

Plant-microbe interaction and microbial biodiversity group

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Techniques used

- AFLP and RFLP genotyping
- Multilocus sequence analysis (housekeeping & symbiotic genes)
- Multivariate analysis in biogeography
- Plant growth promoting properties (*in vitro* and *in vivo*)
- Greenhouse and field tests
- Bioinformatics of genome analysis and annotation
- Solid phase extraction
- HPLC-MS
- Soil DNA and RNA extraction and quantification
- Soil community profiling (LH-PCR, enzyme activities)
- Quantification of functional groups (MPN, qPCR)
- Hydrocarbon contaminant analyses (gravimetric & GC: total, TPH, fractions)
- Multivariate and spatial data analyses (incl. BioNumerics)

Techniques we would like to implement

- FISH
- FC-FACS
- Pyrosequencing, data analysis

Projects

- Molecular diversity, phylogeny and biogeography of plant-microbe interaction (Academy of Finland 2007-2010)
- Whole genome data analysis, molecular phylogenies in plants and bacteria (Academy of Finland 2010-2014)
- Rhizobium-plant signalling molecules
- Bioremediation and molecular soil ecology (Academy of Finland 2008-2011)