

**Programme**  
**Wild Plant Pathosystems, 1st International Conference**  
**(2-5 July 2013, Olomouc, Czech Republic)**

**1 July, Monday**

***Hotel Flora***

15.00-20.00    ***Accommodation***  
                 ***Registration***

**2 July, Tuesday**

***Palacký University, Konvikt***

8.00-10.00    ***Registration, setting up the posters***

***Palacký University, Konvikt „Auditorium“***

**10.00-10.30    *Opening ceremony, Introduction to the programme***

10.00-10.15    ***Opening ceremony***

10.15-10.30    ***Introduction***

**J.J. Burdon (Australia)**

Pathogens as driving forces in evolution

**10.30-12.30    *Broad ecological / genetic view in a coevolutionary setting and host-pathogen interactions***

**Chairpersons: J.J. Burdon, J.K.M. Brown**

10.30-11.00    **J.K.M. Brown (UK)**

Arms race or trench warfare? Predictions about host-parasite coevolution in agriculture and nature

11.00-11.30    **U. Carlsson-Granér, B.E. Giles (Sweden), P.H. Thrall (Australia)**

Patterns of disease and host resistance in spatially structured systems

11.30-12.00    **E. Holub (UK)**

Following Biffen's footsteps with insights from *Arabidopsis-Albugo candida* interactions

12.00-12.15    **C.M. Higgins, J. D. Fletcher, B. Rodoni, F. Ochoa-Corona, M. Roossinck, U. Melcher, R. MacDiarmid (New Zealand, Australia, USA)**

Knowledge of plant virus biodiversity and ecology is required for prediction of virus disease epidemics: an antipodean perspective.

- 12.15-12.30 **Y. Anikster, J. Manisterski, T. Eilam, P. Ben Yehuda, S. Ezrati and H. Sela** (Israel)  
Ecological adaptation of the leaf rust fungi attacking *Hordeum spontaneum* in Israel

**12.30-14.00** *Lunch*

- 14.00-15.45** *Phylogenetics & Speciation*  
**Chairpersons: E. Holub, M. Thines**

- 14.00-14.30 **M. Thines** (Germany)  
Phylogeny, evolution and diversity of oomycetes - a global perspective
- 14.30-15.00 **B. McDonald** (Switzerland)  
The role of effectors in the emergence of host-specialized fungal pathogens: a phylogeographical perspective

- 15.00-15.15 **A.-K. Buch, L. Nigrelli, M. Thines** (Germany)  
Diversity, phylogeny and host range of the *Pythium oligandrum* species complex

- 15.15-15.30 **Y.J. Choi, M. Thines** (Germany)  
Macroevolutionary strategy of downy mildew: A case study of *Bremia* and Asteraceae

- 15.30-15.45 **I. Solovyeva, A. Schmuker, M. Thines** (Germany)  
Evolution of *Hyaloperonospora* effectors: ATR1-effector genes in sister species of *H. arabidopsis*

**15.45-16.15** *Coffee break*

- 16.15-18.30** *Ecological genomics of host-pathogen interactions*  
**Chairpersons: B. McDonald, L. Rose**

- 16.15-16.45 **P.H. Thrall, J.J. Burdon** (Australia)  
Integrated evidence for co-evolution in natural host-pathogen associations
- 16.45-17.15 **A.-L. Laine** (Finland)  
Life-history, evolutionary potential and environment as determinants of pathogen dynamics in a large natural metapopulation

- 17.15-17.45 **Y. Bai** (the Netherlands)  
Genetics and molecular aspects of resistance in wild *Solanum* spp. against powdery mildew

- 17.45-18.15 **L. Rose** (Germany)  
Evolutionary genetics of disease resistance in wild tomato species

- 18.15-18.30 **C. Tollenaere, A.-L. Laine** (Finland)  
Molecular tools for the study of the interaction between *Podosphaera plantaginis* and *Plantago lanceolata* in the Åland metapopulation

**19.00-21.30 Welcome Party at Historical Building of Archbishop Palace, Olomouc**

**3 July, Wednesday**

**Palacký University, Konvikt "Auditorium"**

- 8.30-10.30 Developing a common conceptual framework for antagonistic interactions  
Theoretical and modelling approaches and challenges**  
Chairpersons: M.J. Jeger, E. Kosman

- 8.30-9.00 **E. Kosman** (Israel)  
Diversity analysis of pathogens and their hosts: from individuals to populations

- 9.00-9.30 **M.W. Shaw** (UK)  
The population dynamics of disease on short and long time-scales

- 9.30-10.00 **R.K. Meentemeyer, S.E. Haas and T. Vaclavik** (USA, Czech Republic)  
Landscape epidemiology of emerging infectious diseases in ecological communities

- 10.00-10.15 **T. Koubek** (Czech Republic)  
Matrix models of plant infected by systemic pathogen show low impact of the disease and high influence of the environment

- 10.15-10.30 **P.S. Allen, S.E. Meyer, J. Beckstead** (USA)  
A predictive model for soil seedbank outcomes in the *Pyrenophora semeniperda-Bromus tectorum* pathosystem

**10.30-11.00 Coffee break**

- 11.00-12.30 Pathogens and community structure  
Life-history attributes, evolutionary interactions and trajectories**  
Chairpersons: A.-L. Laine, H.M. Alexander

- 11.00-11.30 **M.J. Jeger, N. Salama, M.W. Shaw, F. van den Berg, F. van den Bosch** (UK)  
Effects of plant pathogens on population dynamics and community composition in grassland ecosystems

- 11.30-12.00 **J. A. Walsh, C. Obermeier, P.J. Hunter, R. Machado, K. Ohshima, M.J. Kearsey** (UK, Japan)  
Plant – virus co-evolution in wild brassicas

- 12.00-12.15 **N.A. Bosque-Pérez, L.L. Ingwell** (USA)  
*Barley/Cereal yellow dwarf viruses* in prairie and grasslands habitats in the US Pacific Northwest

- 12.15-12.30 **H. Susi, A-L Laine** (Finland)  
The effect of co-infection to pathogen epidemiology in *Plantago lanceolata* – *Podosphaera plantaginis* interaction
- 12.30-14.00 Lunch**
- 14.00-15.45 Epidemiological & evolutionary dynamics across the agro-ecological interface**  
**Chairpersons: M.W. Shaw, T. Václavík**
- 14.00-14.30 **J.J. Burdon, P.H. Thrall** (Australia)  
Ecological and evolutionary processes across the agro-ecological interface
- 14.30-15.00 **H.M. Alexander, K.E. Mauck, A.E. Whitfield, K.A. Garrett, C.M. Malmstrom** (USA)  
Plant-virus interactions and the agro-ecological interface
- 15.00-15.15 **P. Bernardo, M. Golden, A. Mohd, E. Fernandez, M. Granier, A. G. Rebelo, M. Peterschmitt, D. P. Martin, P. Roumagnac** (France, South Africa, India)  
New insights into the evolutionary history of geminiviruses derived through the discovery of divergent viruses isolated from wild plants
- 15.15-15.30 **H. Finch, P.S. Allen, S.E. Meyer** (USA)  
Exposure to low water potentials and seed dormancy favor the fungus in the *Pyrenophora semeniperda-Bromus tectorum* pathosystem
- 15.30-15.45 **K. Hawkins, P. Allen, S. Meyer** (USA)  
Secondary dormancy of seeds in relation to the *Bromus tectorum-Pyrenophora semeniperda* pathosystem
- 15.45-16.15 Coffee break**
- 16.15-18.15 Trends in emerging and invasive pathogens**  
**Chairpersons: J. A. Walsh, L. Kiss**
- 16.15-16.45 **L. Kiss** (Hungary)  
Powdery mildew fungi as super-invasive plant pathogens
- 16.45-17.15 **K. Petrzik, J. Vondrák, M. Barták, O. Peksa, O. Kubešová** (Czech Republic)  
Lichens - new source or host of higher plant viruses?
- 17.15-17.30 **O. Frenkel, M.T. Brewer, L. Cadle-Davidson, M.G. Milgroom** (USA)  
Population structure and biology of the grape powdery mildew fungus, *Erysiphe necator*, at its center of diversity

- 17.30-17.45 **R. Ben-David, R. Parks, C. Cowger, A. Dinoor, E. Kosman, T. Wicker, B. Keller** (Israel, Switzerland)  
Reciprocal virulence pattern among *Blumeria graminis tritici* isolates originating from domesticated wheat and its wild progenitor
- 17.45-18.00 **R. Sharma, B. Mishra, F. Runge, M. Thines** (Germany)  
Smut fungi are model systems for investigating the evolution of pathogenicity—insights from the genome of *Melanopsichium pennsylvanicum*

**18.15-19.00 Poster Session**

**4 July, Thursday**

- 8.00-21.00 South Moravia - Excursion**
- 8.00 **Departure from Hotel Flora**
- 9.00-11.30 **“Austerlitz battlefield“ - The Cairn of the Peace Memorial and Museum**
- 12.00-14.30 **The Castle of Austerlitz (Slavkov), Lunch (supported by Rijk Zwaan)**
- 15.30-17.00 **Johann G. Mendel Museum of Genetics and Augustinian Abbey in Old Brno**
- 17.30-19.30 **Moravian wine (Vinselekt Michloovsky) tasting in Augustinian Abbey, Old Brno (Brno)**
- 19.30 **Departure from Brno to Olomouc**
- 21.00 **Arrival to Olomouc**

**5 July, Friday**

**Palacký University, Konvikt “Auditorium“**

- 9.00-12.15 Applied aspects, wild progenitors, sources of resistance, resistance breeding**  
**Chairpersons: Y. Bai, U. Carlsson-Granér**
- 9.00-9.30 **L. Kiss** (Hungary)  
Mycoparasites: surprise elements in wild plant pathosystems
- 9.30-10.00 **A. Lebeda, B. Mieslerová, M. Petřivalský, L. Luhová, M. Špundová, M. Sedlářová, V. Nožková-Hlaváčková, D.A.C. Pink** (Czech Republic, UK)  
Resistance mechanisms of wild tomato germplasm to infection of *Oidium neolyopersici*
- 10.00-10.30 **A. Dreiseitl** (Czech Republic)  
Wild pathosystem *Hordeum vulgare* subsp. *spontaneum* – *Blumeria graminis* f. sp. *hordei* and its position in resistance research and breeding applications

- 10.30-11.00** *Coffee break*
- 11.00-12.15** *Applied aspects, wild progenitors, sources of resistance, resistance breeding*  
(continued)  
**Chairpersons:** Y. Bai, U. Carlsson-Granér
- 11.00-11.15 **A. Tahir, L. Nigrelli, F. Runge, A. Schmuker, I. Solovyeva, A. Çelik, M. Thines** (Germany)  
Diversity of *Arabidopsis thaliana* in Italy as inferred from next-generation genotyping in relation to biotic and abiotic factors
- 11.15-11.45 **A. Lebeda, E. Kříštková, M. Kitner, B. Mieslerová, M. Jemelková, D.A.C. Pink** (Czech Republic, UK)  
Wild *Lactuca* species, their genetic diversity, resistance to diseases and pests, and exploitation in lettuce resistance breeding
- Closing and Challenging lecture**  
11.45-12.15 **M. Thines** (Germany)  
*Microthlaspi – Hyaloperonospora* as a new model system to investigate natural plant – pathogen interactions
- 12.15-12.45** *Closing session and closing ceremony*
- 13.00-14.30** *Lunch*
- 15.00-17.00** **Archdiocese Museum in Olomouc**  
(guided tour through the museum and historical buildings, for those who are interested)
- Farewell Evening, Palacký University, Konvikt “Atrium“ and surrounding area*  
**19.00-19.30** **Baroque music concert in Konvikt Chapel**  
**19.30-24.00** **Farewell dinner**

\* some minor changes may appear in the programme structure/content