

Monday June 7-All times in AST

Concurrent session 1 –Biodiversity & Soil health

3:20-4:30: Recorded video play & panel discussion	Ashebir	Godebo	Biological control of root rot complex of field pea and lentil using bacterial isolates antagonistic to <i>Aphanomyces euteiches</i>
	Tolulope	Mafa-Attaye	Root influence soil microbial diversity and inter-kingdom interactions in different riparian land-use systems
	Bryan	Driscoll	The effects of terraces and tile drainage as best management practices on labile soil carbon fractions, greenhouse gas emissions
	Stephen	Paterson	Aquatic dispersal of non-native earthworms in northern Canada
	Tim	Philpott	Impacts of burn severity on fungal communities and soil carbon pools in dry Douglas-fir forests
	Gordon	Price	Tracking microbial gene abundances in soils over eight years of biosolids applications to agricultural soils
	Xueming	Yang	Carbon loss in surface runoff and tile drainage from a clay loam soil under 53 years of consistent agricultural management

Concurrent session 2-Pedology& Soil Science& soil mapping

3:20-4:30: Recorded video play& panel discussion	Adrienne	Arbor	Filling in the missing pieces: Using pedotransfer functions and machine learning techniques to augment British Columbia's soil data repository
	Komathy	Prapagar	Exploring the variability and dynamics of soil hydromorphism in riparian buffer systems using electromagnetic induction
	José Carlos	Lacayo	Hierarchical Clustering of Soil Profile Horizons: A Tool for Data Analysis in Soil classification
	Qudratullah	Rahmati	Mapping land suitability in areas with scarce ground data using Homosoils method
	Mano	Krishnapillai	Effects of surfactants Tween-80 and Triton X-100 and colder temperatures on cow manure bioremediation of hydrocarbon-contaminated soil
	Ryan	Hangs	Rebuilding the Fertility and Productivity of Eroded Knoll Soils in South-Central Saskatchewan
	Amana Jemal	Kedir	Comparison of agri-environmental phosphorus tests in boreal agricultural and natural Podzols
	Mano	Krishnapillai	The influence of long-term agricultural management practices on the current status of soil physico-chemical properties of a boreal podzolic agricultural soil in Cormack, Newfoundland

Concurrent session 3- Agroecology

3:20-4:30: Recorded video play & panel discussion	Andrew	Hector	Developing a rapid infrared spectroscopic tool for assessment of novel lab-based soil health tests and identification of spectra patterns from Ontario soils
	Nikisha	Muhandiram	Soil health dynamics under an intermediate wheat grass perennial forage grain system
	Victoria	Nimmo	Crop functional trait response to organic amendments and intercropping
	Teresa	Porter	Examining selected soil properties on the Lower Fraser River delta following four-year grassland set-aside
	Caroline	Halde	Soil health and crop yields in four cropping systems transitioning to organic agriculture
	Francis J.	Larney	Cover cropping influences on soil health, weed, and pest parameters, and carrot yield and quality under organic production
	Stephen	Crittenden	Soil health in contrasting grazing and manure treatments in Manitoba.

Tuesday June 8-All times in AST

Concurrent session 1-Soil water and nitrogen use efficiency

2:05 – 3:30: Recorded video play & panel discussion	Iva	Henry	Using ¹⁵ N to identify spring wheat varieties and traits that improve nitrogen use efficiency
	Xueming	Yang	Nitrogen fertilizer replacement values of summer-seeded legumes for corn
	Yvonne	Uwituze	Impact of land use intensity on soil nutrients and on enzymes involved in cycling of soil carbon (C), nitrogen (N) and phosphorus (P)
	Wang	HongXiu	The different isotopic compositions in evaporating water and bulk soil water did not make a difference in estimated evaporative water loss
	Hida	Manns	Soil pores; measuring the hole in the doughnut
	Larissa	Fernandes Costa	Soil degradation by land use in the semiarid region of Brazil

Concurrent session 2-GHG and carbon modelling

2:05-3:20: Recorded video play & panel discussion	Waqar	Ashiq	Topography controls N ₂ O emissions differently during early and late corn growing season
	Xavier	Baril	The biological sink of atmospheric H ₂ is more sensitive to spatial variation of microbial diversity than N ₂ O and CO ₂ emissions
	Joannie	D'Amours	Fertilizer and tillage effects on soil nitrous oxide emissions from organic cropping systems
	Rebecca	Johnson	Nitrous oxide emissions as influenced by crop rotation diversity and winter warming on two Ontario soil types
	Carmen	Roman Perez	How biosolids land application impacts N ₂ O emissions and nitrogen use-efficiency in barley croplands?
	Katie	Barham	Exploring applicability of holos version 4.0 whole-farm greenhouse gas (GHG) emissions model in canadian farms
	E.A.	Badewa	Evaluating the long-term effects of biobased residues on soil organic carbon dynamics using the Century Model
	Arumugam	Thiagarajan	Can increased crop yields from Canadian farmlands mitigate GHG emissions through soil C sequestration?

Concurrent session 3-Soil organic matter

2:05-3:30: Recorded video play & panel discussion	Karoland	Bourdon	Response of cultivated organic soils respiration to straw and wood chips addition
	Qianyi	Wu	Fine-tuning the methodology for measuring soil protein
	Jeewan	Gamage	Molecular-level characterization of alkali and acid extracted soil residues using Carbon Near Edge X-ray Absorption Fine Structure spectroscopy (NEXAFS)
	Nastaran	Chalabianlou	Efficacy comparison of common acid treatments used for carbonate removal from soils without affecting their organic carbon content
	Cindy	DenonCourt	Can animal manure support both carbon sequestration and nitrogen supply in agricultural soils?
	Adam	Gillespie	Soil organic carbon content decreases partly attributed to dilution by increased depth of cultivation in southern Ontario
	Richard	Osei	Species identity effect on soil C storage in European forests: broadleaves (oak, beech) versus a conifer (pine)
	Mervin	St Luce	Monitoring soil organic carbon change in Saskatchewan farms from 1996 to 2018: Comparing on-farm management practices to long-term field experiments
	Huile	Gu	Cadmium adsorption onto wheat straw and manure pellet biochars produced with or without steam activation