

Review

Sexual incompatibility in <i>Rosaceae</i> fruit tree species: molecular interactions and evolutionary dynamics A. HEGEDŰS, J. LÉNÁRT, J. HALÁSZ.....	201-209
Genes involved in the synthesis and signaling pathway of strigolactone, a shoot branching inhibitor L. GONG, Y.-J. YANG, J. ZHOU.....	210-214

Original papers

Cellular origin and development of secondary somatic embryos in <i>Oncidium</i> leaf cultures J.-T. CHEN, P.-I. HONG.....	215-220
Lipid composition of <i>Silybum marianum</i> cell cultures treated with methyl jasmonate M. CACHO, R. PELÁEZ, P. CORCHETE.....	221-226
Nitric oxide promoted rhizome induction in <i>Cymbidium</i> shoot buds under magnesium deficiency S. GUHA, I. USHA RAO.....	227-236
Improved salt tolerance and delayed leaf senescence in transgenic cotton expressing the <i>Agrobacterium IPT</i> gene Y.D. LIU, Z.J. YIN, J.W. YU, J. LI, H.L. WEI, X.L. HAN, F.F. SHEN.....	237-246
Identification and characterization of a bacteria-like sequence in the genome of some <i>Silene</i> species M. TALIANOVÁ, J. ŽLŮVOVÁ, R. HOBZA, B. VYSKOT, B. JANOUŠEK.....	247-253
Nucleotide polymorphism pattern and multiple maternal origin in <i>Thinopyrum intermedium</i> inferred by <i>trnH-psbA</i> sequences J. ZENG, X. FAN, L.-N. SHA, H.-Y. KANG, H.-Q. ZHANG, J. LIU, X.-L. WANG, R.-W. YANG, Y.-H. ZHOU.....	254-260
Isolation and functional analysis of 4-coumarate:coenzyme A ligase gene promoters from <i>Salvia miltiorrhiza</i> X.Q. JIN, Z.W. CHEN, R.H. TAN, S.J. ZHAO, Z.B. HU.....	261-268
Analysis of DNA methylation during the germination of wheat seeds F.-R. MENG, Y.-C. LI, J. YIN, H. LIU, X.-J. CHEN, Z.-F. NI, Q.-X. SUN.....	269-275
Frequencies and variation in cytosine methylation patterns in diploid and tetraploid cytotypes of <i>Paspalum notatum</i> M.P. RODRIGUEZ, G.D.L. CERVIGNI, C.L. QUARIN, J.P.A. ORTIZ.....	276-282
Genetic diversity in white clover and its progenitors as revealed by DNA fingerprinting A. BADR, H.H. EL-SHAZLY, L. MEKKI.....	283-291
Low genetic diversity as revealed by SPAR methods possibly leads to extinction of two critically-endangered and endemic species of <i>Mantisia</i> S.K. SHARMA, S.S.D. BHOWMIK, S. KUMARIA, P. TANDON, S. RAMA RAO.....	292-300
Plastid division and morphology in the genus <i>Peperomia</i> M. AHMADABADI, R. BOCK.....	301-306
Structure-function relationships during metaphloem sieve elements development in <i>Triticum aestivum</i> C.N. YANG, Z.Q. ZHOU, H.Y. FAN, Z. JIANG, F.Z. MEI.....	307-312
Role of hydrogen peroxide in regulating glucose-6-phosphate dehydrogenase activity under salt stress Y. LIU, Q. WAN, R. WU, X. WANG, H. WANG, Z. WANG, C. SHI, Y. BI.....	313-320
Hydrogen peroxide and nitric oxide promote reproductive growth in <i>Litchi chinensis</i> B. ZHOU, N. LI, Z. ZHANG, X. HUANG, H. CHEN, Z. HU, X. PANG, W. LIU, Y. LU.....	321-329
Exogenous H ₂ O ₂ increased catalase and peroxidase activities and proline content in <i>Nitraria tangutorum</i> callus Y.L. YANG, Y.Y. ZHANG, J. LU, H. ZHANG, Y. LIU, Y. JIANG, R.X. SHI.....	330-336
The effect of water deficit and excess copper on proline metabolism in <i>Nicotiana benthamiana</i> H.-M. KU, C.-W. TAN, Y.-S. SU, C.-Y. CHIU, C.-T. CHEN, F.-J. JAN.....	337-343

Continued on the previous page

Root adaptations to cadmium-induced oxidative stress contribute to Cd tolerance in the hyperaccumulator <i>Sedum alfredii</i> S.K. TIAN, L.L. LU, X.E. YANG, H.G. HUANG, K. WANG, P.H. BROWN.....	344-350
Do fern gametophytes have the capacity for irradiance acclimation? B. FERNÁNDEZ-MARÍN, S.J. ARROYO ALFARO, J.M. BECERRIL, J.I. GARCÍA-PLAZAOLA.....	351-356
Brief communications	
Changes in antioxidative enzymes activities during <i>Tacitus bellus</i> direct shoot organogenesis A. MITROVIĆ, D. JANOŠEVIĆ, S. BUDIMIR, J. BOGDANOVIĆ PRISTOV.....	357-361
Micropropagation of <i>Pinus peuce</i> D. STOJČIĆ, D. JANOŠEVIĆ, B. UZELAC, V. ČOKEŠA, S. BUDIMIR.....	362-364
Multiple effects of inhibition of mitochondrial alternative oxidase pathway on photosynthetic apparatus in <i>Rumex K-1</i> leaves L.T. ZHANG, H.Y. GAO, Z.S. ZHANG, Z.C. XUE, Q.W. MENG.....	365-368
Mitochondrial minisatellite polymorphisms in fodder and sugar beets reveal genetic bottlenecks associated with domestication Y. YOSHIDA, M. MATSUNAGA, D. CHENG, D. XU, Y. HONMA, T. MIKAMI, T. KUBO.....	369-372
Monitoring of cultivar identity in micropropagated olive plants using RAPD and ISSR markers A.R. LEVA, R. PETRUCCELLI.....	373-376
Na ⁺ /H ⁺ antiport activity in plasma membrane and tonoplast vesicles isolated from NaCl-treated cucumber roots K. KABAŁA, M. JANICKA-RUSSAK.....	377-382
Sodium nitroprusside modulates gene expression involved in glutathione synthesis in <i>Zea mays</i> leaves C. SOUZA MELLO, V.S. HERMES, M.P. GUERRA, A.C.M. ARISI.....	383-388
Expression of the <i>BBM</i> gene during somatic embryogenesis of <i>Arabidopsis thaliana</i> K. KULINSKA-LUKASZEK, M. TOBOJKA, A. ADAMIOK, E.U. KURCZYNSKA.....	389-394
Genetic variability in regenerated plants of <i>Ungernia victoris</i> O.M. BUBLYK, I.O. ANDREEV, K.V. SPIRIDONOVA, V.A. KUNAKH.....	395-400

BIOLOGIA PLANTARUM

Editor-in-Chief: Jana Pospíšilová; *Executive Editor:* Jiří Šantrůček

Editorial Office: Na Karlovce 1a, 160 00 Praha 6, Czech Republic

phone: (+420) 233331032, fax: (+420) 224310113, e-mail: biol.plant@ueb.cas.cz, <http://www.ueb.cas.cz/bp>

© *Institute of Experimental Botany, Academy of Sciences of the Czech Republic, Praha 2012*