1. Record Nr. UNINA9910767512103321

Titolo	Conservation Agriculture / / edited by Muhammad Farooq, Kadambot H. M. Siddique
Pubbl/distr/stampa	Cham : , : Springer International Publishing : , : Imprint : Springer, , 2015
ISBN	3-319-11620-7
Edizione	[1st ed. 2015.]
Descrizione fisica	1 online resource (662 p.)
Disciplina	333.7 570 630 631.4
Soggetti	Agriculture Environmental management Soil science Soil conservation Environmental Management Soil Science & Conservation
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	Part 1: Introduction -- 1. Conservation Agriculture: Concepts, Brief History and Impacts on Agricultural Systems -- Part 2: Elements of Conservation Agriculture -- 2. Crop Rotations and Residue Management in Conservation Agriculture -- 3. Weed Management in Conservation Agriculture Systems -- 4. Nutrient Management Perspectives in Conservation Agriculture -- 5. Farm Machinery for Conservation Agriculture -- 6. Insect Pest Management in Conservation Agriculture -- Part 3: Modeling and Crop Improvement for Conservation Agriculture -- 7. Breeding for Conservation Agriculture -- 8. Modeling Conservation Agriculture -- Part 4: Status of Conservation Agriculture: some case studies -- 9. Conservation Agriculture in the Middle East -- 10. Explaining Adoption and Measuring Impacts of Conservation Agriculture on Productive Efficiency, Income, Poverty and Food Security in Syria -- 11. Conservation Agriculture in South Asia --

12. Conservation Agriculture in South East Asia -- 13. Conservation Agriculture in Rainfed Areas of China -- 14. Conservation Agriculture in Australia and New Zealand -- 15. Conservation Agriculture in Europe -- 16. Conservation Agriculture in Latin America -- 17. Conservation Agriculture in North America -- 18. Conservation Agriculture in Sub-Saharan Africa -- Part 5: Conservation Agriculture in Agricultural Systems -- 19. Conservation Agriculture and Soil Carbon Sequestration -- 20. Application of Microbiology in Conservation Agriculture -- 21. Conservation Agriculture in Organic Farming: Experiences, Challenges and Opportunities -- 22. Conservation Agriculture and Climate Change -- 23. Farmer Adoption of Conservation Agriculture.

Sommario/riassunto

Conservation agriculture—consisting of four components including permanent soil cover, minimum soil disturbance, diversified crop rotations and integrated weed management—is considered the principal pathway to sustainable agriculture and the conservation of natural resources and the environment. In this book leading researchers in the field describe the basic principles of conservation agriculture, and synthesize recent advances and developments in conservation agriculture research. This book is a ready reference on conservation agriculture and reinforces the understanding for its utilization to develop environmentally sustainable and profitable food production systems. The book describes various elements of conservation agriculture; highlights the associated breeding and modeling efforts; analyses the experiences and challenges in conservation agriculture in different regions of the world; and proposes some pragmatic options and new areas of research in this very important area of agriculture. This book is an invaluable source of information for scientists, teachers and students in the fields of agronomy, farming systems, ecology and environmental sciences.