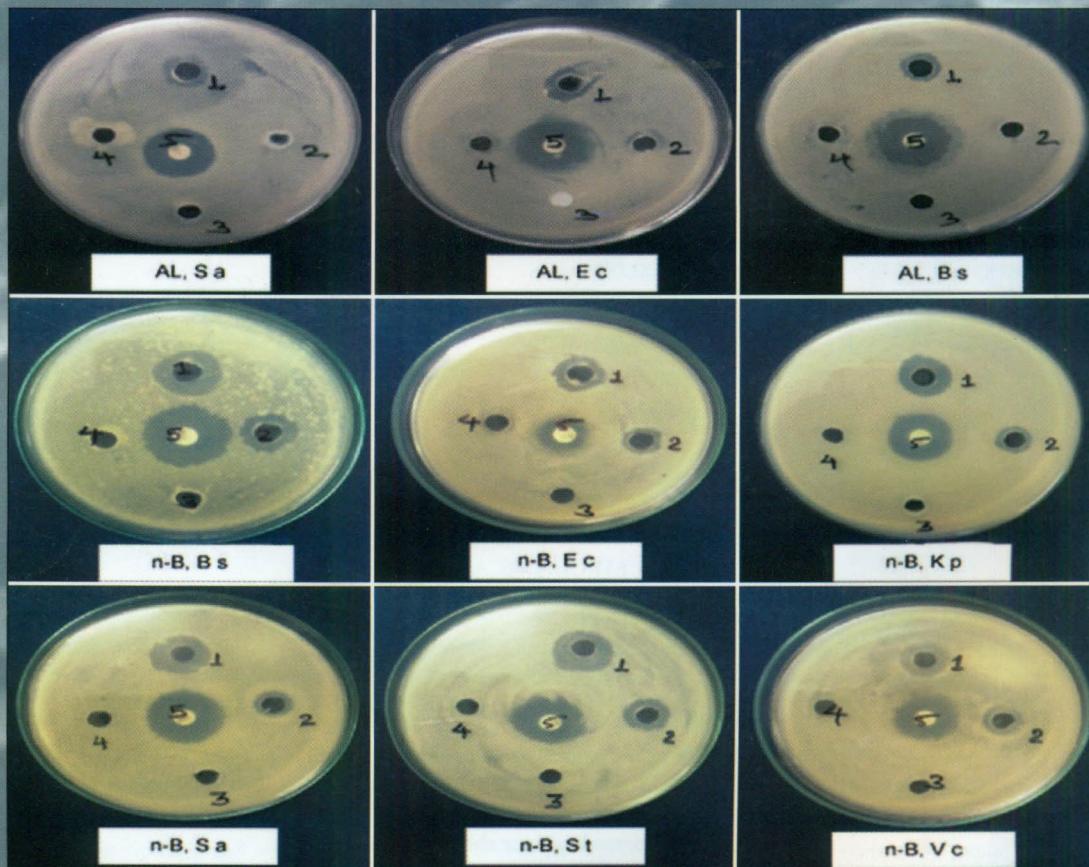




A CSIR Publication

# Indian Journal of Biotechnology

28  
S13  
4/10/2021



www.niscair.res.in



CSIR-National Institute of Science Communication And  
Information Resources  
New Delhi, INDIA

# Indian Journal of Biotechnology

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

VOLUME 19  
CODEN: IJBNAR 19 (3) (2020) 153-230

NUMBER 3

July 2020  
ISSN: 0972-5849 (print)  
0975-0967 (online)

## CONTENTS

### Papers

Variability and molecular diversity of wild sugarcane germplasm collected from low temperature regions Lohit and Changlang of Arunachal Pradesh C Appunu, J Ashwin Narayan, H K Mahadevaswamy, S Karthigeyan, R Valarmathi, C Mahadevaiah, Ravinder Kumar, Mintu Ram Meena, Bakshi Ram	159
Molecular characterisation of a <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> isolated from an infected rice ( <i>Oryza sativa</i> L) plant in Vellore district, India Manjula Ramadass & Padma Thiagarajan	169
Protein profiling by two dimensional gel electrophoresis (2-DE) represented a basic protein fingerprinting in tea Pranita Hazarika & H Ranjit Singh	176
Molecular characterization of tospoviruses infecting <i>Capsicum annuum</i> L. Rajamanickam S, Haokip B D, Caroline R & Nakkeeran S	182
Identification and determination of cellulase activity of cellulose degrading microorganisms from earthworm species of different habitats of North East India Surnalata Devi Hijam, Sailendra Goyari, Elizabeth Thokchom, Mohan Chandra Kalita & Narayan Chandra Talukdar	192
<i>In vivo</i> genomic expression of luteinizing hormone receptors and steroidogenic-enzyme in follicles of crossbred cows S Satheshkumar	206
Genotyping of cattle based on kappa-casein and alpha-lactalbumin genes Rahman Sumaiya, Hossain Md. Imam, Hossain Mridha Md. Kamal, Alim Md. Abdul, Jahan Nusrat, Islam Md. Ariful, Rubaya, Salimullah Md, Bhuyan Anjuman Ara, Alam Jahangir	211
A new multiplex RT-PCR assay for serotyping of bluetongue virus Suresh S, Kalyani Putty, Rao P P, Vishweshwar Kumar Ganji, Shiva Jyothi J, Krishna Jyothi Y, Narasimha Reddy Y	219
<b>Instructions to Contributor</b>	<b>226</b>