

# Defence Life Science Journal

<https://publications.drdo.gov.in/ojs/index.php/dlsj>



Defence Research & Development Organisation

# DEFENCE LIFE SCIENCE JOURNAL

*A Publication of DRDO*

Defence Life Science Journal has been conceptualised to cater to the needs of scientists, researchers, academicians of life sciences and allied disciplines like: Biotechnology, bio-medicine, bio-engineering, bio-electronics, non-invasive life imaging, pharmacology and toxicology, physiology, NBC warfare, food technology, and psychology. Defence Life Science Journal is a quarterly journal. Every year it is published in the month of January, April, July and October.

Papers published in the Journal are covered/indexed by Scopus, UGC-CARE, Indian Citation Index, Google Scholar. Online published papers are assigned with Digital Object Identifier (DOI).

## Editorial Board

**Dr. R Kumar**

*Defence Food Research Laboratory (DFRL), Mysore, India*

**Dr. Sudhir Chandna**

*Institute of Nuclear Medicine & Allied Sciences (INMAS), Delhi, India*

**Dr. Bhuvnesh Kumar**

*Sharda University, Greater Noida, Uttar Pradesh, India*

**Dr. David R. Franz**

*Kansas State University, Kansas*

**Prof. Debnath Pal**

*Indian Institute of Science (IISc), Bengaluru, Karnataka, India*

**Dr. Dev Vrat Kamboj**

*Defence Research Laboratory (DRL), Tezpur, Assam, India*

**Dr. Devendra Parmar**

*CSIR - Indian Institute of Toxicology Research, Lucknow, Uttar Pradesh, India*

**Dr. Gitanjali Yadav**

*National Institute of Plant Genome Research, New Delhi, India*

**Dr. (Ms) Arunima Gupta**

*Defence Institute of Psychological Research (DIPR), Delhi, India*

**Dr. Manjunatha Mahadevappa**

*Indian Institute of Technology - Kharagpur, Kharagpur, West Bengal, India*

**Dr. Manmohan Parida**

*Defence Research and Development Establishment (DRDE), Gwalior, India*

**Shri. Devakanta Pahad Singh**

*Defence Institute of Physiology and Allied Sciences (DIPAS), Delhi, India*

**Dr. Saber Husain**

*US Airforce Research Laboratory, Dayton, OH 45435-0001*

**Dr. Sanjai K Dwivedi**

*Directorate of Personnel (DoP), New Delhi, India*

**Dr. Swaran Jeet Singh Flora**

*National Institute of Pharmaceutical Education and Research (NIPER), Raebareli, India*

**Dr. R Indu Shekhar**

*Defence Bioengineering and Electromedical Laboratory (DEBEL), Bengaluru, India*

**Dr. USN Murty**

*National Institute of Pharmaceutical Education and Research (NIPER), Guwahati, Assam, India*

## Editorial Team

**Editor-in-Chief**

Ms. Kiran Chauhan, DESIDOC, Delhi

**Associate Editor-in-Chief**

Dr. Mohd. Yousuf Ansari, DESIDOC, Delhi

**Editor**

Dr. Yogesh Modi, DESIDOC, Delhi

**Assistant Editor**

Mr. Ankur Pant, DESIDOC, Delhi

Mr. Shiv Shambhu Upadhyay, DESIDOC, Delhi

**Editorial Assistant**

Ms. Bhawana Pal, DESIDOC, Delhi

**Editorial Desk**

Ph: 011-2390 2463/69

**Printing**

Mr. Rajesh Kumar, DESIDOC, Delhi

**For Subscription, Inquires, and Cheque Address**

Ms. Dipti Arora  
DESIDOC, Metcalfe House  
Delhi-110 054  
Ph: 011 - 2390 2612  
Fax: 011-2381 9151  
E-mail: marketing.desidoc@gov.in

**Annual Subscription**

Rs. 2,000/-

**(Discount: 15 % to Publishers, Vendors and Individuals)**

Subscription to be paid in advance by bank draft in the favour of **Director, DESIDOC**. Local subscribers may pay by cheque, payable at Delhi.

---

<http://publications.drdo.gov.in/ojs/index.php/dlsj>

The editor or publisher does not assume responsibility for the statements/opinions expressed by the authors of the papers.

---

© 2025, Defence Scientific Information & Documentation Centre (DESIDOC), Delhi.

---

## Defence Life Science Journal

Volume 10

Number 2

April-June 2025

---

### CONTENTS

---

*Research Article*

- 79-84      Extraction and Formulation of Lip Tint from Natural Dye Extracted from *Celosia Cristata* Linn Flower  
  
*Joysa Ruby J, Selvakumar K, Venkatesh DP, Ajay Pankajbhai Lunagariya, Chandrika P, Shreyas S Kashyap, Tarun R, Kavitha Choudhary and Tanveer*  
 DOI : 10.14429/dlsj.19783
- 85-89      Incidence of Insect Pests on Vegetable Crops in Trans-Himalayan Ladakh, India: A Survey  
*Sonam Yangdol, Nadeya Khaliq, Devraj, Rohit Kumar, Anand K Katiyar, OP Chaurasia, and Tsering Stobdan*  
 DOI : 10.14429/dlsj.19881
- 90-100      Prevalence of Cancer in India with Respect to Leukaemia and their Factorial Relations  
*Paras Sharma, Shoorvir Singh, Umesh Kumar and Dinesh Nalage*  
 DOI : 10.14429/dlsj.20126
- 101-110      Composting of Agricultural Waste Residues by Effective *Streptomyces rameus* KAC3 and *Streptomyces mutabilis* KAC6 Isolates for the Mass Production of Vermicompost  
*R. Kannan, V. Dhivya T. Seenivasa Moorthy and K. Ajay Kallapiran*  
 DOI : 10.14429/dlsj.20200
- 111-120      Characterisation, Synthesis, and Antimicrobial Activities of Silver Nanoparticles Formed via Green Synthesis Approach using Aqueous Extract derived from the Bark of *Mangifera indica*: A Sustainable Resource  
*Shalini Tailor, Ayushi Malik, R.K. Gaur and Avinash Marwal*  
 DOI : 10.14429/dlsj.20245
- 121-126      Commercialisation of Innovations: A Case Study of Liposomal Formulations  
*Nidhi Sandal and Avinash Kumar*  
 DOI : 10.14429/dlsj.20390
- 127-136      Person-Situation-Behaviour Triad: Exploring Relationships and Behavioural Consistency  
*Shashi Darolia and Jyotshna Tyagi*  
 DOI : 10.14429/dlsj.20466

*Review Article*

- 137-142 Hemp (*Cannabis sativa*) - An Underexploited but Promising Oilseed with Multifarious Properties and Applications: A Review  
*Garvita Agarwal, Parul Sharma and Arushi Bisht*  
DOI : 10.14429/dlsj.19497
- 143-153 Phytoremediation by Bio-Energy and Aromatic Plants: A Multidimensional and Ecologically Feasible Method of Remediation  
*Aditi Upadhyay and Ekta Bhatt*  
DOI : 10.14429/dlsj.20037
- 154-165 Pathophysiology of Dermatophytes and Potent Phytochemical Sources as Possible Applications against *Trichophyton* Spp.  
*Monalisha Giri and Sagarika Parida*  
DOI : 10.14429/dlsj.19791