

Curriculum vitae *Markus Fischer*

Date of birth 20 June 1962
Nationality German and Swiss
Affiliation *Institute of Plant Sciences, University of Bern
Altenbergrain 21, 3013 Bern, Switzerland
Phone +41 31 631 4943, Secretary 4911, Fax 4942*
E-mail markus.fischer@ips.unibe.ch



Fields of Expertise

Drivers and ecosystem-service consequences of biodiversity change
Ecology and evolution of rare and invasive species
Conservation biology, mountain ecology
Work at the science-society and science-policy interfaces

Employment

Since 2007 Full Professor of Plant Ecology, Institute of Plant Sciences, University of Bern and (since 2010) Director of the Botanical Garden of the University of Bern

Since 2012 Director, Institute of Plant Sciences, University of Bern
Since 2012 Guest researcher, Senckenberg Biodiversity and Climate Institute, Frankfurt, Germany
2008-2011 Head, Biology Department, University of Bern
2007-2012 Guest Professor at the University of Potsdam, Germany
2003-2007 Full Professor of Botany and Community Ecology, Institute of Biochemistry and Biology, and Director of the Botanical Garden, University of Potsdam
1996-2003 Main Assistant, Institute of Environmental Sciences, Univ. of Zurich, Switzerland
1993-1996 Research Associate, Botanical Institute, University of Basel, Switzerland
1990 Research Associate, Department of Mechanical Engineering, University of Maryland, College Park, U.S.A.

Education

1982-1989 Studies and MSc Diploma in Physics, Technical University Munich, Germany
1990-1992 Studies and BSc in Biology, University of Basel, Switzerland
1993-1996 PhD in Botany, Institute of Botany, University of Basel, Switzerland 2008-2001
Venia legendi in Environmental Sciences, University of Zurich; Switzerland

Services and Awards

2015-2018 Co-chair, IPBES Regional assessment on biodiversity and ecosystem services for Europe and Central Asia

Since 2012 Member of Swiss Delegation to founding meeting in Panama and all IPBES plenaries
Participant of IPBES expert group meetings on IPBES conceptual framework, scoping of regional assessment and global IPBES assessments
Host of Technical Support Unit for IPBES Regional assessment on biodiversity and ecosystem services for Europe and Central Asia
Co-organised 5 IPBES-related author meetings and workshops
>10 presentations at various IPBES-related meetings and workshops

2017 Co-chair of Future Earth committee of the Swiss Academy of Natural Sciences
2016, 2017 Highly Cited Researcher (<http://hcr.stateofinnovation.com/>)
Since 2015 Chair, Global Mountain Biodiversity Assessment
Since 2013 Scientific head, Alpine Botanical Garden Schynige Platte, Switzerland
Since 2012 Member, National Research Council, Swiss National Science Foundation
Since 2011 President, Science-Policy Forum Biodiversity, Swiss Academy of Natural Sciences
2009-2011 President, Swiss Botanical Society
Since 2006 Speaker, Exploratories for Long-term and Large-scale Biodiversity Research
1998 John L. Harper Young Investigator's Prize, British Ecological Society

Teaching and Mentoring

- > 40 supervised diploma/masters and PhD students; 5 Fischer lab alumni are now professors
- Courses taught: plant ecology, population biology, community ecology, conservation biology, experimental design and statistical analysis for ecologists, scientific writing practice, conservation and population genetics, general botany, systematic botany, including practicals, tutorials, and field courses.
- > 170 lectures at conferences and universities

Selected research projects

2012 – 2021	Ex-situ conservation and reintroduction of highly endangered plant species (Swiss Federal Office of the Environment)
2010 – 2019	The Mechanisms underlying plant community productivity, stability and assembly in the Jena Experiment (within research unit 456, DFG; involved since 2005)
2010 – 2019	Plant diversity and performance: communities, populations, ecological genetics (with Andreas Hemp, within DFG research unit KiLi at Kilimanjaro, Tanzania)
2010 – 2015	The role of pollinator diversity for plant genetic diversity (part of STEP (Status of European Pollinators), a framework 7 consortium on pollinator biodiversity funded by EU)
2010 – 2015	The role of biodiversity for multiple ecosystem processes (part of FUNDIV, a framework 7 consortium on forest biodiversity funded by EU)
2007 – 2016	The role of genetic diversity in the context of the species diversity – ecosystem functioning relationship (with Walter Durka, Biodiversity-Ecosystem Functioning China, DFG)
2006 – 2020	Large-scale and long-term exploratories for functional biodiversity research (DFG priority program, speaker)

Memberships

European Society of Evolutionary Biology, Society for Ecology, Swiss Botanical Society (President 2009-2011), Forum Biodiversity of the Swiss Academy of Sciences (President since 2011)

Research impact statistics

Google Scholar statistics, accessed 1 Dec. 2017: Sum of the times cited: 13039 (h index: 59; i10 index: 172)
ResearcherID: C-6411-2008, accessed 1 Dec. 2017: 216 ISI-listed publications; 8581 citations (h index: 49)
Highly Cited Researcher 2016, 2017

Ten relevant publications (full list see following pages and <https://scholar.google.com/citations?user=IXhKkcAAAAAJ&hl=en>)

- Gossner MM et al. 2016. Land-use intensification causes multitrophic homogenization of grassland communities. *Nature* 540: 266-269
- Peters MK et al. 2016. Predictors of elevational biodiversity gradients change from single taxa to the multi-taxa community level. *Nature Communications* 7: 13736
- Liang JJ et al. 2016. Positive biodiversity-productivity relationship predominant in global forests. *Science* 354: aaf8957
- van der Plas F et al. 2016. Jack-of-all-trades effects drive biodiversity–ecosystem multifunctionality relationships in European forests. *Nature Communications* 7:11109
- van der Plas F et al. 2016. Biotic homogenization can decrease landscape-scale forest multifunctionality. *Proceedings of the National Academy of Sciences of the U.S.A.* 7:11109
- Soliveres S et al. 2016. Biodiversity at multiple trophic levels is needed for ecosystem multifunctionality. *Nature* 536: 456-459
- Allan E et al. 2015. Land use intensification alters ecosystem multifunctionality via loss of biodiversity and changes to functional composition. *Ecology Letters* 18: 834-843
- Crowther et al. 2015. Mapping tree density at a global scale. *Nature* 525: 201-205
- Diaz S et al. 2015. The IPBES Conceptual Framework — connecting nature and people. *Current Opinion in Environmental Sustainability*: 1–16
- Fischer M. et al. 2015. Etat de la biodiversité en Suisse en 2014 (State of Biodiversity in Switzerland 2014). *Forum Biodiversité Suisse, Berne*. 92 pages, relié. French: ISBN 978-3-033-04985-7; German: ISBN 978-3-033-04984-0)

1) Peer-reviewed articles (original contributions)

- Dostal, Petr; **Fischer, Markus**; Chytrý, Milan; et al. (2017) No evidence for larger leaf trait plasticity in ecological generalists compared to specialists. *Journal of Biogeography* 44: 511-521, DOI: 10.1111/jbi.12881
- Felipe-Lucia, María; Santiago Soliveres, Caterina Penone, **Markus Fischer**, Eric Allan (2017) Role of biodiversity in mediating land use intensity–ecosystem services relationships in the forests and grasslands of the Biodiversity Exploratories. *F1000Research* 6
- Gilhaus, Kristin; Boch, Steffen; **Fischer, Markus**; Hoelzel, Norbert; Kleinebecker, Till; Prati, Daniel; Rupprecht, Denise; Schmitt, Barbara; Klaus, Valentin H. (2017). Grassland management in Germany: effects on plant diversity and vegetation composition. *Tuexenia*, 37: 379-397. doi: 10.14471/2017.37.010
- Hahn, Christoph Z.; Michalski, Stefan G.; **Fischer, Markus**; Durka, Walter (2017). Genetic diversity and differentiation follow secondary succession in a multi-species study on woody plants from subtropical China. *Journal of Plant Ecology*, 10(1): 213-221. 10.1093/jpe/rtw054
- Hahn, Christoph Z.; Niklaus, Pascal A.; Bruelheide, Helge; Michalski, Stefan G.; Shi, Miaomiao; Yang, Xuefei; Zeng, Xueqin; **Fischer, Markus**; Durka, Walter (2017). Opposing intraspecific vs. interspecific diversity effects on herbivory and growth in subtropical experimental tree assemblages. *Journal of Plant Ecology*, 10(1): 242-251. doi: 10.1093/jpe/rtw098
- Hemp, Andreas; Zimmermann, Reiner; Remmele, Sabine; Pommer, Ulf; Berauer, Bernd; Hemp, Claudia; **Fischer, Markus** (2017). Africa's highest mountain harbours Africa's tallest trees. *Biodiversity and conservation*, 26(1): 103-113. doi: 10.1007/s10531-016-1226-3
- Mollel, Neduvoto Piniel; **Fischer, Markus**; Hemp, Andreas (2017) Usable wild plant species in relation to elevation and land use at Mount Kilimanjaro, Tanzania. *Alpine Botany* 127: 145-154, doi: 10.1007/s00035-017-0187-9
- Pena, Rodica; Lang, Christa; Lohaus, Gertrud; Boch, Steffen; Schall, Peter; Schöning, Ingo; Ammer, Christian; **Fischer, Markus**; Polle, Andrea (2017). Phylogenetic and functional traits of ectomycorrhizal assemblages in top soil from different biogeographic regions and forest types. *Mycorrhiza*, 27(3): 233-245. 10.1007/s00572-016-0742-z
- Ratcliffe, Sophia; Wirth, Christian; Jucker, Tommaso; van der Plas, Fons; Scherer-Lorenzen, Michael; Verheyen, Kris; Allan, Eric; Benavides, Raquel; Bruelheide, Helge; Ohse, Bettina; Paquette, Alain; Ampoorter, Evy; Bastias, Cristina C.; Bauhus, Jürgen; Bonal, Damien; Bouriaud, Olivier; Bussotti, Filippo; Carnol, Monique; Castagnyrol, Bastien; Češko, Ewa; ... (2017). Biodiversity and ecosystem functioning relations in European forests depend on environmental context. *Ecology Letters*, 20(11): 1414-1426. 10.1111/ele.12849
- Roeder, Anna; Schweingruber, Fritz Hans; **Fischer, Markus**; Roscher, Christiane (2017). Growth ring analysis of multiple dicotyledonous herb species—A novel community-wide approach. *Basic and applied ecology*, 21: 23-33. 10.1016/j.baae.2017.05.001
- Rottstock, Tanja; Kummer, Volker; **Fischer, Markus**; Joshi, Jasmin (2017). Rapid transgenerational effects in *Knautia arvensis* in response to plant community diversity. *Journal of Ecology*, 105(3): 714-725. 10.1111/1365-2745.12689
- Schmidt, Lisanna; **Fischer, Markus**; Schmid, Bernhard; Oja, Tatjana (2017). Despite admixing two closely related *Carex* species differ in their regional morphological differentiation. *Plant systematics and evolution*, 303(7): 901-914. 10.1007/s00606-017-1420-0
- Scholten, Thomas; Goebes, Philipp; Kühn, Peter; Seitz, Steffen; Assmann, Thorsten; Bauhus, Jürgen; Bruelheide, Helge; Buscot, Francois; Erfmeier, Alexandra; **Fischer, Markus**; Härdtle, Werner; He, Jin-Sheng; Ma, Keping; Niklaus, Pascal A.; Scherer-Lorenzen, Michael; Schmid, Bernhard; Shi, Xuezheng; Song, Zhengshan; von Oheimb, Goddert; Wirth, Christian; ... (2017). On the combined effect of soil fertility and topography on tree growth in subtropical forest ecosystems—a study from SE China. *Journal of Plant Ecology*, 10(1): 111-127. 10.1093/jpe/rtw065
- Trogisch S, Schuldt A, Bauhus J, et al. (2017) Toward a methodical framework for comprehensively assessing forest multifunctionality. *Ecol Evol.* 2017;00:1–23. <https://doi.org/10.1002/ece3.3488>
- van der Plas, F., Ratcliffe, S., Ruiz-Benito, P., Scherer-Lorenzen, M., Verheyen, K., Wirth, C., Zavala, M. A., Ampoorter, E., Baeten, L., Barbaro, L., Bastias, C. C., Bauhus, J., Benavides, R., Benneter, A., Bonal, D., Bouriaud, O., Bruelheide, H., Bussotti, F., Carnol, M., Castagnyrol, B., Charbonnier, Y., Cornelissen, J. H. C., Dahlgren, J., Checko, E., Coppi, A., Dawud, S. M., Deconchat, M., De Smedt, P., De Wandeler, H., Domisch, T., Finér, L., Fotelli, M., Gessler, A., Granier, A., Grossiord, C., Guyot, V., Haase, J., Hättenschwiler, S., Jactel, H., Jaroszewicz, B., Joly, F.-X., Jucker, T., Kambach, S., Kaendler, G., Kattge, J., Koricheva, J., Kunstler, G., Lehtonen, A., Liebergesell, M., Manning, P., Milligan, H., Müller, S., Muys, B., Nguyen, D., Nock, C., Ohse, B., Paquette, A., Peñuelas, J., Pollastrini, M., Radoglou, K., Raulund-Rasmussen, K., Roger, F., Seidl, R., Selvi, F., Stenlid, J., Valladares, F., van Keer, J., Vesterdal, L., **Fischer, M.**, Gamfeldt, L. and Allan, E. (2017). Continental mapping of forest ecosystem functions reveals a high but unrealised potential for forest multifunctionality. *Ecol Lett.* doi:10.1111/ele.12868
- van der Plas, F., van Klink, R., Manning, P., Olf, H. and **Fischer, M.** (2017) Sensitivity of functional diversity metrics to sampling intensity. *Methods Ecol Evol.* 8: 1072–1080. doi:10.1111/2041-210X.12728
- Weisser, Wolfgang W; Christiane Roscher, Sebastian T Meyer, Anne Ebeling, Guangjuan Luo, Eric Allan, Holger Beßler, Romain L Barnard, Nina Buchmann, François Buscot, Christof Engels, Christine Fischer, **Markus Fischer**, Arthur Gessler, Gerd Gleixner, Stefan Halle, Anke Hildebrandt, Helmut Hillebrand, Hans de Kroon, Markus Lange, Sophia Leimer, Xavier Le Roux, Alexandru Milcu, Liesje Mommer, Pascal A Niklaus, Yvonne Oelmann, Raphael Proulx, Jacques

- Roy, Christoph Scherber, Michael Scherer-Lorenzen, Stefan Scheu, Teja Tschamtko, Michael Wachendorf, Cameron Wagg, Alexandra Weigelt, Wolfgang Wilcke, Christian Wirth, Ernst-Detlef Schulze, Bernhard Schmid, Nico Eisenhauer (2017) Biodiversity effects on ecosystem functioning in a 15-year grassland experiment: Patterns, mechanisms, and open questions. *Basic and Applied Ecology* 23:1-73
- Zeng, Xueqin; Durka, Walter; **Fischer, Markus** (2017) Species-specific effects of genetic diversity and species diversity of experimental communities on early tree performance. *Journal of Plant Ecology* 10: 252-258, doi: 10.1093/jpe/rtw108
- Zeng, Xueqin; Durka, Walter; Welk, Erik; **Fischer, Markus** (2017). Heritability of early growth traits and their plasticity in 14 woody species of Chinese subtropical forest. *Journal of Plant Ecology*, 10(1): 222-231. doi: 10.1093/jpe/rtw086
- Blüthgen, Nico; Simons, Nadja K.; Jung, Kirsten; Prati, Daniel; Renner, Swen C.; Boch, Steffen; Fischer, Markus; Hölzel, Norbert; Klaus, Valentin H.; Kleinebecker, Till; Tschapka, Marco; Weisser, Wolfgang W.; Gossner, Martin M. (2016). Land use imperils plant and animal community stability through changes in asynchrony rather than diversity. *Nature communications*, 7: 10697. doi: 10.1038/ncomms10697
- Boch, Steffen; Berlinger, Matthias; Prati, Daniel; et al. (2016) Is fern endozoochory widespread among fern-eating herbivores? *Plant Ecology* 217: 13-20, doi: 10.1007/s11258-015-0554-9
- Boch, Steffen; Prati, Daniel; **Fischer, Markus** (2016) Gastropods slow down succession and maintain diversity in cryptogam communities. *Ecology* 97: 2184-2191, doi: 10.1002/ecy.1498
- Boch, Steffen; Prati, Daniel; Schöning, Ingo; **Fischer, Markus** (2016). Lichen species richness is highest in non-intensively used grasslands promoting suitable microhabitats and low vascular plant competition. *Biodiversity and Conservation*, 25(2): 225-238. doi: 10.1007/s10531-015-1037-y
- Dostál, Petr; **Fischer, Markus**; Chytrý, Milan; Prati, Daniel (2016). No evidence for larger leaf trait plasticity in ecological generalists compared to specialists. *Journal of Biogeography*, 44(3): 511-521. doi: 10.1111/jbi.12881
- Dostal, Petr; **Fischer, Markus**; Prati, Daniel (2016) Phenotypic plasticity is a negative, though weak, predictor of the commonness of 105 grassland species. *Global Ecology and Biogeography* 25: 464-474. doi: 10.1111/geb.12429
- Gossner, Martin M.; Lewinsohn, Thomas M.; Kahl, Tiemo; Grassein, Fabrice; Boch, Steffen; Prati, Daniel; Birkhofer, Klaus; Renner, Swen C.; Sikorski, Johannes; Wubet, Tesfaye; Arndt, Hartmut; Baumgartner, Vanessa; Blaser, Stefan; Blüthgen, Nico; Börschig, Carmen; Buscot, Francois; Diekötter, Tim; Jorge, Leonardo Ré; Jung, Kirsten; Keyel, Alexander C.; ... (2016). Land-use intensification causes multitrophic homogenization of grassland communities. *Nature*, 540(7632): 266-269. doi: 10.1038/nature20575
- Klaus, Valentin H.; Hölzel, Norbert; Prati, Daniel; Schmitt, Barbara; Schöning, Ingo; Schruppf, Marion; Solly, Emily F.; Hänsel, Falk; **Fischer, Markus**; Kleinebecker, Till (2016). Plant diversity moderates drought stress in grasslands: Implications from a large real-world study on 13C natural abundances. *Science of the total environment*, 566-567: 215-222. doi: 10.1016/j.scitotenv.2016.05.008
- Klaus, Valentin H.; Schäfer, Deborah; Kleinebecker, Till; **Fischer, Markus**; Prati, Daniel; Hölzel, Norbert (2016). Enriching plant diversity in grasslands by large-scale experimental sward disturbance and seed addition along gradients of land-use intensity. *Journal of Plant Ecology*, rtw062. doi: 10.1093/jpe/rtw062
- Liang, J.; Crowther, T. W.; Picard, N.; Wiser, S.; Zhou, M.; Alberti, G.; Schulze, E.-D.; McGuire, A. D.; Bozzato, F.; Pretzsch, H.; de-Miguel, S.; Paquette, A.; Herault, B.; Scherer-Lorenzen, M.; Barrett, C. B.; Glick, H. B.; Hengeveld, G. M.; Nabuurs, G.-J.; Pfautsch, S.; Viana, H.; ... (2016). Positive biodiversity-productivity relationship predominant in global forests. *Science*, 354:6309. doi: 10.1126/science.aaf8957
- Meyer, Sebastian T.; Ebeling, Anne; Eisenhauer, Nico; Hertzog, Lionel; Hillebrand, Helmut; Milcu, Alexandru; Pompe, Sven; Abbas, Maike; Bessler, Holger; Buchmann, Nina; De Luca, Enrica; Engels, Christof; **Fischer, Markus**; Gleixner, Gerd; Hudewenz, Anika; Klein, Alexandra-Maria; de Kroon, Hans; Leimer, Sophia; Loranger, Hannah; Mommer, Liesje; ... (2016). Effects of biodiversity strengthen over time as ecosystem functioning declines at low and increases at high biodiversity. *Ecosphere*, 7(12), e01619. doi: 10.1002/ecs2.1619
- Peters, Marcell K.; Hemp, Andreas; Appelhans, Tim; Behler, Christina; Classen, Alice; Detsch, Florian; Ensslin, Andreas; Ferger, Stefan W.; Frederiksen, Sara B.; Gebert, Friederike; Haas, Michael; Helbig-Bonitz, Maria; Hemp, Claudia; Kindeketa, William J.; Mwangomo, Ephraim; Ngeresa, Christine; Otte, Insa; Röder, Juliane; Rutten, Gemma; Schellenberger Costa, David; ... (2016). Predictors of elevational biodiversity gradients change from single taxa to the multi-taxa community level. *Nature communications*, 7(13736), S. 13736. doi: 10.1038/ncomms13736
- Prati, Daniel; Peintinger, Markus; **Fischer, Markus** (2016) Genetic composition, genetic diversity and small-scale environmental variation matter for the experimental reintroduction of a rare plant. *Journal of Plant Ecology* 9: 805-813, DOI: 10.1093/jpe/rtv067
- Purahong, Witoon; Durka, Walter; **Fischer, Markus**; Dommert, Sven; Schöps, Ricardo; Buscot, François; Wubet, Tesfaye (2016). Tree species, tree genotypes and tree genotypic diversity levels affect microbe-mediated soil ecosystem functions in a subtropical forest. *Scientific Reports*, 6(36672): 36672. doi: 10.1038/srep36672
- Rutten, Gemma; Prati, Daniel; Hemp, Andreas; et al. (2016) Plant-soil feedback in East-African savanna trees. *Ecology* 97: 294-301, doi: 10.1890/15-1316.1
- Soliveres, Santiago; Manning, Peter; Prati, Daniel; Gossner, Martin M.; Alt, Fabian; Arndt, Hartmut; Baumgartner, Vanessa; Binkenstein, Julia; Birkhofer, Klaus; Blaser, Stefan; Blüthgen, Nico; Boch, Steffen; Böhm, Stefan; Börschig, Carmen; Buscot, Francois; Diekötter, Tim; Heinze, Johannes; Hölzel, Norbert; Jung, Kirsten; Klaus, Valentin H.; ... (2016). Locally rare species influence grassland ecosystem multifunctionality. *Philosophical transactions of the Royal Society. Series B - biological sciences*, 371(1694): 20150269. doi: 10.1098/rstb.2015.0269

- Soliveres, Santiago; van der Plas, Fons; Manning, Peter; Prati, Daniel; Gossner, Martin M.; Renner, Swen C.; Alt, Fabian; Arndt, Hartmut; Baumgartner, Vanessa; Binkenstein, Julia; Birkhofer, Klaus; Blaser, Stefan; Blüthgen, Nico; Boch, Steffen; Böhm, Stefan; Börschig, Carmen; Buscot, Francois; Diekötter, Tim; Heinze, Johannes; Hölzel, Norbert; ... (2016). Biodiversity at multiple trophic levels is needed for ecosystem multifunctionality. *Nature*, 536(7617): 456-459. doi: 10.1038/nature19092
- van der Plas, Fons; Manning, Pete; Soliveres, Santiago; Allan, Eric; Scherer-Lorenzen, Michael; Verheyen, Kris; Wirth, Christian; Zavala, Miguel A.; Ampoorter, Evy; Baeten, Lander; Barbaro, Luc; Bauhus, Jürgen; Benavides, Raquel; Benneter, Adam; Bonal, Damien; Bouriaud, Olivier; Bruelheide, Helge; Bussotti, Filippo; Carnol, Monique; Castagnyrol, Bastien; ... (2016). Biotic homogenization can decrease landscape-scale forest multifunctionality. *Proceedings of the National Academy of Sciences of the United States of America - PNAS*, 113(13): 3557-3562. doi: 10.1073/pnas.1517903113
- van der Plas, Fons; Manning, Peter; Allan, Eric; Scherer-Lorenzen, Michael; Verheyen, Kris; Wirth, Christian; Zavala, Miguel A.; Hector, Andy; Ampoorter, Evy; Baeten, Lander; Barbaro, Luc; Bauhus, Jürgen; Benavides, Raquel; Benneter, Adam; Berthold, Felix; Bonal, Damien; Bouriaud, Olivier; Bruelheide, Helge; Bussotti, Filippo; Carnol, Monique; ... (2016). Jack-of-all-trades effects drive biodiversity–ecosystem multifunctionality relationships in European forests. *Nature communications*, 7: 11109. doi: 10.1038/ncomms11109
- Wang, Zhengwen; Bossdorf, Oliver; Prati, Daniel; **Fischer, Markus**; van Kleunen, Mark (2016). Transgenerational effects of land use on offspring performance and growth in *Trifolium repens*. *Oecologia*, 180(2): 409-420. 10.1007/s00442-015-3480-6
- Allan, Eric; Manning, Peter; Alt, Fabian; Binkenstein, Julia; Blaser, Stefan; Blüthgen, Nico; Böhm, Stefan; Grassein, Fabrice; Hölzel, Norbert; Klaus, Valentin H.; Kleinebecker, Till; Morris, E. Kathryn; Oelmann, Yvonne; Prati, Daniel; Renner, Swen C.; Rillig, Matthias C.; Schaefer, Martin; Schloter, Michael; Schmitt, Barbara; Schöning, Ingo; ... (2015). Land use intensification alters ecosystem multifunctionality via loss of biodiversity and changes to functional composition. *Ecology Letters*, 18(8): 834-843. doi: 10.1111/ele.12469
- Boch, Steffen; Fischer, Markus; Knop, Eva; Allan, Eric (2015). Endozoochory by slugs can increase bryophyte establishment and species richness. *Oikos*, 124(3), S. 331-336. Blackwell 10.1111/oik.01536
- Boch, Steffen; **Fischer, Markus**; Prati, Daniel (2015) To eat or not to eat-relationship of lichen herbivory by snails with secondary compounds and field frequency of lichens. *Journal of Plant Ecology* 8: 642-650, DOI: 10.1093/jpe/rtv005
- Crowther, T. W.; Glick, H. B.; Covey, K. R.; Bettigole, C.; Maynard, D. S.; Thomas, S. M.; Smith, J. R.; Hintler, G.; Duguid, M. C.; Amatulli, G.; Tuanmu, M.-N.; Jetz, W.; Salas, C.; Stam, C.; Piotta, D.; Tavani, R.; Green, S.; Bruce, G.; Williams, S. J.; Wiser, S. K.; ... (2015). Mapping tree density at a global scale. *Nature*, 525(7568): 201-205. 10.1038/nature14967
- Diaz, Sandra; Demissew, Sebsebe; Carabias, Julia; et al. (2015) The IPBES Conceptual Framework - connecting nature and people. *Current Opinion in Environmental Sustainability* 14: 1-16, DOI: 10.1016/j.cosust.2014.11.002
- Ensslin, Andreas; **Fischer, Markus** (2015) Variation in life-history traits and their plasticities to elevational transplantation among seed families suggests potential for adaptive evolution of 15 tropical plant species to climate change. *American Journal of Botany* 102: 1371-1379, DOI: 10.3732/ajb.1400518
- Ensslin, Andreas; Rutten, Gemma Gerarda Petronella M.; Pommer, Ulf; Zimmermann, Reiner; Hemp, Andreas; **Fischer, Markus** (2015). Effects of elevation and land use on the biomass of trees, shrubs and herbs at Mount Kilimanjaro. *Ecosphere*, 6(3), S. 1-15. 10.1890/ES14-00492.1
- Fischer, Rico; Ensslin, Andreas; Rutten, Gemma Gerarda Petronella M.; **Fischer, Markus**; Schellenberger Costa, David; Kleyer, Michael; Hemp, Andreas; Paulick, Sebastian; Huth, Andreas (2015). Simulating Carbon Stocks and Fluxes of an African Tropical Montane Forest with an Individual-Based Forest Model. *PLoS ONE*, 10(4), e0123300. 10.1371/journal.pone.0123300
- Kempel, Anne; Razanajatovo, Mialy; Stein, Claudia; et al. (2015) Herbivore preference drives plant community composition. *Ecology* 96: 2923-2934, DOI: 10.1890/14-2125.1
- Keser, Lidewij; Visser, Eric J.W.; Dawson, Wayne; Song, Yao-Bin; Yu, Fei-Hai; **Fischer, Markus**; Dong, Ming; van Kleunen, Mark (2015). Herbaceous plant species invading natural areas tend to have stronger adaptive root foraging than other naturalized species. *Frontiers in Plant Science*, 6(273) 10.3389/fpls.2015.00273
- Lopez, Lua; Barreiro, Rodolfo; **Fischer, Markus**; Koch, Marcus A. (2015). Mining microsatellite markers from public expressed sequence tags databases for the study of threatened plants. *BMC Genomics*, 16(1), S. 1-14. 10.1186/s12864-015-2031-1
- Manning, Peter; Gossner, Martin M.; Bossdorf, Oliver; Allan, Eric; Zhang, Yuan-Ye; Prati, Daniel; Blüthgen, Nico; Boch, Steffen; Böhm, Stefan; Börschig, Carmen; Hölzel, Norbert; Jung, Kirsten; Klaus, Valentin H.; Klein, Alexandra Maria; Kleinebecker, Till; Krauss, Jochen; Lange, Markus; Müller, Jörg; Pašalić, Esther; Socher, Stephanie; ... (2015). Grassland management intensification weakens the associations among the diversities of multiple plant and animal taxa. *Ecology*, 96(6): 1492-1501. 10.1890/14-1307.1
- Marcus, Tamar; Boch, Steffen; Durka, Walter; **Fischer, Markus**; Gossner, Martin M.; Müller, Jörg; Schöning, Ingo; Weisser, Wolfgang W.; Drees, Claudia; Assmann, Thorsten; Paiva, Samuel Rezende (2015). *Living in Heterogeneous Woodlands – Are Habitat Continuity or Quality Drivers of Genetic Variability in a Flightless Ground Beetle?* PLoS ONE, 10(12), e0144217. 10.1371/journal.pone.0144217
- Müller, Jörg; Boch, Steffen; Blaser, Stefan; **Fischer, Markus**; Prati, Daniel (2015). *Effects of forest management on bryophyte communities on deadwood*. Nova Hedwigia, 100(3-4): 423-438. 10.1127/nova_hedwigia/2015/0242

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