

## Plant-pathogen interactions from the perspective of the plant cell wall: new approaches to improve crop protection against fungal pathogens.



A joint South African/French research project has been initiated with the aim to study plant-pathogen interactions with a particular focus on the plant cell wall. This focus has presented itself naturally after it was found that the grapevine polygalacturonase-inhibiting protein1 (VvPGIP1) influence cell wall properties in transgenic tobacco plants in a type of "priming-for-disease" mechanism. The changes observed indicated that cell wall strengthening was observed even before pathogen attack.



The aim of this French-South African seasons workshop is to strengthen the research communication and planning around this joint project by hosting discussion designed to stimulate scientific debate, ideas generation and joint planning sessions.

Co-organized by  
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## South African Season in France - July 2013



Wednesday 3 July 2013



- 8:30 AM **Welcome 'Meet and Greet'**
- 9:00 AM **Understanding and Manipulating Grapevine Defence Systems**  
Prof. Melané A. Vivier (Institute for Wine Biotechnology, Stellenbosch)
- 9:40 AM **An integrated approach to plant systems biology**  
Prof. Johan Trygg (Computational Life Science Cluster, Umeå, Sweden)
- 10:20 AM **Coffee/Tea Break**
- 10:40 AM **The role of AGP's in root-microbe interactions**  
Eric Nguema-Ona (Glyco-MEV, University of Rouen)
- 11:20 AM **Anti-fungal peptides in root border-like cells of *Heliophila coronopifolia***  
Mr. Florent Weiller (Institute for Wine Biotechnology, Stellenbosch)
- 12:00 PM **Comparative analyses to reveal mechanisms of desiccation tolerance in the resurrection plant *Craterostigma plantagineum***  
Prof. Dorothea Bartels (University of Bonn, Germany)
- 13:00 PM **Lunch**
- 14:20 PM **The role of grapevine PGIP's overexpressed in a tobacco model system for characterisation of cell wall-related defence phenotypes**  
Mr. Florent Weiller (with Dr John Moore and Melané A. Vivier (Institute for Wine Biotechnology, Stellenbosch)
- 15:00 PM **A strategic discussion on the PhD project of Mr. Florent Weiller regarding collaboration between the IWBT (Stellenbosch) and GlycoMEV lab (Rouen) – unravelling cell wall defence interactions using bioimaging and -omics technology.**
- 17:00 PM **Concluding Remarks**