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Titolo	Clubroot Disease of Crucifers : Biology, Ecology and Disease Management // by Govind Singh Saharan, Naresh K. Mehta, Prabhu Dayal Meena
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Descrizione fisica	1 online resource (778 pages)
Collana	Biomedical and Life Sciences Series
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Soggetti	Plant diseases Agriculture Botany Plant Pathology Plant Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Chapter 1. Clubroot perspective -- Chapter 2. The disease- clubroot -- Chapter 3. The pathogen: <i>Plasmodiophora brassicae</i> -- Chapter 4. Electron microscopy and ultra-structures -- Chapter 5. Pathogenic variability -- Chapter 6. Perpetuation and survival of the pathogen -- Chapter 7. Infection and pathogenesis -- Chapter 8. Disease cycle -- Chapter 9. Epidemiology and disease forecasting. Chapter 10. Biochemistry of host-pathogen interaction -- Chapter 11. Host resistance -- Chapter 12. Genomics of clubroot pathogen and pathogenesis -- Chapter 13. Disease management -- Chapter 14. Techniques -- Chapter 15. Clubroot of crucifers-an introspection epilogue -- Chapter 16. Future priority areas of clubroot research for better management.
Sommario/riassunto	The book is presenting a comprehensive information on fundamental, and applied knowledge of <i>Plasmodiophora brassicae</i> Woronin, infecting cruciferous crops, and weeds. Clubroot of crucifers has spread over more than 88 countries of the world with average annual loss of cruciferous crops from 10-15 per cent at global level. It is considered as a disease of cultivation since once introduced in a field, its inoculum

piles up year by year in the form of resilient resting spores of *P. brassicae* which spreads in the field through field operations. This disease is very unique since the pathogen can survive in the soil in the rhizosphere of non-host plants in addition to its main host cruciferous species, cultivated or wild. This book complies inclusive information about the disease, its geographical distribution, symptoms, host range, yield losses, and disease assessment scales. The book also explores host-parasite interactions in the form of seed infection, disease cycle, process of infection, pathogenesis, epidemiology and forecasting. Chapters discuss the genetic and molecular mechanisms of host-parasite relationships, management practices including cultural, chemical, biological control practices, and other integrated approaches. The book is immensely useful to researchers, teachers, extension specialists, farmers, and all others who are interested to grow healthy and profitable cruciferous crops all over the world. Also the book serves as additional reading material for undergraduate and graduate students of agriculture and especially plant pathology. National and international agricultural scientists, policy makers will also find this to be a useful read.

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