

1. Record Nr.	UNINA9910130962903321
Titolo	Crop adaptation to climate change // edited by Shyam S. Yadav ... [et al.]
Pubbl/distr/stampa	Chichester, West Sussex ; ; Ames, IA, : Wiley-Blackwell, 2011
ISBN	9780470960905 0470960906 9780470960899 0470960892 9780470960929 0470960922
Edizione	[[1st ed.].]
Descrizione fisica	1 online resource (1641 p.)
Altri autori (Persone)	YadavS. S (Shyam S.)
Disciplina	632/.1
Soggetti	Crops and climate Crops - Adaptation Climatic changes
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 index.
Nota di contenuto	Cover; Title Page; Copyright; List of Contributors; List of Editors; About the Editors; Foreword by Daniel Hillel and Cynthia Rosenzweig; Foreword by M.S. Swaminathan; Foreword by Martin Parry; Foreword by Ahmed Djoghla; Foreword by Cary Fowler; Foreword by David K. Skelly; Foreword by Walter P. Falcon; Preface; Acknowledgments; Chapter 1.1: Climate Change, Population Growth, and Crop Production: An Overview; Introduction; Global scenarios on future greenhouse gas emissions and population growth; Climate impacts on crop productivity; Adaptation options in agriculture; Conclusions Chapter 1.2: Downscaling Global Climatic Predictions to the Regional Level: A Case Study of Regional Effects of Climate Change on Wheat Crop Production in Victoria, AustraliaIntroduction; Methods; Results; Discussion; Conclusions; Acknowledgments; Chapter 2: Agroecology: Implications for Plant Response to Climate Change; Introduction; Energy balance; Changing CO2 concentrations on plant growth; CO2-nutrient interactions; Water-use efficiency; Climate impacts on crop

yields; Implications for agroecology; Chapter 3.1: Impacts of Climate Change on Crop Production in Latin America
 Introduction: A background on agriculture in Latin America Expected climate change in Latin America; Past impacts of climate on production; Looking toward the future; Conclusions; Chapter 3.2: Changing Climate in North America: Implications for Crops; Introduction; Climate change; Implications of climate change; Challenges; Chapter 3.3: Regional Impacts of Climate Change: Africa; Introduction; Climate change and agricultural production in Africa; Climate-dependent challenges; Perception of African farmers to climate change; Coping and adaptation strategies to climate variability and change
 Conclusion Recommendations; Chapter 3.4: Regional Climate Impacts on Agriculture in Europe; Agriculture in Europe; Present climate conditions for agriculture; Climate change impacts; A specific adaptation option: Crop insurance in Spain; Chapter 3.5: Climate Change Impacts and Adaptations in the Countries of the Former Soviet Union; Introduction; Geography of agriculture; Climate change impacts and adaptations; Discussion; Chapter 3.6: Climate Change Impact in Agriculture: Vulnerability and Adaptation Concerns of Semiarid Tropics in Asia; Introduction
 Climate change vulnerability in semiarid tropics of Asia Climate change impacts in Asia; Adaptation to climate change; Conclusions; Future line of investigation; Chapter 3.7: Climate Change Impacts in Japan and Southeast Asia: Implications for Crop Adaptation; Introduction; Climatic change in Japan and Southeast Asia; Projected climate change impacts on crops; Conclusion; Acknowledgments; Chapter 3.8: Regional Impacts: Australia; Introduction; Climate and climate change in Australian cropping regions; Grains, oilseeds, and legumes; Rice; Sugarcane; Viticulture
 Fruits, nuts, and vegetables (excluding grapes)

Sommario/riassunto

A major task of our time is to ensure adequate food supplies for the world's current population (now nearing 7 billion) in a sustainable way while protecting the vital functions and biological diversity of the global environment. The task of providing for a growing population is likely to be even more difficult in view of actual and potential changes in climatic conditions due to global warming, and as the population continues to grow. Current projections suggest that the world's temperatures will rise 1.8-4.0 by 2100 and population may reach 8 billion by the year 2025 and some 9 billion by mi