

Sofia J. van Moorsel

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1. Academic history

- 3/2018 – present Post-doc, Department of Biology, McGill University. Advisors: Prof. Dr. Andrew Gonzalez & Prof. Dr. Owen Petchey
- 11/2017 – 02/2018 Post-doc, Department of Evolutionary Biology and Environmental Studies, University of Zurich. Advisors: Prof. Dr. Bernhard Schmid & Prof. Dr. Owen Petchey
- 3/2015 – 10/2017 PhD, Department for Evolutionary Biology and Environmental Studies, University of Zurich. Supervisor: Prof. Dr. Bernhard Schmid
- 9/2013 – 2/2015 MSc in Biology/Microbiology, University of Zurich
- 9/2010 – 12/2013 BSc Biology, University of Zurich, focus on subjects in Ecology, Evolution and Limnology

2. Research experience (for a detailed description see p. 6)

- 7/2013 – 10/2017 PhD thesis at Life Science Zurich Graduate School, University of Zurich, Switzerland, Advisor: Prof. Dr. Bernhard Schmid
Title of thesis: Community evolution increases ecosystem functioning and stability.
- 3/2012 – 3/2013 Master thesis, Federal Institute of Aquatic Science and Technology (EAWAG), Dübendorf, Switzerland
Advisors: Dr. David Johnson and Prof. Dr. Martin Ackermann
Title of thesis: High-throughput analysis of metabolic incompatibilities in *E. coli*.

3. Publications

Published

van Moorsel, S.J., Schmid, M.W., Hahl, T., Zuppinger-Dingley, D. & Schmid, B. (2018) Selection in response to community diversity alters plant performance and

functional traits. *Perspectives in Plant Evolution Ecology and Systematics* 33:51–61.

van Moorsel, S.J. (2018) Personal Profile. *New Phytologist* 217:993–994.

van Moorsel, S.J.*, Hahl, T.*, Wagg, C., De Deyn, G.B, Flynn, D.F.B., Zuppinger-Dingley, D. and Schmid, B. (2018) Community evolution increases plant productivity at low diversity. *Ecology Letters* 21:128–137. *Equal contribution

Yamasaki, E., Altermatt, F., Cavender-Bares, J., Schuman, M., Zuppinger-Dingley, D., Garonna, I., Schneider, F., Guillén-Escribas, C., van Moorsel, S.J., Hahl, T., Schmid, B., Schaepman, M. and Shimizu, K. (2017) Integrating genomics for monitoring and predicting ecosystem response to global change: phenology, evolution and biodiversity. *Current Opinion in Environmental Sustainability* 29:177–186.

Svercel, M., Saladin, B., van Moorsel, S.J., Wolf, S. and Bagheri, H.C. (2011) Antagonistic interactions between filamentous heterotrophs and the cyanobacterium *Nostoc muscorum*. *BMC Research Notes* 4:357.

Submitted but not yet accepted

van Moorsel, S.J., Schmid, M.W., Wagemaker, N., van Gorp, T., Schmid, B. and Vergeer, P. Evidence of rapid genetic divergence in a grassland biodiversity experiment. (in review)

Schmid, M.W.*, Hahl, T.*, van Moorsel, S.J.*, Wagg, C. and Schmid, B. Rhizosphere bacterial community composition depends on plant species identity but not on plant diversity legacy in soil. *Equal contribution (in review)

In preparation

Hahl, T.*, van Moorsel, S.J.*, Schmid, M.W., Schmid, B. and Wagg, C. Diversity loss selects for altered plant phenotypic responses to local arbuscular mycorrhizal communities. *Equal contribution

van Moorsel, S.J., Hahl, T., Petchey, O.L., Ebeling A., Eisenhauer, N., Schmid, B. & Wagg, C. Evolution increases ecosystem temporal stability and recovery from a flood in grassland communities.

4. Contributions to conferences, symposia and research seminars

Oral presentations

- 2018 Biology18 conference, Neuchâtel, CH
- 2017 British Society of Ecology (BES) annual meeting, Ghent, BEL
- 40th New Phytologist Symposium, Vienna, AT (selected speaker)
- Aquatic ecology & macroevolution seminar series, EAWAG Kastanienbaum, CH (invited speaker)
- Institute of Plant Sciences, University of Bern, CH (invited speaker)
- Biology17 conference, Bern, CH
- 2016 British Society of Ecology (BES) annual meeting, Liverpool, UK
- BEEES Seminar at the University of Zurich, CH
- Ecological Society of America (ESA) annual meeting, Fort Lauderdale, USA
- 2015 Ecological Society of America (ESA) annual meeting, Baltimore, USA
- epiGBS Symposium at the Radboud University, Nijmegen, NL
- 28th Plant Population Biology Conference, Tübingen, DE

Poster presentations

- 2016 Global Change and Biodiversity Conference, Monte Verità, CH
- Urban Ecology Symposium, Zürich, CH
- Biology16 conference, Lausanne, CH
- Symposium of the Zurich-Basel Plant Science Center, Zurich, CH
- 2014 27th Plant Population Biology Conference, Konstanz, DE
- 33rd New Phytologist Symposium, Zurich, CH

5. Awards and grants

- 2018 SNSF Early.Postdoc Mobility Fellowship (138'000 CAD)
- 2017 Poster award at the New Phytologist Symposium (200 Euros)
- New Phytologist Trust Symposium Grant (520 Euros)
- Award for best student talk in the category Ecology & Physiology at the Biology17 conference in Bern (300 CHF)

- 2016 Poster award at the Global Change and Biodiversity Conference in Monte Verità (250 CHF)
- SNF grant number 147092 awarded to Prof. Bernhard Schmid (Sofia van Moorsel contributed to the proposal writing)
- 2015 Short visit travel grant from the ESF Congenomics Network (Reference number 7167, 1800 Euros)
- 2014 Poster award at the PopBio Conference in Konstanz (120 Euros)

6. Teaching activities

- Exam corrections Sustainability, ecology and conservation
- Evaluation Student posters about environmental chemistry and microbiology
Student reports on internships in environmental sciences
- Teaching assistant Undergraduate practicals on vegetation analyses

7. Personal skills

Languages

German: Native proficiency
 English: Full professional proficiency
 Spanish: Professional working proficiency
 French: Professional working proficiency
 Dutch: Limited working proficiency

Digital competency

Data and literature management	Literature search databases and citation tools (e.g. Zotero, Mendeley), Data Dryad, Pangaea
Programming languages / Computation	R
Illustration	Photoshop, Adobe Illustrator, Adobe Indesign Microsoft Office

Other

PADI rescue diver, driving license

8. Coursework and training (partial selection)

- 2017 Voice Training Course
 Receiving and giving feedback workshop
 Workshop on functional trait data analysis in Oldenburg, DE
- 2016 Urban Ecology Summer School in Horgen, CH
 Presentation Practice Course
 Scientific writing course
 Course on writing a postdoctoral grant
 Workshop in leadership skills
 Workshop on the Community ecology package 'vegan' in Liverpool, UK

- 2015 Scientific writing workshop in Wageningen, NL
Mixed-effect modelling with Asreml
- 2013 Conservation management field course in Scotland, UK

9. Outreach activities

- 2018 “24 Heures de Sciences” Outreach event at the Gault Nature Reserve.
- 2017 Participation in the “Science Lab - How researchers do their research”,
Outreach activity targeted at primary and highschool students
- Workshop on Scientific Busking taught by David Price
- Rendez-vous Forschung. A public outreach event (“Scientific Speed-
dating”) at the University of Bern.
- 2016 Science Info Days of the Faculty of Science at the University of Zurich.
Oral presentation entitled “Microbes – the rulers of the world” for
prospective students and their parents.
- 4th Zurich Science Days: Scientifica. Exhibition booth on light-emitting
plant juices.
- Television report “Der Mix macht’s” about my project for a joint Swiss and
German science television program (3Sat SRF Nano).

10. Memberships

British Ecological Society (BES), Canadian Society of Ecology and Evolution (CSEE), University Research Priority Program (URPP) Global Change and Biodiversity of the University of Zurich

11. Peer-reviewing activities

- 2018 – present Oecologia (2 reviews)
- 2017 – present Journal of Plant Ecology (3 reviews)

12. Other experience/volunteering

- 2017 Session Chair at the BES Annual Meeting in Ghent

- 7/2013 – 3/2017 PhD representative at the Department of Evolutionary Biology and Environmental Studies
- 2016 Session Presider at the ESA Annual Meeting in Fort Lauderdale
- 2010 Volunteering at the Red Sea Environmental Center in Dahab, Egypt
(Reef Monitoring, Survey of Fish, Invertebrates, Corals)

13. Detailed research experience

Current position (03/2018 – present)

Postdoctoral researcher at the Department of Biology at McGill.

- Experimental design
- Setting-up a large aquatic mesocosm experiment
- Rearing *Daphnia* populations
- Sampling of phytoplankton, zooplankton
- Measuring ecosystem metabolism, pH, temperature
- Mentorship of undergraduate students
- Peer-reviewing
- Outreach activities

Previous position (11/2017 – present)

Postdoctoral researcher at the Department of Evolutionary Biology and Environmental Studies and the University Research Priority Program Global Change and Biodiversity

- Writing manuscripts and preparing them for submission
- Revisions of manuscripts
- Data analysis and visualization
- Technical assistance in collaborative projects
- Data dissemination (e.g. presenting at international conferences)
- Peer-reviewing
- Outreach activities

Previous position (7/2013 – 10/2017)

PhD candidate at the Department of Evolutionary Biology and Environmental Studies

- Collecting plant biomass and plant trait data in the field (Jena Experiment)
- Design of glasshouse pot experiments
- Planning and conducting glasshouse pot experiments
- Data collection (biomass, functional traits) in the glasshouse
- Soil DNA extraction and library preparation

- Data analysis (mixed-models) and visualization
- Manuscript writing and publishing
- Conference presentations (oral and poster)
- Research seminar presentations (oral)
- Coursework, workshops and summer schools
- Outreach activities and teaching