Record Nr. Titolo	UNINA9910785592403321 Serpentine [[electronic resource]] : the evolution and ecology of a
Pubbl/distr/stampa	model system / / edited by Susan Harrison and Nishanta Rajakaruna Berkeley, : University of California Press, c2010
ISBN	1-283-27765-4 9786613277657 0-520-94845-9
Descrizione fisica	1 online resource (461 p.)
Altri autori (Persone)	HarrisonSusan (Susan Patricia) RajakarunaNishanta <1969->
Disciplina	581.4
Soggetti	Plants - Adaptation Plants - Evolution Plant-soil relationships Serpentine plants Soils - Serpentine content
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Front matter Contents Contributors Preface Introduction 1. Serpentinites and Other Ultramafic Rocks: Why They Are Important for Earth's History and Possibly for Its Future 2. Microbes in Extreme Environments: Implications for Life on the Early Earth and Other Planets 3. Phylogenetic Patterns of Endemism and Diversity 4. Plant Speciation 5. Intraspecific Variation, Adaptation, and Evolution 6. Genomic Approaches to Understanding Adaptation 7. Local Adaptation in Heterogeneous Landscapes: Reciprocal Transplant Experiments and Beyond 8. Herbivory and Other Cross-Kingdom Interactions on Harsh Soils 9. Invasions and the Evolution of Range Limits 10. Plant Competition and Facilitation in Systems with Strong Environmental Gradients 11. Community Invasibility: Spatial Heterogeneity, Spatial Scale, and Productivity 12. Disturbance and Diversity in Low-Productivity Ecosystems 13. Plant-Pollinator Interactions in Naturally Fragmented Habitats 14. Spatial Ecology: The Effects of Habitat Patch Size, Shape, and Isolation on Ecological

1.

	Processes 15. Systematic Conservation Planning: Protecting Rarity, Representation, and Connectivity in Regional Landscapes 16. Biodiversity, Ecosystem Functioning, and Global Change 17. Climate Change and Plant Communities on Unusual Soils 18. Restoration and Revegetation of Harsh Soils 19. What Have We Learned from Serpentine in Evolution, Ecology, and Other Sciences? Species Index Subject Index
Sommario/riassunto	Serpentine soils have long fascinated biologists for the specialized floras they support and the challenges they pose to plant survival and growth. This volume focuses on what scientists have learned about major questions in earth history, evolution, ecology, conservation, and restoration from the study of serpentine areas, especially in California. Results from molecular studies offer insight into evolutionary patterns, while new ecological research examines both species and communities. Serpentine highlights research whose breadth provides context and fresh insights into the evolution and ecology of stressful environments.