asian citrus psyllid in citrus</b>  <b>Xavier Martini</b> , Lukasz L. Stelinski
	<b>9.21</b>	<b>Improvement of the use of yellow stick card for monitoring adults of <i>Diaphorina citri</i> Kuwayama (Hemiptera: Liviidae)</b>  André Leonardo, <b>Marcelo Pedreira De Miranda</b> , Haroldo Xavier Linhares Volpe, Franklin Behlau
	<b>9.22</b>	<b>Evaluation of three releases densities levels of <i>Tamarixia radiata</i> (Waterston) (Hymenoptera: Eulophidae) for the control <i>Diaphorina citri</i> Kuwayama (Hemiptera: Psyllidae)</b>  <b>Anuar Morales-Rodriguez</b> , Manish Poudel, Gregory Simmons, Matt Daugherty
	<b>9.23</b>	<b>Biological control of the Asian citrus psyllid in California</b>  <b>David Morgan</b> , Grace Radabaugh, Alex Muniz, Mike Pitcairn
	<b>9.24</b>	<b>Oils and plant extracts to control the Asian citrus psyllid (<i>Diaphorina citri</i>) in Mexican lime in Mexico</b>  <b>Mario Orozco-Santos</b> , J. Joaquín Velázquez-Monreal, Miguel A. Manzanilla-Ramírez, M. Manuel Robles-González, Manuel Bermúdez-Guzmán, Gilberto Manzo-Sánchez
	<b>9.25</b>	<b>Residual toxicity of various organic and conventional pesticides to Asian citrus psyllid and its parasitoid <i>Tamarixia radiata</i></b>  <b>Poudel, M.</b> , Morse J.G. , Grafton-Cardwell, E.E. , Daugherty, M.P. , Simmons, G.S.
	<b>9.26</b>	<b>Organic insecticides and parasitoids for integrated management of Asian citrus psyllid, <i>Diaphorina citri</i></b>  <b>Jawwad A. Qureshi</b> , Philip A. Stansly
	<b>9.27</b>	Removed from agenda
	<b>9.28</b>	<b><i>Tamarixia radiata</i>: mass production and release in Mexico</b>  <b>Sánchez-Borja, M.</b> , Sánchez-González, J. A and Arredondo- Bernal, H. C.
	<b>9.29</b>	<b>Preference and colonization of <i>Diaphorina citri</i> in frequently established backyard citrus in the Peninsula of Yucatán, México</b>  Emiliano Loeza-Kuk, Armando Ismael Bacab-Pérez, <b>Maricarmen Sánchez-Borja</b> , María Alma Rangel-Fajardo, Claudia Tania Lomas-Barrié, Lizette Cicero-Jurado

	<b>9.30</b>	<b>Repellent effect of <i>Psidium guajava</i> cultivars to the Asian citrus psyllid <i>Diaphorina citri</i></b>  José A A Silva, David G. Hall, Timothy R. Gottwald, Moacir S. Andrade, Stephen L. Lapointe, Rocco T. Alessandro, Eduardo C. Andrade, Marcos A. Machado
	<b>9.31</b>	<b>Functional and behavioral response of <i>Tamarixia radiata</i> (Hymenoptera: Eulophidae) to different densities of its host, <i>Diaphorina citri</i> (Hemiptera: Psylloidea)</b>  Xulin Chen, Philip A. Stansly
	<b>9.32</b>	<b>The behavioral response of <i>Diaphorina citri</i> to ultraviolet light</b>  Thomson M. Paris, Sandra A. Allan, Phillip A. Stansly
	<b>9.33</b>	<b>Frequent low volume applications of horticultural mineral oil for management of Asian citrus psyllid <i>Diaphorina citri</i> Kuwayama (Hemiptera: Liviidae)</b>  James A. Tansey, Moneen M. Jones, Pilar Vanaclocha, Jacqueline Robertson, Philip A. Stansly
		 <b>Session 10: Vector 2 / Vector-Host Interactions</b> <b>Moderators: Lukasz Stelinski / Steve Lapointe</b>
1:45	<b>10.1</b>	<b>Transcriptomics, proteomics, and yeast-2-hybrid analyses reveal genes pathways important for <i>Candidatus Liberibacter</i> sp. circulative, propagative transmission</b>  Judith K. Brown, T.J. Rast, T.W. Fisher
2:00	<b>10.2</b>	<b>Optimization of dsRNA knockdown-phenotype assays to evaluate RNAi efficacy of gene silencing in the potato psyllid</b>  Tonja W. Fisher, T.J. Rast, J. K. Brown
2:15	<b>10.3</b>	<b>Asian citrus psyllid –derived protein suppresses <i>Ca. Liberibacter asiaticus</i> holin promoter activity</b>  Mukesh Jain, Laura A. Fleites, Dean W. Gabriel
2:30	<b>10.4</b>	<b>Host plant influence on Asian Citrus Psyllid titer and transmission efficiency of <i>Candidatus Liberibacter</i>: a proteomic analysis</b>  Jaclyn Mahoney, John Ramsey, Jared Mohr, Richard Johnson, Michael J. MacCoss, Michelle Cilia
2:45	<b>10.5</b>	<b>Attractants for ACP trapping technology: Challenges, status, and opportunities</b>  Joseph Patt, Mamoudou Sétamou
3:00	<b>3:15</b>	<b>Break</b>
3:15	<b>10.6</b>	<b>Merging a crowdsourcing challenge with molecular research to find an RNAi-based biological control strategy for the insect vector of Citrus Greening Disease</b>  Ramos, J.E., Jain, R. , Powell, C.A., Dawson, W.O. , Gowda, S., Borovsky, D., Shatters, R.G., Jr.

3:30	<b>10.7</b>	Development and reproduction of the Asian citrus psyllid on <i>Zanthoxylum fagara</i> Rutaceous relative of citrus  Jawwad A. Qureshi, Susan E. Halbert, Dyrana N. Russell, Philip A. Stansly
3:45	<b>10.8</b>	Effect of temperature and the infection with <i>Candidatus Liberibacter asiaticus</i> on the energy metabolism of Asian citrus psyllid, <i>Diaphorina citri</i> .  Nabil Killiny
4:00	<b>10.9</b>	Asian citrus psyllids respond to degradation products of common citrus plant volatiles.  Stephen Lapointe, Justin George, Paul Robbins
4:15	<b>10.10</b>	RNAi feeding bioassay – Development of a non-transgenic approaches to control Asian citrus psyllid and other hemipterans  Eduardo Andrade, Wayne Hunter
4:30	<b>10.11</b>	Developing a management plan for Asian citrus psyllid in retail nurseries: evaluating uptake and retention of systemic insecticides in containerized citrus  Frank Byrne, Matthew Daugherty, Elizabeth Grafton-Cardwell, Joseph Morse, James Bethke
4:45	<b>10.12</b>	Soil applied systemic insecticides to control Asian citrus psyllid and slow spread of HLB in young citrus trees  Philip A. Stansly, Barry Kostyk, Rachael Cameron, Hector Portillo
		<b>Contributed Posters Session 10</b>
	<b>10.13</b>	Differences in stylet sheath occurrence and the fibrous Ring (sclerenchyma) between <i>xCitroncirus</i> plants relatively resistant or susceptible to adults of the Asian citrus psyllid <i>Diaphorina citri</i>  El-Desouky Ammar, Matthew L. Richardson, Zaid Abdo, David G. Hall, Robert G. Shatters Jr.
	<b>10.14</b>	Effect of <i>Murraya koenigii</i> volatiles on the host selection behavior of the psyllid <i>Diaphorina citri</i> Kuwayama (Hemiptera: Liviidae)  Vitor H. Beloti, Gustavo R. Alves, Franciele Dos Santos, José M. S. Bento, Pedro T. Yamamoto
	<b>10.15</b>	<i>In planta</i> virus-based expression of artificial microRNAs targeting the potato psyllid <i>Bactericera cockerelli</i>  Yen-Wen Kuo, Bryce W. Falk
	<b>10.16</b>	Suitability of <i>Swinglea glutinosa</i> and leaf age of flush growth of citrus on the development of <i>Diaphorina citri</i>  Juan Arenas, Ana Bahia, Antonio Goes, Hermes Oliveira, Silvio Lopes

	<b>10.17</b>	Does experience mediate host plant selection in specialist herbivores? A new look at the nature versus nurture debate  Dara Stockton, Xavier Martini, Lukasz Stelinski
	<b>10.18</b>	Development of efficient trapping citrus to attract Asian citrus psyllid and increase sustainability of citrus groves.  Nabil Killiny, Subhas Hajeri, Siddarame Gowda
5:00	6:30 PM	<i>Posters Session 7, 8, 9, and 10</i>
7:00	9:00 PM	<i>Conference Banquet Entertainment – Dueling Pianos</i>
		<b><u>Friday February 13: Scientific Sessions</u></b>
7:00 AM	9:00 AM	Registration
7:00	8:00 AM	<i>Continental Breakfast</i>
		● <i>Session 11: Infection Consequences 2 / Pathogen 3</i> Moderators: YongPing Duan / Kirsten Pelz-Stelinski
8:00	<b>11.1</b>	Incidence of ' <i>Candidatus Liberibacter asiaticus</i> ' in <i>Poncirus trifoliata</i> hybrids under field conditions  Leonardo Pires Boava, Cíntia Helena Duarte Sagawa, Mariângela Cristofani-Yaly, Marcos Antonio Machado
8:15	<b>11.2</b>	Effect of infection with CLas and/or infestation with Asian citrus psyllid on phytohormonal balances in citrus  Yasser Nehela, Nabil Killiny
8:30	<b>11.3</b>	Early changes in host response to <i>C. Liberibacter asiaticus</i> measured by metabolomics  Elizabeth L. Chin, Darya O. Mishchuk, Shannon V. McClorry, Elizabeth K. Foster, Carolyn M. Slupsky
8:45	<b>11.4</b>	The citrus huanglongbing bacterium, ' <i>Candidatus Liberibacter asiaticus</i> ' encodes an effector targeting to citrus chloroplast  Guixia Hao, Marco Pitino, El-Desouky Ammar, Yongping Duan, Ed Stover
9:00	<b>11.5</b>	Infecting small citrus seedlings by grafting with intact HLB-symptomatic leaves: a small-scale model system for studying basic aspects of ' <i>Ca. Liberibacter asiaticus</i> ' infection in citrus  Mark E. Hilf, Reid S. Lewis
9:15	<b>11.6</b>	Progress on the development of methodology to measure and detect fruit that might contribute to HLB-associated off flavors in juice  Michael Irey, Claudia Kaye, Greg Thelwell, Hangxin Hou, Doug Van Strijp, Ping Sun, Liz Baldwin, Wei Zhao, Anne Plotto, Jinhe Bai, Smita Raithore

9:30	<b>11.7</b>	<b>Analysis of circulative transmission of <i>Liberibacter</i> in the Asian Citrus Psyllid using Protein Interaction Reporter technology</b>  <b>John Ramsey</b> , Juan Chavez, Jaclyn Mahoney, Jared Mohr, Mark Hilf, James Bruce, Michelle Cilia
	<b>11.8</b>	Removed from agenda
9:45	<b>11.9</b>	<b>Comparative Genomics of multiple <i>Candidatus Liberibacter asiaticus</i> isolates reveals genetic diversity in Florida and provides clues to the evolution of the bacteria in citrus</b>  Bo Wu, Yong Ping Duan, Ed Stover, Gloria Moore, John Hartung, Antonella Jara-Cavieres, <b>Robert G. Shatters, Jr.</b>
10:00	<b>11.10</b>	<b>Genetic analysis of a nonpathogenic strain of <i>Ca. Liberibacter asiaticus</i></b>  <b>Laura A. Fleites</b> , Mukesh Jain, William Schneider, Dean W. Gabriel
10:15	<b>11.11</b>	<b>Replication of <i>Candidatus Liberibacter asiaticus</i> in its psyllid vector <i>Diaphorina citri</i> (Hemiptera: Liviidae) following various acquisition access periods</b>  <b>EI-Desouky Ammar</b> , Robert G. Shatters, David G. Hall
10:30		<b>Conference Wrap-up</b>