

**Core Group Meeting – COST Action FA 1103
Progress report of WG3 „Development of new
microbial inocula“**

23.06.2015 in Maastricht

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Meetings in last year

- **Workshop „Application techniques of endophytes“** from 14. - 15. July 2014 at the University of Applied Sciences Bielefeld (Germany)
 - 30 participants from 10 countries
 - Talks about application of endophytes via liquid root infection and seed coating, encapsulation and leaf treatment
- MoU Objective: *„For commercial application it is important to formulate the inoculum in liquid or powder/gel (alginate) substances and to look for successful inoculation techniques. Another aspect is the shelf life of inoculum.“*

Meetings in last year

- **WG 1-4 Meeting on “RISK ASSESSMENT OF ENDOPHYTES”** from 03.- 07. November 2014 in Izmir (Turkey)
 - **Session 3: WG3 Think-tank – “Product pre-requisites for registration regarding risk assessment “ was cancelled**
 - **Discussion points:**
 - How is the endophytic strain placed on the market?
 - What is the „mode of action“ of the endophytic strain?
 - What product will be developed?
 - What risks of the future product can be evaluated and how?
 - **MoU Objectives:** ...“The scientific focus will target the **development of inoculants** (both bacteria and fungi) and **inoculation technology**. The **screening process** will span from *in vitro* tissue culture assays through lab-scale, greenhouse and field trials, as it is the ultimate goal to apply the potential of endophyte inoculants. *In addition the impacts of the endophyte inoculants on population dynamics of pathogens, autochthonous MOs and communication in plants will be investigated.* Epigenetically inherited positive changes in plants after inoculation will be taken into account and studied, as far this information leads to novel technologies...”

Coming soon



- **Workshop about „Monitoring and localization of endophytes“**
 - Local organizer: Gábor Kovacs (Eötvös Loránd University in Budapest)
 - Time: End of September/beginning of October 2015
- MoU objective: *„...Tools for **monitoring and localization of inoculants** within plants as well as molecular sensors for in vitro and in planta detection of bacterial activities relevant for plant growth promotion and phytoremediation will be developed....“*

Proposal for year 2015

Future ideas



Meetings:

"Important parameters for a successful inoculation of beneficial microbial endophytes,, (Idea from Nele Weyens)

„Risk analysis of the introduction/implementation of microorganisms in foreign ecosystems“ (Idea from Philipp Franken)

Workshops:

„Genomic and metagenomic techniques for analyses of functions of endophytes“

„Search for new screening techniques of beneficial endophytic microbial inocula“ (connection to WG2)

Publications:

Collection of publications to special topics (idea came from Anant Patel):

- Plant monitoring techniques
- Genomics and Metagenomics