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| **标题：**Highlights and perspectives of soil biology and ecology research in China |
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| **摘要:** As seen for the publications in several distinguished soil related journals, soil biology and ecology is booming in China in recent years. This review highlights the major findings of the soil biology and ecology projects conducted in China during the past two decades. Special attention is paid on the responses of soil biota to environmental change, and the roles of soil functional groups in C transformation, nutrient cycling and pollution remediation. We also point out the future challenges facing the Chinese soil biologists and soil ecologists. In the future, more systematic studies rather than scattered case studies are needed, more controlled field experiments rather than short-term laboratory studies should be encouraged. Besides, we need to focus more on the linkage between aboveground and belowground organisms, the interactions between different groups of soil food web, and the coupling of observation with modeling. It is essential to employ the state-of-the-art technology in research of soil biology and ecology because to answer the emerging scientific questions relies heavily on the development of new technology. Our ultimate goals are to push forward the research on soil biology and ecology in China and to encourage the interaction and collaboration between the international community and research groups in China. |
| 关键词: China; Belowground; Rhizosphere; Soil fauna; Soil organisms; Soil food web |
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