



2024

PROGRAMME

INTERNATIONAL SOIL SCIENCE SYMPOSIUM on SOIL SCIENCE & PLANT NUTRITION (10th International Scientific Meeting)

13 – 14 December 2024

Samsun, Türkiye

Editors

Dr.Rıdvan KIZILKAYA

Dr.Coşkun GÜLSER

Dr.Orhan DENGİZ

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Erasmus Mundus Joint Master Degree in Soil Science (emiSS) Programme



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International Soil Science Symposium on “SOIL SCIENCE & PLANT NUTRITION” 13-14 December 2024/ Samsun, Türkiye

Symposium Programme (13 Dec 2024 / 09:15-14:30)

HOUR

09:15-09:30	Opening Speech	Ayten NAMLI , President of FESSS
	Welcoming Speech	Rıdvan KIZILKAYA , Chair of Symposium
	Welcoming Speech	Coşkun GÜLSER , Coordinator of emiSS

HOUR	
	Chair : Orhan DENGİZ
09:30-10:30	Application of pedotransfer functions and machine learning for soil bulk density modelling <i>Baig Abdullah Al SHOUMIK, Coşkun GÜLSER</i>
	Understanding soil quality in agricultural land use in Rize province, Türkiye <i>Dikshya POUDEL, Orhan DENGİZ, Sena PACCI</i>
	The evaluation of soil quality in Sivas Ulaş using integrated quality index model and prediction with artificial neural network <i>Elis-bright Iteke MOLUA, Orhan DENGİZ, Sena PACCI</i>
	Effects of Zn application on wheat under drought stress condition <i>Esther Chidinma CHUKWU, Coşkun GÜLSER</i>
10:30-10:45	BREAK
10:45-12:00	Potential effects of biochar on soil properties of calcareous soil <i>Kazi Sanjida BEGUM, Coşkun GÜLSER</i>
	Evaluating Aloe vera's agricultural applications: Organic fertilization and sustainability <i>Michelle Angely MOLLEHUARA HUAYAS, Rıdvan KIZILKAYA</i>
	The impact of soil conditioners on soil quality and conservation <i>Neysa Marelin MAMANI ZENTENO, Coşkun GÜLSER</i>
	Soil quality assessment in Aksu village, Samsun: A SMAF model approach across different land use types <i>Nimeshi WIJEKON, Orhan DENGİZ, Sena PACCI</i>
	The role of Bacillus megaterium in promoting phosphorus availability and sustainable crop production <i>Prabesh RAI, Rıdvan KIZILKAYA</i>
12:00-13:00	BREAK
13:00-14:15	Composted crop residues as organic amendments for soil and plant health <i>Shova AKTER, Rıdvan KIZILKAYA</i>
	Predicting and mapping of soil erodibility factor using artificial neural network and geospatial approach: A case study of Samsun, Türkiye <i>Wudu ABIYE, Orhan DENGİZ, Sena PACCI</i>
	Urban soils organic carbon: A review <i>Abdelrahman TIEMA, Michał GAŚIOREK</i>
	Effectiveness of leaching and drainage systems in salinity control on reclaimed soils: A review <i>Abdullah BALCI, Tomasz ZALESKI</i>
	Assessing the effects of windthrow and regeneration strategies on soil ecology: A comprehensive review <i>Adil ZIA, Agnieszka JÓZEFOWSKA</i>
14:15-14:30	BREAK



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Symposium Programme (13 Dec 2024 / 14:30-17:15)

Hour	
14:30-15:45	Chair : Coşkun GÜLSER
	Ecological impact of imazamox: Effects on soil microbial activity and functional diversity <i>Anupriya ASOK KUMAR SREEKALA, Katya DIMITROVA</i>
	Influence of soil properties on groundwater contamination risks to mineral water sources: A review <i>Farady BANGANA, Tomasz ZALESKI</i>
	Comprehensive review on heavy metal pollution in urban soils: Sources, risk assessment, and impacts <i>Hassan Esmaeili GISAVANDANI, Michał GAŚIOREK</i>
	Soil Persistence of the imidazolinone herbicides-challenges and opportunities <i>Hussein SADDAM, Dobrinka BALABANOVA</i>
	Rhizosphere associated beneficial microbes and its dynamics in soil health and soil microbial diversity <i>Karun ADHIKARI, Mariana PETKOVA</i>
15:45-16:00	BREAK
16:00-17:15	Impact of climate change on soil water balance in agricultural systems <i>Muhammad Haseeb SHOUKAT, Michał GAŚIOREK</i>
	A review on soil quality and ecosystem services: The role of earthworms as bioindicators <i>Shugyla BAKYTBEEK, Agnieszka JOZEFOWSKA</i>
	Exploring yellow mealworm (<i>Tenebrio molitor</i> L.) frass as a soil amendment and biotic stress mitigator in crop production: A brief review <i>Zain UL ABADIN, Lyubka KOLEVA-VALKOVA</i>
	Assessment of humic acid containing fertilizer for sustainable crop production: A comprehensive Review <i>Segun OGUNMEFUN</i>
	Paulownia as a promising technical crop for biomass production <i>Lesia KARPUK, Viktor TITARENKO, Oksana TITARENKO</i>



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Symposium Programme (14 Dec 2024 / 08:45-14:30)

Hour	
09:30-10:30	Chair : Markéta MIHALIKOVA
	Assessment of USLE-K based on pythagorean fuzzy SWARA approach <i>Aykut CAGLAR, Orhan DENGİZ</i>
	GIS-based spatial assessment of soil organic carbon and its influence on physical soil quality indicators in micro watershed level <i>Endalamaw Dessie ALEBACHEW, Orhan DENGİZ</i>
	Determination of potential erosion risk status with LEAM model; A case study in micro basin <i>Eren ÖZEK, Orhan DENGİZ</i>
	Effect of some soil characteristics on plant minerals uptake and plant growth <i>Kamiran Azeez Mahmood GRAVI, Haya Abu SALIH, Ayhan HORUZ</i>
10:30-10:45	BREAK
10:45-12:00	Plant growth promotion of wheat seedlings using Bacillus inoculants <i>Marina JOVKOVIĆ, Magdalena KNEŽEVIĆ, Marina DERVIŠEVIĆ, Jelena MAKSIMOVIĆ, Galina JEVĐENOVIĆ, Aneta BUNTIĆ</i>
	Drought monitoring using spectral remote sensing indices in the Central Rift Valley Lakes, Ethiopia <i>Mulugeta GEDEFA, Furkan YILĞAN, Markéta MIHÁLIKOVÁ, Svatopluk MATULA</i>
	Determination of risk levels of some heavy metals in Menemen Plain <i>Murat Cagatay KECECI, Levent ATATANIR</i>
	Effects of saturated sludge on pseudogly properties and plant yield <i>Nenad PREKOP, Vladimir ĆIRIĆ, Srđan ŠEREMEŠIĆ, Bojan VOJNOV, Vojislav LAZOVIĆ</i>
	Pollution indices of soil contaminated by heavy metals (Ni, Cr, and Co) in the municipality of Bor <i>Sonja TOŠIĆ JOJEVIĆ, Vesna MRVIĆ, Darko JARAMAZ, Tara GRUJIĆ, Vojisav LAZOVIĆ</i>
12:00-13:00	BREAK
	Determining the potential causes of a dust event occurrence in Northern Serbia <i>Vojislav LAZOVIĆ, Nevena STEVANOVIĆ, Marija ĆOSIĆ, Ljubomir ŽIVOTIĆ, Nenad PREKOP, Ana Vuković VIMIĆ</i>
	Management of the soil-borne pest, sugar beet cyst nematode <i>Heterodera schachtii</i> using biological methods <i>Marie MAŇASOVÁ, Jana WENZLOVÁ, Ondřej DOUDA, Miloslav ZOUHAR</i>
	Comparative analysis of multiple linear regression and random forest regression for predicting soil salinity in paddy fields <i>Nurşaç Serda KAYA, Orhan DENGİZ</i>
	Effects of organic and inorganic iron and zinc compounds on active and total iron index in apple trees <i>Fusun GÜLSER</i>
	Salicylic acid and its role in enhancing salt tolerance in crop plants <i>İlayda KULEYİN, Ayhan HORUZ, Güney AKINOĞLU</i>
14:15-14:30	BREAK



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Symposium Programme (14 Dec 2024 / 14:30-17:00)

HOURL	
14:30-16:45	Chair : Rıdvan KIZILKAYA
	Revisiting the sustainable development prospects of qanat systems in resettlement efforts in the liberated Eastern Zangezur <i>Alovsat GULIYEV, Rahila ISLAMZADE, Tunzala BABAYEVA, Tarlan YELMARLI</i>
	Utilizing Thiobacillus bacteria for the reclamation of calcareous soils <i>Merve EKER, Abdurrahman AY, Rıdvan KIZILKAYA</i>
	Combined effect of biochar and peat application on soil evaporation <i>Ayşe Asel FİDAN, Salih DEMİRKAYA, Coskun GULSER</i>
	Determination of spatial distribution of key macro-nutrient contents in soils under different agricultural land uses <i>Sümeyya Ecem TONBUL ÇALOĞLU, Orhan DENGİZ, Sena PACCI</i>
	Effects of organic wastes on permeability ratio <i>Nutullah ÖZDEMİR, Zerrin CİVELEK</i>
	Nano fertilizers in plant nutrition <i>Füsun GÜLSER</i>
	Effects of land use types on soil aggregate stability <i>Betül Selin PACCI, Coskun GULSER, Orhan DENGİZ</i>
	Reactions of some spinach cultivars against beet necrotic yellow vein virus <i>Abide ESER, Nazlı Dide KUTLUK YILMAZ</i>
	The determination of fungal flora into their rhizosphere and root of some wild grasses from different elevation levels of Türkiye <i>Ahmet KANDEMİR, Bayram KANSU, Berna TUNALI</i>
16:45-17:00	CLOSING SPEECH



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