

# Preface

It has been commonly accepted that biological diversity is important as a natural resource and for the functioning of the ecosystem that provides us with benefits essential for human well-being. However, biodiversity loss is continuing on both regional and global scales. To change this trend, the Convention on Biological Diversity at COP10 has adopted the new Strategic Plan for Biodiversity, including the Aichi Biodiversity Targets for the 2011–2020 period. Among the Aichi Biodiversity Targets, no. 19 states, “By 2020, knowledge, the science base and technologies relating to biodiversity, its values, functioning, status and trends, and the consequences of its loss, are improved, widely shared and transferred, and applied.” To achieve this target, promotion of biodiversity observations including development of new technologies is needed.

In March 2012, to provide a quantum step forward in advancing science that optimizes the synergy between development and biodiversity conservation in Asia, we published the book *The Biodiversity Observation Network in the Asia-Pacific Region: Toward Further Development of Monitoring*. In that book, we provided an overview of biodiversity observation studies now organized under the Asia-Pacific Biodiversity Observation Network (AP-BON).

Here, we are publishing the second volume from AP-BON and have decided to launch a new book series titled *Asia-Pacific Biodiversity Observation Network* as a subseries in Ecological Research Monographs. Using this series, we will advance knowledge, the science base, and technology relating to biodiversity of the Asia-Pacific Region and thereby contribute to the achievement of the Aichi Biodiversity Targets by 2020.

In the present book, we have collected papers that review the challenges of studying the spatial variability of biodiversity and ecosystems in the Asia-Pacific region. A special focus is on reviews of advances in concepts and methods of biodiversity observation including ubiquitous genotyping, systematic conservation, monitoring of the function and services of ecosystems, and biodiversity informatics. Together with newly developed concepts and methodologies, the contributions of the present book will lead to the establishment of integrative observations and assessments of Asian biodiversity, which are unquestionably required for reporting

the status of biodiversity in this region and for contributing to its effective conservation and sustainable use.

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