

TH
980/PP
ELSEVIER

Volume 171, issue 6, 15 March 2014, ISSN 0176-1617

Volume 171

6

2014

JOURNAL OF PLANT PHYSIOLOGY

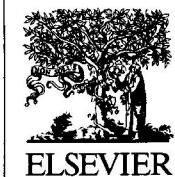
Biochemistry, Physiology, Molecular Biology and Functional Biotechnology of Plants



In Affiliation with FESPB

◆ www.elsevier.com/locate/jplph





Contents

BIOCHEMISTRY

- The dormancy-breaking stimuli "chilling, hypoxia and cyanamide exposure" up-regulate the expression of α -amylase genes in grapevine buds

S. Rubio, A. Donoso, F.J. Pérez _____ 373

PHYSIOLOGY

- Analysis of the expression of putative heat-stress related genes in relation to thermotolerance of cork oak

B. Correia, J.L. Rodriguez, L. Valledor, T. Almeida, C. Santos, M.J. Cañal, G. Pinto _____ 399

- Changes during leaf expansion of Φ_{PSII} temperature optima in *Gossypium hirsutum* are associated with the degree of fatty acid lipid saturation

T.D. Hall, D.R. Chastain, P.J. Horn, K.D. Chapman, J.S. Choinski Jr. _____ 411

- Arbuscular mycorrhizal fungi alleviate oxidative stress induced by ADOR and enhance antioxidant responses of tomato plants

M. García-Sánchez, J.M. Palma, J.A. Ocampo, I. García-Romera, E. Aranda _____ 421

- Characterization of transmembrane auxin transport in *Arabidopsis* suspension-cultured cells

D. Seifertová, P. Skúpa, J. Rychtář, M. Laňková, M. Pařezová, P.I. Dobrev, K. Hoyerová, J. Petrášek, E. Zažímalová _____ 429

- Differences in shoot Na⁺ accumulation between two tomato species are due to differences in ion affinity of HKT1;2

P. Almeida, G.-J. de Boer, A.H. de Boer _____ 438

- Potato tuber cytokinin oxidase/dehydrogenase genes: Biochemical properties, activity, and expression during tuber dormancy progression

J.C. Suttle, L.L. Huckle, S. Lu, D.C. Knauber _____ 448

- Promotion of photosynthesis in transgenic rice over-expressing of maize C₄ phosphoenolpyruvate carboxylase gene by nitric oxide donors

P. Chen, X. Li, K. Huo, X. Wei, C. Dai, C. Lv _____ 458

MOLECULAR BIOLOGY

- Overexpression of the *TIR-X* gene results in a dwarf phenotype and activation of defense-related gene expression in *Arabidopsis thaliana*

H. Kato, T. Saito, H. Ito, Y. Komeda, A. Kato _____ 382

- Proteomic changes in the roots of germinating *Phaseolus vulgaris* seeds in response to chilling stress and post-stress recovery

A. Badowiec, S. Weidner _____ 389

SHORT COMMUNICATIONS

- N-feedback regulation is synchronized with nodule carbon alteration in *Medicago truncatula* under excessive nitrate or low phosphorus conditions

S. Sulieman, J. Schulze, L.P. Tran _____ 407

Table of Contents also available via e-mail by free-of-charge ToC Alert Service.

Register: www.elsevier.com/locate/jplph

Abstracted/Index in

Biochemistry & Biophysics Citation Index; Bioscience Information System (BIOSIS); CAB Abstracts; Cambridge Scientific Abstracts (CSA); Chemical Abstracts Service (CAS); Current Awareness in Biological Sciences (CABS); Current Contents/Life Sciences; Current Contents/Agriculture, Biology & Environmental Sciences; Engineering Information/Compendex (CPX); Food Science and Technology Abstracts (FSTA); MEDLINE; Reference Update; Research Alert; Science Citation Index; SciExpanded; SciSearch. Also covered in the abstract and citation database Scopus®. Full text available on ScienceDirect®.