Curriculum vitae, Petr Kohout, Ph.D.:
Born: 26th June 1986 in Prague

Education

2012 – 2018	PhD study, Department of Botany, University of Tartu, Estonia (Dr. Leho Tedersoo, prof. Urmas Kõljalg)
2008 – 2011	Master Degree, Department of Experimental Plant Biology, Faculty of Science, Charles University in Prague, Czech Rep. (Dr. Martin Vohník, prof. Jana Albrechtová)
2005 – 2008	Bachelor Degree, Department of Experimental Plant Biology, Faculty of Science, Charles University in Prague, Czech Rep.

Employers

2016 – present	Department of Environmental Microbiology, Institute of Microbiology ASCR, Prague, Czech Republic
2012 – 2016	Department of Botany, University of Tartu, Tartu, Estonia
2010 – 2012, 2015 – present	Department of Experimental Plant Biology, Faculty of Science, Charles University, Prague, Czech Rep.
2007 – 2020	Department of Mycorrhizal Symbioses, Institute of Botany ASCR, Pruhonice, Czech Rep.

ORCID: 0000-0002-3985-2310
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Google Scholar: https://scholar.google.cz/citations?user=nlHqs8gAAAAJ&hl=cs

Supervised students

Master students:
Defended: Tomáš Antl, Andrea Moravcová, Eva Luukas, Jan Mádle, Eva Kubove, Johana Kaiserová, Andrej Petr
Studying: Barbora Zelená, Klára Lukáčová
PhD students:
Defended: Lukáš Vlk, Andrea Moravcová
Studying: Jakub Skřivánek, Vasilii Shapkin, Cristina Turcu, Johana Kaiserová, Matheus Nicoletti (co-supervised)

University teaching

2018 - present	MB130P93 Mycorrhizal symbiosis. Department of Experimental Plant Biology, Faculty of Science, Charles University, teaching of 100% lectures

2016 - present	MB130P67 Plant and microorganisms symbiosis. Department of Experimental Plant Biology, Faculty of Science, Charles University, teaching of 80% lectures
2015 - present	MB130P52 Plant ecophysiology. Department of Experimental Plant Biology, Faculty of Science, Charles University, teaching of 25% lectures
2015 – present	MB130P13 Plant physiology (practical course). Department of Experimental Plant Biology, Faculty of Science, Charles University, teaching of 10% courses
2015 – present	MB130C74 Plant physiology (practical course). Department of Experimental Plant Biology, Faculty of Science, Charles University, teaching of 10% courses

Invited lectures

2016 – Faculty of Science, Masaryk University, *seminar* (Czechia)
2018 – Faculty of Science, Charles University, *seminar* (Czechia)
2018 – Nordic Forest Mycologists Network Meeting, Oulanka, *conference* (Finland)
2020 – Institute of Experimental Botany CAS, *seminar* (Czechia)
2020 – Institute of Microbiology CAS, *seminar* (Czechia)
2020 – Faculty of Science, University of Ostrava, *seminar* (Czechia)
2021 – World Microbe Forum, 20-24 June, online worldwide, *conference* (online)
2022 – Ecology of Soil Microorganisms, 19-23 June, Prague, *conference* (Czechia)
2022 – The University of Kansas, Lawrence KS, *seminar* (USA)
2022 – Kansas State University, Manhattan KS, *seminar* (USA)
2022 – Fungi in Ecosystem Restoration, 25-26 October, *conference* (Portugal)
2024 – International Conference on Mycorrhiza, 4-9 August, Manchester, *conference* (UK)
2024 – International Mycological Congress, 11-15 August, Maastricht, *conference* (Netherlands)
2025 – Ecology of Soil Microorganisms, 15-19 June, Helsinki, *conference* (Finland)
2025 – New Phytologist Editor-in-Chief Symposium, 8-10 July, Tartu, *conference* (Estonia)

Grants

2019 – 2021 International project CELSA (co-applicant): The impact of nutrient pollution and mycorrhizal type on soil biodiversity and functionality. Project budget 30,000Eur.
2021 – 2025 Czech Science Foundation, JUNIOR STAR (main applicant): Effect of global change on fungal biogeography and ecosystem functioning. Project budget 25 mil. CZK (approx. 930,000Eur).
2022 – 2024 Czech Science Foundation, STANDARD PROJECT (co-applicant): Towards understanding community assembly in arbuscular mycorrhizal fungi: from structural traits to fundamental and realized niches. Project budget 13 mil. CZK (approx. 500,000Eur).
2024 – 2026 Czech Science Foundation, STANDARD PROJECT (main applicant): Effect of wildfire severity on development of soil microbial communities and microbial mediated ecosystem processes. Project budget 14 mil. CZK (approx. 560,000Eur).
2024 – 2028 Czech Ministry of Education Youth and Sports, Programme Johannes Amos Comenius (WP leader): Talking microbes – understanding microbial interactions within One Health framework. Project budget 437 mil. CZK (approx. 17,500,000Eur).

Editorial boards member

2025	FEMS Microbiology and Ecology (Guest Editor of Special Issue)
2023	FEMS Microbiology and Ecology (Guest Editor of Special Issue)
2021 – present	New Phytologist (Board of Advisors)
2020 – present	FEMS Microbiology and Ecology (Editorial Board member)
2020	Global Ecology and Biogeography (Associated Editor)
2018	Fungal Ecology (Guest Editor of Special Issue)

Awards

2012 Rector's Award for Best Diploma Thesis in Charles University

2019 Neuron Award to promising young scientist in field of biology

2019 Dean's Award to young scientist in Faculty of Science, Charles University

2020 The Otto Wichterle Award to promising young scientists of the Czech Academy of Science

List of all publications

2026

Qin C, Kumar S, Elhance J, Manley B, Corrales A, Plyakov A, Stewart J, Kivlin S, Odriozola I, Větrovský T, **Kohout P**, Baldrian P, Kiers T, Van Nuland M. High-resolution range mapping of mycorrhizal fungal species reveals systematic biases in their protection. ***Conservation Letters*** (accepted)

Human ZR, Štursová M, Odriozola I, Větrovský T, Howe AC, Navrátilová D, Lopéz-Mondéjar R, Žifčáková L, Brabcová V, Mundra S, Thoen E, Morgado L, Fiore-Donno AM, Bonkowski M, Adamczyk B, **Kohout P**, Lipton MS, Pennacchio C, Grigoriev IV, Martin F, Kauserud H, Baldrian P. Comprehensive seasonal multi-omic data from coniferous forest soil. ***Scientific Data*** (accepted)

Vlk L, Odriozola I, Pergl J, Větrovský T, Kvasničková J, Krüger C, Petružálková M, Baldrian P, Vojík M, Sádlo J, Petřík P, *Pyšek P, ***Kohout P**. From pathogens to partners: Temporal and biogeographical patterns in fungal associations. ***New Phytologist*** (accepted) *Shared senior authors

Shapkin V, Zelenka T, Větrovský T, Kostovčík M, Eichlerova I, **Kohout P**, Žifčáková L, Borovička J, Tomšovský M, Adamčík S, Baldrian P, Kolařík M. ITS needs friends: comparison of molecular markers in fungal metabarcoding for environmental studies. ***Molecular Ecology Resources*** (accepted)

2025

van Galen LG, Smith GR, … **Kohout P**, …, van den Hoogen J. A global database of soil microbial phospholipid fatty acids and enzyme activities. ***Scientific Data*** 12: 1568.

van Galen LG, Corrales A, Truong C, van den Hoogen J, Kumar S, Manley BF, Stewart JD, **Kohout P**, Baldrian P, Větrovský T, Crowther TW, Kiers TE, Van Nuland ME. The biogeography and conservation of Earth's 'dark' ectomycorrhizal fungi. ***Current Biology*** 35: R563-R574.

Stewart JD, Corrales A, Canteiro C, Qin C, Gupta MM, Otgonsuren B, Peña-Venegas CP, Clara P, Van Nuland ME, Kokkoris V, **Kohout P**, Větrovský T, Manley BF. Advancing knowledge on the biogeography of arbuscular mycorrhizal fungi to support Sustainable Development Goal 15: Life on Land. ***FEMS Microbiology Letters*** 372: fnaf055.

Moravcová A, Barbi F, Algora C, Tosadori G, Macek P, Albrechtová J, Baldrian P, **Kohout P**$^{+}$. Contrasting stability of fungal and bacterial communities during long-term decomposition of fungal necromass in Arctic tundra. ***Environmental Microbiome*** 20: 75. $^{+}$Corresponding author

Van Nuland ME, Averill C, Stewart JD, Prylutskyi O, Tedersoo L, Větrovský T, **Kohout P**, Baldrian P, Crowther TW, Manley BF, Corrales A, van Galen LG, Qin C, Weedon J, Lauber T, Mikryukov V, Dulia O, Kiers TE, SPUN Consortium, van den Hoogen J. Global Hotspots of Mycorrhizal Fungal Richness are Poorly Protected. ***Nature*** 645: 414-422.

Nouwen O, Rineau F, **Kohout P**, Baldrian P, Eisenhauer N, Beenaerts N, Thijs S, Vangronsveld J, Soudzilovskaia NA. Towards understanding the impact of mycorrhizal fungal environments on the functioning of terrestrial ecosystems. ***FEMS Microbiology Ecology*** 101: fiaf062.

Barbi F, Martinović T, Odriozola I, Machac A, Moravcová A, Algora C, Ballian D, Barthold S, Brabcová V, Hollá SA, Human Z, Kraigher H, Lazarević J, Lepinay C, Mészárošová L, Morais DK, Nikolov N, Thoen E, Tláskal V, Větrovský T, Baldrian P, **Kohout P**[+]. Fungal diversity patterns vary between elevational and latitudinal gradients across Europe. ***New Phytologist*** 247: 295-308. [+]Corresponding author

Moora M, Davison J, **Kohout P**, Zobel M. Mycorrhizal influences on plant ecology across scales. ***Nature Reviews Biodiversity*** 1: 262–273.

2024

Mészárošová L, Kuťáková E, **Kohout P**, Münzbergová Z, Baldrian P. Closing the gap: Examining the impact of source habitat proximity on plant and soil microbial communities in post-mining spoil heap succession. ***Frontiers in Microbiology*** 15: 1416515.

Richy E, Fort T, Odriozola I, **Kohout P**, Martinovic T, Tupek B, Adamczyk B, Lehtonen A, Mäkipää R, Baldrian P. Phosphorus limitation promotes soil carbon storage in a boreal forest exposed to long-term nitrogen fertilisation. ***Global Change Biology*** 30: e17516.

Dostálek T, Rydlová J, **Kohout P**, Kuťáková E, Kolaříková Z, Frouz J, Münzbergová Z. Beyond the rootzone: Unveiling soil property and biota gradients around plants. ***Science of the Total Environment*** 949: 175032.

Kohout P[+]**,** Sudová R, Odriozola I, Kvasničková J, Petružálková M, Hadincová V, Krahulec F, Pecháčková S, Skálová H, Herben T. Accumulation of pathogens in soil microbiome can explain long-term fluctuations of legumes in a grassland community. ***New Phytologist*** 244: 235-248. [+]Corresponding author

Lepinay C, Větrovský T, Chytrý M, Dřevojan P, Fejmon K, Cajthaml T, **Kohout P**, Baldrian P. Effect of plant communities on bacterial and fungal communities in a Central European grassland. ***Environmental Microbiome*** 19: 42.

Baldrian P, Pennanen T, **Kohout P**, Fritze H. Editorial: Theme issue on the ecology of soil microorganisms ***FEMS Microbiology Ecology*** 100: fiae032.

Zubek S, Rozek K, Chmolowska D, Odriozola I, Větrovský T, Skubała K, Thiago Dobler P, Stefanowicz AM, Stanek M, Orzechowska A, **Kohout P**, Baldrian P. Dominant herbaceous plants shape fungal and bacterial diversity contributing to spatial heterogeneity of beech and riparian forest soils. ***Soil Biology and Biochemistry*** 193: 109405

Hyde KD, Baldrian P, Chen Y, Chethana KWT, De Hoog S, Doilom M, Gomes de Farias AR, Gonçalves MFM, Gonkhom D, Gui H, Hilário S, Hu Y, Ruvishika JS, Khyaju S, Kirk PM, **Kohout P**, Luangharn T, Maharachchikumbura SSN, Manawasinghe IS, Mortimer PE, Niego AGT, Phonemany M, Sandargo B, Senanayake IC, Stadler M, Surup F, Thongklang N, Wanasinghe DN, Bahkali AH, Walker A. Current trends, limitations and future research in the fungi? ***Fungal Diversity*** 125: 1-71.

Gao C, Bezemer M, van Bodegom P, Baldrian P, **Kohout P**, Mancinelli R, van der Hagen H, Soudzilovskaia N. Soil microbes are passengers in the community development of early successional dune ecosystems. ***Ecology*** 105: e4312.

Mészárošová L, Kuťáková E, **Kohout P**, Münzbergová Z, Baldrian P. Plant effects on microbiome composition are constrained by environmental conditions in a successional grassland. ***Environmental Microbiome*** 19: 8.

Maillard F, Colin Y, Viotti C, Buée M, Brunner I, Brabcová V, **Kohout P**, Baldrian P, Kennedy PG. A cryptically diverse microbial community drives organic matter decomposition in forests. ***Applied Soil Ecology*** 193: 105148.

2023

Mikryukov V, Dulya O, Zizka A, … **Kohout P**, …, Tedersoo L. Connecting the multiple dimensions of global soil fungal diversity. ***Science Advances*** 48: eadj8016.

Větrovský T, Kolaříková Z, Lepinay C, Awokunle Hollá S, Davison J, Gromyko A, Jelínková B, Kolařík M, Krüger M, Lejsková R, Michalčíková M, Michalová T, Moora M, Moravcová A, Moulíkov Š, Odriozola I, Öpik M, Pappová M, Piché-Choquette S, Popelářová A, Skřivánek J, Vlk L, Zobel M, Baldrian P, **Kohout P**[+]. GlobalAMFungi: a global database of arbuscular mycorrhizal fungal occurrences from high-throughput-sequencing metabarcoding studies. ***New Phytologist*** 240: 2151-2163. [+]Corresponding author

Baldrian P, **Kohout P**, Větrovský T. Global Fungal Diversity Estimated from High-Throughput Sequencing. ***Evolution of Fungi and Fungal-Like Organisms*** 227-238.

Le AV, Větrovský T, Barucic D, Saraiva JP, **Kohout P**, Pospíšek M, da Rocha UN, Kléma J, Baldrian P. Improved recovery and annotation of genes in metagenomes through the prediction of fungal introns. ***Molecular Ecology Resources*** 23: 1800-1811.

Aguilar-Trigueros CA, Krah FS, Cornwell WC, Abrego N, Anderson IC, Andrew CJ, Baldrian P, Bässler C, Bissett A, Chaudhary VB, Chen B, Chen Y, Delgado-Baquerizo M, Deveautour C, Egidi E, Flores-Moreno H, Golan J, Heilmann-Clausen J, Hempel S, Hu Y, Kauserud H, Kivlin SN, **Kohout P**, Lammel DR, Maestre FT, Pringle A, Purhonen J, Singh BK, Veresoglou SD, Větrovský T, Zanne AE, Zhang H, Rillig MC, Powell JR. Symbiotic status alters fungal eco-evolutionary offspring trajectories. ***Ecology Letters*** 26: 1523-1534.

Baldrian P, Lopez-Mondejar R, **Kohout P**. Forest microbiome and global change. ***Nature Microbiology Reviews*** 21: 487–501.

Moravcová A, Barbi F, Brabcová V, Cajthaml T, Martinović T, Soudzilovskaia N, Vlk L, Baldrian P, **Kohout P**. Climate driven shifts in plant and fungal communities can lead to soil carbon loss in alpine ecosystems. ***FEMS Microbiology Ecology*** 99 (5), fiad041.

Rozek K, Chmolowska D, Odriozola I, Větrovský T, Rola K, **Kohout P**, Baldrian P, Zubek S. Soil fungal and bacterial community structure in monocultures of fourteen tree species of the temperate zone. ***Forest Ecology and Management*** 530: 120751.

2022

Martinović T, **Kohout P**, López-Mondéjar R, Algora CG, Starke R, Tomšovský M, Baldrian P. Bacterial community in soil and tree roots of *Picea abies* shows little response to clearcutting. ***FEMS Microbiology Ecology*** 98: fiac118.

Tedersoo L, Mikryukov V, Zizka A, … , **Kohout P**, …, Kõljalg U, Abarenkov K. Towards understanding diversity, endemicity and global change vulnerability of soil fungi. ***Global Change Biology*** 28: 6696-6710.

Boeraeve M, **Kohout P**, Ceulemans T, Cajthaml T, Tedersoo L, Jacquemyn H Changes in the root microbiome of four plant species with different mycorrhizal types across a nitrogen deposition gradient in ombrotrophic bogs. ***Soil Biology and Biochemistry*** 169: 108673.

Averill C, Anthony MC, Baldrian P, Finkbeiner F, van den Hoogen J, Kiers T, **Kohout P**, Hirt E, Smith GR, Crowther T. Defending Earth's terrestrial microbiome. ***Nature Microbiology*** 7: 1717-1725.

Fernández N, Knoblochová T, **Kohout P**, Janoušková M, Cajthaml T, Frouz J, Rydlová J Asymmetric interaction between two mycorrhizal fungal guilds and consequences for the establishment of their host plants. ***Frontiers in Plant Science*** 13: 873204.

Baldrian P, Bell-Dereske L, Lepinay C, Větrovský T, **Kohout P** Fungal communities in soils under global change. ***Studies in Mycology*** 103: 1-24.

Kračmarová M, Uhlík O, Strejček M, Szaková J, Černý J, Balík J, Tlustoš P, **Kohout P**, Demnerova K, Stiborova H. Soil microbial communities following 20 years of fertilization and crop rotation practices in the Czech Republic. ***Environmental Microbiome*** 17: 1-18.

Baldrian P, Větrovský T, Lepinay C, **Kohout P**. The high-throughput sequencing view on the magnitude of global fungal diversity. ***Fungal Diversity*** 114: 539-547.

2021

Odriozola I, Navrátilová D, Tláskalová P, Klinerová T, Červenková Z, **Kohout P**, Větrovský T, Čížková P, Starý M, Baldrian P. Complex sets of drivers determine soil mycobiome productivity and composition in temperate mountainous forests in Central Europe. ***Soil Biology and Biochemistry*** 161: 108366.

Martinović T, Odriozola I, Mašínová T, Bahnmann BD, **Kohout P**, Sedlák P, Merunková K, Větrovský T, Tomšovský M, Ovaskainen O, Baldrian P. Temporal turnover of the soil microbiome composition is guild-specific. ***Ecology Letters*** 24: 2726-2738.

Kolaříková Z, Slavíková R, Krüger C, Krüger M, **Kohout P**+. PacBio sequencing of Glomeromycota rDNA: a novel amplicon covering all widely used ribosomal barcoding regions and its applicability in taxonomy and ecology of arbuscular mycorrhizal fungi. ***New Phytologist*** 231: 490-499 +Corresponding author

Davison J, Moora M, Semchenko M, Adenan S, Ahmed T, Akhmetzhanova A, Alatalo J, Alquraishi S, Andriyanova E, Anslan S, Bahram M, Batbaatar A, Brown C, Bueno CG, Cahill JF, Cantero JJ, Casper B, Cherosov M, Coelho A, Coghill M, Decocq G, Dudov S, Fabiano E, Fedosov V, Fraser L, Glassman S, Helm A, Henry H, Hérault B, Hiiesalu I, Hiiesalu I, Hozzein W, **Kohout P**, Koljalg U, Koorem K, Laanisto L, Mander Ü, Mucina L, Munyampundu JP, Neuenkamp L, Niinemets Ü, Nyamukondiwa C, Oja J, Onipchenko V, Pärtel M, Phosri C, Põlme S, Püssa K, Ronk A, Saitta A, Semboli O, Sepp SK, Seregin A, Soliman S, Sudheer S, Venegas C, Paz C, Vahter T, Vasar M, Veraart A, Tedersoo L, Zobel M, Öpik M. Temperature and pH define the realized niche space of arbuscular mycorrhizal fungi. ***New Phytologist*** (accepted)

Sudová R, Rydlová J, Čtvrtlíková M, **Kohout P**, Oehl F, Voříšková J, Kolaříková Z. Symbiosis of isoetid plant species with arbuscular mycorrhizal fungi under aquatic versus terrestrial conditions. ***Mycorrhiza*** 31, 273–288.

Kohout P+, Sudová R, Brabcová V, Vosolsobě S, Baldrian P, Albrechtová J. Forest microhabitat affects succession of fungal communities on decomposing tree roots. ***Frontiers in Microbiology*** 12: 541583. +Corresponding author

Marín C, **Kohout P**+. Response of soil fungal ecological guilds to global changes. ***New Phytologist*** 229: 656-658. +Corresponding author

2020

Odriozola I, Martinovic T, Bahnmann BD, Ryšánek D, Mašínová T, Sedlák P, Merunková K, **Kohout P**, Tomšovský M, Baldrian P Stand age affects fungal community composition in a Central European temperate forest. ***Fungal Ecology*** 48: 100985.

Põlme S, Abarenkov K, Nilsson RH, Lindahl B, …, **Kohout P**, …, Leho Tedersoo. FungalTraits: a user-friendly traits database of fungi and fungus-like stramenopiles. ***Fungal Diversity*** 105: 1-16.

Štursová M, **Kohout P**, Human ZR, Baldrian P. Production of fungal mycelia in a temperate coniferous forest shows distinct seasonal patterns. ***Journal of Fungi*** 6: 190.

Větrovský T*, Morais D*, **Kohout P***, Lepinay C*, Algora CG, Awokunle Hollá S, Bahnmann BD, Bílohnědá K, Brabcová V, D'Aló F, Human ZR, Jomura M, Kolařík M, Lladó S, López-Mondéjar R, Martinović T, Mašínová T, Meszárošová L, Michalčíková L, Michalová T, Mudra S, Navrátilová D, Odriozola I, Piché-Choquette S, Štursová M, Švec K, Tláskal V, Urbanová M, Vlk L, Voříšková J, Žifčáková L, Baldrian P. GlobalFungi: Global database of fungal records from high-throughput-sequencing metabarcoding studies. ***Scientific Data*** 7: 228 *Joint first authorship

Vlk L, Tedersoo L, Antl T, Větrovský T, Abarenkov K, Pergl J, Vosátka M, Albrechtová J, Pyšek P, Baldrian P, **Kohout P**+ Alien ectomycorrhizal plants differ in their ability to interact with co-introduced and native ectomycorrhizal fungi in novel sites. ***The ISME Journal*** 14: 2336–2346 +Corresponding author

Vogt-Schilb H, Těšitelová T, Kotilínek M, Sucháček P, **Kohout P**, Jersáková J Altered rhizoctonia assemblages in grasslands on ex-arable land support germination of mycorrhizal generalist, not specialist orchids. ***New Phytologist*** 227: 1200-1212

Vlk L, Tedersoo L, Antl T, Větrovský T, Abarenkov K, Pergl J, Vosátka M, Albrechtová J, Pyšek P, Baldrian P, **Kohout P**+ Early successional ectomycorrhizal fungi are more likely to become alien than other ectomycorrhizal fungi. ***New Phytologist*** 227: 2189-2193 +Corresponding author

Sudová R, **Kohout P**, Rydlová J, Čtvrtlíková M, Suda J, Voříšková J, Kolaříková Z. Diverse and host-specific fungal communities associated with the roots of isoetid plants from six Norwegian softwater lakes. ***Fungal Ecology*** 45:100914.

Pawlik L, Buma B, Šamonil P, Kvaček J, Gałązka A, **Kohout P**, Malik I. Impact of trees and forests on the Devonian landscape and weathering processes with implications to the global Earth's system properties - A critical review. ***Earth-Science Reviews*** 205: 103200.

2019

Větrovský T*, **Kohout P***, Kopecký M, Macháč A, Man M, Bahnmann BD, Brabcová V, Choi J, Harantová L, Human ZR, Lepinay C, Lladó S, López-Mondéjar R, Martinović T, Mašínová T, Morais D, Navrátilová D, Odriozola I, Štursová M, Švec K, Tláskal V, Urbanová M, Wan J, Žifčáková L, Howe AC, Ladau J, Peay KG, Storch D, Wild J, Baldrian P A meta-analysis of global fungal distribution reveals climate-driven patterns. ***Nature Communications*** 10: 1-9. *Joint first authorship

Navrátilová D, Tláskalová P, **Kohout P**, Dřevojan P, Fajmon K, Chytrý M, Baldrian P. Diversity of fungi and bacteria in species-rich grasslands increases with plant diversity in shoots but not in roots and soil. ***FEMS Microbiology Ecology*** 95: 208.

Jansa J, **Kohout P**. Ecology of mycorrhizas in Anthropocene. ***Fungal Ecology*** 40: 1-3.

2018

Sudová R, **Kohout P**, Kolaříková Z, Rydlová J, Voříšková J, Suda J, Španiel S, Müller-Schärer H, Mráz P. Sympatric diploid and tetraploid cytotypes of *Centaurea stoebe* s.l. do not differ in arbuscular mycorrhizal communities and mycorrhizal growth response. ***American Journal of Botany*** 105: 1995 – 2007.

Janoušková M, **Kohout P**, Moradi J, Doubková P, Frouz J, Vosolsobě S, Rydlová J. Microarthropods influence the composition of rhizospheric fungal communities by stimulating specific taxa. ***Soil Biology and Biochemistry*** 122: 120-130.

Kohout P, Charvátová M, Štursová M, Mašínová T, Tomšovský M, Baldrian P. Clearcutting alters decomposition processes and initiates complex restructuring of fungal communities in soil and tree roots. ***The ISME Journal*** 12: 692-703.

Põlme S, Bahram M, Jacquemyn H, Kennedy P, **Kohout P**, Moora M, Oja J, Öpik M, Pecoraro L, Tedersoo L. Host preference and network properties in biotrophic symbiotic plant-fungal associations. ***New Phytologist*** 217: 1230-1239.

2017

Kohout P[+], Bahram M, Põlme S, Tedersoo L. Altitude, space and host plant biogeography origin structure Ericaceae root associated fungal communities on Papua New Guinea. ***Fungal Ecology*** 30: 112-121. [+]Corresponding author

Harantová L, Mudrák O, **Kohout P**, Elhotová D, Frouz J, Baldrian P. Development of microbial community along primary succession in areas degraded by mining activities. ***Land Degradation and Development*** 28: 2574-2584.

Knoblochová T, **Kohout P**, Püschel D, Doubková P, Frouz J, Cajthaml T, Kukla J, Vosátka M, Rydlová J. Asymmetric response of root-associated fungal communities of an arbuscular mycorrhizal grass and an ectomycorrhizal tree to their coexistence in primary succession. ***Mycorrhiza*** 27: 775-789.

Kolaříková Z*, **Kohout P***, Krüger C, Janoušková M, Mrnka L, Rydlová J. Root-associated fungal communities along a primary successional chronosequence: different ecological guilds assemble differently. ***Soil Biology and Biochemistry*** 113: 143-152. *Joint first authorship

Baldrian P, **Kohout P**. Interactions of saprotrophic fungi with tree roots: Can we observe the emergence of novel ectomycorrhizal fungi? ***New Phytologist*** 215: 511-513.

Krüger C*, **Kohout P***[+], Janoušková M, Püschel D, Frouz J, Rydlová J. Plant communities rather than soil factors contribute to assembly of arbuscular mycorrhizal fungal communities along primary succession on a mine spoil. ***Frontiers in Microbiology*** 8: 719 *Joint first authorship [+]Corresponding author

Kohout P[+]. Biogeography of ericoid mycorrhiza. Chapter in ***Ecological Studies: Biogeography of Mycorrhizal Symbiosis***, ed. by L. Tedersoo. [+]Corresponding author

Oja J, Vahta J, Bahram M, **Kohout P**, Kull T, Rannap R, Koljalg U, Tedersoo L. Local-scale spatial distribution and community composition of orchid mycorrhizal fungi in relation to grazing and environmental effects in semi-natural grasslands. ***Mycorrhiza*** 27: 355-367.

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