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Nota di contenuto	Frontmatter -- Preface -- Contents -- Contributing authors -- 1. An Introduction to Arid Soils and Their Biology -- 2. Soils in Arid and Semiarid Environments: the Importance of Organic Carbon and Microbial Populations. Facing the Future -- 3. Water Potential as a Master Variable for Atmosphere-Soil Trace Gas Exchange in Arid and Semiarid Ecosystems -- 4. Microbiology of Antarctic Edaphic and Lithic Habitats -- 5. Bryophyte and Lichen Diversity on Arid Soils: Determinants and Consequences -- 6. Fungal Diversity, Community Structure and Their Functional Roles in Desert Soils -- 7. Limits of Photosynthesis in Arid Environments -- 8 The Response of Arid Soil Communities to Climate Change -- 9. Artificial Soils as Tools for Microbial Ecology -- Index
Sommario/riassunto	Soils have been called the most complex microbial ecosystems on Earth. A single gram of soil can harbor millions of microbial cells and thousands of species. However, certain soil environments, such as those experiencing dramatic change exposing new initial soils or that are limited in precipitation, limit the number of species able to survive in these systems. In this respect, these environments offer unparalleled opportunities to uncover the factors that control the development and

maintenance of complex microbial ecosystems. This book collects chapters that discuss the abiotic factors that structure arid and initial soil communities as well as the diversity and structure of the biological communities in these soils from viruses to plants.
