

0971-7811
0974-1275

Volume 31 · Issue 2 · April–June 2022

90


Journal of Plant Biochemistry and Biotechnology



SB
11/07/2022

Society for
Plant Biochemistry and
Biotechnology



 Springer

For Circulation in India only

REVIEW ARTICLES

Biotic and abiotic stress tolerance through CRISPR-Cas mediated genome editing

S. Ghosh · G. Dey 227

Prediction of the sea buckthorn AQP gene structure and its spatiotemporal expression pattern under drought stress

D. Zhang · N. Yang · J. Dong · C. Wang · Q. Li · R. Wang · Z. Feng · D. Xie · G. Ye · Y. Ma 239

ORIGINAL ARTICLES

5-aminolevulinic acid (ALA) regulates photosynthetic performance and nitrogen metabolism status in UV-B challenged *Cajanus cajan* L. seedlings
D. Gupta · S.M. Prasad 250

Physical map of lncRNAs and lincRNAs linked with stress responsive miRs and genes network of pigeonpea (*Cajanus cajan* L.)

J.K. Yasin · B.K. Mishra · M. Arumugam Pillai · V. Chinnusamy 271

Differential stem reserve food mobilization and sink strength in rice cultivars grown under submerged and aerobic conditions

S. Jhandai · A. Pal · N. Mohan · V. Saharan · V. Jain 293

Phytochemical changes of *Digitalis purpurea* L. in response to polyamines and methyl jasmonate application in callus culture

M.M. Rad · V. Abdossi · P. Moradi · F. Rakhshandehroo · A. Mehrfarin 310

Identification and expression studies of a PNP from *Opuntia ficus-indica*

C. Garcidueñas-Piña · V. Herrera-Martínez · M.A. Mejía-Mendoza ·

D.A. Díaz-García · R.E. Soria-Guerra · J.F. Morales-Domínguez 320

Physiological response and transcriptome analysis of *Prunus mume* to early salt stress

X. Wang · Z. Song · Y. Ti · Y. Liu · Q. Li 330

Effects of humic acid on antioxidant defense system and senescence-related genes expression in petals of LA-Hybrid Lily

F. Ghafari Rahbar · A. Vaziri · M. Hassanpour Asil · S. Taleh Sasani · J. Olfati 343

New insights on *Abelmoschus manihot* flower development: dynamic changes of flavonoids based on a metabolomic approach

J. Li · G. Ye · H. Liu · Z. Wang 351

Molecular characterization and expression profiling of NADH-ubiquinone reductase Complex I MLRQ Subunit in *Pennisetum glaucum*

Z.M. Almutairi 361

Production and characterization of somatic hybrids between rice (*Oryza sativa* L.) and reed (*Phragmites communis* Trin.) obtained by protoplast fusion

K. Kim · T.S. Ho · U.S. Hwang 370

Defining the roles of *PvMDH* genes in response to salt stress and detailed characterization of the gene family

S. Yıldız · A. Okay · İ. Büyüç 380

GC-MS-FID characterization and antibacterial activity of the essential oil from *Achyrocline satureioides* (Lam) DC

C.N.F.L. Gondim · J.N.P. Carneiro · C.P. Leite · J.C. Andrade Pinheiro ·

W. do Amaral · C. Deschamps · L.E. da Silva · N.F.L. Sampaio ·

G.E.C. Gondim · H.D.M. Coutinho 394

Micropropagation, antioxidant and anticancer activity of pineapple orchid: *Dendrobium densiflorum* Lindl

B. Pant · K. Chand · M.R. Paudel · P.R. Joshi · B.B. Thapa · S.Y. Park ·

S. Shakya · L.S. Thakuri · S. Rajbahak · A.K. Sah · M.K. Baniya ·

P.R. Gurung · L. Maharjan · P. Rajbhandari 399

Development of near isogenic lines for grain softness through marker assisted backcross breeding in wheat

T.P.J. Kumar · A. Rai · S.K. Singh · R.R. Kumar · A.K. Ahlawat · S. Saini ·

R.B. Shukla · N. Bedi · A. Mahendru-Singh 410

SHORT COMMUNICATIONS

Microsatellite marker based diversity analysis and DNA fingerprinting of Asiatic cotton (*Gossypium arboreum*) varieties of India

H.B. Santosh · M. Meshram · V. Santhy · V.N. Waghmare 421

Enhancement of Celastrol compound by silver nanoparticles and acetosyringone in *Celastrus paniculatus* Willd. through adventitious and hairy root culture

A.K. Moola · T. Senthil Kumar · B.D. Ranjitha Kumari 429

Evaluation of p-Nitrophenyl butyrate based bioautographic method for the identification of lipase inhibitors from the unexplored plant sources

V.K. Bayineni · R.-K. Kadeppagari 435

Elevation of photosystem II thermal stability at pH 5.7 due to the structural transition in the oxygen-evolving complex

E. Lovyagina · B. Semin 440

Single nucleotide polymorphism (SNP) of *Jatropha curcas* associated with the content of phorbol ester

N. Vega-Quirós · E. Arnáez-Serrano · I.M. Moreira-González ·

R. Muñoz-Arrieta · L. Borbón · C. Orozco-Ortiz · G. Vargas-Hernández ·

F. Herrera · E. Araya-Valverde 446

GC-MS Analysis and In Vitro Evaluation of Antioxidant and Cytotoxic Activities of *Melaleuca viminalis* (Myrtaceae)

A.G. Darwish · H.M. Hassan · M.N. Samy · E.S. Shaker · S.M. Basha ·

S.P. Balasubramani 453

Further articles can be found at link.springer.com

Indexed/abstracted in Science Citation Index Expanded (SciSearch), Journal Citation Reports/Science Edition, SCOPUS, Chemical Abstracts Service (CAS), Google Scholar, CSA, CAB International, Biological Abstracts, BIOSIS, CAB Abstracts, Elsevier Biobase, Food Science and Technology Abstracts, Global Health, Indian Science Abstracts, OCLC, SCImago, Summon by ProQuest

Instructions for Authors for *J. Plant Biochem. Biotechnol.* are available at www.springer.com/13562.