



A CSIR Publication

Indian J Exp Biol (Monthly)

JANUARY 2021

CODEN: IJEB (A6) 59 (1) 1-72 (2021)

ISSN: 0019-5189 (Print); 0975-1009 (Online)

ijeb@niscair.res.in

Single copy: Rs. 460.00 \$80.00

Annual Subs: Rs. 4600.00 \$800.00

# Indian Journal of Experimental Biology

[www.niscair.res.in](http://www.niscair.res.in)

CSIR-National Institute of Science Communication And  
Information Resources

New Delhi, INDIA

in association with

Indian National Science Academy, New Delhi, INDIA

# Indian Journal of Experimental Biology

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

VOLUME 59

NUMBER 01

JANUARY 2021

CODEN: IJEB (A6) 59 (1) 1-72 (2021)

ISSN: 0019-5189 (Print); 0975-1009 (Online)

## CONTENTS

### Minireview

- Critical role of biobank in COVID-19 pandemic 7  
Birendra Kumar Yadav & Chhagan Bihari

### Papers

- Permethrin induced cytotoxicity of rat splenocytes: Protective effect of N-acetylcysteine 11  
Tanzeel Ahmed & Basu Dev Banerjee
- Correlation between serum cystatin C, thrombomodulin and T lymphocyte subsets in children with Henoch-Schonlein purpura 19  
Linmei Guo, Huiping Liu, Xiaoyun Zhao & Fanxia Zeng
- Genotoxic effects of Manganese and Nickel doped Zinc Ferrite ( $Mn_{0.3}Ni_{0.3}Zn_{0.4}Fe_2O_4$ ) nanoparticle in Swiss albino mouse *Mus musculus* 25  
Avelyno H. D'costa, Soorambail K. Shyama, Praveen Kumar MK, Vidhyadatta S. Vernekar & Rudraji B Tangsali
- Melatonin abrogates liver, ovarian, and uterine toxicities induced by tamoxifen in a breast cancer mouse model 33  
Iman Ali Alanazy, Badr aldamash, Doaa Mohamed El-Nagar, Khalid Elfaki Ibrahim, Ahmed Mostafa Rady & Muhammad Farooq Khan
- Polyphenol rich extract from *Sesbania grandiflora* (L.) Pers. bark reduces rheumatism by mediating the expression of NF kappa B in rats 44  
Sumit Arora & Prakash Itankar
- Biochemical defense in maize against *Chilo partellus* (Swinhoe) through activation of enzymatic and nonenzymatic antioxidants 54  
Tanmaya K. Bhoi, Neha Trivedi, Hemant Kumar, Aditya K. Tanwar & Mukesh K. Dhillon
- Organosolv process for deconstruction of highly recalcitrant cotton stalks 64  
Santosh N Sankh & Vidhya Rangaswamy

Cont.

Madhu  
केन्द्रीय पुस्तकालय / Central Library  
सिक्किम विश्वविद्यालय  
Sikkim University

### Author Index

Ahmed T	11	Guo L	19	Sankh SN	64
Alanazy IA	33	Ibrahim KE	33	Shyama SK	25
Aldahmash B	33	Itankar P	44	Tangsali RB	25
Arora S	44	Khan MF	33	Tanwar AK	54
Banerjee BD	11	Kumar H	54	Trivedi N	54
Bhoi TK	54	Liu H	19	Verenkar VS	25
Bihari C	7	Praveen Kumar MK	25	Yadav BK	7
D'Costa AH	25	Rady AM	33	Zeng F	19
Dhillon MK	54	Rangaswamy V	64	Zhao X	19
El-Nagar DM	33				

### Keyword Index

Agati	44	Endometrium	33	Necrosis	11
Agricultural residue	64	Enzymatic hydrolysis	64	Nephritis	19
Air Pollution	64	Formic acid	64	NFκB	44
Anticancer	33	<i>Gossypium hirsutum</i>	64	Nitric acid	64
Antioxidant(s)	44,54	Hyper Ovulation	33	Oxidative stress	11
Antirheumatic	44	Immunoglobulin A	19	Pesticide	11
Apoptosis	11	Immunohistochemistry	44	SARS-COV-2	7
Biobanking	7	Induced defense	54	Sweet corn	54
Biotic stress	54	Insect resistance breeding	54	Vasculitis	19
Chromosomal aberrations	25	Insecticide	11	Vegetable Hummingbird	44
Comet assay	25	Maize	54	<i>Zea mays</i>	54
Corn	54	Micronuclei	25		
COVID-19 pandemic	7	Microthrombus	19		
Cytotoxicity	11	MNZF	25		
Dimethylbenzylamine induced breast cancer	33				