1. Record Nr. UNINA9910828477603321

Titolo	Lichen biology / / edited by Thomas H. Nash III [[electronic resource]]
Pubbl/distr/stampa	Cambridge : , : Cambridge University Press, , 2008
ISBN	1-107-18039-2 1-281-75139-1 9786611751395 0-511-79047-3 0-511-41474-9 0-511-41542-7 0-511-41315-7 0-511-41220-7 0-511-41407-2
Edizione	[Second edition.]
Descrizione fisica	1 online resource (ix, 486 pages) : digital, PDF file(s)
Disciplina	579.7
Soggetti	Lichens
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Title from publisher's bibliographic system (viewed on 05 Oct 2015).
Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Cover; Half-title; Title; Copyright; Contents; Contributors; Preface to the second edition; 1 Introduction; 2 Photobionts; 3 Mycobionts; 4 Thallus morphology and anatomy; 5 Morphogenesis; 6 Sexual reproduction in lichen-forming ascomycetes; 7 Biochemistry and secondary metabolites; 8 Stress physiology and the symbiosis; 9 Physiological ecology of carbon dioxide exchange; 10 The carbon economy of lichens; 11 Nitrogen, its metabolism and potential contribution to ecosystems; 12 Nutrients, elemental accumulation, and mineral cycling; 13 Individuals and populations of lichens 14 Environmental role of lichens15 Lichen sensitivity to air pollution; 16 Lichen biogeography; 17 Systematics of lichenized fungi; Appendix: Culture methods for lichens and lichen symbionts; References; Taxon index; Subject index
Sommario/riassunto	Lichens are symbiotic organisms in which fungi and algae and/or cyanobacteria form an intimate biological union. This diverse group is

found in almost all terrestrial habitats from the tropics to polar regions. In this second edition, four completely new chapters cover recent developments in the study of these fascinating organisms, including lichen genetics and sexual reproduction, stress physiology and symbiosis, and the carbon economy and environmental role of lichens. The whole text has been fully updated, with chapters covering anatomical, morphological and developmental aspects; the contribution of the unique secondary metabolites produced by lichens to medicine and the pharmaceutical industry; patterns of lichen photosynthesis and respiration in relation to different environmental conditions; the role of lichens in nitrogen fixation and mineral cycling; and the use of lichens as indicators of air pollution. This is a valuable reference for both students and researchers interested in lichenology.