

1. Record Nr.	UNINA9910270862603321
Titolo	Biofilms in plant and soil health / / edited by Iqbal Ahmad and Fohad Mabood Husain
Pubbl/distr/stampa	Hoboken, New Jersey ; ; Chichester, West Sussex, England : , : Wiley Blackwell, , 2017 ©2017
ISBN	1-119-24637-7 1-119-24641-5 1-119-24632-6
Descrizione fisica	1 online resource (559 pages) : illustrations (some color)
Disciplina	579.1757
Soggetti	Soil microbiology Biofilms
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di bibliografia	Includes bibliographical references at the end of each chapters and index.
Nota di contenuto	Biofilms : an introduction and significance in plant and soil health -- Role of PGPR in biofilm formations and its importance in plant health -- Concept of mono and mixed biofilms and their role in soil and in plant association -- Bacillus biofilms and their role in plant health -- Biofilm formation by Psedumonas spp. and their significance in biocontrol -- Quorum sensing mechanisms in rhizosphere biofilms -- Biofilm formation and quorum sensing in the rhizosphere -- The significance of fungal biofilms in association with plants and soils -- Chemical nature of biofilm matrix and its significance -- Root exudates : composition and impact on plant-microbe interaction -- Biochemical and molecular mechanism in biofilm studies in plant associated bacteria -- Techniques in studying biofilms and their characterization : microscopy to advanced imaging systems in vitro and in situ -- Gene expression and enhanced antimicrobial resistance in biofilms -- In vitro assessment of biofilm formation by soil and plant associated microorganisms -- Biotic and abiotic factors affecting biofilm in vitro and in the rhizosphere -- The ecological significance of soil associated biofilms and stress management -- Developed biofilm-based microbial

ameliorators for bioremediating degraded ecosystems and the environment -- Bioremediation and biofilm in soil and plant root association -- Biofilms for remediation of heavy metals and xenobiotic compounds : a technical review -- Plant pathogenic bacteria : role of quorum sensing and biofilm in disease development -- Plant pathogenic bacteria biofilm instigation and its control measures -- Application of biofilm and quorum sensing inhibitors in food protection and safety -- Biofilm inhibition by natural products of marine origin and their environmental application -- Biofilm formation by enteric pathogens on plants and its impact on human health -- Role of in silico studies in designing QS/antibiofilm agents for controlling biofouling and plant diseases.
