

***General and
Applied
PLANT
PHYSIOLOGY***

Vol. XXXIV, Special Issue, No. 3-4, 2008

**PROCEEDINGS
OF THE INTERNATIONAL
CONFERENCE
ON RESPONSES OF PLANTS TO
ENVIRONMENTAL STRESSES**

Supported by the Municipality of Elena

12 - 18 May, 2008, Elena, Bulgaria



***Acad. M. Popov
Institute of Plant
Physiology***

GENERAL AND APPLIED PLANT PHYSIOLOGY

Volume XXXIV, Special Issue No. 3-4, 2008

Bulgarian Academy of Sciences

L. Popova, L. Maslenkova, R. Yordanova, A. Krantev, G. Szalai, T. Janda. Salicylic acid protects photosynthesis against cadmium toxicity in pea plants	133
A. Ivanova, A. Krantev, Zh. Stoyanova, L. Popova. Cadmium-induced changes ion maize leaves and the protective role of salicylic acid	149
L. Zagorchev, S. Petrova, M. Odjakova. Arabinogalactan proteins in salt adapted suspension cultures of <i>Dactylis glomerata</i> L.	159
H. H. Mert, Y. Dogan, S. Baslar, H. Aydin, N. Yorek. The effect of NaCl on some parameters influencing the soil-plant interactions in <i>Salicornia herbacea</i>	169
M. Kaymakanova and N. Stoeva. Physiological reaction of bean plants to salt stress	177
V. Nenova. Growth and mineral concentrations of pea plants under different salinity levels and iron supply	189
L. Yildiz Aktas, H. Akca, N. Altun, P. Battal. Phytohormone levels of drought-acclimated laurel seedlings in semiarid conditions	203
M. Janmohammadi, P. Moradi Dezfuli, F. Sharifzadeh. Seed invigoration techniques to improve germination and early growth of inbred line of maize under salinity and drought stress	215
D. Klymchuk, T. Vorobyova, O. Sivash, S. Jadko. Effects of water deficit on the water relations of <i>Alisma plantago-aquatica</i> L. under natural environment	227

G. Kosturkova, R. Todorova, G. Sakthivelu, M. K. Akitha Devi, P. Giridhar, T. Rajasekaran, G. A. Ravishankar. Response of Bulgarian and Indian soybean genotypes to drought and water deficiency in field and laboratory conditions	239
Yu.Ye. Kolupaev, Yu.V. Karpets, I.V. Kosakivska. The importance of reactive oxygen species in the induction of plant resistance to heat stress	251
N. Çiçek and H. Çakırlar. Changes in some antioxidant enzyme activities in six soybean cultivars in response to long-term salinity at two different temperatures	267
P. Apostolova, R. Yordanova, L. Popova. Response of antioxidative defence system to low temperature stress in two wheat cultivars	281
S. Boycheva and N. Babalakova. Does chelated copper ameliorate the greening of iron-deficient cucumber plants through nitric oxide signalling? Comparison with chemical forms of zinc	295
M. Geneva, I. Stancheva, M. Sichanova, M. Boychinova, G. Georgiev, M. Dolezal. Improvement of milk thistle (<i>Silybum marianum</i> L.) seed yield and quality with foliar fertilization and growth effector MD 148/II	309
I. Stancheva, M. Geneva, E. Djonova, N. Kaloyanova, M. Sichanova, M. Boychinova, G. Georgiev. Response of alfalfa (<i>Medicago sativa</i> L) growth at low accessible phosphorus source to the dual inoculation with mycorrhizal fungi and nitrogen fixing bacteria	319
M. Hristozkova, M. Geneva, I. Stancheva. Effects of <i>Sinorhizobium meliloti</i> strains (1021 and NitR) on nitrogen assimilation of alfalfa plants under conditions of mineral elements shortage ...	327
J. Ivanova, T. Toncheva-Panova, G. Chernev, B. Samuneva. Effect of Ag ⁺ , Cu ²⁺ and Zn ²⁺ containing hybrid nanomatrixes on the green algae <i>Chlorella keissleri</i>	339
G. Gacheva and P. Pilarski. The resistance of a new strain <i>Chlorella</i> sp. R-06/2, isolated from an extreme habitat to environmental stress factors	347

D. Nedeva, I. Pouneva, T.Toncheva-Panova. Profiles of antioxidant isoenzymes in the pathosystem <i>Scenedesmus-Phlyctidium</i> after treatment with plant growth regulators	361
Z. Katerova and E. Prinsen. Alterations in indoleacetic acid, abscisic acid and aminocyclopropane carboxylic acid in pea plants after prolonged influence of low levels ultraviolet-B and ultraviolet-C radiations	377
N. Dinev, M. Banov, I. Nikova. Monitoring and risk assessment of contaminated soils	389
N. Dinev, I. Nikova, R. Sechkova, M. Banov. Remediation strategies for acid and contaminated soils	397
I. Kosakivska, D. Klymchuk, V. Negretzky, D. Bluma, A. Ustinova. Stress proteins and ultrastructural characteristics of leaf cells of plants with different types of ecological strategies	405