

## Program

### SUNDAY, JUNE 30

- 16.00 - 20.00 Registration open  
18.00 - 21.00 Welcome mixer with snacks sponsored by Trends in Plant Science | Cell Press

### MONDAY, JULY 1

- 09.00 - 09.20 Welcome by Julie Scholes and Harro Bouwmeester
- 09.20 – 12.40 Host plant resistance**  
Session chair: *Steve Runo*
- 09.20 – 09.55 The parasite *Cuscuta australis* with a streamlined genome mediates inter-plant systemic signals  
*Jianqiang Wu*
- 09.55 – 10.30 *Cuscuta* microRNAs target host mRNAs involved in defence and vascular function  
*Michael Axtell*
- 10.30 – 11.00 Coffee break
- 11.00 – 11.25 Interspecific long-distance movement of *Cuscuta* small RNAs control biological processes in host-parasitic plant complex  
*Koh Aoki*
- 11.25 – 11.50 A peptide motif of a parasitic plant cell wall protein is recognized by the receptor protein CuRe1 and induces defence in tomato  
*Markus Albert*
- 11.50 – 12.15 Molecular basis for tomato resistance to the parasitic plant *Cuscuta*  
*Neelima Sinha*
- 12.15 – 12.40 Characterization of resistance to sunflower broomrape (*Orobanche cumana* W.) in sunflower (*Helianthus annuus* L.)  
*Dana Sisou*
- 12.40 – 12.50 International consortium on sunflower broomrape resistance  
*Stephane Munos & Begoña Pérez-Vich*
- 12.50 – 14.15 Lunch
- 14.15 – 18.00 Ecology, phylogeny and evolution**  
Session chair: *Claude DePamphilis*
- 14.15 – 14.50 Eco-evolutionary causes and consequences of parasitism in plants  
*Susan Wicke*
- 14.50 – 15.25 Novel genetic code and record-setting AT-richness in the highly reduced plastid genome of the holoparasitic plant *Balanophora*  
*Claude dePamphilis*
- 15.25 - 15.50 A neglected alliance in battles against parasitic plants: AM and rhizobial symbioses alleviate damage to a legume host by root hemiparasitic *Pedicularis* species  
*Airong Li*
- 15.50 – 16.20 Coffee break
- 16.20 – 16.45 When the same is not the same  
*Peter Toth*
- 16.45 – 17.10 Genetic diversity of *Orobanche cumana* (sunflower broomrape) populations at the world level revealed by SSR markers  
*Luyang Hu*
- 17.10 - 17.35 Facultative parasitism: an evolutionary precursor of complete parasitism or an effective strategy in its own right?  
*Lammert Bastiaans*
- 17.35 – 18.00 Fitness of reciprocal F1 hybrids between *Rhinanthus minor* and *R. major*  
*Renate Wesselingh*
- 18.00 - 19.30 Poster viewing with drinks
- 19.30 - 21.00 Dinner
- 21.00 – Bar conference centre open

## Program

### TUESDAY, JULY 2

09.00 – 12.45

#### Genes and genomes

Session chair: *Jim Westwood*

09.00 – 09.35

*Cuscuta campestris*: A plant genome under the influence of a parasitic lifestyle

*Kirsten Krause*

09.35 – 10.10

Genetic basis for host and parasitic plant communication

*Satoko Yoshida*

10.10 – 10.35

Exploring the evolutionary origin of haustorium development in root parasitic plants

*Daniel Steele*

10.35 – 11.05

Coffee break

11.05 – 11.30

Where the action is: gene expression at the parasite-host interface

*Elizabeth Kelly*

11.30 – 11.55

Convergent horizontal gene transfer and crosstalk of mobile nucleic acids in parasitic plants

*Claude dePamphilis*

11.55 – 12.20

The identification of candidate pathogenicity-related genes from the genome of *Striga hermonthica*

*James Bradley*

12.20 – 12.45

Lack of evidence for horizontally transferred genes in mitochondria of *Cuscuta* species

*Benjamin Anderson*

12.45 - 14.15

Lunch

14.15 – 18.10

#### Molecules and Biochemistry

Session chair: *David Nelson*

14.15 – 14.50

CHEMICALS that control *Striga* germination

*Tadao Asami*

14.50 – 15.25

Signalling pathways in *Striga hermonthica* germination

*Shelley Lumba*

15.25 - 15.50

Complementary hormone-based approaches for *Striga* Control

*Salim Al-Babili*

15.50 – 16.20

coffee break

16.20 – 16.55

Unravel strigolactone signaling and controlling parasitic plant behaviors in *Striga*

*Yuichiro Tsuchiya*

16.55 – 17.20

Structural and biochemical characterization of strigolactone parasitic receptors, understanding their functionality and how to inhibit them

*Amir Arellano Saab*

17.20 - 17.45

Identification and characterization of  $\alpha$ -galactosidase capable of hydrolyzing planteose in *Orobancha minor* as a target for control of root parasitic weeds

*Atsushi Okazawa*

17.45 – 18.10

Cannalactone: a new non-canonical strigolactone exuded by *Cannabis sativa* roots with a pivotal role in host specialization: within French broomrape (*Phelipanche ramosa*) populations

*Jean-Bernard Pouvreau*

18.10 - 19.30

Poster viewing with drinks

19.30 - 21.00

Dinner

21.00 –

Bar conference centre open

09.00 – 12.45

#### Control and Management

Session chair: *Maurizio Vurro*

### WEDNESDAY, JULY 3

09.00 – 09.35

*Striga* research on finger millet: protocols, GWAS and RNA sequencing

*Damaris Odeny*

09.35 – 10.10

Parasitic weed management - opportunities and challenges

*Hanan Eizenberg*

10.10 – 10.35

Advances in parasitic weed control in the field

*Binne Zwanenburg*

10.35 – 11.05

Coffee break

11.05 – 11.30

Correctly multi-targeted Host-Induced Gene Silencing (HIGS) should allow full and sustainable control of parasitic weeds

*Jonathan Gressel*

11.30 – 11.55

Realizing the suicidal germination strategy to control *Striga hermonthica* in rain-fed agriculture of sub-Saharan Africa

*Boubacar Kountche*

## Program

- 11.55 – 12.20 How do fertilisers affect the facultative parasitic weed *Rhamphicarpa fistulosa* ?  
*Jonne Rodenburg*
- 12.20 – 12.45 Development of chickpea (*Cicer arietinum* L.) mutant resistant to imidazolinone herbicides for broomrape management  
*Evgenia Dor*
- 12.45 - 13.45 Lunch
- 14.00 - 23.00 Conference tour + Conference dinner

### THURSDAY JULY 4

#### 09.00 – 12.45 Parasitic plant biology

Session chair: *Airong Li*

- 09.00 – 09.35 Understanding the arms race: host resistance and parasite virulence in the *Striga*-cereal interaction  
*Julie Scholes*
- 09.35 – 10.10 Native parasitic plants: a solution of plant invasions worldwide?  
*Jakub Tesitel*
- 10.10 – 10.35 Transcriptomics to farmer field: a system biology approach for commercializing root parasitic *Santalum album* (Sandalwood)  
*Pradeepa Bandaranayake*
- 10.35 – 11.05 Coffee break
- 11.05 – 11.30 Reproductive biology and pollination of *Cynomorium songaricum* (Cynomoriaceae)  
*Guilin Chen*
- 11.30 – 11.55 *Triphysaria* controls vegetative self-recognition by restricting release of HIFs in roots  
*Yaxin Wang*
- 11.55 – 12.20 Analysis of genetic variation in pre and post attachment resistance mechanisms in maize inbred lines to the parasitic weed *Striga hermonthica* ; implications for control  
*Mamadou Cissoko*
- 12.20 – 12.45 Impact of the soil microbiome on *Striga*-sorghum interaction  
*Desalegn Etalo*
- 12.45 - 14.15 Lunch

#### 14.15 – 18.00 Parasitic plant-host interaction

Session chair: *John Yoder*

- 14.15 – 14.50 War and peace – the molecular dynamics of compatible and incompatible *Striga*-host plant associations  
*Mike Timko*
- 14.50 – 15.25 What model plants can tell us about parasitic plants  
*Thomas Spallek*
- 15.25 - 15.50 Message received: Evidence for translation of mobile mRNAs in *Cuscuta*-host interactions  
*James Westwood*
- 15.50 – 16.20 Coffee break
- 16.20 – 16.45 The roles and functions of lignin in parasitic plant-host interaction  
*Songkui Cui*
- 16.45 – 17.10 A receptor and pathways discovered in the lignin-based resistance to *Cuscuta campestris* in Heinz hybrid tomato cultivars  
*Min-Yao Jhu*
- 17.10 - 17.35 Cytokinins act as signaling molecules within the rhizosphere to trigger haustorium formation in the holoparasitic plant *Phelipanche ramosa*  
*Estelle Billard*
- 17.35 – 18.00 Striking vegetative developmental convergence in endoparasitic angiosperms  
*Luiza Teixeira-Costa*
- 18.00 - 19.30 Poster viewing with drinks
- 19.30 - 21.00 Dinner
- 21.00 – Bar conference centre open
- Departure participants