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Nota di contenuto	Chapter 1. Applying Rice Husk Biochar to Revitalise Saline Sodic Soil in Khorat Plateau Area-A Case Study for Food Security Purposes (Saowanee Wijitkosum) -- Chapter 2. Impact of Pyrolysis Techniques on Biochar Characteristics: Application to Soil (Vineet Yadav and Puja Khare) -- Chapter 3. The Potential Application of Biochars for Dyes with an Emphasis on Azo Dyes: Analysis through an Experimental Case Study Utilizing Fruit-Derived Biochar for the Abatement of Congo Red as The Model Pollutant (Kumar Vikrant, Kangkan Roy, Mandavi Goswami, Himanshu Tiwari, Balendu Shekher Giri, Ki-Hyun Kim, Yui Fai Tsang and Ram Sharan Singh) -- Chapter 4. Potential of Biochar for the Remediation of Heavy Metal Contaminated Soil (Amita Shakya and Tripti Agarwal) -- Chapter 5. Biochars and Its Implications on Soil Health and Crop Productivity in Semi-Arid Environment (P Kannan, D Krishnaveni

and S Ponmani) -- Chapter 6. Recent Development in Bioremediation of Soil Pollutants through Biochar for Environmental Sustainability (Gulshan Kumar Sharma, Roomesh Kumar Jena, Surabhi Hota, Amit Kumar, Prasenjit Ray, Ramkishore Fagodiya, Lal Chand Malav, Krishna Kumar Yadav, Dipak Kumar Gupta, Shakeel A Khan and SK Ray) -- Chapter 7. Role of Biochar in Carbon Sequestration and Greenhouse Gas Mitigation (Dipak Kumar Gupta, Chandan Kumar Gupta, Rachana Dubey, RK Fagodiya, Gulshan Sharma, Keerthika A, MB Noor Mohamed, Rahul Dev and A K Shukla) -- Chapter 8. Biochar coupled rehabilitation of Cyanobacterial soil crusts: A sustainable approach in stabilization of arid and semiarid soils (Arun Kumar and Jay Shankar Singh) -- Chapter 9. Soil Health Management through Low Cost Biochar Technology (Shaon Kumar Das and Goutam Kumar Ghosh) -- Chapter 10. Utilization of Agricultural Waste as Biochar for Soil Health (AG Rajalakshmi) -- Chapter 11. Biochar: A New Environmental Paradigm in Management of Agricultural Soils and Mitigation of GHG Emission (Palakshi Borah, Nijara Baruah, Lina Gogoi, Bikram Borkotoki, Nirmali Gogoi and Rupam Kataki) -- Chapter 12. Multifarious Benefits of Biochar Application in Different Soil Types (Umesh Pankaj).

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#### Sommario/riassunto

This book provides up-to-date information on biochar use in management of soil health, agriculture productivity, green-house gases, restoration ecology and environment. Biochar application to nutrient deficient and disturbed soils is a viable option which may promotes advances in food safety and food security to human nutrition and overall fundamental research in the agricultural sciences. The book describes in detail how the recalcitrant biochar is able to persist for long periods of time and work as a shelter for soil microbial colonisation and their biomass/numbers. This book also includes contents related to important role of biochar applications in the restoration of contaminated agricultural soils. The book will be of particular interest to students, teachers and researchers in the disciplines.

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