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Nota di contenuto	Chapter 1. Biological Invasions: factors, process, consequences and ecological impacts -- Chapter 2. Expansion of moso bamboo into adjacent ecosystems -- Chapter 3. Moso bamboo expansion and forest biodiversity -- Chapter 4. Bamboo expansion effects on litter production and stoichiometric characteristics -- Chapter 5. Moso bamboo expansion effects on soil physicochemical characteristics -- Chapter 6. Effects of moso bamboo expansion on soil carbon pools and carbon cycle -- Chapter 7. Moso bamboo expansion effects on soil nitrogen transformations and N <sub>2</sub> O emissions -- Chapter 8. Bamboo expansion and soil ecological stoichiometry -- Chapter 9. Temperature sensitivity of soil C and N cycling as affected by moso bamboo expansion -- Chapter 10. Bamboo expansion and forest carbon sequestration -- Chapter 11. Moso bamboo expansion and soil

microbial PLFAs -- Chapter 12. Effects of moso bamboo expansion on soil bacterial and fungal communities.

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Sommario/riassunto

This book highlights processes, impacts and management practices of bamboo expansion occurring in areas where it is distributed around the world. Although not conceptually plant invasions, bamboo expansion has been considered an “invasion” based on its characteristics and the impacts it caused on adjacent ecosystems it expanded into, including altered element cycling, transformed soil microbial community compositions, decreased biodiversity, fluctuated primary productions, etc. However, the processes and impacts during or after complete expansion and the underlying mechanisms of successful expansion, are still unclear. The ecological effects of bamboo expansion are not given full consideration and are not thoroughly understood. Based on the latest studies, this book synthesizes research progress of bamboo expansion effects on the soil abiotic environment, soil microbial community compositions, plant characteristics, ecosystem biodiversity, element cycling process, and ecological effects of primary management practice, etc. This book will provide a thorough understanding of ecological changes following bamboo expansions, benefit the effective control of expanding bamboo with respect to decreased biodiversity and mitigation of global change, and accurate prediction and evaluation of bamboo expansion impacts currently and in the future occur around the world. This book presents critical points that need further investigation based on the latest findings, which will be helpful for ecological researchers, policymakers, forestry workers, or graduate and PhD students. .

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