

Program COST FA1103 Workshop

Application Techniques of Endophytes

14-15. July 2014 FH Bielefeld

Monday, 14. July 2014

Venue: Room 132/Wilhelm-Bertelsmann-Straße 10/D-33602 Bielefeld

- 13:00 **Opening address** Dr. Carolin Schneider, Chair of COST Action FA 1103
- 13:10 **Welcome address** and presentation of the hosting university
Dept. Engineering and Mathematics, University of Applied Sciences by dean Prof. Budde
and hosting working group "Fermentation and Formulation of Biologicals and Chemicals" by
Prof. Anant Patel
- 13:25 **Introduction of participants**
- 13:50 **Technical notes and arrangements**, Dr. Desiree Jakobs-Schönwandt, organizer

Keynote

- 13:55 **Patel, A.**, WG Fermentation and Formulation of Biologicals and Chemicals, University of Applied
Sciences Bielefeld (D)
Introduction to Application Techniques of Endophytes

Session 1 Application via liquid root infection and seed coating

- 14:20 **Bejarano, A.**, Austrian Institute of Technology, Department of Health & Environment,
Bioresources Unit, Tulln,(AT)
Development of bacteria formulations for seed coating
- 14:45 **Rybakova, D.**, Environmental Biotechnology, Graz University of Technology, (AT)
A search for a novel seed treatment for oilseed rape and Brassica vegetables
- 15:10 **Ozaktan, H.**, Faculty of Agriculture Dep. of Plant Protection, University of Ege, Izmir (TR)
Application of bacterial endophytes to cucumber plants for their effects on growth promotion
and biocontrol
- 15:35 Coffee break
- 16:05 **van Vlaenderen, J.**, Behavioural Ecology and Biocontrol Laboratory, Department of Biology,
National University of Ireland, Maynooth, Co. Kildare (IR)
Inoculation of entomopathogenic fungi as endophytes by treatments of the seeds and rootlets
of Sitka spruce and lodgepole pine seedlings
- 16:30 **Chebotar, V.**, All-Russia Research Institute for Agricultural Microbiology (ARRIAM), Saint-
Petersburg (RU)
Endophytes as promising inoculants for bioremediation of salinated soils
- 16:55 **Wijkamp, I.**, Koppert Biological Systems, Berkel en Rodenrijs, (NLD)
Endophytes for commercial use in plant growth promotion
- 17: 20 **Niehaus, K.**, Faculty of Biology, Department of Proteome and Metabolome Research, Bielefeld
University (D)
Molecular uptake mechanisms of symbiotic bacteria with respect to legume plant roots
- 17:45 **Schneider, C.**, Institut für Pflanzenkultur e. K., Schnega (D)
How to (re)integrate endophyte soil potential in field crops?
- 18:10 Walk to the restaurant "Brauhaus" in Bielefeld old town

Thursday, 15. July 2014

Venue: Room 132 / Wilhelm-Bertelsmann-Straße 10/ 33602 Bielefeld

08:30 **Announcements**

Session 2 Application via encapsulation

08:40 **Berninger, T.**, Department of Health and Environment, Bioresource Unit, Austrian Institute of Technology GmbH (AT)

Developing a formulation for the plant growth-promoting bacterium *Burkholderia phytofirmans* psjn to be applied as a "Biofertilizer"

Session 3 Application via leaf treatment

09:05 **Garrido Jurado, I.**, Agricultural Entomology, Department of Agricultural and Forestry Sciences, Cordoba (E)

Endophytically colonized plants by entomopathogenic fungi for *Spodoptera littoralis* control

09:30 **Lohse, R.**, WG Fermentation and Formulation of Biologicals and Chemicals, University of Applied Sciences Bielefeld (D)

Development of spray formulations for an endophytic *Beauveria bassiana* strain

09:55 **Matecki, C.**, Julius Kühn-Institut, Darmstadt (D)

Detection of entomopathogenic fungi in crop plants by immunofluorescence techniques

10:20 **Öğüt, M.**, Selçuk University, Cumra Vocational College, Çumra-Konya (TR)

Double inoculation leads into impaired colonization pattern and failure to synergistically increase plant growth in wheat

10:45 Coffee break

Session 4 Open topics

11:15 **Iasur-Kruh, L.**, Department of Entomology, Newe Ya'ar Research Center, ARO (IL)

Endophytic bacterium, obtained from phytoplasma vector, as possible control agents of yellow disease in grapevine

11: 40 **Kukali, E.**, Department of Horticulture & Designer Architecture, Agriculture University of Tirana, (AL)

Evaluation of endophytic situation in "In vitro" propagation of *Vitis vinifera* L.

Discussion and Conclusion

12:05 **Discussion round**

12:30 Coffee break and finger food

13:00 **Conclusions for the future work of the COST Action FA 1103**

13:30 **Visit to the laboratories** of WG "Fermentation and Formulation of Biologicals and Chemicals" with demonstrations