

## INDEX OF VOLUME 56

- Abramovich T.K., Zurovsky Y., Steinberger Y.: Effect of inhibitors on *Zygophyllum dumosum* plant litter decomposition ..... 168
- Agyarko K., Darteh E., Berlinger B.: Metal levels in some refuse dump soils and plants in Ghana ..... 244
- Al-Khaliel A.S.: Effect of salinity stress on mycorrhizal association and growth response of peanut infected by *Glomus mosseae* ..... 318
- Ashrafijou M., Sadat Noori S.A., Izadi Darbandi A., Saghafi S.: Effect of salinity and radiation on proline accumulation in seeds of canola (*Brassica napus* L.) ..... 312
- Biglouei M.H., Assimi M.H., Akbarzadeh A.: Effect of water stress at different growth stages on quantity and quality traits of Virginia (flue-cured) tobacco type ..... 67
- Burešová I., Sedláčková I., Faměra O., Lipavský J.: Effect of growing conditions on starch and protein content in triticale grain and amylose content in starch ..... 99
- Cai Y., Lin L., Cheng W., Zhang G., Wu F.: Genotypic dependent effect of exogenous glutathione on Cd-induced ganges in cadmium and mineral uptake and accumulation in rice seedlings (*Oryza sativa*) ..... 516
- Changhai S., Baodi D., Yunzhou Q., Yuxin L., Lei S., Mengyu L., Haipei L.: Physiological regulation of high transpiration efficiency in winter wheat under drought conditions ..... 340
- Chen J., Xiao Q., Wu F.H., Pei Z.M., Wang J., Wu Y.G., Zheng H.L.: Nitric oxide emission from barley seedlings and detached leaves and roots treated with nitrate and nitrite ..... 201
- Chen Y.E., Yuan S., Su Y.Q., Wang L.: Comparison of heavy metal accumulation capacity of some indigenous mosses in Southwest China cities: a case study in Chengdu city ..... 60
- Cui X.M., Zhang Y.K., Wu X.B., Liu C.S.: The investigation of the alleviated effect of copper toxicity by exogenous nitric oxide in tomato plants ..... 274
- Černý J., Balík J., Kulhánek M., Čásová K., Nedvěd V.: Mineral and organic fertilization efficiency in long-term stationary experiments ..... 28
- Dogan M., Tipirdamaz R., Demir Y.: Salt resistance of tomato species grown in sand culture ..... 499
- Egamberdieva D.: Growth response of wheat cultivars to bacterial inoculation in calcareous soil ..... 569
- Fecák P., Šariková D., Černý I.: Influence of tillage system and starting N fertilization on seed yield and quality of soybean *Glycine max* (L.) Merrill ..... 105
- Filep T., Szili-Kovács T.: Effect of liming on microbial biomass carbon of acidic arenosols in pot experiments ..... 268
- Gholizadeh A., Kohnehrouz B.B.: A molecular evidence for the presence of methylobacterial-type Fe siderophore receptor in *Celosia cristata* ..... 133
- Gui D.W., Lei J.Q., Zeng F.J.: Farmland management effects on the quality of surface soil during oasisification in the southern rim of the Tarim Basin in Xinjiang, China ..... 348

Hajiboland R., Amirazad F.: Growth, photosynthesis and antioxidant defense system in Zn-deficient red cabbage plants .....	209
Hamouz K., Lachman J., Hejtmánková K., Pazderů K., Čížek M., Dvořák P.: Effect of natural and growing conditions on the content of phenolics in potatoes with different flesh colour .....	368
Hani A., Pazira E., Manshouri M., Babaie Kafaky S., Ghahroudi Tali M.: Spatial distribution and mapping of risk elements pollution in agricultural soils of southern Tehran, Iran .....	288
Hao C., Fan R., Zhang X., Wang L., Chen W., Chen Z.: Physiological response of <i>Monimopetalum chinense</i> to light stress under habitat fragmentation .....	550
Hejduk S., Knot P.: Effect of provenance and ploidy of red clover varieties on productivity, persistence and growth pattern in mixture with grasses .....	111
Iordache M., Borza I.: Relation between chemical indices of soil and earthworm abundance under chemical fertilization .....	401
Jain M., Tiwary S., Gadre R.: Sorbitol-induced changes in various growth and biochemical parameters in maize .....	263
Jalili B., Nourbakhsh F., Ghiasi M.: Kinetic approach to evaluate the effects of 3,3'-diaminobenzidine on N mineralization in soils .....	429
Jursík M., Holec J., Soukup J., Venclová V.: Seasonal emergence of selected summer annual weed species in dependence on soil temperature .....	444
Kabir M., Iqbal M.Z., Shafiq M., Farooqi Z.R.: Effects of lead on seedling growth of <i>Thespesia populnea</i> L. ....	194
Kolář L., Kužel S., Peterka J., Borová-Batt J.: Agrochemical value of the liquid phase of wastes from fermentem during biogas production .....	23
Kozlovský O., Balík J., Černý J., Kulhánek M., Hakl J., Kohoutek A.: Assessment of surface and injection fertilization on various grass hybrids in grass-clover mixture .....	556
Krajnáková L., Kákoniová D., Lišková D., Hlinková E.: The effect of benzothiazolium salt on spruce callus cells .....	463
Krofta K., Ježek J.: The effect of time of cutting on yield and the quality of the hop hybrid varieties Harmonie, Rubín and Agnus .....	563
Kroutil M., Hejtmánková A., Lachman J.: Effect of spring wheat ( <i>Triticum aestivum</i> L.) treatment with brassinosteroids on the content of cadmium and lead in plant aerial biomass and grain .....	43
Kuvalekar A.A., Gandhe K.R.: Hydrogen peroxide generation and lignification by peroxidases from <i>Acacia eburnea</i> infected with <i>Ravenelia esculenta</i> .....	419
Landová M., Hamouzová K., Soukup J., Jursík M., Holec J., Squire G.R.: Population density and soil seed bank of weed beet as influenced by crop sequence and soil tillage .....	541
Li Q.Q., Zhou X.B., Chen Y.H., Yu S.L.: Grain yield and quality of winter wheat in different planting patterns under deficit irrigation regimes .....	482
Liu B., Liu X.B., Wang C., Li Y.S., Jin J., Herbert S.J.: Soybean yield and yield component distribution across the main axis in response to light enrichment and shading under different densities .....	384

Liu D., Wang X., Chen Z., Xu H., Wang Y.: Influence of mercury on chlorophyll content in winter wheat and mercury bioaccumulation .....	139
Liu X.B., Zhang X.Y., Wang Y.X., Sui Y.Y., Zhang S.L., Herbert S.J., Ding G.: Soil degradation: a problem threatening the sustainable development of agriculture in Northeast China .....	87
Lošák T., Hlušek J., Filipčík R., Pospíšilová L., Maňásek J., Prokeš K., Buňka F., Kráčmar S., Martensson A., Orosz F.: Effect of nitrogen fertilization on metabolisms of essential and non-essential amino acids in field-grown grain maize ( <i>Zea mays</i> L.) .....	573
Madani A., Shirani-Rad A., Pazoki A., Nourmohammadi G., Zarghami R., Mokhtassi-Bidgoli A.: The impact of source or sink limitations on yield formation of winter wheat ( <i>Triticum aestivum</i> L.) due to post-anthesis water and nitrogen deficiencies .....	218
Martinková Z., Honěk A.: Effect of desiccation temperature on viability of immature dandelion ( <i>Taraxacum</i> agg.) seeds dried in mowed inflorescences .....	579
Matucha M., Clarke N., Lachmanová Z., Forczek S.T., Fuksová K., Gryndler M.: Biogeochemical cycles of chlorine in the coniferous forest ecosystem: practical implications .....	357
Matula J.: Differences in available phosphorus evaluated by soil tests in relation to detection by colorimetric and ICP-AES techniques .....	297
Matějková Š., Kumhálová J., Lipavský J.: Evaluation of crop yield under different nitrogen doses of mineral fertilization .....	163
Neuberg M., Pavlíková D., Pavlík M., Balík J.: The effect of different nitrogen nutrition on proline and asparagine content in plant .....	305
Okhovatian-Ardakani A.R., Mehrabanian M., Dehghani F., Akbarzadeh A.: Salt tolerance evaluation and relative comparison in cuttings of different pomegranate cultivars .....	176
Oslovičová V., Gálová Z., Chňapek M., Balážová Ž.: Identification of <i>Triticum aestivum</i> L., <i>Triticum spelta</i> L. and <i>Triticum durum</i> DESF. genotypes on the HMW-GS base .....	82
Oveysi M., Mirhadi M.J., Madani H., Nourmohammadi G., Zarghami R., Madani A.: The impact of source restriction on yield formation of corn ( <i>Zea mays</i> L.) due to water deficiency .....	476
Pagano M.C., Cabello M.N., Scotti M.R.: Arbuscular mycorrhizal colonization and growth of <i>Eremanthus incanus</i> Less. in a highland field .....	412
Pavlík M., Pavlíková D., Balík J., Neuberg M.: The contents of amino acids and sterols in maize plants growing under different nitrogen conditions .....	125
Pavlík M., Pavlíková D., Vašíčková S.: Infrared spectroscopy-based metabolomic analysis of maize growing under different nitrogen nutrition .....	533
Qin J., Dong W.Y., He K.N., Yu Y., Tan G.D., Han L., Dong M., Zhang Y.Y., Zhang D., Li A.Z., Wang Z.L.: NaCl salinity-induced changes in water status, ion contents and photosynthetic properties of <i>Shepherdia argentea</i> (Pursh) Nutt. seedlings .....	325
Qin J., Wang X., Hu F., Li H.: Growth and physiological performance responses to drought stress under non-flooded rice cultivation with straw mulching .....	51
Ramos S.J., Faquin V., Guilherme L.R.G., Castro E.M., Ávila F.W., Carvalho G.S., Bastos C.E.A., Oliveira C.: Selenium biofortification and antioxidant activity in lettuce plants fed with selenate and selenite .....	583

Sangakkara U.R., Amarasekera P., Stamp P.: Irrigation regimes affect early root development, shoot growth and yields of maize ( <i>Zea mays</i> L.) in tropical minor seasons .....	228
Sharma M.P., Srivastava K., Sharma S.K.: Biochemical characterization and metabolic diversity of soybean rhizobia isolated from Malwa region of Central India .....	375
Sinegani A.A.S., Hosseinpur A.: Evaluation of effect of different sterilization methods on soil biomass phosphorus extracted with NaHCO <sub>3</sub> .....	156
Sinegani A.A.S., Mahohi A.: Soil water potential effects on the cellulase activities of soil treated with sewage sludge .....	333
Skládanka J., Adam V., Ryant P., Doležal P., Havlíček Z.: Can <i>Festulolium</i> , <i>Dactylis glomerata</i> and <i>Arrhenatherum elatius</i> be used for extension of the autumn grazing season in Central Europe? .....	488
Song C.Y., Zhang X.Y., Liu X.B., Sui Y.Y., Li Z.L.: Impact of long term fertilization on soil water content in Haploborolls .....	408
Song H.T., Cheng S.: Various growth strategies of yellow birch seedlings in multiple-abiotic factor changing environments .....	235
Srećec S., Zechner-Krpan V., Petravić-Tominac V., Čerenak A., Liber Z., Šatović Z.: Phenotypic and alpha-acid content diversity of wild hop populations in Croatia .....	37
Strnad L., Hejcmán M., Křišťálová V., Hejcmánová P., Pavlů V.: Mechanical weeding of <i>Rumex obtusifolius</i> L. under different N, P and K availabilities in permanent grassland .....	393
Syafruddin S., Wieshammer G., Puschenreiter M., Langer I., Wieshammer-Zivkovic M., Wenzel W.W.: Effect of N and P fertilisation and aeration on biodegradation of crude oil in aged hydrocarbon contaminated soils .....	149
Šimek M., Brůček P., Hynšt J.: Diurnal fluxes of CO <sub>2</sub> and N <sub>2</sub> O from cattle-impacted soil and implications for emission estimates .....	451
Vanaja M., Ram Reddy P.R., Lakshmi N.J., Abdul Razak S.K., Vagheera P., Archana G., Yadav S.K., Maheswari M., Venkateswarlu B.: Response of seed yield and its components of red gram ( <i>Cajanus cajan</i> L. Millsp.) to elevated CO <sub>2</sub> .....	458
Vaněk J., Červenková E., Jarolímek J., Šimek P.: State and evaluation of information and communication technologies development in agricultural enterprises in the Czech Republic .....	144
Vácha R., Čechmánková J., Skála J.: Polycyclic aromatic hydrocarbons in soil and selected plants .....	434
Verma R.K., Yadav D.V., Singh C.P., Suman A., Gaur A.: Effect of heavy metals on soil respiration during decomposition of sugarcane ( <i>Saccharum officinarum</i> L.) trash in different soils .....	76
Yang C.H., Chai Q., Huang G.B.: Root distribution and yield responses of wheat/maize intercropping to alternate irrigation in the arid areas of northwest China .....	253
Wang Y., Hu C., Zhu B., Xiang H., He X.: Effects of wheat straw application on methane and nitrous oxide emissions from purplish paddy fields .....	16
Wu Q.S., Zou Y.N., Liu W., Ye X.F., Zai H.F., Zhao L.J.: Alleviation of salt stress in citrus seedlings inoculated with mycorrhiza: changes in leaf antioxidant defense systems .....	470

Zhang C., Li Z., Gu M., Deng C., Liu M., Li L.: Spatial and vertical distribution and pollution assessment of soil fluorine in a lead-zinc mining area in the Karst region of Guangxi, China .....	282
Zhang L., Wu Z., Jiang Y., Chen L., Song Y., Wang L., Xie J., Ma X.: Fate of applied urea $^{15}\text{N}$ in a soil-maize system as affected by urease inhibitor and nitrification inhibitor .....	8
Zhang J.J., Wang L.B., Li C.L.: Humus characteristics after maize residues degradation in soil amended with different copper concentrations .....	120
Zhang Y.L., Chen L.J., Sun C.X., Wu Z.J., Chen Z.H., Dong G.H.: Soil hydrolase activities and kinetic properties as affected by wheat cropping systems of Northeastern China .....	526
Zheng G., Lv H.P., Gao S., Wang S.R.: Effects of cadmium on growth and antioxidant responses in <i>Glycyrrhiza uralensis</i> seedlings .....	508
Zhou X.B., Yang G.M., Sun S.J., Y.H. Chen: Plant and row spacing effects on soil water and yield of rainfed summer soybean in the northern China .....	1
Zhou X., Yan Y., Wan Ch., Wang H., Wu L., Wang Y., Ren J.: Effects of film-bottomed treatment on seedling emergence and growth of <i>Caragana korshinskii</i> in arid northwestern China .....	186