

HPIS 2017 Program

The HPIS 2017 venue will be the CSIC main campus. The Oral Sessions will be held at the Auditorium located at the CSIC Main Building, Calle Serrano 117, 28006, Madrid, Spain.

Sunday 4th, June

- 7:00 PM - 10:00 PM: **Registration & Welcome Reception at Residencia de Estudiantes.** Calle del Pinar 21. Madrid. 2 min-walking distance from CSIC Main Building. <https://goo.gl/maps/yj8NmRMZLGo>

Monday 5th to Wednesday 7th, June - Scientific Sessions

- ORAL SESSIONS: CSIC Main Building Auditorium. C/ Serrano 117
 - POSTERS & COFFEE BREAKS: CSIC Atrium located at the Instituto de Física Fundamental. C/Serrano 113b (2 min walk from Auditorium)
 - LUNCH: Divided in two groups: CSIC restaurant located in Main Building & Instituto de Química Orgánica (C/Serrano 150, 5 min walk from Auditorium)
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Monday 5th, June

7:30-8:45 AM. Registration (continued)

8:45-9:00 OPEN CEREMONY

Emilio Lora-Tamayo, President of the Consejo Superior de Investigaciones Científicas, CSIC; D^a Marina Villegas, Director of the National Research Agency (AEI) and Alberto Fereres, Chairman of the HPIS 2017 Organizing Committee.

09:00-10:45 ORAL PRESENTATIONS

Session 1. Hemipteran Systematics & Genomics

Session Chairs: Joao Spotti Lopes, Michael Wilson

9:00-9:30. **Keynote Lecture**

Michael Wilson. Hemiptera and their vectors: the known and the unknowns

9:30-9:45. **Arnold Gegechkori.** *Psyllids (Hemiptera, Psylloidea) as phloem feeding pests of agriculture crops of the Caucasus*

9:45-10:00. **Thomas Mathers.** *Sequencing two aphid genera: comparative genomics of Myzus and Brachycaudus to infer the genomic basis of generalism*

10:00-10:15. **Shai Morin**. *Unravelling the role of Bemisia tabaci - plant associations in the species diversification*

10:15-10:30. **Jennifer Sjölund**. *The identification and detection of psyllid vectors of Candidatus Liberibacter solanacearum in suction traps*

10:30-10:45. **Anna Maria Botha**. *Is methylation one of the drivers of virulence in Diuraphis noxia (Kurd.) Hemiptera: Aphididae?*

10:45-11:15. Coffee Break & Poster Exhibit

11:15-12:30 ORAL PRESENTATIONS

Session 2. Xylem Feeders

Session Chairs: Sandy Purcell, Rodrigo Almeida

11:15-11:45. Keynote Lecture

Rodrigo Almeida. *Is the role of vector choice on disease epidemiology as simple as it appears to be?*

11:45-12:00. **Adam Zeilinger**. *Epidemiology of novel defensive traits against Xylella fastidiosa in grapevines*

12:00-12:15. **Domenico Bosco**. *Host-plant association and host-shifting of nymphs and adults of Philaenus spumarius L. in Italian olive orchards*

12:15-12:30. **Miguel Ángel Miranda**. *Surveillance and identification of potential vectors of Xylella fastidiosa in Mallorca (Islas Baleares, Spain) after 2016 outbreak*

12:30-14:30. Lunch and Poster Exhibit

14:30-16:00. ORAL PRESENTATIONS

Session 3. Phloem & Mesophyll Feeders

Session Chairs: Gregory Walker, Shu-Sheng Liu

14:30-15:00. Keynote Lecture

Shu-Sheng Liu. *Plant-mediated interspecific competition between whiteflies*

15:00-15:15. **Jaime Jiménez**. *Newly distinguished potential drops are related to phloem cell punctures associated to the inoculation of closterovirus by aphids*

15:15-15:30. **Freddy Tjallingii**. *Compatible/incompatible aphid-plant interactions*

15:30-15:45. **Gregory Walker**. *The role of sieve element occlusion proteins in aphid resistance*

15:45-16:00. **Jirapong Jairin**. *Loss of resistance to Nilaparvata lugens (Hemiptera: Delphacidae) may be due to low-level expression of Bph32 in rice panicles at heading stage*

16:00-16:30. Coffee Break

16:30-18:30. ORAL PRESENTATIONS

Session 3. (continued) *Phloem & Mesophyll Feeders*

16:30-16:45. **Kenneth Webster.** *Grapevine secondary metabolites involved in insect resistance*

16:45-17:00. **Taciana M.A. Kuhn.** *Settling and oviposition preferences of *Russelliana solanicola* Tuthill (Hemiptera: Psyllidae) among different cultivated and spontaneous plants*

17:00-17:15. **Elaine Backus.** *Chemical evidence of inducible tannins as plant defense response to *Lygus lineolaris* feeding on cotton squares: correlation with EPG waveforms*

17:15-17:30. **Zhiwei Kang.** *Infection of powdery mildew (*Blumeria graminis*) reduces the fitness of grain aphids (*Sitobion avenae*) through the restricted nutrition and induced defense response in wheat*

17:30-17:45. **Marcelo G. Santos.** *Leaf preference of the scale insects on fern species *Asplenium serratum* L.*

Session 4. *Hemiptera-Symbiont Interactions*

Session Chairs: Murad Ghanim, David Martínez-Torres

17:45-18:00. **David Martínez-Torres.** *Mutualism turns into aggressive mimicry in an aphid*

18:00-18:15. **Inès Pons Guillouard.** *Horizontal transmission of insect symbiont *Serratia symbiotica* via phloem and new insight into the acquisition of the symbiont*

18:15-18:30. **Jacqueline Morris.** *Microflora analyses of the Australian eggplant psyllid, *Acizzia solanicola**

18:30-19:30. POSTER SESSION 1 (odd numbers, w/presenters)

Tuesday 6th, June

8:30-10:30 ORAL PRESENTATIONS

Session 5. *Hemiptera-Plant Pathogen Interactions*

Session Chairs: Alberto Ferreres, Jesús Navas-Castillo

8:30-9:00. **Keynote Lecture**

Jesús Navas-Castillo. *Differential transmission of criniviruses and begomoviruses by whiteflies of the *Bemisia tabaci* complex*

9:00-9:15. **Lilong Pan.** *Clathrin-mediated endocytosis is involved in Tomato yellow leaf curl virus transport across the midgut barrier of its whitefly vector*

9:15-9:30. **María Luisa Domingo-Calap.** *Host-vector-pathogen interactions in the context of mixed infections by hemipteran-transmitted viruses*

9:30-9:45. **Christiane Then.** *The N-terminus of the Cauliflower mosaic virus aphid transmission protein P2 is involved in both transmission and microtubule interaction*

9:45-10:00. **Nilsa Bosque-Pérez.** *Drought stress facilitates conditional mutualism in a plant-virus-vector interaction*

10:00-10:15. **Veronique Brault.** *Is viral transmission by aphids enhanced upon manipulation of host Brassicaceae by Turnip yellows virus?*

10:15-10:30. **Torsten Will.** *Effects of Barley yellow dwarf virus infection on the interaction of virus susceptible and tolerant barley genotypes with different clones of the aphid species *Rhopalosiphum padi**

10:30-11:00. Coffee Break

11:00-12:30 ORAL PRESENTATIONS

11:00-11:15. **Micky Eubanks.** *The effect of ant-aphid mutualisms and plant diversity on the spread of aphid-vectored plant viruses*

11:15-11:30. **Piotr Trebicki.** *Elevated CO₂ impacts aphid and plant physiology, virus incidence and interactions between them*

11:30-11:45. **Xifeng Wang.** *Understanding the transmission mechanism of Rice stripe virus by its insect vector *Laodelphax striatellus**

11:45-12:00. **Emmanuel Jacquot.** *Inoculation of Wheat dwarf virus strains to wheat and barley plants by *Psammotettix alienus**

12:00-12:15. **Cristina Marzachi.** *Molecular characterization of phytoplasmas to trace the epidemiological routes of *Flavescence dorée* between *Vitis* spp. and the leafhopper vector*

12:15-12:30. **Adi Kliot.** *Do phytoplasma effectors target specific processes in insect vectors?*

12:30-14:30. Lunch and Poster Exhibit

14:30-15:30. ORAL PRESENTATIONS

14:30-14:45. **Simon Elliot.** *Invasive mutualisms between a plant pathogen and insect vectors in the Middle East and Brazil*

14:45-15:00. **Ofir Bahar.** *Genetic and metabolic analyses of *Candidatus Liberibacter solanacearum* infecting carrot*

15:00-15:15. **Murad Ghanim.** *New insights into psyllid-Liberibacter interactions*

15:15-15:30. **Judith Brown.** *Psyllid-Ca.Liberibacter interactions at molecular and cellular interfaces*

15:30-16:00. Coffee Break

16:00-18:00. ORAL PRESENTATIONS

Session 6. Insect-Plant Dialog

Session Chairs: Saskia Hogenhout, Christine Coustau

16:00-16:30. **Keynote Lecture**

Christine Coustau. Role of MIF immune regulators in plant-aphid interactions

16:30-16:45. **Dganit Sadeh.** *Chemical and behavioral analysis of the whitefly Bemisia tabaci attraction to rosemary (Rosmarinus officinalis)*

16:45-17:00. **Grit Kunert.** *Modulation of legume defense signaling pathways by native and non-native pea aphid clones*

17:00-17:15. **Vered Tzin.** *Genetic mapping shows intraspecific variation and transgressive segregation for caterpillar-induced aphid resistance in maize*

17:15-17:30. **Jia Fan.** *Identification and expression analysis of candidate odorant-receptors (ORs) by antennal transcriptome of Sitobion avenae*

17:30-17:45. **Teresa Vaello.** *Linking plant-soil feedbacks to several trophic levels in sweet pepper-aphid system*

17:45-18:00. **Sam Mugford.** *An aphid effector protein localizes to the cytoplasm of mesophyll cells and suppresses the first layer of the plant defence response*

18:00-19:00. POSTER SESSION 2 (even numbers w/presenters)

Wednesday 7th, June

8:30-10:30 ORAL PRESENTATIONS

Session 6. (continued) Insect-Plant Dialog

8:30-8:45. **Karen Kloth.** *On the verge of a hot, juicy dinner: A heat-inducible phloem protein that compromises aphid feeding*

8:45-9:00. **Agnieszka Woźniak.** *Nitric oxide as a signaling molecule in bioactive pea response to pea aphid infestation*

9:00-9:15. **Jorunn Bos.** *An aphid effector associates with a host trafficking protein to promote virulence*

9:15-9:30. **Lidia Blanco.** *Characterization and effect of glandular trichomes on plant aphid interactions in tomato*

9:30-9:45. **Colin Turnbull.** *Genetics of virulence in pea aphid on Medicago truncatula hosts differing in R gene complement*

9:45-10:00. **Eduard Venter.** *A wheat specific integrated-domain NLR gene as role player in the wheat-Diuraphis noxia interaction*

10:00-10:15. **Petra Bleeker.** *Small RNAs from whiteflies are transferred to tomato phloem during feeding*

10:15-10:30. **Osnat Malka.** *Metabolic responses to variable host plants play a key role in different degrees of polyphagy in the Bemisia tabaci species complex*

10:30-11:00. Coffee Break

11:00-12:30 ORAL PRESENTATIONS

Session 7. Pest/Disease Management

Session Chairs: Phyllis Weintraub, Michael Rogers

11:00-11:30. Keynote Lecture

Michael Rogers. *Management of the Asian Citrus Psyllid and Citrus Greening Disease*

11:30-11:45. **Marcelo Miranda.** *Kaolin affecting the host plant finding ability of *Diaphorina citri* in field conditions*

11:45-12:00. **Jessica Dohmen-Vereijssen.** *Ecology and management of *Bactericera cockerelli* in potato crops*

12:00-12:15. **Silvia Rondón.** *Zebra chip in Oregon and Washington: a retrospective towards managing the disease*

12:15-12:30. **Yupa Hanboonsong.** *Evaluation of sugarcane varieties for differential resistance to insect vector of sugarcane white leaf disease*

12:30-14:30. Lunch and Poster Exhibit (all Posters should be removed at 14:30)

14:30-16:00. ORAL PRESENTATIONS

14:30-14:45. **Gary A. Thompson.** *Transcriptomics of altered aphid phenotype on Vat+ resistant plants*

14:45-15:00. **Adriana Álvarez.** *Searching for strategies to control the green peach aphid on potato crops*

15:00-15:15. **Rajagopalbabu Srinivasan.** *The effects of host resistance on whitefly-Tomato yellow leaf curl virus interactions: Implications for viral epidemics and management*

15:15-15:30. **Alvin Simmons.** *Whiteflies: Developing host plant resistance in watermelon from wild sources*

15:30-15:45. **Patricia Prade.** **Calophya terebinthifolii* and *Calophya lutea*: Host specificity of two potential biological control agents of Brazilian peppertree in Florida, USA*

15:45-16:00. **Ikponmwosa Egbon.** *The genotype of *Pereskia aculeata* (Cactaceae) influences performance of its biological control agent, *Catorhintha schaffneri* (Coreidae) in South Africa*

16:00-16:30. Coffee Break

16:30-18:00. ORAL PRESENTATIONS

16:30-16:45. **Daniel Leybourne.** *Investigating plant-aphid-environment interactions: *Rhopalosiphum padi* –barley interactions under plant water stress*

16:45-17:00. **Imre Mezei.** *Isoclast Active as a new tool for managing virus vectors and virus transmission*

17:00-17:15. **Un Taek Lim.** *Laboratory evaluation of a mycoinsecticide (BotaniGard® ES) on Riptortus pedestris (Hemiptera: Alydidae)*

17:15-17:30. **Paola Riolo.** *Behavioural responses of Hyalesthes obsoletus to volatiles of plants sprayed with resistance inducers*

17:30-17:45. **Tatiane da Cunha.** *Bacillus thuringiensis translocation inside citrus plants and insecticidal activity against Diaphorina citri, vector of HLB causal agents*

17:45-18:00. **Ken Tabuchi.** *Effect of the amount of source habitat on the rice damage caused by a mirid pest Stenotus rubrovittatus: constructing a spatial predictive model of rice damage and the potential hazard map using land use data*

20:30. **CLOSING BANQUET**

Thursday 8th to Saturday 10th (optional)

1. Satellite **EPG Workshop.** Venue: Instituto de Ciencias Agrarias. ICA-CSIC. Calle Serrano 115 duplicado. <https://goo.gl/maps/na6nSmzv72>

2. Optional **Touristic tours** to Toledo, Segovia, Cordoba and Granada are available at: <http://www.hpis2017.csic.es/accommodationtours/>



**CSIC Campus & main building
(C/Serrano 117)**

**CSIC main auditorium
(Oral Sessions)**

**Atrium at Physics Building
(Poster & Coffee Breaks)**