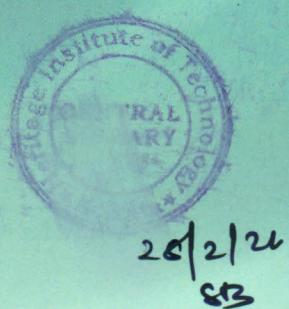


# Proceedings of the National Academy of Sciences, India

## Section B: Biological Sciences



Official Publication of  
**The National Academy of Sciences, India**  
5, Lajpatrai Road, Allahabad-211002 (India)



# Proceedings of the National Academy of Sciences, India

## Section B: Biological Sciences

Volume 93 · Number 3 · July-Sept 2023

### REVIEWS

#### Use of Hazardous Chemical Pesticides in India: A Review

J.K. Pandey 523

#### Asthma History, Current Situation, an Overview of Its Control History, Challenges, and Ongoing Management Programs: An Updated Review

A. Kapri · S. Pant · N. Gupta · S. Paliwal · S. Nain 539

### RESEARCH ARTICLES

#### Anticockroach Activity of Fruit Extract of *Luffa acutangula* var. *amara* Anticockroach Activity of *Luffa amara*

S.J. Jadhav · N.S. Chavan 553

#### Forest Cover Change Detection Using Remote Sensing and GIS in Dibrugarh-Saikhowa National Park, Assam: A Spatio-Temporal Study

R.K. Shah · R.K. Shah 559

#### GC-MS Fingerprinting and Antibacterial Activity of *Solanum khasianum* Stem and Fruit Extracts

P. Chirumamilla · S. Taduri 565

#### Evaluation of Tropical Edible Seaweeds Across the Untapped Frontier of Gokarna for Boosting the Expanse's Fiscal Valorization

D. Dixit · P. Suthar · M.H. Trivedi · C.R.K. Reddy · D. Gadhwani 577

#### In Vitro Propagation of *Edithcolea grandis*

K. Rose · M. Williams · R. Francis · S. Higgins 589

#### Identification, Characterization, Isolation, and Pathogenicity Study of *Ralstonia solanacearum*: Foundation for Development of a Highly Selective DNA-Biosensing Platform

R. Patel · M. Vinchurkar · R. Patkar · R. Ramesh · M.S. Baghini 595

#### Impact of IAA Application on Growth and Biochemical Aspects of *Silybum marianum* (L.) Gaertn. Under Lead Stress

S. Bhardwaj · A. Sharma · D. Kapoor · N. Kumar 603

#### Toxicity Assessment of the Long-Term Usage of *Asparagus racemosus* Willd., an Anthelmintic Plant of India

A.D. Soren · A.K. Yadav 611

#### Antioxidant, cytotoxic and antimicrobial efficacy of potato peels, taro peels, and husk and silk of corn

S.A. El-Sawi · M.E. Ibrahim · R.I. Bassuiny · R.M. Merghany 619

#### Storage Stability of Meat Bread Prepared with Addition of *Cinnamomum* and *Origanum* Herbs Stored at Refrigeration Temperature

P. Umaraw · G. Chauhan · S.K. Mendiratta · A.K. Verma 627

#### An Insightful Evaluation of Evodiamine Analogs Effect as DNA Topoisomerase I Inhibitors Using QSAR Method

H. Soufi · M. Salah · S. Belaaouad · M. Moutaabbid 639

#### Volatile Profiles of Mango (*Mangifera indica* L.) Fruits from Natural Accessions and Cultivated Alphonso

M.S. Dar · B.B. Dholakia · S.A. Punekar · V.S. Gupta · A.P. Giri 659

#### Chemical Composition and Biological Activities of Essential Oil from *Kaempferia rotunda*

S. Sahoo · M. Dash · D. Sahoo · S.K. Kar · B. Kar · S. Nayak 669

#### Particulate Matter Deposition on the Foliage Aided in Low Temperature Acclimatization of *Psidium guajava* L. in Winter

H. Singh · P. Singh · S.B. Agrawal · M. Agrawal 677

#### Banana Based Composite Flour Blends for the Development of Low Gluten Convenience food

P.S. Kumar · D.A. Keran · S. Uma 689

#### Optimization of Formulated Kefiran/*Malva neglecta* Film with Rice Bran Oil to Maintain Cauliflower Quality in Storage

F. Jourabian · M. Nouri 697

#### Cognitive and Mitochondrial Alterations in Rat Striatum and Hippocampus Exposed to Imidacloprid: The Protective Role of Catechins

S. Haddad · Z. Chouit · D. Djellal · M. Hachemi · M. Hanfer · F. Nouicer · O. Bennoune · Z. Lakroun · D. Zama · M. Kebieche · R. Soulimani 705

#### Response to Temperature Stress of Free-Living *Symbiodinium* Isolated from Three Coral Host Species (*Porites lobata*, *Porites cylindrica* and *Seriatopora* sp) in the Spermonde Archipelago

N. Rukminasari · D.Y. Satari · S. Suharto · S. Sahabuddin 713

- ## **Isolation and Biochemical Properties of Extremophilic Keratinase from *Bacillus cereus* FC1365**

- # **Phenology and Fruit Growth Dynamics of Mango (*Mangifera indica* L.) in Greenhouse and Open Air in Mediterranean Climate**

- ## **Genetic Diversity and Food Value of Black Soybean (*Glycine max* (L.) Merr.) in Uttarakhand Hills, North-Western India**

- ## **A Novel Multiplex RT-PCR for Simultaneous Detection of Malaria, Chikungunya and Dengue Infection (MCD-RT-PCR)**

S. Sinha · R. Gahtori · P. Kumari · R.K. Baharia · M. Saxena · V. Pande · A.R. Anvikar · D. Savargaonkar **755**

## **Identification and Characterization of Endophytic Bacteria Isolated from *Curcuma longa***

S.R. Thankam : S.G.A. Manuel 763

**Further articles** can be found at [link.springer.com](http://link.springer.com)

**Further articles** can be found at [link.springer.com](http://link.springer.com)

**Instructions for Authors** for *Proc. Natl. Acad. Sci., India, Sect. B Biol. Sci.* are available at [www.springer.com/40011](http://www.springer.com/40011)