1. Record Nr. UNINA9910437835703321

Titolo	Piriformospora indica : Sebacinales and Their Biotechnological Applications / / edited by Ajit Varma, Gerhard Kost, Ralf Oelmüller
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2013
ISBN	1-299-33678-7 3-642-33802-X
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (389 p.)
Collana	Soil Biology, , 2196-4831 ; ; 33
Altri autori (Persone)	VarmaAjit KostGerhard OelmullerRalf
Disciplina	579.5
Soggetti	Microbiology Agriculture Plant biotechnology Fungi Mycology Soil science Plant Biotechnology Soil Science
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	Piriformospora indica as Beneficial Root Symbiont -- Interaction with Different Plant Species -- Resistance Against Biotic and Abiotic Stress Factors -- Piriformospora indica and Macronutrients for Plants -- Experimental Protocols for Piriformospora indica Studies.
Sommario/riassunto	Sebacinales have emerged as a fascinating order with mutualistic plant-fungal symbionts that consists of exclusively beneficial fungi. This volume of Soil Biology presents an overview of the current results in Sebacinales research with a focus on the potential of these fungi in crop improvement and stress tolerance. The authors demonstrate that Sebacinales are not only extremely versatile in their associations with roots, but are also almost universally present as symptomless

endophytes. With this extraordinary diversity, Sebacinales with the key fungus Piriformospora indica might possess remarkable significance in natural ecosystems. Their biotechnological applications are expected to improve the quality of crops while maintaining ecologically and economically sustainable production systems.