

Ondřej Uhlík received a Ph.D. in Biochemistry from the University of Chemistry and Technology, Prague (UCTP) in 2009. Since his Ph.D. he has been interested in plant-microbe interactions. His team (Laboratory of Microbial Ecology, UCTP) is working under the hypotheses that secondary plant metabolites (SPM), including lignin degradation intermediates and other phenolics as well as terpenes, significantly affect the biodegradation potential of soil microbial communities. They also predict that biodegradative functions, originally evolved for SPM degradation, and plant-growth promoting functions are often attributed to the same plant-associated microbial

populations. They hypothesize that this functional association helps the plant to selectively enrich microbial populations which promote its growth through SPM exudation. At the same time, SPMs indirectly help the plant thrive in contaminated soil by increasing the biodegradation potential of soil microbial communities. The outreach of this fundamental research includes mainly sustainable agriculture or environmental protection.