

## CONTENTS

### Review Articles

1. Bacterial Virulence Factors: Secreted for Survival 1  
**A.K. Sharma · N. Dhasmana · N. Dubey · N. Kumar · A. Gangwal · M. Gupta · Y. Singh**
2. Compound-Specific Stable Isotope Analysis: Implications in Hexachlorocyclohexane in-vitro and Field Assessment 11  
**P. Kohli · H.H. Richnow · R. Lal**
3. Survey of (Meta)genomic Approaches for Understanding Microbial Community Dynamics 23  
**A. Sharma · R. Lal**
4. Microbial Cometabolism and Polyhydroxyalkanoate Co-polymers 39  
**S. Ray · V.C. Kalia**

### Original Articles

5. Development of *Mesorhizobium ciceri*-Based Biofilms and Analyses of Their Antifungal and Plant Growth Promoting Activity in Chickpea Challenged by Fusarium Wilt 48  
**K. Das · M.V.S. Rajawat · A.K. Saxena · R. Prasanna**
6. Simultaneous Biodegradation of Polyaromatic Hydrocarbons by a *Stenotrophomonas* sp: Characterization of *nid* Genes and Effect of Surfactants on Degradation 60  
**S. Kumari · R.K. Regar · A. Bajaj · R. Ch · G.N.V. Satyanarayana · M.K.R. Mudiam · N. Manickam**
7. A Rapid Method with UPLC for the Determination of Fusaric Acid in *Fusarium* Strains and Commercial Food and Feed Products 68  
**Z. Chen · Q. Luo · M. Wang · B. Chen**
8. Bio-Prospecting Laccases in the Bacterial Diversity of Activated Sludge From Pulp and Paper Industry 75  
**V. Gupta · N. Capalash · N. Gupta · P. Sharma**
9. Optimization of Microbial Flocculant-Producing Medium for *Bacillus subtilis* 83  
**C. Zhao · Q. Yang · H. Zhang**
10. Temporal Variations in Diazotrophic Communities and *nifH* Transcripts Level Across the Agricultural and Fallow Land at Jaipur, Rajasthan, India 92  
**S. Sharma · D.K. Singh**
11. Multiplicity of Quorum Quenching Enzymes: A Potential Mechanism to Limit Quorum Sensing Bacterial Population 100  
**S. Koul · V.C. Kalia**

### Short Communications

12. Simple and Rapid Method for Detecting Biofilm Forming Bacteria 109  
**V.C. Kalia · J. Prakash · S. Koul · S. Ray**
13. Gene Specific Impedimetric Bacterial DNA Sensor for Rheumatic Heart Disease 112  
**S. Singh · A. Kaushal · S. Gupta · A. Kumar**
14. Spatio-Temporal Monitoring and Ecological Significance of Retrievable Pelagic Heterotrophic Bacteria in Kongsfjorden, an Arctic Fjord 116  
**R.K. Sinha · K.P. Krishnan · S. Kerkar · T. Divya David**



15. Nano-Au/cMWCNT Modified *speB* Gene Specific Amperometric Sensor for Rapidly Detecting *Streptococcus pyogenes* causing Rheumatic Heart Disease 121  
**A. Kaushal · S. Singh · A. Kumar · D. Kumar**
16. Discovery of a Highly Virulent Strain of *Photobacterium luminescens* ssp. *akhurstii* from Meghalaya, India 125  
**J. Kushwah · P. Kumar · V. Garg · V.S. Somvanshi**

*Scientific Correspondence*

17. Progress in Microbial Carotenoids Production 129  
**R.K. Saini · Y.-S. Keum**

The copies of the journal to members of the association are sent by ordinary post. If any of the member wishes to receive the copies by registered post or courier, kindly contact the journal's/publisher's office. Membership or subscription copies returned due to incomplete, incorrect or changed address for two consecutive occasions, would force us to delete the names from the mailing list of the journal. Providing complete, correct and up-to-date address is the responsibility of the members. The editorial board, association or publisher will not be responsible for non-receipt of copies due to incorrect or incomplete address. The copy received for personal use by a member of the association/society, should not be sold or given away for commercial or library use. It is also illegal to acquire copies from any other source without subscribing to the journal.