RICCARDO MANCINELLI

Curriculum Vitae

EDUCATION

Jan 2022 / now - PhD candidate
Center for Environmental Science, Hasselt University, Hasselt, Belgium
Supervisor and Promotor: prof. Nadia Soudsilovskaya
Title: "Eco-physiological mechanisms of mycorrhizal fungal impacts on soil carbon cycle"

Oct 2017 /now - PhD candidate
Institute of Environmental Sciences, Leiden University, Leiden, The Netherland
Supervisor: prof. Nadia Soudsilovskaya
Promotor: prof. Peter van Bodegom
Title: "Eco-physiological mechanisms of mycorrhizal fungal impacts on soil carbon cycle"

Feb 2017 - MSc in Environmental Biology at the University of Trieste.

Thesis title: "Biological control of fungal pathogens on *Brassica napus* using bacterial seed treatments"
Final grade: 108/110

Mar/Sep 2016 - Research Assistant (Internship) for Master degree thesis
Institute of Environmental Biotechnology, Graz University of Technology, Graz, Austria
Supervisor: Gabriele Berg, Daria Rybakova

Nov/ Gen 2016 - Traineeship
Department of life Science, University of Trieste, Trieste, Italy
Supervisor: Lucia Muggia

Dec 2014 - BSc in Biological Science and Technologies at the University of Trieste.

Thesis title: "Carbon Starvation As a Possible Mechanism Driving Drought-Induced Tree Die-Off"
Final grade: 95/110

Jun/Aug 2014 – Traineeship for Bachelor thesis
Department of Agricultural and Environmental Sciences, University of Udine, Udine, Italy
Supervisor: Valentino Casolo

WORK EXPERIENCE

Feb 1st 2024/Jan 31st 2024 – Research Fellowship
"L'ecologia del seme come strategia efficace nella conservazione e nel ripirstino della biodiversità"
Department of Agricultural and Environmental Sciences, University of Udine, Udine, Italy
Supervisor: Valentino Casolo

Oct 15th 2023/Jan 15th 2024 – Research Scholarship
"Valutazione del ruolo delle riserve di carboidrati non strutturali nello sviluppo delle barbatelle e ricadute sulle operazioni di gestione"
Department of Agricultural and Environmental Sciences, University of Udine, Udine, Italy
Supervisor: Valentino Casolo

Oct 1st 2022/ Nov 7th 2022 – Visiting researcher
Institute of Microbiology, Laboratory of Environmental Microbiology, The Czech Academy of Sciences.
Grant: Short-Term Scientific Mission Grant, COST- Action, European Cooperation in Science and Technology
Host Supervisors: Petr Baldrian, Petr Kohout.
Title: "Long term trends of soil microbiome development in the context of ecosystem restoration through soil inoculation methods".

Jul 2017/Sept 2017 – Extracurricular Traineeship in Geographical Mobility
University of Graz, Institute of Plant Sciences, 8010 Graz, Austria
Grant: EURES FVG, Extracurricular Traineeship in Geographical Mobility
Supervisors: Muggia L, Grube M.
Title: "Laboratory trials for *in vitro* lichenization in alginate inclusions"

PAPERS

Mancinelli R, van Bodegom P, Lankhorst J and Soudzilovskaia N.
Title: "Understanding the impact of main cell wall polysaccharides on the decomposition of ectomycorrhizal fungal necromass".

Scientific Article Published in European *Journal of Soil Science* 74(2). February 2023.
DOI: 10.1111/ejss.13351
Talk and Poster at "Netherlands Annual Ecology Meeting". Wageningen, The Netherlands, February 11-12, 2020

Chenguang G, Bezemer TM, van Bodegom P, Cornelissen JHC, van Logtestijn RSP, Xiangyu L, Mancinelli R, van der Hagen H, Zhou M and Soudzilovskaia N.
Title: "Plant community responses to alterations in soil abiotic and biotic conditions are decoupled for above- and belowground traits".

Scientific Article Published in *Journal of Ecology* 111(3). January 2023.
DOI: 10.1111/1365-2745.14070

Chenguang G, van Bodegom P, Bezemer TM, Veldhuis MP, Mancinelli R and Soudzilovskaia N.
Title: "Soil Biota Adversely Affect the Resistance and Recovery of Plant Communities Subjected to Drought".

Scientific Article Published in *Ecosystems* 26(3):1-11. August 2022.
DOI: 10.1007/s10021-022-00785-2

Muggia L, Mancinelli R, Tønsberg T, Palice Z.
Title: "Molecular analyses uncover the phylogenetic position of the lichenized hyphomicetous genus *Cheiromycina*".

Scientific Article Published in Mycologia 109(4):1-13
DOI: 10.1080/00275514.2017.1397476
Talk at the "XXIX Convegno della Società Lichenologica Italiana". Trieste, Italy. September 28-30, 2016.
Poster at the 8th IAL Symposium. Helsinki, Finland. Aug 1-5, 2016.

Rybakova D, Mancinelli R, Schmuck M, Wirkstrom M, Birch-Jensen F, Postma J, Ehlers RU and Berg G
Title: "The seed microbiome: cultivar-dependent structure in oilseed rape affects the interaction with beneficial bacteria and pathogens".
Published in Microbiome 5(1)
DOI: 10.1186/s40168-017-0310-6

Wassermann B, Rybakova D, Adam E, Zachow C, Bernhard M, Müller M, Mancinelli R and Berg G.
Title: "Studying Seed Microbiomes"

Chapter in *Methods in molecular biology* (Clifton, N.J.) 2232:1-21. January 2021
DOI: 10.1007/978-1-0716-1040-4_1
In book: *The Plant Microbiome*

TALKS AND POSTERS

Mancinelli R, Bavcon J, Boscutti F, Braidot E, Della Mea L, De Paoli E, Felice N, Gargiulo S, Marroni F, Morgante M, Gil PPB, Petrussa E, Ravnjak B, Trotta G, Vuerich M, Casolo C
Title: "Actions for Eryngium alpinum conservation in Eastern Alps: germination and genotyping approaches"

Talk at "7th European Congress on Conservation Biology". Bologna, Italy. June17-21 2024

Mancinelli R, van Bodegom P, He L, Soudzilovskaia N.
Title: "Global analysis reveals the importance of mycorrhizal type to predict soil microbial composition and biomass across biomes"

Talk at "Ecology of Soil Microorganisms". Prague, Czeck Republic. June 19-23, 2022.

Mancinelli R, Rybakova D, Berg G
Title: "Synergistic effects of the *Verticillium longisporum* antagonistic bacterial strains and their influence on the microbiome of Brassica plants".
Poster at the "8th ÖGMBT Annual Meeting". Graz, Austria. Sep 12-14, 2016.

SKILLS

Mancinelli R, Rybakova D, Wetzlinger U, Schmuck M, Berg G
Title: "Biocontrol agents against Verticillium wilt in oilseed rape: studies *in vitro* and *in planta*".
Poster at the "12th International Verticillium Symposium". Ljubljana, Slovenia. October 6-9,2016

Rybakova D, Schmuck M, Mancinelli R, Berg G
Title: "Seed treatment with biological control agents against Verticillium wilt in

oilseed rape".
Biological and integrated control of plant pathogens. IOBC-WPRS Bulletin Vol. 117, 2016, pp. 254-257

Languages:

- Italian: Native language
- English: Fluent speech, reading/writing with proficiency, professional experience in advanced scientific environments
- German: Beginner
- Dutch: Beginner
- Spanish: Beginner

Informatics:

- OS: windows, mac (basics)
- Programming language: R.
- General use software:
- Microsoft Office (Word, Excel, Power point, Access),
  Statistical analysis software (R, R studio), GIS software (QGIS, GRASS),
  Bioinformatics software (BioEdit, Mr. Bayes, BEAST, SEED 2.0)
- Bioinformatic: NGS data analysis, OTU database construction.
  Usage of programs and databases for nucleotide and amino acid sequence analysis and phylogenetic reconstruction

Laboratory:

- Cultivation of plant specimen in greenhouse setup
- Plant NSC analysis
- Usage of GCMS and HPLC techniques
- In vitro isolation, cultivation and maintenance of fungal specimen
- Microscopy (Optical, Confocal, plant and fungal tissue staining)
- DNA extraction and PCR amplification of environmental samples
- Fungal and bacterial isolation and culture techniques
- Plant-bacterial interaction and growth promoting assays

Others:

- Experimental design, scientific communication, teaching and student supervision.
- Understanding of plant biology and microbiology (genetics, physiology, ecophysiology, taxonomy), remote sensing, statistical analysis and modelling.
- Laboratory management
- Environmental samples collection
- Confident in presenting information and research findings in writing and in conferences