

Special Issue

Advances in Phytomanagement for Soil Health Restoration and Sustainability

Message from the Guest Editors

By 2050, the global population will exceed 9 billion, doubling crop demand while land remains limited. Marginal, contaminated, and saline lands offer untapped potential for cultivating industrial crops to meet food, bio-based product, and bioenergy needs. Phytoremediation uses plants to clean soils through **phytoextraction** (removing metals) and **phytostabilization** (immobilizing contaminants). **Phytomanagement** combines remediation with sustainable site use, boosting soil health, ecosystem services, and economic returns. High-yield crops like hemp, flax, and switchgrass can turn degraded lands into sources of biomaterials, biofuels, and bioplastics, supporting circular economy solutions and eco-friendly value chains. This Special Issue invites research on farming marginal lands, highlighting environmental and economic benefits of phytomanagement, sustainable agriculture, and value-added products. Let's advance solutions for restoration and growth.

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Message from the Editor-in-Chief

Plants is an open access journal which provides an advanced forum for research findings in areas related to plant function, its physiology, biology, taxonomy, stresses, and its interactions with other organisms. It publishes original research articles, reviews, reports, conference proceedings (peer reviewed full articles) and communications. In original research papers, it is important that full experimental details are provided. We also encourage timely reviews and commentaries on topics of interest to the plant research community.

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