

# Opravný list k bakalářské práci

Název práce: Význam požáru v ekologii mykorhizních hub

Řešitelka: Anna Mlčochová

Školní rok: 2024/2025

## Opravený kompletní seznam použité literatury (str. 29-46):

AROCENA, Joselito M. a OPIO, Christopher (2003). Prescribed fire-induced changes in properties of sub-boreal forest soils. *Geoderma*, vol. 113, n.1, s. 1–16.

ASHMAN, Mark a PURI, Geeta (2002). *Essential soil science: A Clear and Concise Introduction to Soil Science*. Oxford: John Wiley & Sons.

ATCHLEY, Adam L.; KINOSHITA Alicia M.; LOPEZ, Sonya R.; TRADER, Laura a MIDDLETON, Richard (2018). Simulating Surface and Subsurface Water Balance Changes Due to Burn Severity. *Vadose Zone Journal*, vol. 17, n. 1, s. 1–13.

BALCH, Jennifer K.; BRADLEY, Bethany A.; D'ANTONIO, Carla M. a GÓMEZ-DANS, José (2013). Introduced annual grass increases regional fire activity across the arid western USA (1980-2009). *Global Change Biology*, vol. 19, n. 1, s. 173–183.

BÁRCENAS-MORENO, Gema; BRANDÓN, María Gómez; ROUSK, Johannes a BÅÅTH, Erland (2009). Adaptation of soil microbial communities to temperature: Comparison of fungi and bacteria in a laboratory experiment. *Global Change Biology*, vol. 15, n. 12, s. 2950–2957.

BARKER, Jason S.; SIMARD, Suzanne W.; JONES, Melanie D. a DURALL, D. M. (2013). Ectomycorrhizal fungal community assembly on regenerating Douglas-fir after wildfire and clearcut harvesting. *Oecologia*, vol. 172, n. 4, s. 1179–1189.

BECERRA, Alejandra; BARTOLONI, Norberto; COFRÉ, Noelia; SOTERAS, Florencia a CABELLO, Marta (2014). Arbuscular mycorrhizal fungi in saline soils: Vertical distribution at different soil depth. *Brazilian journal of microbiology*, vol. 45, n. 2, s. 585-94.

BOWMAN, David M. J. S.; BALCH, Jennifer K.; ARTAXO, Paulo; BOND, William J.; CARLSON, Jean M.; COCHRANE, Mark A.; D'ANTONIO, Carla M.; DEFRIES, Ruth S.; DOYLE, John C.; HARRISON, Sandy P. et al. (2009). Fire in the Earth System. *Science*, vol. 324, n. 5926, s. 481–484.

BRADY, Nyle C. a WEIL, Ray R. (2018). *Elements of the Nature and Properties of Soils*. 4. vyd. New York: Pearson.

BRAIS, Suzanne; DAVID, Paré a OUIMET, Roch (2000). Impacts of wild fire severity and salvage harvesting on the nutrient balance of jack pine and black spruce boreal stands. *Forest Ecology and Management*, vol. 137, n. 1–3, s. 231–243.

THE EDITORS OF ENCYCLOPAEDIA BRITANNICA (2024). Wildfire | Definition & Facts. Encyclopedia Britannica [online].  
Dostupné z: <https://www.britannica.com/science/wildfire> [citováno 2024-05-30]

BRUNDRETT, Mark C.; 2017. Global Diversity and Importance of Mycorrhizal and Nonmycorrhizal Plants. V: TEDERSOO, Leho (ed.). *Biogeography of Mycorrhizal Symbiosis. Ecological studies*, vol. 230, s. 533–556. Springer, Cham.

BRUNDRETT, Mark C. a TEDERSOO, Leho (2018). Evolutionary history of mycorrhizal symbioses and global host plant diversity. *New Phytologist*, vol. 220, n. 4, s. 1108–1115.

BRUNS, Thomas D.; HALE, Maren L. a NGUYEN, Nhu H. (2019). Rhizopogon olivaceotinctus increases its inoculum potential in heated soil independent of competitive release from other ectomycorrhizal fungi. *Mycologia*, vol. 111, n. 6, s. 936–941.

BRUNS, Thomas D.; CHUNG, Judy A.; CARVER, Akiko A. a GLASSMAN, Sydney I. (2020). A simple pyrocosm for studying soil microbial response to fire reveals a rapid, massive response by Pyronema species. *PLoS ONE*, vol. 15, n. 3, článek č. e022269.

BURKLE, Laura A.; MYERS, Jonathan A. a BELOTE, R. Travis (2015). Wildfire disturbance and productivity as drivers of plant species diversity across spatial scales. *Ecosphere*, vol. 6, n. 10, s. 1–14.

BUSCARDO, Erika; RODRÍGUEZ-ECHEVERRÍA, Susana; MARTÍN, María P.; DE ANGELIS, Paolo; PEREIRA, João Santos a FREITAS, Helena (2010). Impact of wildfire return interval on the ectomycorrhizal resistant propagules communities of a Mediterranean open forest. *Fungal Biology*, vol. 114, n. 8, s. 628–636.

CARDILLE, Jeffrey A.; VENTURA Stephen J. a TURNER, Monica G. (2001). Environmental and social factors influencing wildfires in the Upper Midwest, United States. *Ecological Applications*, vol. 11, n. 1, s. 111–127.

CASTAÑO, Carles; SUAREZ-VIDAL, Estefanía; ZAS, Rafael; BONET, José Antonio; OLIVA, Jonàs a SAMPEDRO, Luis (2023). Ectomycorrhizal fungi with hydrophobic mycelia and rhizomorphs dominate in young pine trees surviving experimental drought stress. *Soil Biology and Biochemistry*, vol. 178, článek č. 108932.

CERTINI, Giacomo (2005). Effects of fire on properties of forest soils: A review. *Oecologia*, vol. 143, n. 1, s. 1–10.

CLARKE, P. J.; LAWES, M. J.; MIDGLEY, J. J.; LAMONT, B. B.; OJEDA, F.; BURROWS, G. E.; ENRIGHT N. J. a KNOX, K. J. E. (2013). Resprouting as a key functional trait: how buds, protection and resources drive persistence after fire. *New Phytologist*, vol. 197, n. 1, s. 19–35.

COLLA, Giuseppe, ROUPHAEL, Youssef; CARDARELLI, Mariateresa; TULLIO, Monica; RIVERA, Carlos Mario a REA, Elvira (2008). Alleviation of salt stress by arbuscular mycorrhizal in zucchini plants grown at low and high phosphorus concentration. *Biology and Fertility of Soils*, vol. 44, n. 3, s. 501–509.

COLLIER, Fay A. a BIDARTONDO, Martin I. (2009). Waiting for fungi: The ectomycorrhizal invasion of lowland heathlands. *Journal of Ecology*, vol. 97, n. 5, s. 950–963.

CORDERO, Radames J.B. a CASADEVALL, Arturo (2017). Functions of fungal melanin beyond virulence. *Fungal Biology Reviews*, vol. 31, n. 2, s. 99–112.

COWAN, Ariel D.; SMITH, Jane E. a FITZGERALD, Stephen A. (2016). Recovering lost ground: Effects of soil burn intensity on nutrients and ectomycorrhiza communities of ponderosa pine seedlings. *Forest Ecology and Management*, vol. 378, s. 160–172.

DAHLBERG, Anders; SCHIMMEL, Johnny; TAYLOR, Andy F. S. a JOHANNESSON, Hanna (2001). Post-fire legacy of ectomycorrhizal fungal communities in the Swedish boreal forest in relation to fire severity and logging intensity. *Biological Conservation*, vol. 100, n. 2, s. 151–161.

DAY, Nicola J.; DUNFIELD, Kari E.; JOHNSTONE, Jill F.; MACK, Michelle C.; TURETSKY, Merritt R.; WALKER, Xanthe J.; WHITE, Alison L. a BALTZER, Jennifer L. (2019). Wildfire severity reduces richness and alters composition of soil fungal communities in boreal forests of western Canada. *Global Change Biology*, vol. 25, n. 7, s. 2310–2324.

DAY, Nicola J., WHITE, Alison L.; JOHNSTONE, Jill F.; DEGRÉ-TIMMONS, Geneviève; CUMMING, Steven G.; MACK, Michelle C.; TURETSKY, Merritt R.; WALKER, Xanthe J. a BALTZER, Jennifer L. (2020). Fire characteristics and environmental conditions shape plant communities via regeneration strategy. *Ecography*, vol. 43, n. 10, s. 1464–1474.

DE GRANDPRÉ, Louis; GAGNON, Daniel a BERGERON, Yves (1993). Changes in the understory of Canadian southern boreal forest after fire. *Journal of Vegetation Science*, vol. 4, n. 6, s. 803–810.

DEBANO, L. F. (2000). The role of fire and soil heating on water repellency in wildland environments: a review. *Journal of Hydrology*, vol. 231–232, s. 195–206.

DEBANO, Leonard F. (1991). The effect of fire on soil properties. *US Forest Service Research and Development*, s. 151-156.

DOERR, Stefan H. a SANTÍN, Cristina (2016). Global trends in wildfire and its impacts: Perceptions versus realities in a changing world. *Philosophical Transactions of the Royal Society B: Biological Sciences*, vol. 371, n. 1696, článek č. 20150345.

DOVE, Nicholas C. a HART, Stephen C. (2017). Fire reduces fungal species richness and in situ mycorrhizal colonization: A meta-analysis. *Fire Ecology*, vol. 13, n. 2, s. 37–65.

DOVE, Nicholas C.; TAŞ, Neslihan a HART, Stephen C. (2022). Ecological and genomic responses of soil microbiomes to high-severity wildfire: linking community assembly to functional potential. *The ISME Journal*, vol. 16, n. 7, s. 1853–1863.

EL-ABYAD, M. S. H. a WEBSTER, J. (1968). Studies on pyrophilous discomycetes: I. Comparative physiological studies. *Transactions of the British Mycological Society*, vol. 51, n. 3, s. 353–367.

EOM, Ahn-Heum; HARTNETT, David C.; WILSON, Gail W. T. a FIGGE, Deborah A. H. (1999). The Effect of Fire, Mowing and Fertilizer Amendment on Arbuscular Mycorrhizas in Tallgrass Prairie. *The American Midland Naturalist*, vol. 142, n. 1, s. 55–70.

ESTES, Becky L.; KNAPP, Eric E.; SKINNER, Carl N.; MILLER, Jay D. a PREISLER, Haiganoush K. (2017). Factors influencing fire severity under moderate burning conditions in the Klamath Mountains, northern California, USA. *Ecosphere*, vol. 8, n. 5, článek č. e01794.

FERNANDEZ-ANEZ, Nieves; KRASOVSKIY, Andrey; MÜLLER, Mortimer; VACIK, Harald; BAETENS, Jan; HUKIĆ, Emira; KAPOVIC SOLOMUN, Marijana; ATANASSOVA, Irena; GLUSHKOVA, Maria; BOGUNOVIĆ, Igor et al. (2021). Current Wildland Fire Patterns and Challenges in Europe: A Synthesis of National Perspectives Air, Soil and Water Research, vol. 14.

FLANNIGAN, Mike; CANTIN, Alan S.; DE GROOT, William J.; WOTTON, Mike; NEWBERY, Alison a GOWMAN, Lynn M. (2013). Global wildland fire season severity in the 21st century. *Forest Ecology and Management*, vol. 294, s. 54–61.

*FireWords*. Online. Poslední změna 11.03.2008. Dostupné z: <http://www.firewords.net/>. [citováno 2023-04-10]

FOX, Sam; SIKES, Benjamin A.; BROWN, Shawn P.; CRIPPS, Cathy L.; GLASSMAN, Sydney I.; HUGHES, Karen; SEMENOVA-NELSEN, Tatiana a JUMPPONEN, Ari (2022). Fire as a driver of fungal diversity — A synthesis of current knowledge. *Mycologia*, vol. 114, n. 2, s. 215–241.

FU, Wei; CHEN, Baodong; RILLIG, Matthias C.; JANSA, Jan; MA, Wang; XU, Chong; LUO, Wentao; WU, Honghui; HAO, Zhipeng; WU, Zhipeng et al. (2022). Community response of arbuscular mycorrhizal fungi to extreme drought in a cold-temperate grassland. *New Phytologist*, vol. 234, n. 6, s. 2003–2017.

GARCIA, Kevin a ZIMMERMANN, Sabine D. (2014). The role of mycorrhizal associations in plant potassium nutrition. *Frontiers in Plant Science*, vol. 5, článek č. 337.

GASSIBE, Pablo Vásquez; FABERO, Raul Fraile; HERNÁNDEZ-RODRÍGUEZ, María; ORIA-DE-RUEDA, Juan Andrés; OVIEDO, Felipe Bravo a MARTÍN-PINTO, Pablo (2014). Post-fire production of mushrooms in Pinus pinaster forests using classificatory models. *Journal of Forest Research*, vol. 19, n. 3, s. 348–356.

GLASSMAN, Sydney I.; LEVINE, Carrie R.; DIROCCO, Angela M.; BATTLES, John J. a BRUNS, Thomas D. (2016). Ectomycorrhizal fungal spore bank recovery after a severe forest fire: Some like it hot. *ISME Journal*, vol. 10, n. 5, s. 1228–1239.

GOLAN, Jacob a PRINGLE, Anne (2017). Long-Distance Dispersal of Fungi. *Microbiology Spectrum*, vol. 5, n. 4, s. 1-23.

GÓMEZ-BELLOT, María José; ORTUÑO, María Fernanda; NORTES, Pedro Antonio; VICENTE-SÁNCHEZ, Javier; MARTÍN, Félix Fernández; BAÑÓN, Sebastián a SÁNCHEZ-BLANCO, María Jesús (2015). Protective effects of *Glomus iranicum* var. *tenuihypharum* on soil and *Viburnum tinus* plants irrigated with treated wastewater under field conditions. *Mycorrhiza*, vol. 25, n. 5, s. 399–409.

HARDEN, Jennifer W; MACK, Michelle; VELDHUIS, Hugo a GOWER, S. T. (2003). Fire dynamics and implications for nitrogen cycling in boreal forests. *Journal of Geophysical Research: Atmospheres*, vol. 108, n. D3, s. 4-1 – 4-8.

HART, Stephen C.; DELUCA, Thomas H.; NEWMAN, Gregory S.; MACKENZIE, M. Derek a BOYLE, Sarah I. (2005). Post-fire vegetative dynamics as drivers of microbial community structure and function in forest soils. *Forest Ecology and Management*, vol. 220, n. 1, s. 166–184.

HAWKES, Christine V.; HARTLEY, Iain P.; INESON, Phil a FITTER, Alastair H. (2008). Soil temperature affects carbon allocation within arbuscular mycorrhizal networks and carbon transport from plant to fungus. *Global Change Biology*, vol. 14, n. 5, s. 1181–1190.

HE, Tianhua, LAMONT, Byron B. a PAUSAS, Juli G. (2019). Fire as a key driver of Earth's biodiversity. *Biological Reviews*, vol. 94, n. 6, s. 1983–2010.

HEDAYATI-DEZFOOLI, M. a LEONG, Wey H. (2019). An experimental study of coupled heat and moisture transfer in soils at high temperature conditions for a medium coarse soil. *International Journal of Heat and Mass Transfer*. vol. 137, s. 372–389.

HEIM, Ramona J.; HEIM, Wieland; BÜLTMANN, Helga; KAMP, Johannes; RIEKER, Daniel; YURTAEV, Andrey a HÖLZEL, Norbert (2022). Fire disturbance promotes biodiversity of plants, lichens and birds in the Siberian subarctic tundra. *Global Change Biology*, vol. 28, n. 3, s. 1048–1062.

HERNÁNDEZ-RODRÍGUEZ, María; ORIA-DE-RUEDA, Juan Andrés a MARTÍN-PINTO, Pablo (2013). Post-fire fungal succession in a Mediterranean ecosystem dominated by *Cistus ladanifer* L. *Forest Ecology and Management*. vol. 289, s. 48–57.

HEWITT, Rebecca E.; BENT, Elizabeth; HOLLINGSWORTH, Teresa N.; CHAPIN, F. Stuart a TAYLOR, D. Lee (2013). Resilience of Arctic mycorrhizal fungal communities after wildfire facilitated by resprouting shrubs. *Ecoscience*, vol. 20, n. 3, s. 296–310.

HEWITT, Rebecca E.; CHAPIN, F. Stuart; HOLLINGSWORTH, Teresa N. a TAYLOR, D. Lee (2017). The potential for mycobiont sharing between shrubs and seedlings to facilitate tree establishment after wildfire at Alaska arctic treeline. *Molecular Ecology*, vol. 26, n. 14, s. 3826–3838.

HOLDEN, Sandra R.; ROGERS, Brendan M.; TRESEDER, Kathleen K. a RANDERSON, James T. (2016). Fire severity influences the response of soil microbes to a boreal forest fire. *Environmental Research Letters*, vol. 11, n. 3, článek č. 035004.

HOLLINGSWORTH, T. N.; WALKER, M. D.; CHAPIN, F. S. a PARSONS, A. L. (2006). Scale-dependent environmental controls over species composition in Alaskan black spruce communities. *Canadian Journal of Forest Research*, vol. 36, n. 7, s. 1781–1796.

HOLLINGSWORTH, Teresa N.; JOHNSTONE, Jill F.; BERNHARDT Emily L. a CHAPIN, F. Stuart (2013). Fire Severity Filters Regeneration Traits to Shape Community Assembly in Alaska's Boreal Forest. *PLoS ONE*, vol. 8, n. 2, článek č. e56033.

HOPKINS, Jacob R. a BENNETT, Alison E. (2023). Spore traits mediate disturbance effects on arbuscular mycorrhizal fungal community composition and mutualisms. *Ecology*, vol. 104, n. 5, článek č. e4016.

HUGHES, Karen W.; CASE, Alexis; MATHENY, P. Brandon; KIVLIN, Stephanie; PETERSEN, Ronald H.; MILLER, Andrew N. a ITURRIAGA, Teresa (2020a). Secret lifestyles of pyrophilous fungi in the genus Sphaerosporella. *Applications in Plant Sciences*, vol. 107, n. 6, s. 876–885.

HUGHES, Karen W.; MATHENY, P. Brandon; MILLER, Andrew N.; PETERSEN, Ronald H.; ITURRIAGA, Teresa M.; JOHNSON, Kristine D.; METHVEN, Andrew S.; RAUDABAUGH, Daniel B.; SWENIE, Rachel A. a BRUNS, Thomas D. (2020b). Pyrophilous fungi detected after wildfires in the Great Smoky Mountains National Park expand known species ranges and biodiversity estimates. *Mycologia* [online]. 112(4), 677–698.

CHAUDHARY, V. Bala; NOLIMAL, Sarah; Moisés A SOSA-HERNÁNDEZ, Moisés A.; EGAN, Cameron a KASTENS, Jude (2020). Trait-based aerial dispersal of arbuscular mycorrhizal fungi. *New Phytologist*, vol. 228, n. 1, s. 238–252.

CHEN, David M. a CAIRNEY, John W. G. (2002). Investigation of the influence of prescribed burning on ITS profiles of ectomycorrhizal and other soil fungi at three Australian sclerophyll forest sites. *Mycological Research*. vol. 106, n. 5, s. 532–540.

JUNG, Sabine C.; MARTINEZ-MEDINA, Ainhoa; LOPEZ-RAEZ, Juan A. a POZO, Maria J. (2012). Mycorrhiza-Induced Resistance and Priming of Plant Defenses. *Journal of Chemical Ecology*, vol. 38, n. 6, s. 651–664.

JUO, Anthony S.R. a MANU, Andrew (1996). Chemical dynamics in slash-and-burn agriculture. *Agriculture Ecosystems & Environment*, vol. 58, n. 1, s. 49–60.

KADOWAKI, Kohmei; YAMAMOTO, Satoshi; SATO, Hirotoshi; TANABE, Akifumi S.; HIDAKA, Amane a TOJU, Hirokazu (2018). Mycorrhizal fungi mediate the direction and strength of plant–soil feedbacks differently between arbuscular mycorrhizal and ectomycorrhizal communities. *Communications Biology*, vol. 1, n. 1, článek č. 196.

KANE, Jeffrey (2025). Prescribed fire | Definition, Ecology, History, & Benefits. *Encyclopedia Britannica* [online].  
Dostupné z: <https://www.britannica.com/science/prescribed-fire>. [citováno 2024-05-30]

KEELEY, Jon E. (2009). Fire intensity, fire severity and burn severity: A brief review and suggested usage. *International Journal of Wildland Fire*, vol. 18, n. 1, s. 116–126.

KETTERINGS, Quirine M.; BIGHA, Jerry M. a LAPERCHE, Valérie (2000). Changes in Soil Mineralogy and Texture Caused by Slash-and-Burn Fires in Sumatra, Indonesia. *Soil Science Society of America Journal*, vol. 64, n. 3, s. 1108–1117.

KILPELÄINEN, Jouni; APHALO, Pedro J. a LEHTO, Tarja (2020). Temperature affected the formation of arbuscular mycorrhizas and ectomycorrhizas in *Populus angustifolia* seedlings more than a mild drought. *Soil Biology and Biochemistry*, vol. 146, článek č. 107798.

KIPFER, Tabea; EGLI, Simon; GHAZOUL, Jaboury; MOSER, Barbara a WOHLGEMUTH, Thomas (2010). Susceptibility of ectomycorrhizal fungi to soil heating. *Fungal Biology*, vol. 114, n. 5–6, s. 467–472.

KIPFER, Tabea; MOSER, Barbara; EGLI, Simon; WOHLGEMUTH, Thomas a GHAZOUL, Jaboury (2011). Ectomycorrhiza succession patterns in *Pinus sylvestris* forests after stand-replacing fire in the Central Alps. *Oecologia*, vol. 167, n. 1, s. 219–228.

KIVLIN, Stephanie N.; HARPE, V. Rosanne; TURNER, Jackson H.; MOORE, Jessica A.M.; MOORHEAD, Leigh C.; BEALS, Kendall K.; HUBERT, Mali M.; PAPES, Monica a SCHWEITZER, Jennifer A. (2021). Arbuscular mycorrhizal fungal response to fire and urbanization in the Great Smoky Mountains National Park. *Elementa*, vol. 9, n. 1, článek č. 00037.

KIVLIN, Stephanie N.; WINSTON, Greg C.; GOULDEN, Michael L. a TRESEDER, Kathleen K. (2014). Environmental filtering affects soil fungal community composition more than dispersal limitation at regional scales. *Fungal Ecology*, vol. 12, s. 14–25.

KOZBIAR, Leda N.; PINGREE, Melissa R. A.; LARSON, Heather; DREADEN, Tyler J.; GREEN, Shelby a SMITH, Jason A. (2018). Pyroaerobiology: the aerosolization and transport of viable microbial life by wildland fire. *Ecosphere*, vol. 9, n. 11, článek č. e02507.

KONG, Jian jian; YANG, Jian a BAI, Edith (2018). Long-term effects of wildfire on available soil nutrient composition and stoichiometry in a Chinese boreal forest. *Science of the Total Environment*, vol. 642, s. 1353–1361.

KORB, Julie E.; JOHNSON, Nancy C. a COVINGTON, W. W. (2003). Arbuscular mycorrhizal propagule densities respond rapidly to ponderosa pine restoration treatments. *Journal of Applied Ecology* [online]. vol. 40, n. 1, s. 101–110.

KRAUSE, Andreas; KLOSTER, Silvia; WILKENSKJELD, Stiig a PAETH, Heiko (2014). The sensitivity of global wildfires to simulated past, present, and future lightning frequency. *Journal of Geophysical Research: Biogeosciences*, vol. 119, n. 3, s. 312–322.

LANFRANCO, Luisa; BONFANTE, Paola a GENRE, Andrea (2016). The Mutualistic Interaction between Plants and Arbuscular Mycorrhizal Fungi. *Microbiology Spectrum*, vol. 4, n. 6

LINDAHL, Björn D. a TUNLID, Anders (2015). Ectomycorrhizal fungi – potential organic matter decomposers, yet not saprotrophs. *New Phytologist*, vol. 205, n. 4, 1443–1447.

LIU, Yuan; HE, Nianpeng; WEN, Xuefa; XU, Li; SUN, Xiaomin; YU, Guirui; LIANG, Liyin a SCHIPPER, Louis A. (2018). The optimum temperature of soil microbial respiration: Patterns and controls. *Soil Biology and Biochemistry*, vol. 121, s. 35–42.

LIVNE-LUZON, Stav; SHEMESH, Hagai; OSEM, Yagil; CARMEL, Yohay; MIGAEL, Hen; AVIDAN, Yael; TSAFRIR, Anat; GLASSMAN, Sydney I.; BRUNS, Thomas D. a OVADIA, Ofer (2021). High resilience of the mycorrhizal community to prescribed seasonal burnings in eastern Mediterranean woodlands. *Mycorrhiza*, vol. 31, n. 2, s. 203–216.

LONGO, M. Silvana; URCELAY, Carlos a NOUHRA, Eduardo (2011). Long term effects of fire on ectomycorrhizas and soil properties in Nothofagus pumilio forests in Argentina. *Forest Ecology and Management*, vol. 262, n. 3, s. 348–354.

LONGO, Silvana; NOUHRA, Eduardo; GOTO, Bruno T.; BERBARA, Ricardo L. a URCELAY, Carlos (2014). Effects of fire on arbuscular mycorrhizal fungi in the Mountain Chaco Forest. *Forest Ecology and Management*, vol. 315, s. 86–94.

MACDONALD, Lee H. a HUFFMAN, Edward L. (2004). Post-fire Soil Water Repellency: Persistence and Soil Moisture Thresholds. *Soil Science Society of America Journal*, vol. 68, n. 5, s. 1729–1734.

MAGOMANI, M. I. a VAN TOL, J. J. (2019). The impact of fire frequency on selected soil physical properties in a semi-arid savannah Thornveld. *Acta Agriculturae Scandinavica Section B: Soil and Plant Science*, vol. 69, n. 1, s. 43–51.

MACHÓN, P.; PAJARES, J. A.; DIEZ, J. J. a ALVES-SANTOS, F. M. (2009). Influence of the ectomycorrhizal fungus *Laccaria laccata* on pre-emergence, post-emergence and late damping-off by *Fusarium oxysporum* and *F. verticillioides* on stone pine seedlings. *Symbiosis*, vol. 49, n. 2, s. 101–109.

MANTON, Michael; RUFFNER, Charles; KIBIRKŠTIS, Gintautas; BRAZAITIS, Gediminas; MAROZAS, Vitas; PUKIENĖ, Rūtilė; MAKRICKIENE, Ekaterina a ANGELSTAM, Per (2022). Fire Occurrence in Hemi-Boreal Forests: Exploring Natural and Cultural Scots Pine Fire Regimes Using Dendrochronology in Lithuania. *Land*, vol. 11, n. 2, s. 260.

MARTIN, Francis (2016). *Molecular Mycorrhizal Symbiosis*. John Wiley & Sons.

MENON, Surabi; DENMAN, Kenneth L.; BRASSEUR, Guy; CHIDTHAISONG, Amnat; CIAIS, Philippe; COX, Peter M.; DICKINSON, Robert E.; HAUGLUSTAINE, Didier; HEINZE, Christoph; HOLLAND, Elisabeth et al. (2007). Couplings between changes in the climate system and biogeochemistry. *Lawrence Berkeley National Lab. (LBNL), Berkeley, CA (United States)*[online]. Dostupné z: <https://www.osti.gov/biblio/934721>

METODICKÝ LIST Č. 21 P. 2001. Lesní požáry. Bojový řád jednotek požární ochrany – taktické postupy zásahu. Praha, MV GŘ HZS ČR:3 s.

MILLER, Russell G.; TANGNEY, Ryan; ENRIGHT, Neal J.; FONTAINE, Joseph B.; MERRITT, David J.; OOI, Mark K.J.; RUTHROF, Katinka X. a MILLER, Ben P. (2019). Mechanisms of fire seasonality effects on plant populations. *Trends in Ecology & Evolution*, vol. 34, n. 12, s. 1104–1117.

MIRZAEI, Javad; HEYDARI, Mehdi; OMIDIPOUR, Reza; JAFARIAN, Nahid a CARCAILLET, Christopher (2023). Decrease in Soil Functionalities and Herbs' Diversity, but Not That of Arbuscular Mycorrhizal Fungi, Linked to Short Fire Interval in Semi-Arid Oak Forest Ecosystem, West Iran. *Plants*, vol. 12, n. 5, článek č. 1112.

MOLINA, Randy; MASSCIOTTE a TRAPPE, James M. (1992). Specificity Phenomena in Mycorrhizal Symbioses: Community-Ecological Consequences and Practical Implications. V: ALLEN, M. J. (Ed.). *Mycorrhizal functioning: an integrative plant-fungal process*. New York: Chapman and Hall. s. 357-423.

MOODY, John A.; EBEL, Brian A.; NYMAN, Petter; MARTIN, Deborah A.; STOOF, Cathelijne a MCKINLEY, Randy (2016). Relations between soil hydraulic properties and burn severity. *International Journal of Wildland Fire*, vol. 25, n. 3, s. 279–293.

MOTIEJŪNAITĖ, Jurga; ADAMONYTĖ, Gražina; IRŠĒNAITĖ, Reda; JUZĒNAS, Sigitas; KASPARAVIČIUS, Jonas; KUTORGA, Ernestas a MARKOVSKAJA, Svetlana (2014). Early fungal community succession following crown fire in *Pinus mugo* stands and surface fire in *Pinus sylvestris* stands. *European Journal of Forest Research*, vol. 133, n. 4, s. 745–756.

MUCHA, Joanna; PEAY, Kabir G.; SMITH, Dylan P.; REICH, Peter B.; STEFAŃSKI, Artur a HOBBIE, Sarah E. (2018). Effect of Simulated Climate Warming on the Ectomycorrhizal Fungal Community of Boreal and Temperate Host Species Growing Near Their Shared Ecotonal Range Limits. *Microbial Ecology*, vol. 75, n. 2, s. 348–363.

NASI, Robert; MEIJAARD, E.; APPLEGATE, G. a MOORE, P. (2002). Forest fire and biological diversity. *Unasylva*, vol. 53, n. 209, s. 36-40.

NAVARRO, Josefa M., PÉREZ-TORNERO, Olaya a MORTE, Asunción (2014). Alleviation of salt stress in citrus seedlings inoculated with arbuscular mycorrhizal fungi depends on the rootstock salt tolerance. *Journal of Plant Physiology*, vol. 171, n. 1, s. 76–85.

NAVE, Lucas E.; VANCE, Eric D.; SWANSTON, Christopher W. a CURTIS, Peter S. (2011). Fire effects on temperate forest soil C and N storage. *Ecological Applications*, vol. 21, n. 4, s. 1189–1201.

NEARY, Daniel G.; KLOPATEK, Carole C.; DEBANO, Leonard F. and FFOLLIOTT, Peter F. (1999). Fire effects on belowground sustainability: a review and synthesis. *Forest Ecology and Management*, vol. 122, n. 1–2, s. 51–71.

NEARY, Daniel G.; RYAN, Kevin C. a DEBANO, Leonard F. (2005). *Wildland fire in ecosystems: effects of fire on soils and water*. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

NEFF, J. C.; HARDEN, J. W. a GLEIXNER, G. (2005). Fire effects on soil organic matter content, composition, and nutrients in boreal interior Alaska. *Canadian Journal of Forest Research*, vol. 35, n. 9, s. 2178–2187.

NEVILLE, J.; TESSIER, J. L.; MORRISON, I.; SCARRATT, J; CANNING, B a KLIRONOMOS, J. N. (2002). Soil depth distribution of ecto- and arbuscular mycorrhizal fungi associated with *Populus tremuloides* within a 3-year-old boreal forest clear-cut. *Applied Soil Ecology*, vol. 19, n. 3, s. 209–216.

NISSAN, Alon; ALCOLOMBRI, Uria; PELEG, Nadav; GALILI, Nir; JIMENEZ-MARTINEZ, Joaquin; MOLNAR, Peter a HOLZNER, Markus (2023). Global warming accelerates soil heterotrophic respiration. *Nature Communications*, vol. 14, n. 1, článek č. 3452.

NOTTINGHAM, Andrew T.; BÅATH, Erland; REISCHKE, Stephanie; SALINAS, Norma a MEIR, Patrick (2019). Adaptation of soil microbial growth to temperature: Using a tropical elevation gradient to predict future changes. *Global Change Biology*, vol. 25, n. 3, s. 827–838.

NUÑEZ, Martin A.; HORTON, Thomas R. a SIMBERLOFF, Daniel (2009). Lack of belowground mutualisms hinders Pinaceae invasions. *Ecology*, vol. 90, n. 9, s. 2352–2359.

ORUMAA, Argo; AGAN, Ahto; ANSLAN, Sten; DRENKHAN, Tiia; DRENKHAN, Rein; KAUER, Karin; KÖSTER, Kaja; TEDERSOO, Leho a METSLAID, Marek (2022). Long-term effects of forest fires on fungal community and soil properties along a hemiboreal Scots pine forest fire chronosequence. *Science of the Total Environment*, vol. 851, článek č. 158173.

OWEN, Suzanne M.; PATTERSON, Adair M.; GEHRING, Catherine A.; SIEG, Carolyn H.; BAGGETT, L. Scott a FULÉ, Peter Z. (2019). Large, high-severity burn patches limit fungal recovery 13 years after wildfire in a ponderosa pine forest. *Soil Biology and Biochemistry*, vol. 139, článek č. 107616.

PAULSON, Alison K.; PEÑA, Homero; ALEXANDER, Heather D.; DAVYDOV, Sergei P.; LORANTY, Michael M.; MACK Michelle C. a NATALI, Susan M. (2021). Understory plant diversity and composition across a postfire tree density gradient in a Siberian arctic boreal forest. *Canadian Journal of Forest Research*, vol. 51, n. 5, s. 720–731.

PAUSAS, Juli G. a KEELEY, Jon E. (2009). A burning story: The role of fire in the history of life. *BioScience*, vol. 59, n. 7, s. 593–601.

PEAY, Kabir G.; SCHUBERT, Max G.; NGUYEN, Nhu H. a BRUNS, Thomas D. (2012). Measuring ectomycorrhizal fungal dispersal: macroecological patterns driven by microscopic propagules. *Molecular Ecology*, vol. 21, n. 16, s. 4122–4136.

PÉREZ-IZQUIERDO, Leticia; CLEMMENSEN, Karina E.; STRENGBOM, Joachim; GRANATH, Gustaf; WARDLE, David A.; NILSSON, Marie-Charlotte a LINDAHL, Björn D. (2020). Crown-fire severity is more important than ground-fire severity in determining soil fungal community development in the boreal forest. *Journal of Ecology*, vol. 109, n. 1, s. 504–518.

PÉREZ-IZQUIERDO, Leticia, ZABAL-AGUIRRE, Mario; VERDÚ, Miguel; BUÉE, Marc a RINCÓN, Ana (2020). Ectomycorrhizal fungal diversity decreases in Mediterranean pine forests adapted to recurrent fires. *Molecular Ecology*, vol. 29, n. 13, s. 2463–2476.

PFEIFFER, M.; SPESSA, A. a KAPLAN, J. O. (2013). A model for global biomass burning in preindustrial time: LPJ-LMfire (v1.0). *Geoscientific Model Development* vol. 6, n. 3, s. 643–685.

PHILLIPS, Richard P.; BRZOSTEK, Edward a MIDGLEY, Meghan G. (2013). The mycorrhizal-associated nutrient economy: a new framework for predicting carbon–nutrient couplings in temperate forests. *New Phytologist*, vol. 199, n. 1, s. 41–51.

PIETIKÄINEN, Janna, PETTERSSON, Marie a BÅÅTH, Erland (2005). Comparison of temperature effects on soil respiration and bacterial and fungal growth rates. *FEMS Microbiology Ecology*, vol. 52, n. 1, s. 49–58.

PÜSCHEL, David; BITTERLICH, Michael; RYDLOVÁ, Jana a JANSA, Jan (2021). Drought accentuates the role of mycorrhiza in phosphorus uptake. *Soil Biology and Biochemistry* vol. 157, článek č. 108243.

RAUDABAUGH, Daniel B.; MATHENY, P. Brandon; HUGHES, Karen W.; ITURRIAGA, Teresa; SARGENT, Malcolm a MILLER, Andrew N. (2020). Where are they hiding? Testing the body snatchers hypothesis in pyrophilous fungi. *Fungal Ecology*, vol. 43, článek č. 100870.

RINCÓN, Ana a PUEYO, José J. (2010). Effect of fire severity and site slope on diversity and structure of the ectomycorrhizal fungal community associated with post-fire regenerated *Pinus pinaster* Ait. seedlings. *Forest Ecology and Management*, vol. 260, n. 3, s. 361–369.

SANTOS, Gil Rodrigues Dos, MAGALLANES, Sandra Ruth Saavedra; HAESBAERT, Fernando Machado; ROTILI, Eliane Aparecida; CACHOEIRA, Jader Nunes and ALVES, Marcos Vinicius Giongo (2019). Fire effects on soil fungi in a Cerrado vegetation area according to the collection period. *Floresta*, vol. 50, n. 1, článek č. 1113.

RUIZ-LOZANO, J. M. a AZCÓN, Rosario (2000). Symbiotic efficiency and infectivity of an autochthonous arbuscular mycorrhizal Glomus sp. from saline soils and Glomus deserticola under salinity. *Mycorrhiza*, vol. 10, n. 3, s. 137–143.

SALO, Kauko a KOUKI, Jari (2018). Severity of forest wildfire had a major influence on early successional ectomycorrhizal macrofungi assemblages, including edible mushrooms. *Forest Ecology and Management*, vol. 415–416, s. 70–84.

SÁNCHEZ-RAMÍREZ, Santiago, WILSON, Andrew W. a RYBERG, Martin (2017). Overview of Phylogenetic Approaches to Mycorrhizal Biogeography, Diversity and Evolution. V: TEDERSOO, Leho (ed.) *Biogeography of Mycorrhizal Symbiosis*, Cham: Springer International Publishing, s. 1–37.

SANTÍN, Cristina a DOERR, Stefan H. (2016). Fire effects on soils: the human dimension. *Philosophical Transactions of the Royal Society B Biological Sciences*, vol. 371, n. 1696, článek č. 20150171.

SHAKESBY, R. A. a DOERR, Stefan H. (2006). Wildfire as a hydrological and geomorphological agent. *Earth-Science Reviews*, vol. 74, n. 3–4, s. 269–307.

SIMON, Luc; BOUSQUET, Jean; LÉVESQUE, Roger C. a LALONDE, Maurice (1993). Origin and diversification of endomycorrhizal fungi and coincidence with vascular land plants. *Nature*, vol. 363, n. 6424, s. 67–69.

SMITH, Sally E. a READ, David (2008). *Mycorrhizal symbiosis*. Third edition. Amsterdam: Elsevier.

SMITH, Sally E. a SMITH, F. Andrew (2011). Roles of arbuscular mycorrhizas in plant nutrition and growth: New paradigms from cellular to ecosystem scales. *Annual Review of Plant Biology*, vol. 62, s. 227–250.

SOLOMON, Susan (Atmospheric chemist); INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE a INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE WORKING GROUP I (2007). *Climate change 2007 - The Physical science basis Contribution of Working Group I to the Fourth Assessment Report of the IPCC*. B.m: Cambridge University Press.

SOUDZILOVSKAIA, Nadejda A., VAN BODEGOM, Peter M.; TERRER, César; ZELFDE, Maarten Van't; MCCALLUM, Ian; MCCORMACK, M. Luke; FISHER, Joshua B.; BRUNDRETT, Mark C.; DE SÁ, Nuno César a TEDERSOO, Leho (2019). Global mycorrhizal plant distribution linked to terrestrial carbon stocks. *Nature Communications*, vol. 10, n. 1., článek č. 5077.

STEIDINGER, B. S.; CROWTHER, T. W.; LIANG, J.; VAN NULAND, M. E.; WERNER, G. D.A.; REICH, P. B.; NABUURS, G.; DE-MIGUEL, S.; ZHOU, M.; PICARD et al. (2019). Climatic controls of decomposition drive the global biogeography of forest-tree symbioses. *Nature*, vol. 569, n. 7756, s. 404–408.

STOOF, Cathelijne R., WESSELING, Jan G. a RITSEMA, Coen J. (2010). Effects of fire and ash on soil water retention. *Geoderma*, vol. 159, n. 3–4, s. 276–285.

SUN, Hui; SANTALAHTI, Minna; PUMPANEN, Jukka; KÖSTER, Kajar; BERNINGER, Frank; RAFFAELLO, Tommaso; JUMPPONEN, Ari; ASIEGBU, Fred O. a HEINONSALO, Jussi (2015). Fungal community shifts in structure and function across a boreal forest fire chronosequence. *Applied and Environmental Microbiology*, vol. 81, n. 22, s. 7869–7880.

SWITZER, Joshua M.; HOPE, Graeme D.; GRAYSTON, Sue J. a PRESCOTT, Cindy E. (2012). Changes in soil chemical and biological properties after thinning and prescribed fire for ecosystem restoration in a Rocky Mountain Douglas-fir forest. *Forest Ecology and Management*, vol. 275, s. 1–13.

TEDERSOO, Leho a BAHRAM, Mohammad (2019). Mycorrhizal types differ in ecophysiology and alter plant nutrition and soil processes. *Biological Reviews*, vol. 94, n. 5, s. 1857–1880.

TEDERSOO, Leho; BAHRAM, Mohammad; PÖLME, Sergei; KÖLJALG, Urmas; YOROU, Nourou S.; WIJESUNDERA, Ravi; RUIZ, Luis Villarreal; VASCO-PALACIOS, Aída M.; THU, Pham Quang; SUIJA, Ave et al. (2014). Global diversity and geography of soil fungi. *Science*, vol. 346, n. 6213, s. 1078–1088.

TEDERSOO, Leho, MAY, Tom W. a SMITH, Matthew E. (2009). Ectomycorrhizal lifestyle in fungi: global diversity, distribution, and evolution of phylogenetic lineages. *Mycorrhiza*, vol. 20, n. 4, s. 217–263.

TEDIM, Fantina, XANTHOPOULOS, Gavriil a LEONE, Vittorio (2014). Forest fires in Europe. V: *Elsevier eBooks*, s. 77–99

THOMAZ, Edvaldo L.; ANTONELI, Valdemir a DOERR, Stefan H. (2014). Effects of fire on the physicochemical properties of soil in a slash-and-burn agriculture. *Catena*, vol. 122, s. 209–215.

TRESEDER, Kathleen K.; MAC, Michelle C. a CROSS, Alison (2004). Relationships among fires, fungi, and soil dynamics in Alaskan boreal forests. *Ecological Applications*, vol. 14, n. 6, s. 1826–1838.

VAN DER HEIJDEN, Marcel G. A.; KLIRONOMOS, John N.; URSCIC, Margot; MOUTOGLIS, Peter; STREITWOLF-ENGEL, Ruth; BOLLER, Thomas; WIEMKEN, Thomas a SANDERS, Ian R. (1998). Mycorrhizal fungal diversity determines plant biodiversity, ecosystem variability and productivity. *Nature*, vol. 396, n. 6706, s. 69–72.

VAN WEES, Saskia C. M., VAN DER ENT, Sjoerd a PIETERSE, Corné M. J. (2008). Plant immune responses triggered by beneficial microbes. *Current Opinion in Plant Biology*, vol. 11, n. 4, s. 443–448.

VÁZQUEZ-VELOSO, Aitor; DEJENE, Tatek; ORIA-DE-RUEDA, Juan Andrés; GUIJARRO, Mercedes; HERNANDO, Carmen; ESPINOSA, Juncal; MADRIGAL, Javier a MARTÍN-PINTO, Pablo (2022). Prescribed burning in spring or autumn did not affect the soil fungal community in Mediterranean Pinus nigra natural forests. *Forest Ecology and Management*, vol. 512, článek č. 120161.

VERMA, Satyam, SINGH, Dharmatma; SINGH, Ajeet Kumar a JAYAKUMAR, Shanmuganathan (2019). Post-fire soil nutrient dynamics in a tropical dry deciduous forest of Western Ghats, India. *Forest Ecosystems* vol. 6, n. 1, článek č. 6.

VISSEER, Suzanne, 1995. Ectomycorrhizal fungal succession in jack pine stands following wildfire. *New Phytologist* [online]. 129(3), 389–401. ISSN 14698137. Dostupné z: doi:10.1111/j.1469-8137.1995.tb04309.x

VOKOUN, J. (2002): Příručka pro průzkum lesních půd. V: NĚMEČEK, Jan et al. *Taxonomický klasifikační systém půd ČR v lesnické praxi*. Ústav pro hospodářskou úpravu lesů, Brandýs n. Labem. s. 1-44.

VOŘÍŠKOVÁ, Alena; JANSA, Jan; PÜSCHEL, David; VOSÁTKA, Miroslav; ŠMILAUER, Petr a JANOUŠKOVÁ, Martina (2019). Abiotic contexts consistently influence mycorrhiza functioning independently of the composition of synthetic arbuscular mycorrhizal fungal communities. *Mycorrhiza*, vol. 29, n. 2, s. 127–139.

WANG, Chao, Ember M. MORRISSEY, Rebecca L. MAU, Michaela HAYER, Juan PIÑEIRO, Michelle C. MACK, Jane C. MARKS, Sheryl L. BELL, Samantha N. MILLER, Egbert SCHWARTZ et al. (2021). The temperature sensitivity of soil: microbial biodiversity, growth, and carbon mineralization. *ISME Journal*, vol. 15, n. 9, s. 2738–2747.

WESTERLING, A. L.; HIDALGO, H. G.; CAYAN, D. R. a SWETNAM, T. W. (2006). Warming and earlier spring increase western U.S. forest wildfire activity. *Science*, vol. 313, n. 5789, s. 940–943.

WILSON, Carlos A., MITCHELL, Robert J.; BORING, Lindsay R. a HENDRICKS, Joseph J. (2002). Soil nitrogen dynamics in a fire-maintained forest ecosystem: results over a 3-year burn interval. *Soil Biology and Biochemistry*, vol. 34, n. 5, s. 679–689.

XIANG, Xingjia; GIBBONS, Sean M.; YANG, Jian; KONG, Jianjian; SUN, Ruibo a CHU, Haiyan (2015). Arbuscular mycorrhizal fungal communities show low resistance and high resilience to wildfire disturbance. *Plant and Soil*, vol. 397, n. 1–2, s. 347–356.

YANG, Teng, TEDERSOO, Leho; LIN, Xingwu; FITZPATRICK, Matthew C.; JIA, Yunsheng; LIU, Xu; NI, Yingying; SHI, Yu; LU, Pengpeng; ZHU, Jianguo et al. (2020). Distinct fungal successional trajectories following wildfire between soil horizons in a cold-temperate forest. *New Phytologist*, vol. 227, n. 2, s. 572–587.