

SUMMARY

SOIL SCIENCES

1. TILLAGE EFFECTS ON SOIL ORGANIC CARBON, MICROBIAL BIOMASS CARBON AND BETA-GLUCOSIDASE ENZYME ACTIVITY IN A TYPIC HAPLOXERERT SOIL - **Mert ACAR, İsmail ÇELİK, Hikmet GÜNAL, Nurullah ACİR, Zeliha BARUT BEREKET, Mesut BUDAK** 13
2. THE EFFECTS OF DIFFERENT ZN DOSES AND MYCORRHIZAE APPLICATION ON HORSE BEAN GROWTH AND NUTRIENT UPTAKE UNDER STERILE AND NON STERILE SOIL CONDITIONS - **Cagdas AKPINAR, Ibrahim ORTAS, Ahmet DEMIRBAS** 21
3. CHISEL PLOW TILLAGE DEPTH EFFECT ON SOIL CARBON DIOXIDE EMISSION - **Ghassan AL-AZZAWI, Davut AKBOLAT** 27
4. EFFECT OF DIFFERENT MAGNESIUM DOSES ON GROWTH AND YIELD OF PEPPER PLANT IN MYCORRHIZA INOCULATED HARRAN SOIL - **Ahmet ALMACA** 34
5. SOIL EROSION RISK MAPPING USING USLE/GIS METHODOLOGY IN ROZE-CHAY CATCHMENT, NORTHWEST IRAN - **Farrokh ASADZADEH, Maryam RAHMATI, Hossein ASGARZADEH** 38
6. EVOLUTION OF DARK CHESTNUT STEPPE SOIL UNDER CONDITIONS OF DIFFERENT USE AND CLIMATE CHANGE - **Sveatoslav BALIUK, Lyudmila VOROTYNTSEVA** 42
7. INFLUENCE OF SOIL TILLAGE SYSTEMS AND INOCULATION ON SOYBEAN NODULATION AND YIELD - **Nicoleta CĂPĂȚÂNĂ, Ciprian BOLOHAN, Cristina Andreea OPREA, Doru Ioan MARIN** 46
8. AGROTECHNICAL SYSTEMS TO CONSERVING WATER IN THE SOIL FOR WHEAT CROP - **Felicia CHETAN, Teodor RUSU, Cornel CHETAN, Paula Ioana MORARU, Alina SIMON** 53
9. HEAVY METALS CONTENT IN ALFALFA CULTIVATED ON VERTISOLS ALONG THE HIGHWAY E75 FROM BELGRADE TO LESKOVAC (SERBIA) - **Zoran DINIĆ, Radmila PIVIĆ, Jelena MAKSIMOVIĆ, Aleksandar STANOJKOVIĆ, Dragana JOŠIĆ, Aleksandra STANOJKOVIĆ-SEBIĆ** 63
10. THE EFFECTS OF DIFFERENT SALT DOSES ON YIELD AND NUTRIENT UPTAKE OF TOMATO PLANT - **Hasan DURUKAN, Ahmet DEMIRBAS** 71
11. COMPARING THE EFFECTS OF COMPOST AND VERMICOMPOST ON CORN GROWTH, NUTRIENT CONCENTRATION AND UPTAKE DURING THE DIFFERENT GROWTH PERIODS - **İbrahim ERDAL, Ahmet DOGAN, Cennet YAYLACI, Pelin ALABOZ** 77
12. EVOLUTION MICROMORPHOLOGY OF ARGILLIC HORIZONS IN SOME ARID SOILS IN THE WEST OF URMIA LAKE IN WESTERN AZERBAIJAN PROVINCE, IRAN - **Tina JAHAN, Shahram MANAFI** 84

13. PHYSICAL PROPERTIES FEATURES OF ALLUVIAL IRRIGATED SOILS OF DNIESTER AND DNEPER RIVERS BASINS - Tamara LEAH, Valerian CERBARI, Sveatoslav BALIUK, Marina ZAKHAROVA, Oleksandr NOSONENKO	90
14. IMPACT OF CLIMATE CHANGE ON AGRO-CLIMATIC INDICATORS IN TRANSYLVANIAN PLAIN BETWEEN 2009-2016 - Mihai-Avram MAXIM, Teodor RUSU, Paula Ioana MORARU, Marius SĂBĂDAȘ, Ovidiu MAXIM	96
15. HEAVY METALS FROM THE SOIL AND MINERAL FERTILIZATION - Nicoleta MĂRIN, Nicoleta VRÎNCEANU, Naliana LUPAȘCU, Mihail DUMITRU	101
16. DYNAMICS OF SOIL PROPERTIES UNDER A POLLUTION GRADIENT IN URBAN AREAS (PLOVDIV, BULGARIA) - Slaveya PETROVA, Bogdan NIKOLOV, Iliana VELCHEVA, Mariya Yankova, Emiliya Kogan, Elena ZHELEVA, Ekaterina VALCHEVA, Alexandar ALEXANDROV, Mariana MARHOVA, Marinela TSANKOVA, Ivan ILIEV	109
17. THE USE OF CHEMICAL AND ORGANIC FERTILIZERS FOR SUNFLOWER CULTURE ON A STERILE DUMP - CĂTĂLIN AURELIAN ROȘCULETE, ELENA ROȘCULETE ...	117
18. INFLUENCE OF SYSTEM TILLAGE UPON WEEDING LERVELIN THE MAIZE CROP GROWN AT MOARA DOMNEASCĂ – ILFOV - Ionuț Cosmin SFETCU, Elena Loredana SFETCU, Doru Ioan MARIN	125
19. MYCORRHIZAS AS A TOOL IN MAPPING AGRICULTURAL SOILS - Vlad STOIAN, Roxana VIDICAN, Ioan ROTAR, Florin PĂCURAR, Mignon ȘANDOR, Mihai BUTA, Valentina STOIAN	130

CROP SCIENCES

1. MANAGEMENT OF FUSARIUM WILT (<i>Fusarium oxysporum</i> F. sp. <i>lycopersici</i>) OF TOMATO WITH ORGANIC AMENDMENTS - Gurama ABUBAKAR UMAR, Haruna SALISU GOMBE	139
2. EFFECT OF RHIZOBIUM BACTERIA ON NITROGEN FERTILIZER REQUEST OF COMMON VETCH (<i>Vicia sativa</i> L.) - Ayşen AKAY, Ali ÇİÇEK	143
3. EFFECT OF WHEATGRASS (<i>Triticum aestivum</i> L.) JUICE ON SEEDLING GROWTH AND <i>Rhizoctonia solani</i> ON CORN - İlknur AKGÜN, Rabia AYATA, Ruziye KARAMAN, Gürsel KARACA	149
4. DETERMINATION OF YELLOW RUST DISEASE (<i>Puccinia striiformis</i> f. sp. <i>tritici</i>) RESISTANT OF THE WHEAT LANDRACE COLLECTED FROM ISPARTA AND BURDUR PROVINCES - Demet ALTINDAL, İlknur AKGÜN, Hülya ÖZGÖNEN ÖZKAYA	155
5. USING DIFFERENT METHODS OF ADDING HERBICIDES IN CONTROLLING WATER HYACINTH (<i>Eichhornia crassipes</i>) AND REDUCE IN WATER ENVIRONMENT POLLUTION - Adnan AL-WAGGA, Omar AL-GBURI	162
6. ANTIFUNGAL ACTIVITY OF NANO CALCIUM POLYSULFIDE AGAINST PATHOGENIC FUNGI ON TOMATO - Şerife Evrim ARICI, Ahmet ŞİMSEK, Mustafa ASKIN	170

7. EVALUATION OF CYTOTOXICITY OF THE HERBICIDE GALIGAN 240 EC TO PLANTS - Elena BONCIU	175
8. GROWTH AND GRAIN YIELD PARAMETERS OF SINGLE-PLANTED AND IN-CANOPY GROWN WHEAT (<i>Triticum aestivum</i> L.) - Uğur ÇAKALOĞULLARI, Gülден Deniz ATEŞ ATASOY, Deniz İŞTİPLİLER, Özgür TATAR	179
9. QUALITATIVE MODIFICATIONS PRODUCED IN FEED OF <i>Festuca rubra</i> L. AND <i>Agrostis capillaries</i> L. UNDER INFLUENCE OF UAN LIQUID FERTILIZER - Mirela CIREBEA, Ioan ROTAR, Roxana VIDICAN, Anca PLEŞA, Ovidiu RANTA	184
10. ALLELOPATHY AND ALLELOCHEMICAL INTERACTIONS AMONG PLANTS - Ramona COTRUȚ	188
11. INVESTIGATION ON THE YIELD AND GRAIN QUALITY OF COMMON WHEAT (<i>T. aestivum</i> L.) CULTIVARS GROWN UNDER THE AGROECOLOGICAL CONDITIONS OF CENTRAL BULGARIA - Vania DELIBALTOVA, Manol DALLEV	194
12. APPLICATION OF THE COEFFICIENT OF USING THE ACTIVE SUBSTANCE FOR THE EVALUATION OF THE EFFECT OF CHANGES OF NOZZLE OPERATING PARAMETERS ON THE SPRAYING PROCESS - Katarzyna DEREŃ, Antoni SZEWCZYK, Deta ŁUCZYCKA, Beata CIENIAWSKA	199
13. EVALUATION OF SOME MORPHOLOGICAL, CHEMICAL PARAMETERS AND ANTIOXIDANT CAPACITY OF POMEGRANATE - Cristina DIȚESCU, Narcisa BĂBEANU, Sultana NIȚĂ, Ovidiu POPA	205
14. EFFECT OF BIOCYCLIC HUMUS SOIL ON YIELD AND QUALITY PARAMETERS OF SWEET POTATO (<i>Ipomoea batatas</i> L.) - Lydia Dorothea EISENBACH, Antigolena FOLINA, Charikleia ZISI, Ioannis ROUSSIS, Ioanna TABAXI, Panayiota PAPASTYLIANOU, I. KAKABOUKI, Aspasia EFTHIMIADOU, Dimitrios J. BILALIS	210
15. DETERMINATION OF THRESHING PERFORMANS OF NEW DESING THRESHING UNIT FOR SAGE - Mehmet Emin GOKDUMAN, Deniz YILMAZ	218
16. DETERMINATION OF THE EFFECTS OF GENOTYPE AND SOWING TIME ON PLANT GROWTH AND DEVELOPMENT IN CAMELINA [(<i>Camelina sativa</i> L. (Crantz))] - Merve GÖRE, Orhan KURT	223
17. WEEDS MAPPING FROM WHEAT CROPS - Marga GRADILA, Daniel JALOBA	227
18. ANALYSIS OF SOME QUALITY COMPONENTS TO FEW AMPHIDIPOID LINES OF WHEAT - Paula IANCU, Marin SOARE, Ovidiu PĂNIȚĂ	234
19. DRY MATTER YIELD AND DIGESTIBILITY OF SECOND CROP SILAGE CORN CULTIVATED AFTER CEREALS UNDER ESKISEHIR ECOLOGICAL CONDITIONS - Onur ILERI, Suleyman AVCI, Ali KOC	240
20. RESULTS REGARDING YIELD COMPONENTS AND GRAIN YIELD AT SUNFLOWER UNDER DIFFERENT ROW SPACING AND NITROGEN FERTILISATION CONDITIONS - Viorel ION, Adrian Gheorghe BĂŞA, Marin DUMBRAVĂ, Lenuța Iuliana EPURE	247
21. VARIATION OF CURRENT MORPHOLOGICAL CHARACTERS IN WINTER BARLEY, <i>Hordeum vulgare</i> L. - Nicolae IONESCU, Mihaela Ioana GEORGESCU, Aurel PENESCU, Elena SĂVULESCU, Maria VOICA, Alexandru LAZĂR	255
22. SALINITY EFFECTS ON SWEET CORN YIELD AND WATER USE EFFICIENCY UNDER DIFFERENT HYDROGEL DOSES - Sema KALE, Burcu ARICAN	263

23. EFFECTS OF DIFFERENT SEED SIZES AND SHAPES ON FORAGE YIELD AND QUALITY OF FODDER MAIZE - Emre KARA, Mustafa SÜRME	267
24. EFFECTS OF NANO SULFUR (S) APPLICATIONS ON YIELD AND SOME YIELD PROPERTIES OF BREAD WHEAT - Muharrem KAYA, Ruziye KARAMAN, Aykut ŞENER	274
25. EFFECT OF EXTRA POTASSIUM SUPPLY ON AMINOACID COMPOSITION OF CORN SEED UNDER THE DEFICIT IRRIGATION CONDITIONS (SECTION C) - Yakup Onur KOCA	280
26. PHOSPHINE RESISTANCE OF RUSTY GRAIN BEETLE <i>Cryptolestes ferrugineus</i> (<i>Coleoptera: Laemophloeidae</i>) POPULATIONS IN TURKEY - Erhan KOÇAK, Abdullah YILMAZ, Y. Nazım ALPKENT, Serdar BİLGİNTURAN	286
27. IMPACT OF SOIL TILLAGE REDUCTION ON CULTIVATION PRODUCTIVITY OF WHEAT, BARLEY AND SOYBEAN - Igor KOVAČEV, Nikola BILANDŽIJA, Krešimir ČOPEC, Dubravko FILIPOVIĆ	291
28. A BIBLIOMETRIC REVIEW OF RESEARCH TRENDS IN SALICYLIC ACID USES IN AGRICULTURAL AND BIOLOGICAL SCIENCES: WHERE HAVE BEEN STUDIES DIRECTED? - Muhittin KULAK	296
29. DETERMINATION OF YIELD AND YIELD COMPONENTS OF SOME CRAMBE GENOTYPES IN THE WORLD CRAMBE COLLECTION - Orhan KURT, Tuba ÖZYILMAZ, Merve GÖRE	304
30. IMPROVE OF GRAIN YIELD AND QUALITY OF WINTER WHEAT BY NITROGEN INPUTS - Roxana Maria MADJAR, Gina VASILE SCĂEȚEANU, Andreea ANTON	310
31. CONTROL OF THE CARROT CYST NEMATODE <i>Heterodera carotae</i> BY TANNIN AQUEOUS SOLUTIONS - Lara MAISTRELLO, Nicola SASANELLI, Giacomo VACCARI, Ion TODERAS, Elena IURCU-STRAISTARU	316
32. STUDY OF <i>Rhinoncus pericarpus</i> (Linneus, 1758) (<i>Coleoptera: Curculionidae</i>) BIOLOGY, AN IMPORTANT PEST OF HERB PATIENCE AND RHUBARB IN ROMANIA - Traian MANOLE	322
33. FIRST RECORDS OF NATURAL ENEMIES OF KERMES HERMONENSIS SPODEK & BEN-DOV (<i>Hemiptera: Sternorrhyncha: Kermesidae</i>) IN TURKEY - Hasan MARAL, Halil BOLU	334
34. BIOLOGICAL EFFICACY OF SOME SOIL HERBICIDES AT MAIZE (<i>Zea mays</i> L.) - Anyo MITKOV, Mariyan YANEV, Nesho NESHEV, Tonyo TONEV	340
35. PERFORMANCE OF MAIZE VARIETIES (<i>Zea mays</i> L.) WITH DIFFERENT RATES OF NITROGEN FERTILIZER AND COWDUNG IN MUBI, NORTHERN GUINEA SAVANNA, NIGERIA - Mustapha Alhaji MUHAMMAN, Ruth SAMUEL	346
36. THE EFFECTS OF TILLAGE METHODS AND PLANT DENSITY ON GROWTH, DEVELOPMENT AND YIELD OF SOYBEAN [<i>Glycine max</i> (L.) Merrill] GROWN UNDER MAIN AND SECOND CROPPING SYSTEM: II. GROWTH-DEVELOPMENT COMPONENT – Ferhat ÖZTÜRK, Tahsin SÖGÜT	353
37. THE CHANGE OF SHEAR FORCE AND ENERGY OF COTTON STALK DEPEND ON KNIFE TYPE AND SHEAR ANGLE - F. Göksel PEKİTKAN, Reşat ESGİCİ, A. Konuralp ELİÇİN, Abdullah SESSİZ	360

38. COMPARATIVE STUDY REGARDING THE INFLUENCE OF HERBICIDES ON THE YIELD OF SUNFLOWER CROPS, THE CROPS BEING OBTAINED WITH CONVENTIONAL, CLEARFIELD AND EXPRESSUN TECHNOLOGIES IN THE FIELD CONDITIONS OF MOARA DOMNEASCA - Aurelian PENESCU, Mariana BRAN, Mihaela NICHITA, Nicolae IONESCU, Dumitru Ilie SĂNDOIU, Costică CIONTU, Tudor ȘCHIOPU, Mihai GÎDEA, Cosmin ȘONEA, Ciprian BOLOHAN ...	367
39. DETERMINATION OF THE EFFECTS OF DIFFERENT FERTILIZER APPLICATIONS ON SWEET CORN - Zanko Othman RASHID, Cagatay TANRIVERDI	375
40. EFFECT OF HIGH DILUTIONS OF SODIUM CHLORIDE SOLUTIONS ON WHEAT GERMINATION - PRELIMINARY STUDY - Ileana RÎNDAȘU, Roxana CICEOI, Elena Ștefania IVAN, Florin STĂNICĂ.....	380
41. THE INFLUENCE OF THE INTERACTION OF SOME MINERAL FERTILIZERS ON THE ACCUMULATION OF SOME NUTRITIVE ELEMENTS IN WHEAT GRAINS - Elena ROȘCULETE, Cătălin Aurelian ROȘCULETE	386
42. FACTORS AFFECTING ENERGY CONSUMPTION IN HAMMER MILLS - Hüseyin SAUK, Kemal Çağatay SELVİ	392
43. EFFECT OF LOW TEMPERATURE ON DIAPAUSE EGGS OF <i>Dysdercus cingulatus</i> (Hemiptera: Pyrrhocoridae) - Shahjahan SHAIKH	397
44. RESEARCH AT NIRDPSB BRASOV ABOUT <i>IN VITRO</i> BEHAVIOR OF POTATO PLANTLETS BELONGING TO NEW AMELIORATED LINES AT SRDP TARGU SECUIESC - Andreea TICAN, Carmen Liliana BĂDĂRĂU, Anca BACIU,, Mihaela CIOLOCA	401
45. THE EFFECT OF NITROGEN FERTILIZER ON THE YIELD AND QUALITY IN THE SWEET MAIZE - Mevlüt TÜRK, Mehmet ALAGÖZ	408
46. THE BIOCHEMICAL METHANE POTENTIAL OF <i>Miscanthus giganteus</i> BIOMASS UNDER THE CONDITIONS OF MOLDOVA - Victor ȚÎȚEI	412
47. INDUCING TRANSIENT GENE EXPRESSION IN <i>Nicotiana tabacum</i> PLANT BY AGROINFILTRATION METHOD - Anca Amalia UDRIȘTE	416
48. THE ROLE OF BUFFER ZONES IN ENSURING THE COEXISTENCE OF GM AND NON-GM MAIZE - Viorica URECHEAN, Dorina BONEA	420

MISCELLANEOUS

1. COMPARISON BETWEEN PRISTINE PURE-BEECH STAND AND MIXED BEECH-OAK STAND USING AN UNMANNED AERIAL VEHICLE - Tiberiu Paul BANU, Manfred SCHÖLCH, Constantin BANU, Gheorghe Florian BORLEA.....	429
2. MODAL ANALYSIS OF FIELD SPRAYER BOOM DESIGN FOR DIFFERENT MATERIALS - Ali BAYAT, Medet İTMEÇ, Ali BOLAT	434
3. EVALUATION OF TILLAGE SYSYEMS ON SOIL FUNGUS MICROFLORA UNDER WINTER WHEAT CULTIVATION - Serkan BAYMAN, M. Murat TURGUT	438
4. TOTAL CONTENT OF SOME ANTIOXIDANTS IN TEN ROMANIAN POTATO GENOTYPES - Carmen Liliana BĂDĂRĂU, Maria Floriana ȘTEFAN, Cristina Maria CANJA, Mirabela Ioana LUPU	442

5. ESTIMATION OF THE LIQUID COVER OF SELECTED DICOTYLEDONOUS PLANTS IN VARIOUS PHASES OF DEVELOPMENT DURING SPRAYING - Beata CIENIAWSKA, Deta LUCZYCKA, Antoni SZEWCZYK, Katarzyna DEREŃ	448
6. DIVERSITY, DISTRIBUTION AND ECOLOGY OF THE FOREST NATURAL HABITATS IN THE BRATOVOEȘTI FOREST, DOLJ COUNTY - Florin Dorian COJOACĂ, Mariana NICULESCU	453
7. PHYTOCHEMICAL RESEARCH ON AERIAL PARTS OF <i>Raphanus raphanistrum</i> subsp. <i>landra</i> (Moretti ex DC.) Bonnier & Layens - Aurora DOBRIN, Vlad Ioan POPA, Constantin Daniel POTOR, Mihaela Ioana GEORGESCU	458
8. WHICH SHRUB SPECIES SHOULD BE USED FOR THE ESTABLISHMENT OF FIELD SHELTERBELTS IN ROMANIA? - Cristian Mihai ENESCU	464
9. MORPHOLOGICAL ASPECTS ABOUT GERMINATION OF <i>Vulpia myuros</i> (L.) C.C. Gmel. CARYOPSIS - Mihaela Ioana GEORGESCU, Vlad Ioan POPA, Daniel Constantin POTOR, Nicolae IONESCU, Elena SĂVULESCU	470
10. MELLIFEROUS POTENTIAL OF SILVER LINDEN TREES (<i>Tilia tomentosa</i> Moench.) GROWING IN THE FORESTS FROM SOUTH ROMANIA - Nicoleta ION, Răzvan COMAN, Viorel ION	474
11. INVESTIGATION OF DIFFERENT TILLAGE AND SEEDING METHODS IN SAFFLOWER (<i>Carthamus tinctorius</i> L.) CULTIVATION - Hüseyin KÜÇÜK, Davut AKBOLAT	481
12. NEW INSIGHTS INTO THE MULTIPLE PROTECTIVE FUNCTIONS OF DIATOMACEOUS EARTH DURING STORAGE OF AGRICULTURAL PRODUCTS - Carmen LUPU, Elena DELIAN, Lenuța CHIRA, Adrian CHIRA	487
13. BIOMASS QUALITY OF SOME <i>Poaceae</i> SPECIES AND POSSIBLE USE FOR RENEWABLE ENERGY PRODUCTION IN MOLDOVA - Ivan MUNTEAN, Victor ȚÎȚEI, Andrei GUDIMA, Andrei ARMAȘ, Mihai GADIBADI	497
14. RESEARCH OF THE COLEOPTERA (<i>Cerambycidae</i> and <i>Lucanidae</i>) FOUND IN THE NATURAL HABITATS OF THE GATEJESTI-BUNESTI FOREST - Laurențiu NICULESCU, Ion MITREA	503
15. STUDIES ON THE VITALITY AND THE STATE OF HEALTH OF CHARACTERISTIC SPECIES OF TREES FROM THE FOREST HABITATS FOUND IN THE PROTECTED AREA ROSCI 0128 (NORDUL GORJULUI DE EST) - Mariana NICULESCU, Liviu Aurel OLARU, Silvestru Ilie NUȚĂ	507
16. DEVELOPMENT OF TAILOR-MADE FOOD WASTE PREVENTION MEASURES BASED ON CONSUMER TYPE ANALYSIS - Sandra SCHWÖDT, Gudrun OBERSTEINER	513
17. PRECISION OF DROUGHT BASED ON THE TOPSIS METHOD - Çağatay TANRIVERDİ, Hasan DEĞİRMENCİ, Mahmut TEKİNERDOĞAN, Engin GÖNEN, Firat ARSLAN, Atılğan ATILGAN	516