

## Curriculum vitae: Petr Kohout

Born: 26<sup>th</sup> June 1986 in Prague

### Education

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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

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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 - present	Department of Mycorrhizal Symbioses, Institute of Botany ASCR, Pruhonice, Czech Rep.

**ORCID:** 0000-0002-3985-2310

**Number of citations (Google Scholar):** 2439

**H-index (Google Scholar):** 14

### Publications (31)

2018

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- 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. In press *American Journal of Botany*
- 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.
- 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. *ISME Journal* 12: 692-703.

Pölme 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

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**Kohout P**, Bahram M, Pölme 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.

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

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

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.

**Kohout P**, Tedersoo L. Effect of soil moisture on root-associated fungal communities of *Erica dominans* in Drakensberg mountains in South Africa. *Mycorrhiza* 27: 397-406.

2016

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Pölme S, Öpik M, Moora M, Zobel M, **Kohout P**, Kõljalg U, Oja J, Tedersoo L. Arbuscular mycorrhizal fungi associating with roots of *Alnus* and *Rubus* in Europe and Middle East. *Fungal Ecology* 24: 27-34.

Sýkorová Z, Rydlová J, Slavíková R, Ness T, **Kohout P**, Püschel D. Appraisal of mycorrhizal inoculation in forest reclamation of fly ash deposits. *Restoration Ecology* 24: 184-193.

Bahram M, **Kohout P**, Anslan S, Harend H, Abarenkov K, Tedersoo L. Fine-scale spatial patterns of soil biota provide evidence for the predominance of stochastic processes in community assembly. *ISME Journal* 10: 885-896.

2015

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Lukešová T, **Kohout P**, Větrovský T, Vohník M (2015). The potential of Dark Septate Endophytes to form root symbioses with ectomycorrhizal and ericoid mycorrhizal middle European forest plants. *PLoS One* 10: e0124752.

**Kohout P**, Doubková P, Bahram M, Suda J, Tedersoo L, Voříšková J, Sudová R (2015). Niche partitioning in arbuscular mycorrhizal communities in temperate grasslands: a lesson from adjacent serpentine and nonserpentine habitats. *Molecular Ecology* 24: 1831-1843.

Oja J, **Kohout P**, Tedersoo L, Kull T, Kõljalg U (2015). Temporal patterns of orchid mycorrhizal fungi in meadows and forests as revealed by 454 pyrosequencing. *New Phytologist* 205: 1608-1618.

2014

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**Kohout P**, Sudová R, Janoušková M, Čtvrtlíková M, Hejda M, Pánková H, Slavíková R, Štajerová K, Vosátka M, Sýkorová Z (2014). Comparison of commonly used primer sets for evaluation of arbuscular mycorrhizal fungal communities: Is there a universal solution? *Soil Biology and Biochemistry* 68: 482-493.

Tedersoo L, Bahram M, Põlme S, Kõljalg U, Yorou NS, Wijesundera R, Abell S, Ruiz LV, Thu PQ, Suija A, Smith ME, Sharp S, Saluveer E, Saitta A, Rosas M, Riit T, Ratkowsky D, Pritsch K, Põldmaa K, Piepenbring M, Phosri C, Peterson M, Parts K, Pärtel K, Palacios AV, Otsing E, Nouhra E, Njouonkou AL, Nilsson RH, Mayor J, May TW, Majuakim L, Lee SS, Larsson KH, Kohout P, Hosaka K, Hiiesalu I, Henkel TW, Harend H, Guo L, Greslebin A, Grelet G, Geml J, Gates G, Dunstan W, Dunk C, Drenkhan R, Dearnaley J, Kesel A, Dang T, Chen X, Buegger F, Brearley F, Bonito G, Anslan S, Abarenkov K (2014). Global diversity and geography of soil fungi. *Science* 346: 1256688.

2013

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**Kohout P**, Malinová T, Roy M, Vohník M and Jersáková J (2013) Diverse fungal community associated with roots of *Pseudorchis albida* (Orchidaceae). *Fungal Ecology* 6: 50-64.

Bahram M, Kõljalg U, **Kohout P**, Mirshahvaladi S and Tedersoo L (2013) Ectomycorrhizal fungal community and diversity of exotic pine plantations in relation to native Fagales in Iran: evidence of host switch of local symbionts to distantly related exotic host taxa. *Mycorrhiza* 23: 11-19.

Doubková P, **Kohout P**, Sudová R (2013). Soil nutritional status, not inoculum identity primarily determines the effect of different arbuscular mycorrhizal fungi on the growth of *Knautia arvensis* plants. *Mycorrhiza* 23: 561-572.

Vohník M, Mrnka L, Lukešová T, Bruzone MC, **Kohout P** and Fehrer J (2013). The cultivable endophytic community of Norway spruce ectomycorrhizae from microhabitats lacking ericaceous hosts is dominated by ericoid mycorrhizal *Meliniomyces variabilis*. *Fungal Ecology* 6: 281-292.

Kõljalg U, Nilsson RH, Abarenkov A, Tedersoo T, Taylor AFS, Bahram M, Bates ST, Bruns TD, Bengtsson-Palme J, Martin T, Callaghan, Douglas B, Drenkhan T, Eberhardt U, Dueñas M, Grebenc T, Griffith GW, Hartmann M, Kirk PM, **Kohout P**, Larsson E, Lindahl BD, Lücking R, Martín MP, Matheny PB, Nguyen NH, Niskanen T, Oja J, Peay KG, Peintner U, Peterson M, Põldmaa K, Saag L, Saar I, Schüßler A, Senés C, Smith ME, Suija A, Taylor L, Telleria MT, Weiß M and Larsson KH (2013). Towards a unified paradigm for sequence-based identification of Fungi. *Molecular Ecology* 22: 271-277.

2012

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**Kohout P**, Sýkorová Z, Čtvrtlíková M, Rydlová J, Suda J, Vohník M and Sudová R (2012) Surprising spectra of root associated fungi in submerged aquatic plants. *FEMS Microbiology Ecology* 80: 216-235.

Vohník M, Sadowsky JJ, **Kohout P**, Lhotáková Z, Nestby R and Kolařík M (2012) Novel root-fungus symbiosis in Ericaceae: sheathed ericoid mycorrhiza formed by a hitherto undescribed lineage in Agaricomycetes. *PLoS ONE* 7: e39524.

2011

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**Kohout P**, Sýkorová Z, Bahram M, Hadincová V, Albrechtová J, Tedersoo L and Vohník M (2011) Understorey ericaceous shrubs affect ectomycorrhizal fungal community of the invasive *Pinus strobus* and native *Pinus sylvestris* in a pot experiment. *Mycorrhiza* 21: 403-412.

Tedersoo L, Abarenkov K, Nilsson RH, Schüßler A, Grelet GA, **Kohout P**, Oja J, Bonito GM, Veldre V, Jairus T, Ryberg M, Larsson KH and Kõljalg U (2011) Tidying up GenBank: quality and metadata annotation of ITS sequences of mycorrhizal fungi. *PLoS ONE* 6: e24904.

### Supervised students

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Mgr. Tomáš Antl, Mgr. Tereza Lukešová, Mgr. Lukáš Vlk, Lucie Cihlářová, Klára Haiclová, Andrea Moravcová (all Faculty of Science, Charles University), Eva Luukas, MSc. (Department of Botany, University of Tartu).

### University teaching

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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 100% 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. 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