1. Record Nr. UNINA9910373914303321

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Titolo	Plant Ecology / / by Ernst-Detlef Schulze, Erwin Beck, Nina Buchmann, Stephan Clemens, Klaus Müller-Hohenstein, Michael Scherer-Lorenzen
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2019
ISBN	3-662-56233-2
Edizione	[2nd ed. 2019.]
Descrizione fisica	1 online resource (XXI, 926 p. 580 illus., 527 illus. in color.)
Disciplina	581.7
Soggetti	Plant ecology Plant physiology Plant biochemistry Plant genetics Climate change Plant Ecology Plant Physiology Plant Biochemistry Plant Genetics and Genomics Climate Change Ecologia vegetal Llibres electrònics
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	Introduction -- General Themes of Molecular Stress Physiology -- Light -- Temperature -- Oxygen Deficiency -- Water Deficiency (Drought) -- Adverse Soil Mineral Availability -- Biotic Stress -- Thermal Balance of Plants and Plant Communities -- Water Relations -- Nutrient Relations -- Carbon Relations -- Ecosystem Characteristics -- Approaches to Study Terrestrial Ecosystems -- Approaches to Model Processes at the Ecosystem Level -- Biogeochemical Fluxes in Terrestrial Ecosystems -- Development of Plant Communities in Time -- Spatial Distribution of Plants and Plant Communities -- Interactions between Plants, Plant Communities and the Abiotic and Biotic Environment -- Biodiversity --

Global Biogeochemical Cycles -- Dynamic Global Vegetation Models -- Global Change and Terrestrial Ecosystems.

Sommario/riassunto

This completely updated and revised second edition provides a unique and up-to-date treatment of all aspects of plant ecology, making it an ideal textbook and reference work for students, researchers and practitioners. More than 500 high-quality images and drawings, mostly in colour, aid readers' understanding of various key topics, while the clear structure and straightforward style make it user friendly and particularly useful for students. Written by leading experts, it offers authoritative information, including relevant references. While Plant Ecology primarily addresses graduate students in biology and ecology, it is also a valuable resource for post-graduate students and researchers in botany, environmental sciences and landscape ecology, as well as all those whose study or work touches on agriculture, forestry, land use, and landscape management. Key Topics: - Molecular ecophysiology (molecular stress physiology: light, temperature, oxygen deficiency, water deficit (drought), unfavorable soil mineral conditions, biotic stress) - Physiological and biophysical plant ecology (ecophysiology of plants: thermal balance, water, nutrient, carbon relations) - Ecosystem ecology (characteristics of ecosystems, approaches how to study and how to model terrestrial ecosystems, biogeochemical fluxes in terrestrial ecosystems) - Community ecology and biological diversity (development of plant communities in time and space, interactions between plants and plant communities with the abiotic and the biotic environment, biodiversity and ecosystem functioning) - Global ecology (global biogeochemical cycles, Dynamic Global Vegetation Models, global change and terrestrial ecosystems).