

0971-7811
0974-1275

Volume 29 · Issue 3 · July–September 2020

83

Journal of Plant Biochemistry and Biotechnology

Society for
Plant Biochemistry and
Biotechnology

LB
16/10/2020



 Springer

For Circulation in India only

ORIGINAL ARTICLES

Genetic variability and population structure of Mexican chickpea (*Cicer arietinum* L.) germplasm accessions revealed by microsatellite markers

E. Valadez-Moctezuma · A.J. Cabrera-Hidalgo · R. Arreguin-Espinosa 357

A protocol for functional study of genes in *Brassica juncea* by *Agrobacterium*-mediated transient expression: applicability in other Brassicaceae

M. Das · H. Naiya · A. Marik · G. Mukherjee · A. Seal 368

Expression profiling of miRNAs indicates crosstalk between phytohormonal response and rhizobial infection in chickpea

M. Tiwari · S. Bhatia 380

TaZnF, a C3HC4 type RING zinc finger protein from *Triticum aestivum* is involved in dehydration and salinity stress

P. Agarwal · P. Khurana 395

Transfer of grain softness from 5U-5A wheat-*Aegilops triuncialis* substitution line to bread wheat through induced homeologous pairing

Y. Sharma · I. Sheikh · A. Sharma · A.N. Yadav · K. Kumar · P. Chhuneja · S. Ram · S. Kumar · P. Vyas · H.S. Dhaliwal 407

Introgression of powdery mildew resistance from *Aegilops triuncialis* into wheat through induced homeologous pairing

R. Kamboj · S. Sharma · R. Kumar · P. Sharma · V.K. Ravat · P. Chhuneja · P. Vyas · I. Sheikh · H.S. Dhaliwal 418

High-density genetic linkage map based on arbitrary and microsatellite markers using inter-specific recombinant inbred lines in eggplant (*Solanum melongena* L.)

P. Mishra · S.K. Tiwari · S.P. Kashyap · K.N. Tiwari · M. Singh · B. Singh 427

Proteomic profiling of foxtail millet hybrid Zhangzagu10 and its parent lines using iTRAQ-based technique

Q. Weng · X. Song · Y. Zhao · J. Yuan · Z. Dong · Z. Zhao · Y. Liu 439

Changes in essential oil composition, phenylalanine ammonia lyase gene expression and rosmarinic acid content during shoot organogenesis in cytokinin-treated *Satureja spicigera* (C. Koch) boiss. shoots

E. Bektaş 450

EST-SSRs reveal genetic distinction between lac and grain yielding genotypes of pigeonpea

T. Kandasamy · K. Kumari · J. Ghosh · K.U. Tribhuvan · V.D. Lohot · M. Gargi · S. Ghosal 461

Chitosan effects on the elevation of essential oils and antioxidant activity of *Carum copticum* L. seedlings and callus cultures under in vitro salt stress

R. Razavizadeh · F. Adabavazeh · S. Komatsu 473

Naringin inhibits the *Zea mays* coniferyl aldehyde dehydrogenase: an in silico and in vitro approach

A.P. Ferro · A.V. Parizotto · W.D. dos Santos · R. Marchiosi · F.A.V. Seixas · O. Ferrarese-Filho 484

DNA barcoding of selected Zingiberaceae species from North-East India

K. Saha · B.B. Dholakia · R.K. Sinha · S. Sinha 494

Independent overexpression of *OsRab16A* and *AtDREB1A* exhibit enhanced drought tolerance in transgenic aromatic rice variety Pusa Sugandhi 2

M. Ganguly · A. Roychoudhury · D.N. Sengupta · S.K. Datta · K. Datta 503

Molecular stacking of two codon-modified genes encoding *Bt* insecticidal proteins, Cry1AcF and Cry2Aa for management of resistance development in *Helicoverpa armigera*

N. Muralimohan · R.P. Saini · K. Kesiraju · D. Pattanayak · P. Ananda Kumar · K. Kasturi · R. Sreevatha 518

Application of the phosphomannose-isomerase/mannose selection system in the *Agrobacterium*-mediated transformation of *Lonicera hypoglaucula* Miq.

F. Shi · M. Tan · Q. Mo · X. Chen · Y. Zhao · X. Guo · N. Jiang 528

Preliminary screening of *Houttuynia cordata* for biological potential and chemical components using TLC and GC–MS analysis

S. Kharnaior · S.C. Thomas 539

Effective use of zinc oxide nanoparticles through root dipping on the performance of growth, quality, photosynthesis and antioxidant system in tomato

M. Faizan · A. Faraz · S. Hayat 553

SHORT COMMUNICATION

Estimation of neomycin phosphotransferase-II (NPT-II) protein in vegetative and reproductive tissues of transgenic chickpea (*Cicer arietinum* L.) and biosafety perspectives

A. Das · A. Shukla · S. Thakur · M. Rathore · N.P. Singh 568

CORRECTION

Correction to: Transcriptome analysis of flowering genes in mango (*Mangifera indica* L.) in relation to floral malformation

A. Yadav · P.K. Jayaswal · K. Venkat Raman · B. Singh · N.K. Singh · K. Usha 571

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.