

SUMMARY

SOIL SCIENCES

Water stress and K nutrition effects on growth indices and seed yield of sunflower – Mehdi AZIZI, Mona SHEKARI	15
Effect of potassium, zinc and manganese on agronomic traits of soybean – Mehdi AZIZI, Danial SOROURI	18
Influence of organic and mineral fertilization on some agrochemical modification of chromic luvisol from Romanian Plain – Liviu DINCĂ, Dumitru Ilie SĂNDOIU, Wilson Pedro ANTONIO, Marin NICOLETA, Victor Adrian MATEI, Cosmin Cătălin CALOTĂ	22
Elements of evolution for typical chernozem humus moderated under various tillage conditions – Gheorghe JIGAU	25
The agrogen evolution of chernozems under Prut and Dniester space (Republic of Moldova) – Gheorghe JIGAU, Elena TOFAN	31
Soil nitrogen content and effectiveness of nitrogen fertilizers for winter wheat in Moldova – Nicolai LEAH	36
Natural conditions contributing to appearance and development of soil degradation in Moldova – Tamara LEAH	40
Evaluation of nutrients availability by applying fertilizer at different doses in soil column – Roxana MADJAR, Gina VASILE SCĂEȚEANU, Adrian PETICILĂ, Mircea Ștefăniță TUDOR	46
Evaluation of chernozems from Balta Alba area, Buzau County – Mircea MIHALACHE, Leonard ILIE, Daniela MIHALACHE, Ana Maria GHINEA	54
The effect of crops and farming systems on soil quality – Victor PETCU, Liviu DINCĂ, Ion TONCEA	58
Processing of animal manure, obtained from cattle, pigs and chicken with red California worms – Gheorghe PRIPA	64
Nitrate monitoring in private wells from Prahova District – Gina VASILE SCĂEȚEANU, Roxana Maria MADJAR, Aurelian PENESCU, Emanuel Petre DINCĂ, Iulica Alexandra TERZEA	68

Evaluation of organic amendments effects on soil microorganisms and enzymatic activities of degraded chernozem – Irina SENICOVSCAIA	74
Research regarding the possibility of use the wine yeast as fertilizer – Andrei SIURIS, Tudor BOUNEGRU, Vasile PLAMADEALA	80

CROP SCIENCES

Influence of treated wastewater irrigation on white-corn plant – Taher ABUNAMA	87
Oilcrop-Sun model application for agronomic strategies of sunflower crop – Amjed ALI, Ashfaq AHMAD, Tasneem KHALIQ	91
Research on the behavior of soybean varieties to bacterial attack caused by <i>Pseudomonas savastanoi</i> pv. <i>Glycinea</i> – Alexandru Gheorghe BĂLAȘU, Stelica CRISTEA, Cristinel Relu ZALĂ, Antonio Romeo LOMBARDI	97
Above-ground biomass of sunflower plant under different planting patterns and growing conditions – Adrian Gheorghe BĂȘA, Viorel ION, Marin DUMBRAVĂ, Georgeta TEMOCICO, Georgeta DICU, Lenuța Iuliana EPURE, Daniel STATE	101
Estimates for broad sense heritability and heterosis of agronomic and quality characters of safflower (<i>Carthamus tinctorius</i> L.) – Hasan BAYDAR, Sabri ERBAŞ	110
Effects of seed deterioration and inoculation with <i>Mesorhizobium ciceri</i> on chickpea plant performance under laboratory conditions – Abbas BIABAN, Lynne Carpenter BOGGS, Hosein SABOURY	116
Productivity and quality of winter triticale (x <i>Triticosecale</i> Wittmack) in multifactorial experiments – Victor BURDUJAN, Mihail RURAC, Angela MELNIC	119
Genotype and conditioning method influence on sowing material quality for winter wheat – Gheorghe-Laurențiu BURICESCU, Gheorghe MOTCĂ, Ricuța-Vasilica DOBRINOIU, Silvana DĂNĂILĂ-GUIDEA, Luminița VIȘAN	123
Genotype and conditioning method influence on sowing material quality for sunflower – Gheorghe-Laurențiu BURICESCU, Gheorghe MOTCĂ, Ricuța-Vasilica DOBRINOIU, Silvana DĂNĂILĂ-GUIDEA, Luminița VIȘAN	129
Changes in macro and micro plant nutrients of sunflower (<i>Helianthus annuus</i> L.) under drought stress – Öner CANAVAR, Mustafa Ali KAPTAN	136

Influence of grain type on the efficacy of some formulations of diatomaceous earth against the rice weevil (<i>Sitophilus oryzae</i> L.) – Andrei CHIRILOAIE, Christos ATHANASSIOU, Thomas VASSILAKOS, Viorel FĂTU, Sonica DROSU, Maria CIOBANU	140
In vitro compatibility between chemical and biological products used for seed treatment – Florica CONSTANTINESCU, Oana-Alina SICUIA, Cristina FĂTU, Mihaela Monica DINU, Ana-Maria ANDREI, Carmen MINCEA	146
Research regarding oilseeds crops species growing in ecologic agriculture production system, in North Dobrudja – Mădălina Ecaterina CUCU (POIDA)	152
An inventory of floristic composition in permanent grasslands of Rucăr-Bran Corridor: Application and perspectives of melliferous potential – Niculae DINCĂ, Ionela BARBU, Daniel DUNEA	157
Researches on the effect of phytosanitary treatments to grain sorghum in sandy soil conditions – Iulian DRAGHICI, Reta DRAGHICI, Mihaela CROITORU	163
Vulnerability to contamination with plant pathogens and pests in specific crop rotations of agroforestry holdings on sandy soils – Reta DRAGHICI, Iulian DRAGHICI, Milica DIMA	168
Results regarding yield and yield components at different triticale varieties – Marin DUMBRAVĂ, Adrian Gheorghe BĂȘA, Viorel ION, Lenuța Iuliana EPURE, Niculae DINCĂ, Dumitru ȘTEFAN	174
Spatio-temporal characterization of natural grasslands from Bucegi Natural Park using remote sensing resources – Daniel DUNEA, Niculae DINCĂ, Ștefania IORDACHE	180
Draught influence concerning maize leaf weevil (<i>Tanymecus dilaticollis</i> GYLL) attack on maize crops at NARDI Fundulea – Emil GEORGESCU, Maria TOADER, Lidia CANA, Radu GARGARITA	186
Research regarding the treatments with bio-stimulator at maize crop – Marian GHEORGHE, Mihai GIDEA, Ioan ROSCA, Kostas DIMASIS	192
Future of magnetic agriculture in arid and semi arid regions (case study) – Mahmoud HOZAYN, Amany Attia ABD EL MONEM, Tarek ABD EL-FATAH ELWIA, Maha Mohamed EL-SHATAR	197
Results regarding biomass yield at sunflower under different planting patterns and growing conditions – Viorel ION, Georgeta DICU, Marin DUMBRAVĂ, Adrian Gheorghe BĂȘA, Georgeta TEMOCICO, Daniel STATE, Lenuța Iuliana EPURE	205
The weeds control by mechanical and manual management practices – Nicolaie IONESCU, Aurelian PENESCU, Sorin Gabriel IONESCU	211

Effect of some organic fertilizers treatments on dry seed yield of broad bean (<i>Vicia faba</i> L.) – Ali Husain JASIM, Qais Lamy MHANNA	218
Study of the effective parameters on the adsorption of malonic acid from aqueous solutions by rice (<i>Oryza sativa</i> L.) bran – Vida JODAIAN, Narges SAMADANI LANGEROODI, Sepideh MEHRANI, Behzad SANI	223
The effect of sowing date on yield and yield components and seed quality of corn (<i>Zea mays</i> L.) – Yakup Onur KOCA, Öner CANAVAR	227
Grain yield and protein of barley in dependence of phosphorus and potassium nutrition – Svetla KOSTADINOVA	232
Experimental results on non-GMO soybean varieties productivity in Tulcea County conditions – Antonio-Romeo LOMBARDI, Lenuța Iuliana EPURE, Gheorghe Valentin ROMAN	236
Effects of zinc and phosphorus fertilizers on sugar beet (<i>Beta vulgaris</i> cv. SBSI005 Crouse) yield in Iranian high zinc alkaline soil condition – Hamid MADANI, Saeid BORJI, Noor-Ali SAJEDI	240
Alfalfa (<i>Medicago sativa</i> L.) forage yield responses to triple super phosphate, phosphate solubilizing bacteria and gibberllic acid foliar application – Hamid MADANI, Agnieszka STOKLOSA, Jafar ZAREI, Zahra USEFI	246
Influence of organic and mineral fertilization on grassland of <i>Dichanthium ischaemum</i> L. Roberty in the Moldavian steppe – Lucian Ciprian MELUȚ, Vasile VÎNTU, Costel SAMUIL, Iulian Constantin POPOVICI, Mihai STAVARACHE	249
Estimation of crop evapotranspiration in Bulgarian climate conditions – Milena MOTEVA, Valentin KAZANDJIEV, Zhivko ZHIVKOV, Romyana KIREVA, Bozhidara MLADENOVA, Alexander MATEV, Radost KALAYDZHIEVA	255
Response of maize (<i>Zea mays</i> L.) to aqueous extract of moringa (<i>Moringa oleifera</i> Lam.) and nitrogen rates. Part II – Mustapha Alhaji MUHAMMAN, Bindawa Mohammed AUWALU, Sanusi Gaya MOHAMMED	264
Effects of aqueous extract of moringa (<i>Moringa oleifera</i> Lam.) and nitrogen rates on the contribution of some physiological and yield attributes to grain yield of sesame (<i>Sesamum indicum</i> L.) II – Mustapha Alhaji MUHAMMAN, Sanusi Gaya MOHAMMED	272
Fresh biomass production of double crop maize (<i>Zea mays</i> L.) hybrids cultivated in Moara Domneasca, Ilfov – Silviu Gabriel MURESEANU, Doru Ioan MARIN, Ciprian BOLOHAN	276

The effects of foliar application of aba AND cytokinin in different reproductive growth stages of maternal wheat plants on the seed traits under saline conditions – Esmail NABIZADEH	281
Interrelationships between grain protein content and indicators of nitrogen status of wheat plant – Olivera NIKOLIC, Snezana ZIVANOVIC-KATIC, Milivoje MILOVANOVIC, Milanko PAVLOVIC	289
The dosage effect of the opaque-2 gene on the amino acid composition of protein from tetraploid maize grain – Andrei PALII, Grigorii BATIRU, Alexandr ROTARI, Eugen ROTARI, Galina COMAROV, Vasile ȚIGANAȘ	294
Wheat efficiency use of climate resources in Găvanu-Burdea Plain – Marian POPA	298
Influence of iron foliar fertilization on some growth and physiological parameters of wheat at two growth stages – Hamzeh RAWASHDEH, Florin SALA	306
Assessment of mung bean yield potential production in the North Eastern region of Romania – Teodor ROBU, Creola BREZEANU, Petre Marian BREZEANU, Silvia AMBARUS	310
The effects of phosphorus deficiency and rhizobacteria on phosphorus contents of two soybean (<i>Glycine max</i> L.) cultivars grown at low water supply – Vladimir ROTARU, Simion TOMA, Ana BIRSAN	316
Preliminary results on creating new sunflower (<i>Helianthus annuus</i> L.) with resistance to drought based on interspecific hybridation with wild silverleaf sunflower (<i>Helianthus argophyllus</i> Torr. & A. Gray) – Florentina SAUCĂ, Daniela LAZĂR, Cătălin LAZĂR	322
Biochemical changes during accelerated ageing conditions of mung bean seeds and their field performance – Abdulla I. SHAHEED, Farah A. ABASS	325
New amphidiploid wheat species (Nothosp. Nov.) as a result of artificial hybridisation – Hristo P. STOYANOV	331
Preliminary agronomic evaluation of <i>Chenopodium quinoa</i> Willd. under climatic conditions of Romania – Lizica SZILAGYI, Bjarne JØRNSGÅRD	339
Biological peculiarities and forage value of the species of the genus <i>Astragalus</i> L. in the Republic of Moldova – Alexandru TELEUȚĂ, Victor ȚÎȚEI	344
Agro biological peculiarities of giant knotweed and cup plant after fertilization with sewage sludge – Victor ȚÎȚEI, Alexandru TELEUȚĂ	350

Effect of planting date and application of nitrogen on yield related traits of forage sorghum cultivars – Mohammad Reza TOOKALLOO	357
Effect of drought stress by using PEG 6000 on germination and early seedling growth of <i>Brassica juncea</i> Var. Ensabi – Abbas Fallah TOOSI, Baki Bin BAKAR, Mehdi AZIZI	360
Effect of different sources of nitrogen fertilizer on yield & yield components of sunflower (<i>Helianthus annuus</i> L.) – Abbas Fallah TOOSI, Mehdi AZIZI	364
Studies regarding dynamics of water and nutrients absorption in winter barley and wheat – Daniela TRIFAN, Marcel BULARDA, Ioan VIȘINESCU	367
Research about influence of sowing density and sowing time for production level of winter barley in North Baragan Plain conditions – Daniela TRIFAN, Ioan VIȘINESCU, Marcel BULARDA	372
Efficacy of different fungicides in wheat foliar diseases management – Cristinel Relu ZALĂ, Horia Victor HĂLMĂJAN, Camelia-Elena CLINCIU, Gheorghe PETCU, Daniel TABACU, Angelo NICULESCU	379

MISCELLANEOUS

<i>Holocacista rivillei</i> (Stainton, 1855) (Lepidoptera Heliozidae) – A leafminer species recorded on <i>Vitis vinifera</i> L. from Southern Romania – Mirela CEAN	385
The influence of modern day tractor cab ergonomics on productivity – Adam ECKERSLEY, Lancelot BUTTERS	389
Aspects of floristic diversity in the community Topolog (Tulcea county): II – Grasslands flora – Mihaela Ioana GEORGESCU, Elena SĂVULESCU	395
Collective action for an equitable food production system – Ioana Liane GEORGESCU, Florentin BERCU	400
Morphology and distribution of <i>Longidorus euonymus</i> (Nematoda) from Romania – Mariana GROZA, Stela LAZAROVA, Ioan ROSCA, Vlada PENEVA	407
Automation and computer-based technology for small vegetable farm holders – Cristian IACOMI, Ioan ROȘCA, Roxana MADJAR, Beatrice IACOMI, Viorel POPESCU, Gaudențiu VĂRZARU, Cătălin SFETCU	415
Study about biodiversity of <i>Raphanus raphanistrum</i> petals color – Nicolaie IONESCU, Sorin Gabriel IONESCU	421

The role of ESCORENA (European System of Cooperative Research Networks in Agriculture) in agriculture knowledge sharing and technology transfer – Ryszard M. KOZLOWSKI, Maria MACKIEWICZ-TALARCZYK, Jorge BARRIGA	427
‘Our daily bread’: History... and stories – Elena NISTOR, Elena-Loredana SFETCU, Ionuț-Cosmin SFETCU	432
Morpho-anatomic features and chemical compounds in some aquatic plant species – Preliminary data – Emilia Brîndușa SÂNDULESCU, Mala-Maria STAVRESCU-BEDIVAN, Gina VASILE SCĂEȚEANU, Tudor ȘCHIOPU	441
‘The beautiful world germinates...’: Corn – history... and stories – Ionuț-Cosmin SFETCU, Elena-Loredana SFETCU, Elena NISTOR	448
Analysis of water balance for determine cropping patterns for food crops in watershed Karangmumus – The Province of East Kalimantan – Akas Pinarangan SUJALU, Ismail, Sigit HARDWINARTO, Chandradewana BOER, Sumaryono	455
Dynamics and distribution of <i>Diaphorina citri</i> (Hemiptera: Psyllidae) in a citrus orchard in Terengganu, Malaysia – Hassan SULE, Rita MUHAMAD	461