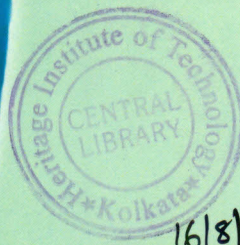


0971-7811
0974-1275

Volume 32 · Issue 1 · January–March 2023

59


Journal of Plant Biochemistry and Biotechnology



16/8/23
LB

Society for
Plant Biochemistry and
Biotechnology



 Springer

For Circulation in India only

Journal of Plant Biochemistry and Biotechnology

Volume 32 · Number 1 · January–March 2023

COMMENTARIES

The bioethanol production for blending into petrol

V.S. Malik 1

The war for apoplastic water: stomatal control as a key strategy in bacterial pathogenesis

A. Choudhary · M. Senthil-Kumar 8

REVIEW ARTICLES

Genetic engineering of plants for phytoremediation: advances and challenges

K. Kumar · A. Shinde · V. Aeron · A. Verma · N.S. Arif 12

Application of NGS-BSA and proposal of Modified *QTL-seq*

X. Wang · G. Wang 31

ORIGINAL ARTICLES

Identification of shoot and root genomic regions in response to nitrogen deficiency tolerance in rice through the use of rice back cross recombinant inbred lines (BRILs)

A.M. Solangi · H. Khanzada · G.M. Wassan · A. Rasheed · A.A. Keerio · H. Li · S. Khanzada · M. Faheem · M.A. Laghari · J. Bian · X. Pan · Z. Wu 40

Understanding aquaporins regulation and silicon uptake in carrot (*Daucus carota*)

N. Rajora · V. Thakral · Geetika · S. Vats · G. Padalkar · S. Sudhakaran · S. Kumawat · H. Sonah · R. Deshmukh 51

Leaf and rhizome transcriptome assembly and expression analysis of genes involved in terpene biosynthesis in *Dioscorea opposita*

D. Hou · Y. Wang · R. Zhang · X. Zhao · Z. Ma · Z. Fan · L. Wang · X. Liu · J. Zhang 63

Comparing the structural characteristics and expression of *GA2ox* gene in dwarf banana and its wild type

J. Lin · D. Feng · Y. Li · S. Xiao · W. Xuan 76

Overexpressing 4-coumaroyl-CoA ligase and stilbene synthase fusion genes in red raspberry plants leads to resveratrol accumulation and improved resistance against *Botrytis cinerea*

J. Zhang · X. Yan · T. Huang · H. Liu · F. Liu · M. Yang · M. Yang · L. Ma 85

Nucleotide diversity and molecular characterization of soluble starch synthase I gene in wheat and its ancestral species

M. Singh · S. Kaur · A. Kaur · I.S. Yadav · P. Sharma · P. Chhuneja · K. Singh 92

Further insights into the association of the protein phosphatase gene *ABI1* with drought and salinity stress responses in Brassica species

R. Shamloo-Dashtpajardi · H. Razi · A. Alemzadeh · E. Ebrahimie 106

Characterization of biochemical indicators and metabolites linked with rancidity and browning of pearl millet flour during storage

A. Ali · R.R. Kumar · T. Vinutha · N. Bansal · H. Bollinedi · S.P. Singh · C.T. Satyavathi · S. Praveen · S. Goswami 121

Overexpression of *AtMYB115* gene in transgenic rice exhibits increased early regeneration and results in dwarf phenotype

T. Victorathisayam · A. Muthuganeshan · K. Subhalakshmi · G. Sridevi 132

Purification, characterization and antioxidant efficacy testing of trypsin inhibitor protein from *Annona squamosa* seeds

K.P. Lijith · K. Merin Rinky · D. Gayathri Devi 145

RNA interference-induced silencing of the *SIHSP17.7* gene delays fruit ripening in tomato

W. Liu · X. Zhao · B. Bai · Y. Xie · D. Li · X. Mao · N. Zhang 153

Potential of *Zingiber zerumbet* endophytic *Fusarium oxysporum* as biopriming agents to control *Pythium* mediated soft-rot and optimization of fermentation conditions for cytotoxic metabolite(s) production

D. Keerthi · K. Harsha · K. Harshitha · A.R. Nair 163

Comparative transcriptome analysis and identification of flavonoid biosynthesis related genes from fruits of different *Ficus hirta* varieties

R. Chen · X. Wang · Z. Lai 174

SHORT COMMUNICATIONS

A quick and simple gel diffusion assay to visualize and quantify pullulanase activity for resistant starch content in food crops

V. Krishnan · M. Awana · A. Kulshreshta · S. Praveen · A. Singh 189

Promising rice genotypes with enhanced root growth and HMA transporter gene expression under zinc deficient conditions

W.B. Barrera Jr. · S. Bej · K. Suman · M. Surapaneni · R.M. Sundaram · C.N. Neeraja 196

α -Amino adipic acid metabolism is controlled by the glutathione-dependent redox environment in Arabidopsis

Z. Gulyás · L. Simon-Sarkadi · B. Moncsek · M. Pál · G. Kocsy 204

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.