

RNDr. Petr Baldrian, Ph.D. – seznam publikací

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3.b) Práce v recenzovaných sbornících (4)

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6.) Přednášky typu “invited speaker”

- Baldrian P., Valášková V., Štursová M., Voříšková J., Šnajdr J., Dobiášová P., Baldrian P.: The role of fungi in the decomposition processes in forest soils. 3rd International Conference on Environmental, Industrial and Applied Microbiology BioMicroWorld 2009, Lisbon, December 2-4, 2009, Book of Abstracts, p. 253.
- Baldrian P., Štursová M., Voříšková J., Žifčáková L., Šnajdr J., Valášková V.: Fungal organic matter transformation in forest soils: from genes and enzymes to communities of active

- decomposers. 9th International Mycological Congress, Edinburgh, August 1-6, 2010, Programme Book, D5.I1.
- Baldrian P.: Parsing microbial community structure and function using next generation sequencing, stable isotope probing and enzyme analysis. 96th Ecological Society of America Annual Meeting, Austin, August 7-12, 2011, Abstract published online.
- Baldrian P., Voříšková J., Štursová M., Valášková V., Větrovský T., Žifčáková L., Šnajdr J., Vlček Č., Rídl J., Kopecký J., Kolařík M.: Decomposition processes in forest soils: identification of active microorganisms, Ecology of Soil Microorganisms, Prague, April 27 - May 1, 2011, Book of Abstracts, p. 33.
- Baldrian P.: Production of lignocellulolytic enzymes by mushrooms. In: Proceedings of the 7th International Conference on Mushroom Biology and Mushroom Products. Savoie JM, Foulongne-Oriol M., Largeau M., Barroso G. (eds). Arcachon, October 4-7, 2011, pp. 334-338.
- Baldrian P.: Linking microbial community structure to decomposition in forest ecosystems. INTECOL 2013, London, August 18-23, 2013, Abstracts.
- Baldrian P.: Enzyme activity measurements at various spatial scales: from landscape level to the microscale. The Dahlia Greidinger International Symposium 2013, Haifa, March 4-7, 2013, Book of Abstracts, p. 28-29.
- Baldrian P.: Fungal communities in soils - structure, dynamics and functioning. 2nd Thünen Symposium on Soil Metagenomics, Braunschweig, December 11-13, 2013, Book of Abstracts, p. 37.
- Baldrian P., Žifčáková L., Štursová M., Větrovský T., López-Mondéjar R.: Involvement of soil microorganisms in the biodegradation of lignocellulosics: from ecology to biotechnology. 6th Conference of the Hellenic Scientific Society Microbiokosmos, Athens, April 3-5, 2015, Book of Abstracts, p. 9.
- Baldrian P.: The effect of forest trees on microbial processes involved in C cycling. The final European Forest Research and Innovation conference, Rogla, August 31-September 4, 2015, Book of Abstracts, p. 21.
- Baldrian P.: Forest microbiome - diversity, functioning and dynamics. Ecology of Soil Microorganisms, Prague, November 29-December 3, 2015, Book of Abstracts, p. 25.
- Baldrian P.: Exploring microbial processes in forest soils using metatranscriptomics and complementary methods. Enzymes in the Environment: Activity, Ecology, & Applications, Bangor, July 24-28, 2016, Book of Abstracts.
- Baldrian P.: Tracing the activity of microbes in forest soils: from communities to individual taxa. 3rd Thünen Symposium on Soil Metagenomics, Braunschweig, December 14-16, 2016, Book of Abstracts, p. 55.
- Baldrian P.: Fungi in discomfort: periods of starvation and the fate of dead mycelia. North European Forest Mycologists Meeting, Finse, September 18-21, 2016.
- Baldrian P.: Environmental microbiology coming back to strain isolation and characterization: the future role of culture collections. ECCO XXXVI: European Culture Collections Organisation Annual Meeting, Brno, September 13-15, 2017, Book of Abstracts, p. 18.
- Baldrian P., The known and the unknown in soil microbial ecology. 3rd Ecology of Soil Microorganisms, Helsinki, June 17-21, 2018, Book of Abstracts, p. 38.
- Baldrian P.: Fungi in the forest ecosystem: habitats, diversity, and contribution to ecosystem processes. 14th European Conference on Fungal Genetics, Haifa, February 25-28, 2018, Book of Abstracts, p. 77.
- Baldrian P.: Fungal communities in soils and the functioning of forest ecosystems: the picture obtained using NGS methods. Fungal Diversity in Forest: Mushroom Taxonomy and

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- Baldrian P.: Lignocellulose in forest soils and its microbial decomposers. Exploring Lignocellulosic Biomass! Challenges and Opportunity for Bioeconomy, Reims, June 26-27, 2018, Book of Abstracts, pp. 143-144.
- Baldrian P.: Fungi and the dynamics of forest ecosystems. 11th International Mycological Congress, San Juan, July 15-21, 2018, Book of Abstracts, pp. 143-144.
- Baldrian P.: Forest tree rhizosphere: an activity hotspot with specific microbiome and specific functions. Rhizosphere 5, Saskatoon, July 7-11, 2019, Book of Abstracts, p. 75.
- Baldrian P.: Microbial communities and their activity at the root-soil interface of a coniferous forest soil respond to seasonal changes of metabolomes. 4th Thünen Symposium on Soil Microbiology, Berlin, June 30- July 5, 2019, Book of Abstracts, p. 112.
- Baldrian P.: Seasonality of ectomycorrhizal function at the spruce root-soil interface. 10th International Conference on Mycorrhiza, Mérida, June 30- July 5, 2019, Book of Abstracts, p. 112.
- Baldrian P.: Seasonality of microbiome activity in the temperate forest soil: carbon utilization, decomposers and mycorrhizal symbionts. Microbial and biogeochemical processes controlling soil carbon storage, Örenäs, September 9-10, 2019.
- Baldrian, P.: Seasonal dynamics of microbial communities and their activity at the root-soil interface of a coniferous forest soil. Forest Science for Future Forests, Ljubljana, September 21-25, 2020, Abstract book, page 25.

9.) Disertační práce:

Baldrian, P., 2000. Effect of heavy metals on the growth and biodegradative abilities of wood-rotting fungi. Přírodovědecká fakulta Univerzity Karlovy

11.) Účast na řešení grantů

- GP204/02/P100 Vliv těžkých kovů na rozklad lignocelulózy dřevokaznými basidiomycety, Poskytovatel: GA0 - Grantová agentura České republiky (GA ČR), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2002-2004.
- IAB5020202 Biotické a abiotické faktory ovlivňující růst a biodegradaci dřevokazných hub v půdě, Poskytovatel: AV0 - Akademie věd České republiky (AV ČR), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2002-2004.
- IBS5020306 Heterogenní katalyzátory odbourání těžko rozložitelných organických látek peroxidem vodíku, Poskytovatel: AV0 - Akademie věd České republiky (AV ČR), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2003-2005.
- GA526/05/0168 Ekologický význam saprofytických hub, rozkládajících lignocelulózu v lesních půdách, Poskytovatel: GA0 - Grantová agentura České republiky (GA ČR), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2005-2007.
- KJB600200516 Výskyt a vlastnosti ligninolytických lakáz a peroxidáz v lesní půdě, Poskytovatel: AV0 - Akademie věd České republiky (AV ČR), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2005-2007.
- ME 954 Transformace humusových látek saprotrofními basidiomycety, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2007.
- OC 155 Půdní houby jako zdroj enzymů pro funkcionalizaci polymerů, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2007-2010.

- QH72216 Vývoj postupů pro standardizovanou analýzu extracelulárních enzymatických aktivit v půdě a jejich využití pro hodnocení narušení funkce půdy, Poskytovatel: MZE - Ministerstvo zemědělství (MZe), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2007-2011.
- OC08050 Enzymy saprotrfních hub, využitelné pro zpracování lignocelulózy v biorafinériích, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2008-2011.
- GA526/08/0751 Půdní procesy a mikrobiální společenstva se vztahem k cyklům C a N v průběhu regenerace horského smrkového lesa po kůrovcové kalamitě, Poskytovatel: GA0 - Grantová agentura České republiky (GA ČR), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2008-2012.
- IAA603020901 Význam hub a aktinomycet pro rozklad odumřelé rostlinné hmoty v ekosystémech kontaminovaných těžkými kovy. Poskytovatel: AV0 - Akademie věd České republiky (AV ČR), Hlavní příjemce: Výzkumný ústav rostlinné výroby, v.v.i., Období řešení projektu: 2009-2013.
- OC10064 Úloha půdních hub při přeměně uhlíku v hlubších vrstvách lesních půd, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2010-2012.
- ME10028 Identifikace a analýza aktivních mikrobiálních populací, degradujících odumřelou organickou hmotu v lesních půdách, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2010-2012.
- ME10152 Rozklad rostlinného materiálu v lesních půdách - role hub a jejich extracelulárních enzymů, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2010-2012.
- LA10001 Kooperace a členství v mezinárodních nevládních společnostech, zabývajících se ekologií mikroorganismů, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2010-2012.
- LD12050 Analýza environmentálních metagenomů metodami next-generation-sequencing a vývoj postupů pro analýzu dat, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2012-2015.
- LD12048 Kombinace přístupů metatranskriptomiky a metagenomiky pro identifikaci aktivních mikroorganismů a jejich funkce v půdě, Poskytovatel: MSM - Ministerstvo školství, mládeže a tělovýchovy (MŠMT), Hlavní příjemce: Mikrobiologický ústav AV ČR, v. v. i., Období řešení projektu: 2012-2015.
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