Special Issue

Advancing Forest Ecosystem Sustainability: Integrating Plant Physiology, Microbial Ecology, and Spatial Technologies

Message from the Guest Editors

This Special Issue focuses on the intersection of forest plant physiology, soil microbial ecology, and Geographic Information System (GIS) applications to promote sustainable forest ecosystem management. Understanding their physiological responses and interactions is crucial in addressing contemporary environmental challenges, such as climate change and habitat degradation. We invite submissions exploring forest plant physiological mechanisms, including photosynthesis, water-use efficiency, and stress responses under changing environmental conditions. Contributions examining microbial community structures in soil, metabolic pathways, and their roles in nutrient cycling are particularly welcome. Studies leveraging GIS to analyze spatial patterns and model ecosystem processes or to integrate plant and microbial data into decision-making frameworks will be prioritized. We encourage theoretical, methodological, and empirical studies, as well as reviews and case studies that link forest plant physiology, microbial ecology, and GIS.

Guest Editors

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Deadline for manuscript submissions

31 December 2025

Forests

an Open Access Journal by MDPI

Impact Factor 2.5
CiteScore 4.6

mdpi.com/si/235895

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Forests (ISSN 1999-4907) is an international and cross-disciplinary, scholarly forestry journal. The distinguished editorial board and refereeing process ensures the highest degree of scientific rigor and review of all published articles. Original research articles and timely reviews are released online, with unlimited free access. Our goal is to have *Forests* be recognized as one of the foremost publication outlets for high quality, leading edge research in this broad and diverse field. We therefore invite you to be one of our authors, and in doing so share your important research findings with the global forestry community.

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