

Curriculum Vitae

Personal Details

Name: Merav Seifan

Work Address: Mitrani Department of Desert Ecology, Swiss Institute for Dryland Environmental and Energy Research, The Jacob Blaustein Institutes for Desert Research, Ben-Gurion University of the Negev.
 Tel: +972-8-6563485
 Fax: +972-8-6563491

Education

B.Sc. 1994 – 1997 – The Hebrew University of Jerusalem, Jerusalem, Israel – Faculty of Natural Sciences, Institute of Life Science (Biology).

M.Sc. 1997 – 1999 – The Hebrew University of Jerusalem, Jerusalem, Israel – Faculty of Natural Sciences, Institute of Life Science, the Department of Evolution, Systematics and Ecology, under the supervision of Prof. Ronen Kadmon as part of a doctoral degree.

Ph.D. 1999 – 2005 – The Hebrew University of Jerusalem, Jerusalem, Israel – Faculty of Natural Sciences, Institute of Life Science, the Department of Evolution, Systematics and Ecology.
 Name of advisor: Prof. Ronen Kadmon
 Title of thesis: Interactions between shrubs and herbaceous plants in Mediterranean grazing systems

Employment History

2013 – present Senior lecturer. Ben-Gurion University of the Negev; Mitrani Department of Desert Ecology, Swiss Institute for Dryland Environmental and Energy Research, The Jacob Blaustein Institutes for Desert Research.

2007 – 2012 Research assistant. Tübingen University, Germany, Institute for Evolution and Ecology, Plant Ecology group, head: Prof. Dr. Katja Tielbörger.

2006 Post-Doc. Tübingen University, Germany; Institute of Botany, Plant Ecology Department.

1998 – 2004 Teaching Assistant. The Hebrew University of Jerusalem, Jerusalem, Israel. Institute of Life Sciences. Department of Evolution, Systematics and Ecology.

Professional Activities

a. Positions in academic administration

- 2014 - present – organization committee of the new graduate program in Ecology, Conservation and Management, a joint program of the Jacob Blaustein Institutes for Desert Research and the Life Science Department.
- 2010 - 2012 – Equal opportunity commissioner in the graduation grants committee of Baden-Württemberg in the University of Tübingen ('Landesgraduiertenförderung').
- 2010 - 2012 – Representative of the research assistants in the committee for the geology study program (bachelor and graduation program) of Tübingen University.
- 2010 - 2011 – Equal opportunity commissioner in the biology faculty, Tübingen University. Under which duty I participated as a member of the search committee ('Berufungskommission') for W3-Professorship in Botany, Tübingen University.

b. Professional functions outside the university/institute

- 2009 – Member of PhD committees in Israel (Ben-Gurion University of the Negev, the Hebrew University of Jerusalem, Haifa University), Germany (Tübingen University), Spain (University of Castilla-La Mancha, Albacete)
- 2011 – present: Proposal reviewer for the Israeli Agriculture ministry; the Israel Science Foundation (ISF); United States – Israel Binational Science Foundation (BSF)
- 2011 – Organizing committee of the 13th Congress of the European Society for Evolutionary Biology (Tübingen, 20-25 August 2011).
- 2014 - present – Editor in *Israel Journal of Ecology and Evolution*.
- 2015 – Organizing committee of the 1st annual meeting for Plant Ecology in Israel (Tel-Hai College 15-16.02.2016)
- 2015 - present – Member of the Kadas Green Roofs Ecology Center, University of Haifa.
- 2016 – Organizing committee of the 2nd annual meeting for Plant Ecology in Israel (BGU, Sde-Boker Campus. 06-07.02.2017)
- Reviewer in the following international journals: *Acta Oecologica*; *African Zoology*; *American Naturalist*; *Annals of Botany*; *Applied Vegetation science*; *Basic & Applied Ecology*; *Biological Reviews*; *Ecological Modeling*; *Functional Ecology*; *Journal of Arid Environment*; *Journal of Arid Land*; *Journal of Biogeography*; *Journal of Ecology*; *Journal of Vegetation Science*; *Israel Journal of Plant Sciences*; *Israel journal of Ecology*

& Evolution; Landscape Ecology; New Phytologist; Oikos; Perspectives in Plant Ecology, Evolution & Systematics (PPEES); PLOS One; Trends in Ecology & Evolution (TREE).

- Memberships: The European dry grassland working group (EDGG), The international facilitation network, The Ecological Society of Germany, Austria and Switzerland (GfÖ), The British Ecological Society (BES).

Educational activities

a.1 Courses teaching – Ben-Gurion University of the Negev

001-2-3021 Biostatistics: ANOVA and Experimental Design (3cp) (Graduate level)

001-2-3020 The Ecology of plant-animal interactions (3cp) (Graduate level)

001-2-3083 Community Ecology (3cp) (Third year BSc and graduate level)

a.2 Courses taught – Tübingen University, Germany

Level: Bachelor – first/second year bachelor; Advanced – third year bachelor/Master program; Graduate – PhD courses.

Type of teaching: L – Lectures, CE – Computer exercises, FE – Field exercises, S – Seminars

Current teaching experience (University of Tübingen, Germany)

Year	Name	Level	Type of teaching	No. of hours*	comments
2010-	Advanced biostatistics	Advanced/ Graduate	L,CE	60	With K. Tielbörger
2005-present	The ecology of plant-herbivore interactions	Advanced/ Graduate	L, CE,S	42	
2006-present	Plant ecology	Bachelor/ Advanced	L, CE, FE, S	60	With K. Tielbörger
2007-present	Experimental design and statistics in ecology	Advanced	L, CE, FE	21	With K. Tielbörger
2009-present	Biodiversity and ecology 1	Bachelor	L, CE, FE	12	With others; My part: Population ecology & experimental design
2009-present	Biodiversity and ecology 2	Bachelor	L, CE	6	With others; My part: Nature conservation
2008	General subjects in ecology and evolution	Bachelor	L	4	With others; My part: Biogeography

*Number of hours taught by me in the course

b. Research students

Ben-Gurion University

Master Students:

Mr. Aharon Shlomi. M.Sc. 2013 – 2015. Project title: ‘Species richness, geographic distributions and taxonomical revision of the genus *Artema* (Pholcidae, Araneae). Supervision with Prof. Y. Lubin & Dr. E. Gavish.

Ms. Levine Natalie. MA. 2015 – presence. Project title: ‘The effect of forest management on the distribution of *Sternbergia clusiana*’. Supervision with Dr. I. Giladi.

PhD Students:

Ms. Arroyave Martinez Maria Fernanda. PhD. 2014 – present. Project title: ‘Inter- and Intra-specific plant interactions under abiotic stress: experimental approach with three model species’.

Mr. Ben-Zvi Gilad. PhD. 2014 – presence. Project title: ‘Seed dispersal of *Sternbergia clusiana* – geographic mosaic of ant-plant interactions’. Supervision with Dr. I. Giladi.

Ms. Schindler Bracha. PhD. 2015 – presence. Title: ‘Effects of microhabitat heterogeneity on plant and arthropos communities on vegetated roofs’. Supervision with Prof. Leon Blaustein; Student affiliation is Haifa University.

Mr. Fabian Slowik. PhD. 2016 – presence. Title: ‘Population- and community-level plant trait variability in a changing arid environment, the case study of *Anastatica hierochuntica*’.

Post-Doctoral fellows:

Dr. Jayanti Mukherjee. Post-Doc. 2014 – 2015. Project title: ‘Relative importance of intra- and inter-specific variation in functional traits for successful coexistence in arid environments: an experimental approach’

Tübingen University, Germany

PhD and Master/diploma students must have a second supervisor when supervised by a research assistant, according to the rules in Tübingen University. Therefore, all students were officially jointly supervised (name of second supervisor is indicated).

Post-Doctoral fellows:

Dr. Qu Hongchun. Post-Doc. 2012 – 2013. Project topic: ‘Shared pollination and its effect on indirect interactions in a plant community – a modelling approach’.

PhD Students:

- Ms. Rysavy Anne. PhD. 2010 – 2013. Project topic: ‘Biotic and a-biotic effects on species interactions in a water-stressed ecosystem: the effect of grazing and precipitation on the establishment and growth of *Sarcopoterium spinosum*’. Supervision with K. Tielbörger (TÜ) and M. Strenberg (Tel-Aviv U. Israel).
- Mr. Hanoteaux Sven. PhD. 2009 – 2014. Project topic: ‘The role of facilitative indirect interactions on plant communities’. Supervision with K. Tielbörger (TÜ).

Master/Diploma Students:

- Ms. Schloz-Murer Daniela. Diploma (equal to Master). 2006. Project topic: ‘Effect of small scale disturbances on European grassland community dynamics along a productivity gradient: molehills as a case study’. Supervision with K. Tielbörger (TÜ) and P. Edwards (ETH, Zürich).
- Mr. Schmid Alexander. Diploma (equal to Master). 2007. Project topic: ‘Die Dynamik europäischer Wiesengemeinschaften entlang eines Produktivitätsgradienten – der Einfluss individueller Wechselbeziehungen, Düngung und der Artenherkunft’ (Changes in species interactions along a nutrient gradient in a European grassland community). Supervision with Prof. K. Tielbörger (TÜ) and R. Hampp (TÜ).
- Ms. Horstmann Heike. Diploma (equal to Master). 2008. Project topic: ‘Is there facilitation in central European grasslands? a search for patterns’. Supervision with K. Tielbörger (TÜ).
- Ms. Mund Eva Eliana. Diploma (equal to Master). 2010. Project topic: ‘Landuse effects on Carbon stocks in Brazilian Cerrado’. Supervision with K. Tielbörger (TÜ), and K.M. Wantzen (Konstanz U., Germany)
- Ms. Seyfang Hannah. Diploma (equal to Master). 2010. Project topic: ‘The role of facilitative indirect interactions on plant communities – shared pollinator service as a case study’. Supervision with K. Tielbörger (TÜ).
- Ms. Hoch Eva Maria. Diploma (equal to Master). 2011. Project topic: ‘The role of community structure on the success of shared pollinator service’. Supervision with K. Tielbörger (TÜ).
- Ms. Hofmann Elena. Diploma (equal to Master). 2012. Project topic: ‘The effect of cattle grazing intensity on patch dependent carbon and nitrogen fluxes in a species rich grassland’. Supervision with J. Isselstein (Göttingen U.) and K. Tielbörger (TÜ).
- Ms. Hirth Astrid. Diploma (equal to Master). 2011-present. Project topic: ‘Combined disturbances and their effect on grassland diversity – effect of molehills and land management’. Supervision with K. Tielbörger (TÜ).
- Ms. Birkhold Franziska. M.Sc. 2012-2014. Project topic: ‘Shifts in reproduction strategies as a function of pollination service choices’. Supervision with K. Tielbörger (TÜ)

Ms. Caceres Castellanos Yolanda. one year project. 2013. Project topic: ‘Developing a conceptual approach to assess the role of shared pollination on plant biodiversity in fragmented landscapes’.

Lectures and presentations at Meetings and invited seminars

a. Invited plenary lectures at conferences/meetings

2015 – The effect of climate change on terrestrial ecosystems – Lessons from the eastern Mediterranean. Energy, Water, Climate Change – Building bridges between Europe and MENA and between generations, Young Scholars’ Forum. The Cyprus Institute, Nicosia, Cyprus.

b. Presentation of papers at conferences/meetings (oral or poster)

2016 – Seifan M. Is the effect of climate change less dramatic than expected? Lessons from a study of shrub seedlings. PopBio – 29th conference of the Plant Population Biology section of the Ecological Society of Germany, Austria and Switzerland, Trebon, Czech Republic. (Lecture)

2016 – Ben-Zvi G., **M. Seifan**, I. Giladi. Local versus regional: are wide geographic gradients the main influence on the demography of *Sternbergia clusiana* populations? PopBio – 29th conference of the Plant Population Biology section of the Ecological Society of Germany, Austria and Switzerland, Trebon, Czech Republic. (Lecture)

2016 – Arroyave Martinez, M.F., S. Rachmilevitch, S. Barak, **M. Seifan**. Intra- and Inter-specific plant interactions: an experimental approach using three model species. ? PopBio – 29th conference of the Plant Population Biology section of the Ecological Society of Germany, Austria and Switzerland, Trebon, Czech Republic. (Poster).

2015 – Wedergärtner R., J. Ray Mukhersee, **M. Seifan**. Modelling the influence of soil parameters on spatial pattern of the real rose of Jericho in the Negev desert. PopBio – 28th conference of the Plant Population Biology section of the Ecological Society of Germany, Austria and Switzerland, Tübingen, Germany. (Poster)

2014 – **Seifan M.** How foraging decisions of pollinators may shape plant community structure. BES-SFE (the joint annual meeting of the British & French ecological societies), Lille, France. (Lecture)

2013 – **Seifan M.**, Hoch E.M., Hanotaux S., K. Tielbörger. Shifts in the outcome of shared pollination services are affected by the density and spatial pattern of an attractive neighbor. The

26th annual conference of the of the plant population biology section, GfÖ, Tartu, Estonia. (Lecture).

2013 – Rysavy A., **Seifan M.**, Sternberg M, K. Tielbörger. Indirect effects of grazing on the dynamics of a common Mediterranean dwarf shrub in a water stressed ecosystem. The 26th annual conference of the of the plant population biology section, GfÖ, Tartu, Estonia. (Lecture).

2013 – Hoch E.M., **Seifan M.**, K. Tielbörger. Distribution patterns as indicator for plant-plant interactions in metal hyperaccumulating *Noccaea caerulescens*. The 26th annual conference of the of the plant population biology section, GfÖ, Tartu, Estonia (Poster).

2012 – **Seifan M.**, T. Seifan, K. Schiffers, F. Jeltsch, K. Tielbörger. Multiple trait response and disturbance characteristics – going beyond simple tradeoffs. The 25th annual conference of the of the plant population biology section, GfÖ, Zürich, Switzerland. (Lecture).

2012 – Rysavy A., **M. Seifan**, M. Sternberg, K. Tielbörger. Identifying key mechanisms influencing the fate of a common Mediterranean dwarf shrub under changing climate. The 25th annual conference of the of the plant population biology section, GfÖ, Zürich, Switzerland. (Lecture).

2011 – **Seifan M.**, Hoch E.M., Hanoteaux S., K. Tielbörger. Plant community structure helps manipulating shared pollination services – the role of species density and spatial pattern. The 24th annual conference of the of the plant population biology section, GfÖ, Oxford, Great Britain (Poster).

2011 – Tielbörger K., Joshi S., Wegerer R., **M. Seifan**. Cherchez la Femme – is invasiveness maternally inherited? The 24th annual conference of the of the plant population biology section, GfÖ, Oxford, Great Britain (Lecture).

2011 – Hanoteaux S., E.M. Hoch, Tielbörger K., **M. Seifan**. Density and spatial distribution of an attractive species: effects on plant-pollinator interaction structure in grasslands? The 24th annual conference of the of the plant population biology section, GfÖ, Oxford, Great Britain (Lecture).

2010 – Hoch E.M., Hanoteaux S., **Seifan M.**, K. Tielbörger. Density or spatial patterns of inflorescences – what influences the success of shared-pollination most? The 40th annual conference of the Ecological Society of Germany, Austria and Switzerland (GfÖ). Giessen, Germany (Poster).

2010 – **Seifan M.**, Schloz-Murer D., K. Tielbörger. The role of molehill disturbances in maintaining high grassland diversity under different management regimes (field results). The 7th

international meeting of the European dry grassland working group (EDGG), Smolenice, The Slovak Republic. (Lecture).

2010 – Hanoteaux S., **Seifan M.**, K. Tielbörger. The attractiveness of your neighbors – when does it matters? The 7th international meeting of the European dry grassland working group (EDGG), Smolenice, The Slovak Republic. (Lecture).

2010 – **Seifan M.**, Schloz-Murer D., K. Tielbörger. The role of molehill disturbances in maintaining high grassland diversity under different management regimes (model implications). The 23rd annual conference of the plant population biology section, GfÖ, Nijmegen, The Netherlands. (Lecture).

2010 – Hanoteaux S., **Seifan M.**, K. Tielbörger. The attractiveness of your neighbors – when does it matters? The 23rd annual conference of the plant population biology section, GfÖ, Nijmegen, The Netherlands. (Poster).

2010 – **Seifan M.**, Schloz-Murer D., K. Tielbörger. A botanical view on the role of molehill disturbances in maintaining high grassland diversity under different management regimes. The 7th international meeting of the European dry grassland working group (EDGG), Smolenice, Slovak Republic. (Lecture).

2010 – Hanoteaux S., **Seifan M.**, K. Tielbörger. The attractiveness of your neighbours: when does it matter? The 23rd annual conference of the plant population biology section, GfÖ, Nijmegen, The Netherland. (Lecture).

2010 – **Seifan M.**, Schloz-Murer D., K. Tielbörger. The role of molehill disturbances in maintaining high grassland diversity under different management regimes. The 23rd annual conference of the plant population biology section, GfÖ, Nijmegen, The Netherland. (Lecture).

2010 – Hanoteaux S., **Seifan M.**, K. Tielbörger. The attractiveness of your neighbours: when does it matter? The 23rd annual conference of the plant population biology section, GfÖ, Nijmegen, The Netherland. (Poster).

2009 – Seyfang, H., **Seifan M.**, Hanoteaux S., K. Tielbörger. Potential effects of shared pollinators on grassland composition along a productivity gradient – first step: identification of potential magnet species. The 6th international meeting of the European dry grassland working group (EDGG), Halle (Saale), Germany. (Poster).

2009 – Hanoteaux S., **Seifan M.**, K. Tielbörger. Effects of spatial patterns on a less attractive species success in grasslands. The 6th international meeting of the European dry grassland working group (EDGG), Halle (Saale), Germany. (Lecture).

2009 – Hanoteaux S., **Seifan M.**, K. Tielbörger. Effects of spatial patterns on a less attractive species success: a simple modeling approach. The 22nd annual conference of the plant population biology section, GfÖ, Bern, Switzerland. (Poster)

2009 – **Seifan M.**, Hanoteaux S., K. Tielbörger. Effects of indirect facilitation and environmental conditions on community structure – shared pollinators as a case study. The 22nd annual conference of the plant population biology section, GfÖ, Bern, Switzerland. (Poster)

2009 – **Seifan M.**, Hanoteaux S., K. Tielbörger. Effects of facilitative indirect interactions and environmental conditions on community structure – facilitation via shared pollinators as a case study. BSE annual symposium facilitation in plant communities, Aberdeen, UK (Poster).

2008 – **Seifan M.**, Schloz-Murer D., K. Tielbörger. Effect of molehill disturbances on grassland composition along a productivity gradient. The 21st annual conference of the Plant population biology section, GfÖ. Luxembourg city, Luxembourg (Lecture).

2008 – Tielbörger K., **Seifan M.**, Sternberg M. Jeltsch F, Köchy M, Malkinson D., Kigel H., Fleischer A., Prasse R., Liancourt P., J. Metz. Response of manmade ecosystems to climate change: an integrated approach exemplified for semi-arid environments. 4th national colloquium, handling of climate change. Bad-Honnef, Germany (Poster).

2006 – Werner Y.L., Montgomery L.G., **Seifan M.**, J.C. Saunders. Some determinants of auditory sensitivity as seen in lizards as a model: effects of age versus effects of size. Published abstract in: *Journal of basic and clinical physiology and pharmacology* 17: 211.

2001 – Werner Y.L., Iqic P.G., **Seifan M.**, J.C. Saunders. The middle-ear transfer function of Gekkonomorph lizards depends on body size. Published abstract in *Journal of basic and clinical physiology and pharmacology* 12: 169.

1998 – **Katz, M.** and Y. Sapir. Diversity and distribution of molluscs in the coral reserve, Eilat, Israel. Diversity and distribution of molluscs in the coral reserve, Eilat. *Israel Journal of Zoology* 44(1): 77

d. Seminar presentations at universities

2017 – How plant animal interactions can change community dynamics – lessons from pollination and seed dispersal. The department of Botany, Ecology and Plant physiology, University of La Laguna, Tenerife, Spain.

2017 – Disturbances as a force shaping communities. The department of Botany, Ecology and Plant physiology, University of La Laguna, Tenerife, Spain.

2015 – Spatial aspects of plant-animal interactions – implications for plant communities. Department of Evolutionary & Environmental Biology, University of Haifa.

2014 - On Bees, butterflies and flowers: how plant-pollinator interactions help shaping community structure. Joint Seminar of the Agroecology and Entemology departments, The Faculty of Agriculture, Food & Environment, The Hebrew University of Jerusalem., Rehovot.

2014 – Plant-pollinator interactions and their effects on community dynamics. Department of Ecology, Evolution and Behavior, The Hebrew University of Jerusalem.

2013 – Plant, Pollinators and everything about them – how plant-pollinator interactions affects the dynamics of plant communities. The Department of Biology and Environmental Sciences, University of Haifa faculty of Natural Sciences at Oranim.

2013 – On Bees, butterflies and flowers: how plant-pollinator interactions help shaping community structure (In Hebrew). The Department of Zoology, Tel-Aviv University.

2013 – On Bees, butterflies and flowers: how plant-pollinator interactions help shaping community structure. Joint seminar of Mitrani Department of Desert Ecology & Life Science Department, Ben-Gurion University of the Negev.

2011 – Complex plant interactions and their effect on community structure in space and time. The faculty of Agricultural Sciences, University of Hehenheim, Germany.

2011 – How complex can it be? Insights into plant community structure. The Faculty of Agriculture, Food and Environment, The Hebrew University of Jerusalem, Rehovot, Israel.

2010 – Plant-plant interactions in a varying world – the special role of disturbances. Kolloquium Störungsökologie, Bayreuth University, Germany.

Research grants

2010 – 2013. Deutsche Forschungsgemeinschaft (DFG) Research grant SE1840/1-1. Seifan M. (PI); Tielbörger K. Subject: ‘The role of indirect interactions via shared pollinators in shaping grassland communities along productivity gradients’. Research grand including a doctoral fellowship.

2011 – 2014. Deutsche Forschungsgemeinschaft (DFG) Research grant TI338/10-1 within the SPP 1529 section, Adaptomics. Seifan M. (PI) and Tielbörger K. (PI). Subject: ‘The role of biotic interactions in determining phenotypic and genotypic variation in metal hyperaccumulation and hypertolerance in two model Brassicaceae species’. Research grant including a doctoral student fellowship and a scientific technician salary.

2012 – 2013. The Alexander von Humboldt International climate protection fellowship. Visiting scientist fellowship. Seifan M. (PI), Caceres Castellanos Y. Subject: ‘Developing a conceptual approach to assess the role of shared pollination on plant biodiversity in fragmented landscapes’.

2014 – presence. Koshland Foundation for Support of Interdisciplinary Research in Combating Desertification. Seifan M. (PI), S. Barak, S. Rachmilevitch. Subject: Do neighboring plants interfere with stress tolerance ability? An experimental model for species coexistence in arid environments.

2015 –Jewish National Fund (KKL). Itamar Giladi (PI) & M. Seifan. Subject: Effect of forest management on the distribution of *Sternbergia clusiana*. (grant accepted but due to juristic dispute with the Univesity not received).

2016 – 2019 – State of Lower Saxony and Volkswagen Fellowship Grant 11-76251-99-7/16. M. Seifan (Israeli PI) and K. Meyer (German PI). Subject: Population and community level plant trait variability in changing arid environments.

2017 – presence. Koshland Foundation for Support of Interdisciplinary Research in Combating Desertification. Seifan M. (PI), V. Tzin. Subject: Understanding the combined visual and chemical signals governing plant-pollinator interactions in desert communities.