

Original article

EDN TBJKYN

DOI 10.24419/LHI.2304-3083.2025.4.05

Competitive Development of Wood from Trees of the Salicaceae Family by Xylotrophic Basidiomycetes and Xylobiotic Asco- and Myxomycetes in Coniferous and Broadleaf Forests

Svyatoslav E. Neklyayev¹

Candidate of Agricultural Sciences

Galina E. Larina²

Doctor of Biological Sciences

Sergei L. Rysin³

Candidate of Biological Sciences

Abstract. The article reveals the differences in achieving an effective functional role of communities of wood-destroying fungi. The patterns of interaction of representatives of the Basidiomycota R.T. Moore, Ascomycota Caval.-Sm. and Myxomycetes G. Winter divisions on a woody substrate in the xylolysis process in coniferous-deciduous forests with a predominance of species of the Salicaceae (Willow) family have been studied on an extensive field material. The analysis of the colonization strategy of the woody substrate by different ecological and trophic groups of fungi is carried out. Possible joint settlements of basidio-, asco-, and myxomycetes on poplar and willow wood are shown

Key words: fungi, Basidiomycota, Ascomycota, Myxomycetes, Salicaceae, forest ecosystems, adaptation strategy

For citation: Neklyayev S., Larina G., Rysin S. Competitive Development of Wood from Trees of the Salicaceae Family by Xylotrophic Basidiomycetes and Xylobiotic Asco- and Myxomycetes in Coniferous and Broadleaf Forests. – Text: electronic // Forestry Information. 2025. № 4. P 71–88. – DOI 10.24419/LHI.2304-3083.2025.4.05. <https://elibrary.ru/tbjkyn>.

¹ All-Russian Research Institute for Silviculture and Mechanization of Forestry Head of the Phytopathology Group at the Laboratory for Forest Protection from Invasive and Quarantine Organisms (Pushkino, Moscow region, Russian Federation); All-Russian Scientific Research Institute for Phytopathology, Head of the Laboratory of the Diagnosis of Harmful Organisms (Bolshye Vyazemy, Moscow region, Russian Federation); Tsitsin Main Botanical Garden of the Russian Academy of Sciences, Senior Researcher at the Dendrology Laboratory (Moscow, Russian Federation); slava9167748107@yandex.ru

² All-Russian Scientific Research Institute for Phytopathology, Head of the Laboratory of Experimental Research Methods (Bolshye Vyazemy, Moscow region, Russia Russian Federation), galina.larina@mail.ru

³ Tsitsin Main Botanical Garden of the Russian Academy of Sciences, Head of the Laboratory of Dendrology, Leading Researcher (Moscow, Russian Federation), ser-rysin@yandex.ru