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Sommario/riassunto	This volume covers recent developments in both fundamental and applied research in biological nitrogen fixation. It emphasizes the application of biological nitrogen fixation for sustainable agriculture, which should lead to poverty alleviation, environmental protection, and good agricultural practices generally. The roles of, and advances in, plant breeding, plant molecular biology, nodule physiology, and symbiotic and associative interactions between plants and microbes in sustaining agricultural productivity and soil fertility are described. The evolution of symbioses and nitrogen fixation are also covered in this volume. To ensure high agricultural productivity, while protecting the environment (both soil and water resources), requires plant cultivars that also respond to beneficial microbes. The volume, therefore, describes the physiology and genomics of nitrogen-fixing bacteria together with the biochemistry and molecular genetics of the nitrogenase enzyme that actually fixes atmospheric nitrogen to a usable form. This volume, which covers the most recent data on the role of nitrogen fixation in agriculture and forestry and on the biology of both plants and nitrogen-fixing microbes, is intended to serve as a useful reference for students and researchers, both in the laboratory (academic and commercial) and in the field.