

ISTRO2024 POSTER PRESENTATIONS

Refer to the agenda for details on location and “authors present” sessions

MONDAY, SEPTEMBER 23 RD 8am to 5pm			
TILLAGE			
ISTRO 229	Quantifying the effects of repeated wheeling on soil water conditions and maize growth during a growing season in a Mollisol	Xinjun Huang	Tillage
ISTRO 227	Revolutionizing Sustainable Agriculture: A Convolutional Neural Network Model and Algorithm-Driven Prototype for Sustainable Tilling and Fertilizer Optimization	Sajeev Magesh	Tillage
ISTRO 204	Impact of a calcitic amendment on the compressibility of a Mollisol under direct seeding and controlled traffic	Silvia Imhoff	Tillage
ISTRO 181	Effect of controlled traffic farming on crop yield over thirteen cropping seasons in Central Europe	Jana Galambosova	Tillage
ISTRO 175	Fabrication and calibration of an Extended Octagonal Ring (EOR) transducer for measuring tillage forces	Kayode Elegbeleye	Tillage
ISTRO 157	Potato-LITE project: Low Intensity Tillage Enhancements for Sustainable Potato Production in Regenerative Agricultural Systems	Paula Misiewicz	Tillage
ISTRO 149	Review of techniques for the recovery of compacted soils in Europe	Guido Bakema	Tillage
ISTRO 130	Long-term trends in soil organic carbon: Insights from comprehensive measurements	Vaida Steponaviciene	Tillage
ISTRO 65	Tractor Forward Speed, Wheel Design and Slippage of a Cassava Planter in a Sandy Clay Loam Soil	Monday Ale	Tillage
ISTRO 55	Comparative Analysis of Energy Consumption and Soil Compaction between Tracked and Wheeled Tractors	Zoltán Hudoba	Tillage
ISTRO 48	Development of a Computer Model to Predict the Performance and Cost of Use of an Acha Harvesting Machine in Nigeria	Joshua Olaoye	Tillage
ISTRO 41	Effects of conservation tillage on soil properties and soybean yields on Stagnosol, Eastern Croatia	Irena Jug	Tillage
ISTRO 17	Towards A Methodology for Evaluating The Potential of Bio-Subsoilers in Soil Compaction Recovery	Maria Camila Herrera-Coy	Tillage
ISTRO 7	Row cleaner coulter disc performance effects on no-till pneumatic precision direct seeding machines	Metin Kaan Uyguntüzel	Tillage
ISTRO 257	Energy required for subsoiling long-term no-tillage soil using curved, rigid shanks	Guido Botta	Tillage

TUESDAY SEPTEMBER 24TH 8am to 5pm

SOIL AND WATER MANAGEMENT, SOIL FERTILITY, PRECISION AG, ON-FARM RESEARCH, CROP PROTECTION

ISTRO 256	Confirmation of Multiple Herbicide Resistance in Italian ryegrass in Virginia	Milos Viric	Crop protection
ISTRO 255	Influence of different Cover Crops and their Termination Timings on Weed Suppression in Edamame (<i>Glycine max</i>) cultivars	Akashdeep Brar	Crop protection
ISTRO 260	Influence of Biochar-Herbicide Interactions on Weed Control Efficacy in sandy soil in Alabama	Nisith Nishank Purohit	Crop Protection
ISTRO 166	An On-Farm Test Plot Can Teach You a Lot. Utilizing Legume Cover Crops to Reduce Nitrogen Fertilizer	Jenna Beville	On-farm, applied research and extension
ISTRO 254	Comparative Analysis of Unmanned Aerial Systems for Weed Control in Broccoli (<i>Brassica oleracea</i> var. <i>italica</i>)	Fatemeh Esmaeilbeiki	Precision agriculture and modeling
ISTRO 234	Cover Crop Decision Support Tools: Free, Open-source Resources for U.S. Agriculture Professionals	Elizabeth Seyler	Precision agriculture and modeling
ISTRO 56	Application of site-specific seeding methods to winter wheat using proximal soil sensing data	Egidijus Sarauskis	Precision agriculture and modeling
ISTRO 183	Principles of soil protection in high-risk agriculture and horticulture	Hosein Ghasemnezhad	Soil and water management
ISTRO 161	Impact of utility-scale solar field development on surface infiltration and ponding.	Emilia Hyland	Soil and water management
ISTRO 136	Wetting-drying cycle alleviates subsoil compaction of Mollisol in Northeast China	Li Wang	Soil and water management
ISTRO 122	Reducing phosphorus leaching in a clay soil through slaked lime amendment: A Swedish field trial	Ararso Etana	Soil and water management
ISTRO 92	Influence of crop diversification in farming systems: effects on soil physical attributes	Vanessa S Romanoski	Soil and water management
ISTRO 33	Soils in Space: Soil Water Under Microgravity	M.B. Kirkham	Soil and water management
ISTRO 32	Effects and mechanism of soil freezing and thawing processes on N ₂ O emission in grazing grasslands Based on the typical temperate grassland in Inner Mongolia and alpine grassland in Xinjiang	Wangchen Zhang	Soil and water management
ISTRO 24	Irrigated sugarbeet yield, water use and water use efficiency responses to tillage practices	Jay Jabro	Soil and water management
ISTRO 158	Biochar application enhances tolerance to boron toxicity in rice (<i>Oryza sativa</i>) seedlings	Muhammad Riaz	Soil fertility and plant nutrition
ISTRO 109	Sulfur Rate and Application Timing for Maize Production on Sandy Loam Soils in Virginia, U.S.	John Mason	Soil fertility and plant nutrition

THURSDAY, SEPTEMBER 25TH 8am to 5pm
ENVIRONMENTAL QUALITY, REGENERATIVE AGRICULTURE

ISTRO 201	Effects of traffic and tillage management systems on soil organic carbon dynamics	Ana B. Prada Barrio	Environmental quality
ISTRO 169	Greenhouse Gas Emissions from Agricultural Fields in Virginia	Patrick Bewick	Environmental quality
ISTRO 167	Effect of Cover Crop Lignin: N on the Stabilization of Plant Carbon Inputs	Poulomi Dey	Environmental quality
ISTRO 152	The influence of different agricultural production systems on carbon sequestration in the soils of Eastern Croatia	Brigita Popovic	Environmental quality
ISTRO 98	Soil loss due to crop harvesting (SLCH): insights into an underestimated soil degradation process	Fritjof Busche	Environmental quality
ISTRO 88	What is the best application method for reducing P loss with gypsum from fields receiving poultry litter	Dexter Watts	Environmental quality
ISTRO 80	Long-term response of bahagrass pastures to elevated atmospheric CO ₂ and fertility management: Forage quality	Stephen Prior	Environmental quality
ISTRO 203	Temporal dynamics of soil aggregating agents and aggregates properties induced by plant roots and crop residues in Argiudolls	Silvia Imhoff	Regenerative Agriculture
ISTRO 176	Short-term Carbon Mineralization: Review on Sampling, Storage, and Incubation	Caroline Wolcott	Regenerative Agriculture
ISTRO 172	Animal trampling and its impact on soil compactability and structural parameters in riparian environments in southeastern Brazil	Reginaldo Barboza Da Silva	Regenerative Agriculture
ISTRO 170	Conversion of Atlantic Forest into pastures, influencing soil quality in southeastern Brazil	Reginaldo Barboza Da Silva	Regenerative Agriculture
ISTRO 95	Evaluating 7 Years of Conservation Management for Soil Health in the Virginia Coastal Plain	Sophie Nicholagos	Regenerative Agriculture
ISTRO 9	Different methods of sample extraction and breakup for the Visual Evaluation of Soil Structure (VESS)	Rachel Muylaert Locks Guimaraes	Regenerative Agriculture
ISTRO 164	Visual evaluation of soil structure (VESS) and its relationship with soil physical properties	Rachel Muylaert Locks Guimaraes	Regenerative Agriculture
ISTRO 87	Evaluation of the effect of agroecological practices on soil health with Biofunctool®, an in-field integrative approach	Alain Brauman	Regenerative Agriculture
ISTRO 86	Direct Seeding with living mulch of Permanent Leguminous Cover: Practices and Benefits	Michael Geloen	Regenerative Agriculture