

Masaryk University

Faculty

Procedure field

Applicant

Applicant's home unit, institution

Board members

Chair

Members

Faculty of Science

Botany

doc. RNDr. Zdeňka Lososová, Ph.D.

Faculty of Science, Masaryk University

prof. RNDr. Petr Bureš, Ph.D.

Faculty of Science, Masaryk University

prof. Mgr. Michal Hájek, Ph.D.

Faculty of Science, Masaryk University

prof. RNDr. Jan Lepš, CSc.

Department of Botany, Faculty of Science, University of South Bohemia in České Budějovice

prof. RNDr. Tomáš Herben, CSc.

Department of Botany, Faculty of Science, Charles University; Institute of Botany CAS

David Mark Richardson

Stellenbosch University, South Africa

Evaluation of the applicant's scholarly/artistic qualifications

Zdeňka Lososová graduated from Masaryk University in 1989 with a degree in Mathematics and Biology, obtained her Ph.D. in Botany in 2003, and was appointed Associate Professor of Botany in 2010. Her research combines field-based plant ecology with quantitative and macroecological analyses, focusing on biodiversity patterns, community structure, and the ecological and evolutionary processes shaping vegetation in both natural and human-influenced environments.

Over the course of her career, her research interests have developed from studies of local floras and weed vegetation classification towards the ecology of urban and ruderal habitats, where she has become one of the internationally recognized specialists. Her work integrates extensive empirical experience with advanced statistical and phylogenetic approaches, making an important contribution to understanding how urbanization, land use, and environmental gradients affect plant community composition and diversity.

She has led four major research projects funded by the Czech Science Foundation (GAČR) and the Grant Agency of the Czech Academy of Sciences, including the project Evolutionary determinants of disconnected phylogenetic and functional diversity in European plant communities (2018–2021), which was nominated for the Czech Science Foundation President's Award. She currently leads the GAČR project Urbanized landscape as a human contribution to the diversity of nature (2025–2027) and has also participated as co-investigator in the international project Emerging Agricultural Weeds under Climate and Land-Use Changes in Central Europe (GZ C163517), funded by the Austrian Climate and Energy Fund (ACRP programme).

Her publication record comprises 76 original research papers indexed in the Web of Science—including a number of collaborative synthesis articles—together with two book chapters, with publications in leading international journals such as Nature Communications, Nature Plants, Annual Review of Ecology, Evolution and Systematics, Global Ecology and Biogeography, Journal of Ecology, Diversity and Distributions, Functional Ecology, Landscape and Urban Planning, Methods in Ecology and Evolution. According to the Web of Science database, her work has been cited over 4,000 times (H-index = 30), and more than one-quarter of her papers belong to the top 10% most cited in their respective fields.

Zdeňka Lososová has long-standing collaborations with major European research groups and consortia, such as the German sDiv Synthesis Centre (projects sUrBioCity and sGUBIK), and has contributed substantially to continental databases like Pladias, TRY, and FloraVeg.EU. Her integration of functional traits, dispersal ecology, and phylogenetic metrics into vegetation science represents a major conceptual advancement in Central European ecology.

She has served as Associate Editor of Applied Vegetation Science and Vegetation Survey and Classification, and formerly of Phytocoenologia and Urban Ecosystems. In 2023, she was elected to the Council of the International Association for Vegetation Science (IAVS), where she also contributes to the European Vegetation Classification Committee. She co-organized major international conferences, including the 17th European Vegetation Survey Workshop (2008) and the 58th IAVS Symposium in Brno (2015).

Overall, Zdeňka Lososová is an internationally recognized vegetation ecologist whose integrative research has substantially advanced the understanding of plant community diversity, structure, and assembly across urban and anthropogenic landscapes.

Conclusion: The applicant's scholarly/artistic capabilities meet the requirements expected of applicants participating in a professor appointment procedure in the field of Botany.

Evaluation of the applicant's pedagogical experience

Zdeňka Lososová has been continuously involved in university teaching for over 25 years. She began her pedagogical career at the Faculty of Education, Masaryk University, where she taught courses for future teachers in biology and environmental education. Between 2006 and 2013, she served as Head of the Department of Biology. Since 2013, she has been active at the Department of Botany and Zoology, Faculty of Science.

She has delivered both compulsory and elective courses such as System and Evolution of Higher Plants, Plant Physiology, Ecology for Primary Education, Didactics of Biology, and Nature Conservation. She also teaches and coordinates several seminars and field courses, including Plant Ecology Lab Meeting, Botanical Seminar, and Geobotanical Seminar, which form the core of training for advanced Master's and PhD students. Her teaching consistently integrates recent ecological findings and modelling approaches into the curriculum.

Zdeňka Lososová is the guarantor of the Bachelor's and Master's programmes in Biology and Biology Education at Masaryk University. She chairs the State Examination Boards for both degrees and is an active member of doctoral boards and committees in Botany and Ecology. She has supervised 31 Bachelor's, 49 Master's, and several doctoral theses, with additional PhD students currently under her supervision. Her doctoral graduates have successfully continued to academic and research careers in Europe.

Her pedagogical output includes several textbook chapters, notably in Vegetation of the Czech Republic 2 (Academia 2009), widely used in university teaching of vegetation ecology, as well as popular science contributions to Živa. She also co-edited a special issue of Zprávy České botanické společnosti focused on the flora and vegetation of urban and anthropogenic habitats. In her teaching and supervision, Zdeňka Lososová places strong emphasis on critical thinking, methodological rigour, and the ability to connect theoretical and applied aspects of plant ecology.

Her commitment to education extends beyond the university: she regularly contributes to the activities of the Czech Botanical Society, co-organizing educational conferences and field courses, and has participated in public science outreach and teacher-training activities. Her long-term pedagogical service, course leadership, and student mentorship reflect her strong didactic skills and academic dedication.

Conclusion: The applicant's pedagogical capabilities **meet** the requirements expected of applicants participating in a professor appointment procedure in the field of Botany.

Evaluation of the applicant as a respected and recognized scholarly or artistic figure in a given field

The committee is convinced that Zdeňka Lososová is a well-established and internationally recognized researcher in vegetation ecology, with a particular focus on urban and anthropogenic ecosystems. Her scientific record and documented achievements clearly reflect long-term excellence and international visibility. She has made important contributions to understanding biodiversity patterns, community assembly processes, and the functional and phylogenetic dimensions of plant ecology. Through her integrative approach combining field data, trait-based analyses, and macroecological synthesis, she has played a significant role in the development of contemporary vegetation science in Europe.

Her career demonstrates a consistent and productive research profile focused on biodiversity patterns, community assembly, and plant invasions in urban environments. By combining extensive empirical data with quantitative and macroecological approaches, she has contributed substantially to advancing the field of vegetation ecology. Her leadership in collaborative research projects, editorial responsibilities in leading journals, and election to the Council of the International Association for Vegetation Science (IAVS) further confirm her strong standing in the international scientific community. The committee also appreciates her ability to connect empirical research with large-scale data syntheses, effectively linking local and global perspectives in vegetation science.

The recommendation letters provided by Professors Francesco de Bello, Ingolf Kühn, Jitka Klimešová, and Javier Loidi further corroborate this view. They unanimously emphasize Dr. Lososová's originality, methodological precision, and intellectual leadership, highlighting her pioneering role in urban vegetation research and her impact on the development of European vegetation ecology. These assessments are consistent with the committee's own evaluation and support the conclusion that she enjoys a high level of international recognition.

The committee also notes the successful delivery of her public lecture, Functional and phylogenetic diversities in invasion biology, held on 25 September 2025 as part of the professorial appointment procedure. The lecture clearly demonstrated her expertise in invasion ecology, her ability to synthesize complex ecological concepts, and her strong communication skills. It was very well received by both students and academics, confirming her scholarly authority and pedagogical excellence.

In summary, Zdeňka Lososová is an internationally recognized scholar whose sustained research excellence, conceptual innovation, and academic integrity have significantly advanced the field of vegetation ecology. Her promotion to Professor of Botany is fully warranted by the quality, continuity, and international impact of her scientific and pedagogical achievements.

Conclusion: The applicant **is** a respected and recognized scholarly figure in his/her field. The applicant **has** made a significant contribution to the development of his/her field. The applicant **constitutes** a leading figure in his/her field of scholarship or research.

Secret vote results

Voting took place: electronically

Number of board members		5
Number of votes cast		5
of which	in favour	5
	against	0

Board decision

Based on the outcome of the secret vote and following an evaluation of the applicant's scholarly or artistic qualifications, pedagogical experience and role as a respected and recognized scholarly or artistic figure, the board hereby submits a proposal to the Scientific Board of the Faculty of Science of Masaryk University to **appoint the applicant professor** of Botany.

In Brno on 15.10.2025

prof. RNDr. Petr Bureš, Ph.D.