

# Indian Journal of Biotechnology

*Special Issue*  
*on*

**Emerging Trends in Biotechnology**  
**(ICETB-2014)**

<http://www.niscair.res.in>

---

VOLUME 14

NUMBER 2

April 2015

CODEN: IJBNAJ 14(2) (2015) 137-286

ISSN: 0972-5849 (print)

0975-0967 (online)

---

## CONTENTS

### Special Papers

- High mode contamination of multi-drug resistant bacteria in Kolkata: Mechanism of gene activation and remedy by heterogeneous phyto-antibiotics 149  
Asit Kumar Chakraborty
- Evaluation and use of *in silico* structure based epitope prediction for listeriolysin O of *Listeria monocytogenes* 160  
Dharmendra Kumar Soni, Abhigyan Nath & Suresh Kumar Dubey
- High quinolone resistance pattern among enteric pathogens isolated from patients with urinary tract infection 167  
Lesley R Varughese & Vikas Beniwal
- Role of tetracycline and cAMP analogues in pancreatic  $\beta$  stem cell differentiation/proliferation process *via* modulation of epac2 protein 172  
Anushree Tripathi & Krishna Misra
- Assessment of free-radical scavenging activities of mangiferin from *Curcuma amada* obtained by non-conventional extraction methods: A comparative study 179  
Surojit Bera, Surabhi Chaudhuri & Debjani Dutta
- Comparative studies on ability of *N*-acetylated chitoooligosaccharides to scavenge reactive oxygen species and protect DNA from oxidative damage 186  
Neeta Salgaonkar, Divya Prakash, N N Nawani & B P Kapadnis
- Sugarcane bagasse as inert support for L-lysine production in solid-state fermentation 193  
M Anusree, K Madhavan Nampoothiri & Ashok Pandey
- Keratinase production by *Bacillus weihenstephanensis* PKD5 in solid-state fermentation and its milk clotting potential 200  
Dipak K Sahoo, Suman K Halder, Arpan Das, Arijit Jana, Tanmay Paul, Hrudayanath Thatoi, Keshab C Mondal & Pradeep K Das Mohapatra

Degradation of polycyclic aromatic hydrocarbons (PAHs) employing biosurfactant producing <i>Pseudomonas aeruginosa</i> KS3 Kaustuvmani Patowary, Mohan Chandra Kalita & Suresh Deka	208
Biodegradation of vapour phase benzene, toluene and xylene (BTX) using compost based modified biofilter medium Sanjay Singh, B N Rai, J Verma & R S Singh	216
Acetylene reductase activity and molecular characterization of plant growth promoting rhizobacteria to know efficacy in integrated nutrient management system Manoj Kaushal & Rajesh Kaushal	221
Biofixation of carbon dioxide using mixed culture of microalgae Deepshikha Singh, Krishnapriya Yadav, Deepshikha & R S Singh	228
<b>Papers</b>	
Expression of rice chitinase gene in transgenic eggplant confers resistance to fungal wilts Deepali Singh, Robert Haicour, Darasinh Sihachakr & Manchikatla Venkat Rajam	233
Molecular characterization of wheat germplasm for stripe rust resistance genes ( <i>Yr5</i> , <i>Yr10</i> , <i>Yr15</i> & <i>Yr18</i> ) and identification of candidate lines for stripe rust breeding in Kashmir Shazia Mukhtar, M A Khan, B A Paddar, Azra Anjum, Gul Zaffar, S A Mir, Sabina Naseer, M A Bhat & Kamaluddin	241
Molecular identification and genetic improvement <i>vis-à-vis</i> comparison of yield and quality in different generations of <i>Erianthus arundinaceus</i> , <i>E. bengalense</i> and <i>Saccharum spontaneum</i> cyto-nuclear genome introgressed sugarcane Ravinder Kumar, M N Premachandran, C Appunu, A Anna Durai, V Raffee Viola, C Mahadevaiah & Mintu Ram Meena	249
Relative expression profile of lingual antimicrobial peptide (LAMP) mRNA by different tissues of <i>Bubalus bubalis</i> Dhruba Jyoti Kalita	256
COI based molecular identification of mango leaf hoppers (Hemiptera: Cicadellidae) in India R Asokan, B N Chaitanya, K B Rebijith, N K Krishna Kumar, C A Viraktamath & V V Ramamurthy	260
Optimization of inoculum density in hairy root culture of <i>Plumbago rosea</i> L. for enhanced growth and plumbagin production towards scaling-up in bioreactor Dhanya B Pillai, Binoy Jose, K Satheeshkumar and P N Krishnan	264
Enzymatic transformation of the major ginsenoside Rb1 to compound K by <i>Weissella hellenica</i> DC06 Md Amdadul Huq, Yeon-Ju Kim, Jin-Woo Min, Fayeza Md Siraj, Muhammad Zubair Siddiqi & Deok-Chun Yang	270
Green synthesis and cytotoxicity of silver nanoparticles from extracts of the marine macroalgae <i>Gracilaria corticata</i> B Valentin Bhimba, J Saraniya Devi & S Usha Nandhini	276
<b>Instructions to Contributors</b>	283

## AUTHOR INDEX

Anjum A	241	Mondal K C	200
Anusree M	193	Mukhtar S	241
Appunu C	249		
Asokan R	260	Nampoothiri K M	193
		Nandhini S U	276
Beniwal V	167	Naseer S	241
Bera S	179	Nath A	160
Bhat M A	241	Nawani N N	186
Bhimba B V	276		
		Paddar B A	241
Chaitanya B N	260	Pandey A	193
Chakraborty A K	149	Patowary K	208
Chaudhuri S	179	Paul T	200
		Pillai D B	264
Das A	200	Prakash D	186
Deepshikha	228	Premachandran M N	249
Deka S	208		
Devi J S	276	Rai B N	216
Durai A A	249	Rajam M V	233
Dutta D	179	Ramamurthy V V	260
		Rebijith K B	260
Haicour R	233		
Halder S K	200	Sahoo D K	200
Huq M A	270	Salgaonkar N	186
		Satheeshkumar K	264
Jana A	200	Siddiqi M Z	270
Jose B	264	Sihachakr D	233
		Singh D	233
Kalita D J	256	Singh De	228
Kalita M C	208	Singh R S	216, 228
Kamaluddin	241	Singh S	216
Kapadnis B P	186	Siraj F M	270
Kaushal M	221	Soni D K	160
Kaushal R	221		
Khan M A	241	Thatoi H	200
Kim Y-J	270	Tripathi A	172
Krishnan P N	264		
Kumar D S	160	Varughese L R	167
Kumar N K K	260	Verma J	216
Kumar R	249	Viola V R	249
		Viraktamath C A	260
Mahadevaiah C	249		
Meena M R	249	Yadav K	228
Min J-W	270	Yang D-C	270
Mir S A	241		
Misra K	172	Zaffar G	241
Mohapatra P K D	200		

