

CONTENTS

Review Articles

1. Meddling *Vibrio cholerae* Murmurs: A Neoteric Advancement in Cholera Research 121
M. Hema · S. Balasubramanian · S.A. Princy
2. Contemplating 3-Hydroxypropionic Acid Biosynthesis in *Klebsiella pneumoniae* 131
Y. Li · P. Tian

Original Articles

3. Insights into the Origin of *Clostridium botulinum* Strains: Evolution of Distinct Restriction Endonuclease Sites in *rrs* (16S rRNA gene) 140
A. Bhushan · T. Mukherjee · J. Joshi · P. Shankar · V.C. Kalia
4. Phylogenetic Study of Methanol Oxidizers from Chilika-Lake Sediments Using Genomic and Metagenomic Approaches 151
K.K. Meena · M. Kumar · S. Mishra · S.K. Ojha · G.C. Wakchaure · B. Sarkar
5. Antibacterial Activity of Green Synthesized Silver Nanoparticles Using Vasaka (*Justicia adhatoda* L.) Leaf Extract 163
D. Bose · S. Chatterjee
6. Antimicrobial Activities of Silver Nanoparticles Synthesized by Using Water Extract of *Arnicae anthodium* 168
R. Dobrucka · J. Długaszewska
7. Essential Oils, Silver Nanoparticles and Propolis as Alternative Agents Against Fluconazole Resistant *Candida albicans*, *Candida glabrata* and *Candida krusei* Clinical Isolates 175
P. Szweda · K. Gucwa · E. Kurzyk · E. Romanowska · K. Dzierżanowska-Fangrat · A. Zielińska Jurek · P.M. Kuś · S. Milewski
8. Molecular, Physiological and Phenotypic Characterization of *Paracoccus denitrificans* ATCC 19367 Mutant Strain P-87 Producing Improved Coenzyme Q₁₀ 184
P. Tokdar · A. Sanakal · P. Ranadive · S.S. Khora · S. George · S.K. Deshmukh
9. Heterologous Expression and Efficient Secretion of Chitinase from *Microbacterium* sp. in *Escherichia coli* 194
Y. Sun · J. Zhang · S. Wang
10. Direct Biotransformation of Dioscin into Diosgenin in Rhizome of *Dioscorea zingiberensis* by *Penicillium dioscin* 200
J. Dong · C. Lei · D. Lu · Y. Wang
11. IAA Producing *Enterobacter* sp. I-3 as a Potent Bio-herbicide Candidate for Weed Control: A Special Reference with Lettuce Growth Inhibition 207
J.-M. Park · R. Radhakrishnan · S.-M. Kang · I.-J. Lee
12. Rapid Diagnosis and Simultaneous Identification of Tuberculous and Bacterial Meningitis by a Newly Developed Duplex Polymerase Chain Reaction 213
K.J. Nagdev · S.P. Bhagchandani · S.S. Bhullar · R.C. Kapgade · R.S. Kashyap · N.H. Chandak · H.F. Dagainawala · H.J. Purohit · G.M. Taori
13. Using a Label Free Quantitative Proteomics Approach to Identify Changes in Protein Abundance in Multidrug-Resistant *Mycobacterium tuberculosis* 219
T.Q. Phong · D.T.T. Ha · U. Volker · E. Hammer

Short Communication

14. Development of PCR Diagnostic System for Detection of the Seed-Transmitted *Tobacco Ringspot Virus* in Quarantine
S. Lee · G. Lee · I.C. Choi · J.Y. Rho

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.