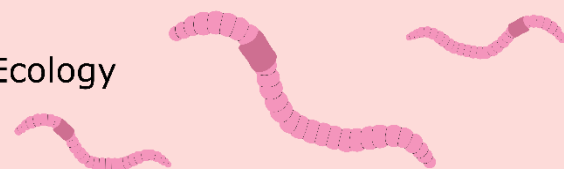
**ISEE13****13th International Symposium on Earthworm Ecology****23-28 August 2026****Wageningen - the Netherlands****PRELIMINARY PROGRAM - POSTERS****Note:** changes are still possible. For now, the authors are listed in alphabetical order.**Monday, August 24****Session 1: Soil Functioning & Biogeography**

Authors	Titel
M. Álvarez-Jiménez M., A.C. Reyes Ceron, ... , I. Barois	Earthworm gut microbiota as a source of biologically fixed nitrogen
E.J.A. Angeles, C.P. Española	Earthworm Diversity across an Elevational Gradient in Mt. Sawtooth and its Neighboring Highlands in the Philippines
K. Appiahene, M. Takyiwaa, F.D. Memgmi, S.O. Poku	Earthworm Effects on Fertilizer Nitrogen Behavior in Synthetic and Organic Farming Systems
L. Apuri, H.L. Hayden, R. Ghaderi, H.-W. Hu, J.-Z. He	Earthworm Ecological Groups Shape Microbial Communities and Enhance Phosphorus Cycling in Soil Casts
E. Baekelmans, N. Hoekstra, J. Finn, J. Groot, N. van Eekeren	Plant species identity affects earthworm abundance and diversity in managed grasslands
M.L.C. Bartz, R. Leitão, ..., J.P. Sousa	From orchards to Montado: earthworm community responses to land-use intensification in Portugal
F. Bosello, W. Demetrio W., ... , J. Mathieu	Earthworms in Eucalyptus and natural regenerating forests in two Brazilian biodiversity hotspots
K.R. Butt, M. Garczyńska, A. Mazur-Pączka, G. Pączka, J. Kostecka	Earthworm strategies for winter survival in temperate mountain forest soils
K.R. Butt, M.A. Callaham Jr, ... , P. Euteneuer	Flint burial by earthworms at Darwin's home: 18 years of monitoring
K.R. Butt, V. Nuutinen	Reproductive relationships between the two epinecic earthworms <i>Lumbricus terrestris</i> (L.) and <i>Lumbricus friendi</i> (Cognetti): Potential pre- and postzygotic isolating mechanisms
E. Buyck, P. De Smedt, ..., S. Schelfhout	The Belgian Earthworm Atlas: Updating a national inventory of earthworm diversity since Bouché (1978)
D. Donata, K.R. Butt, E. Vanguelova	Principal earthworm drivers in plantations vs. natural colonised forests in the UK
W. Demetrio, George Brown, ... , M. Cooper	Exotic earthworms in Brazil and their invasion into protected areas: a call for applied research
P. De Jong, P. Schleppei, ..., F. Hagedorn	Interactions between earthworm species enhance litter-derived carbon stabilization in the mineral soil
L. Delourme, S. Guillocheau, ..., G. Pérès	Earthworm community at French national scale - Results from national network RMQS Biodiversity
R. Dudas, V.M. Oliveira, ... , Brown G.	Earthworm density in urban and semi-urban land uses in Curitiba, Brazil's "Ecological Capital"
L. Dupont, S. Noël, ... , V. Roy	Invasion dynamics of the exotic flatworm <i>Obama nungara</i> and impact on soil ecosystem
P. Euteneuer, L. Sturm, J. Stuhler, K.R. Butt	Cocoon distribution and earthworm survival strategies in hot summer soils
P. Euteneuer, M. März, P. Flotzinger, K.R. Butt	Cover crop in pure stands or in mixtures? Earthworm preferences in the field and laboratory

A. Förster, J. Tilk, K. Weinfurter, C. Emmerling	A comprehensive survey of earthworm populations in arable soils of Germany
P. Gáramszegi, K.E. Clemmensen, ..., E.J. Krab	Tracking earthworms in space and time – is there an ongoing colonization of Scandinavian boreal forests by burrowing earthworms?
S. Gayani, B.M. Dissanayake B. M., K.R. Butt, K. Doick, E. Vanguelova	Quantitative Assessment of Earthworm Community Structure and Soil Physicochemical Properties to Support Urban Forest Management
S. Gérard, M. Grüneberger, ..., H.R.P. Phillips	Earthworm functional diversity in the Americas: trait data and global change threats.
E. Golovanova	Changes in SOM functional groups under the influence of invasive endogeic earthworms
M. Gutiérrez López, A. Piris, ..., E. Andivia	Impact of forest management practices on soil functioning and earthworm communities in Spanish National Parks
D. Hackenberger Kutuzović, T. Đerđ, B. Hackenberger Kutuzović	Earthworm species richness across major habitat types and biogeographical regions in Croatia
W.M. Heinze, T. Keller	Influence of organic matter types on earthworm activity and burrowing patterns in arable soils
Z. Huang, M. Guo, Jia Cao	Drilosphere core microbiome drives convergent nitrogen assimilation and nutrient availability across Contrasting soil ecosystems
Z. Huang, Y. Wu, D. Su, Z. Zhu, J. Cao	Salt-alkali-tolerant plant growth-promoting bacteria from the earthworm gut contribute to saline-alkali soil amelioration
L. Jia, X. Li, C. Zhang	Harnessing Multi-species Earthworm Combinations to Enhance Phytoextraction through Reshaping Rhizosphere Microecosystem
Y. Jiang, L. Yaoxiong, ..., Y. Wu	Biochar Alleviates Earthworm-Induced Soil N ₂ O Emission: Mechanistic Insights from Drilosphere
M.I. Kamil, P. Jouquet, N. Bottinelli, H. Huot, C. Rumpel	Unravelling the effects of ageing and soil characteristics on earthworm cast properties in tropical volcanic soils of Bengkulu, Indonesia
A. Kliszcz	Shaping the regenerative mechanisms in the soil by earthworms
K. Konsap, A. Kuu, ... , M. Shanskiy	Climate scenarios shape earthworm communities in boreal agricultural lands
E.J. Krab, P. Gáramszegi, ... , B.D. Lindahl	When burrowing earthworms enter unexplored domains: effects on northern forest soils and ecosystem functioning
M.C.F. Lago, M. Çakir, M.J.I. Briones	Earthworm communities in black pine forests from Turkey: relationships with tree age and <i>Formica rufa</i> ants.
T.Z. Lerch, J.H.R. Araujo, Y. Capowiez, C. Hartmann, L. Dupont	Interactions among earthworms ecotypes affect soil physical properties, carbon dynamics and plant physiology
A. Ligrone, P. Berenstecher, G. Jorge-Escudero, G. Piñeiro	Earthworms increase carbon incorporation into soil from plant shoots or rhizodeposition depending on feeding habits and plant traits
A. Ligrone, G. Jorge-Escudero, B. Martínez, G. Piñeiro	Vegetation structure effects on earthworm horizontal distribution depend on their size: evidence from a grazed temperate grassland
Z. Liu, Y. Wu, Z. Sun	A high-alkalinity vermicompost and its utilization to regional acidified land
W.-T. Liu, S.-H. Yang, C.-H. Chang	Linking functional differences between soil faunal and microbial communities: Earthworm gut microbiomes are ecological group-specific
K. Ma, C. Huang, ..., Y. Qiao	Niche differentiation and interaction between earthworm functional groups shape distinct soil carbon fate
L. Magr, K. Vancampenhout, ..., E. Desie	From soil to canopy: the role of soil fauna and structure in drought-resilience in pear trees
C. Marsden, C. d'Hervilly, ... , Capowiez Y.	Do earthworms commute? Monitoring within-field earthworm movements in agroforestry systems

R. Melis, E. Desie, B. Muys, R. Samson	Beneath the park surface: earthworm abundance and diversity as function of soil conditions and landscape context in urban green spaces
F.D. Memgmi, S. Asare, ..., J. Osei	Impact of Pesticides on Earthworm Populations and Soil Health
M. Mittmannsgruber, E. Gruber, ..., J.G. Zaller	Into the Woods! Investigating earthworm diversity in the forests of Austria
J. Osei, K. Appiahene, ..., S.O. Poku	Influence of Land Use Patterns on Earthworm Communities and Soil Ecosystem Functions
H.R.P. Phillips, K. Hoeffner, ..., C. Pelosi	Urban earthworm communities driven more by climate and elevation than urbanisation intensity
A. Piris, H.R.P. Phillips, ..., M. Novo	Species distribution modelling of Iberian earthworms: Current patterns and future projections
R. Pommeresche Reidun, T.F. Rittl, A.-K. Løes	Earthworms and agricultural soils – lessons from Norwegian research
G.A. Ramos, G. Medeiros, ..., M.L.C. Bartz	Land use-driven responses of enchytraeid communities in Atlantic Forest and Cerrado soils
M. Roulin, M. Coudene, ... , C. Le Bayon	Earthworm communities under differentiated management of urban soils: the case of the city of Lausanne (CH)
N.L. Schon, G. Laurenson, ..., A.D. Mackay	Impact of regenerative management practices on earthworm populations in pasture soils
S. Semeraro, O. Joye, S. Rasmann, C. Le Bayon	Earthworm biodiversity across alpine pastures: patterns and environmental controls along an altitudinal gradient
M. Shashkov, A. Petrunin-Sukharev, N. Ivanova	Earthworm Communities of the Island Forest of Central Kazakhstan
C. Tibihenda, M. Zhang M, ..., C. Zhang	Earthworms modulate the effectiveness of Biochar and Nanohydroxyapatite in Cadmium Immobilization in soil aggregates and vegetable uptake
T. Uma, C. Srinivas, R.D. Kale	Earthworm Mediated Vermicomposting as a Source of Bioactive Actinomycetes for Sustainable Agriculture.
T.H.V. Tran, B. Woś, M. Pietrzykowski, A. Józefowska	Long-term recovery of earthworm communities in post-fire temperate forests: Tree species effects on soil biological functioning in Podzols
M. Weghorst, L. Van Schaik, J. Baartman	Individual and combined effects of microplastics and Aporrectodea caliginosa on soil structure formation.
D. Wu, J. Jiang, ..., J. Qiu	Survey on Earthworm Species Diversity in Agricultural Areas of Eastern China
Y. Xiao, M. Zhang, ..., C. Zhang	Earthworms and Bacillus spp. synergistically improve Tobacco Growth and Regulate Soil Microbial Community

Tuesday, August 25

Session 2: Ecotoxicology & Stress Ecology

Authors	Titel
L. Bataille, E. Chédru, ..., C. Pelosi	Bioaccumulation of chlordecone in earthworms from banana fields: effect of ecological categories, soil type and characteristics
M. Chavanne, L. Roelfstra, C. Le Bayon E. Eagles, S. Short., ..., D. Spurgeon	Impact of equine deworming agents on soil fauna When Order Matters: Sequence-Dependent Pesticide Toxicity in Enchytraeus crypticus.
S. Garima, Y. Shweta	Impact of Polyurethane Microplastics on Earthworm Health and Soil Ecological Functioning
W.M. Heinze, E. Lahive, ..., G. Cornelis	Earthworm bioturbation as a driver of microplastic fibre transport in soil
V. Harris, H. Bouwman, M.S. Maboeta	Sustainable Agriculture on the Moon and Mars: An Ecotoxicological Perspective
E. Huerta-Lwanga	Earthworms as indicators of soil health. The Case of the EU-H2020 MINAGRIS project.
A. Kliszcz, M. Mitchell, K. Legge	Trophic behaviour of <i>A. longa</i> Ude and <i>L. terrestris</i> L. earthworms in relation to two lichen litters in North America
L. Magr, K. Vancampenhout K., ..., E. Desie	Earthworm community responses to soil texture and management in Flemish vineyards
S. Marhan	Biochar - friend or foe to earthworms?
U. Menke, G. Ernst, V. Roeben, M.T. Marx	<i>Eisenia</i> is the Suitable Indicator to Predict the Risk of Reproductive Toxicity to Earthworms
P.K. Namdev, S. Yadav	Meta-analysis of dose- and time-dependent metabolic pathway perturbations in earthworms exposed to agrochemicals
B. Pile, M. Berenbrink, ..., Q. Zhu	Impacts of climate change-related flooding on earthworm populations
M. Roucaute, D. , ..., G. Pérès	Long term assessment of the effects of various organic inputs on earthworm communities in an experimental field trial
N. Topa, J. Kulczyńska, ..., J. Homa	Size matters: effects of chitosan-coated silver nanoparticles on the earthworm <i>Eisenia andrei</i>
N. Topa, J. Kulczyńska, ..., J. Homa	Nanoparticle-based modulation of wound healing: insights from <i>Eisenia andrei</i>
D.M. Truchet, G. Pérès, C. Wiegand	Microplastics in earthworms: linking (sub)individual responses to population-level effects through meta-analysis
G. Shang, J. Zhai, ..., X. Wang	Contrasting Effects of Polystyrene and Biodegradable PLA Microplastics on Cadmium-Induced Toxicity in Earthworms
Y. Yan, J. Zhai, L. Wang, X. Wang	Response and defense mechanisms of the earthworms <i>Eisenia foetida</i> to natural saline soil stress
S. Yue, R. Wang, Y. Zhang, J. Xu	Effects of selenium and earthworm on the bioremediation of ryegrass to cadmium contaminated soil
C. Zhong, N. Li, ..., Z. Sun	Divergent efficacy and mechanisms of attapulgite versus biochar for heavy metal stabilization during sewage sludge vermicomposting
H. Zhong, M. Li M., ..., C. Zhang	From bulk soil to bio-aggregates: how Pb contamination alters microhabitat physicochemical and structural traits via ecosystem engineer-driven aggregation

Session 3: Earthworms & Society

Authors	Titel
A.A. Ansari, S. Huntley	Vermitechnology-based recycling of fruit and vegetable waste using <i>Perionyx excavates</i>
P. Euteneuer, J. Epperlein, S. Krück.	Finding Memo: Public engagement and dissemination of knowledge about earthworms through a memo game
C. Feng, I.M. Lubbers, S. Vasenev, T. Vink, J. Stoorvogel	Drivers of earthworm community patterns in Urban Private Gardens
A. Fertil, K. Hoeffner, ..., D. Cluzeau	Drivers of urban earthworm communities across contrasting land use and management in Rennes (France)
A. Fertil, K. Hoeffner, ..., D. Cluzeau	Deployment of a citizen science approach to study earthworm communities at the regional scale
M. Garczyńska, M. Dziuba, ..., J. Kostecka	Potential of vermicomposting agricultural biogas plant digestate using <i>Dendrobena veneta</i> (Rosa 1893) – adding to a circular economy
M. Garczyńska, S. Waberska, ..., J. Kostecka	Vermicomposting of waste from vegetable processing
K. Hoeffner, B. Bergerot, ..., D. Cluzeau	How reliable is citizen science for earthworm monitoring in a soil health context?
C. McHugh, C. Fernández Marchán, ..., O. Schmidt O.	History, Ecological Impacts, and Adaptation of an Introduced Earthworm in Ireland and the UK
F.D. Memgmi, M. Takyiwaa, ..., J. Osei	Linking Earthworm Diversity and Abundance to Soil Characteristics Under Different Land-Use Patterns
A. Nicolai, A. Fertil, ..., M. Hervé	Capacity building on earthworms in a researcher-student-citizen chain of participatory science
P. Pacanowski P, A. Józefowska A., ..., M. Potthoff	Between tweet and science – the online image of the earthworm
G. Pączka, A. Mazur-Pączka, ..., K.R. Butt	Effects of Vermicompost Produced from Organic Kitchen Waste on Selected Characteristics of <i>Allium cepa</i> L. 'Exhibition'
M. Quintanilla, A. Martínez Navarro, D. Trigo, M. Gutiérrez López	Comparative biotransformation of organic substrates by detritivorous isopods and earthworms: implications for nutrient cycling and waste management
H.-P. Shen, S.-W. Chang, ..., C.-H. Chang	Citizen science highlights earthworms (Annelida: Clitellata) as prey for mammals in Taiwan
L. Sturm, J. Stuhler, J.G. Zaller, K.R. Butt, P. Euteneuer	Influence of surrounding land-use on earthworm communities in arable fields
L. Sturm, J. Stuhler, J.G. Zaller, K.R. Butt, P. Euteneuer	Tillage depth – a possible driver for earthworm diversity in arable land
Z. Sun, T. Zhao, Z. Li, J. Rui	Modern applications of earthworms (<i>Di long</i>) in human and pet food in Asia
Q.V. Pham, C. Rumpel, D.H. Lam, Y. Zi, N. Bottinelli	Earthworm ecological differentiation across sites: contrasting signals from stable isotopes and infrared spectroscopy

Thursday, August 27

Session 4: Earthworm taxonomy

Authors	Titel
C.C. Capote Alvarez, G. Cabrera Dávila	The only earthworm collection in Cuba: taxonomic update, curatorial revision and research potential
L. Capurro, C. Martínez-Debat, A. Ligrone, G. Jorge-Escudero.	Digging in search of local biodiversity: earthworms of the genus <i>Microscolex</i>
R. Latif, A.A. Roohi, M.J.I. Briones	A comparative study of earthworm diversity in pastures and croplands in northern Iran
A. Martínez Navarro, L. Caproni, ..., M. Novo	Decoding earthworm resilience: genomic drivers of climatic and phenotypic adaptation in the <i>Allolobophora molleri</i> complex
A. Piris, A. Martínez Navarro, ..., M. Novo	Hidden lineages, different futures: integrative phylogeography and ecological preferences of the <i>Allolobophora chlorotica</i> species complex
J. Stuhler, L. Sturm, P. Euteneuer	Dead or Alive every earthworm counts: A comparison of live and preserved earthworm identification from arable soils
Y. Zhang, H. Zhao, ..., Y. Qin	Earthworm species diversity and systematics in Northwest and Northeast of China

Session 5: Earthworms Outside the Bos & Emerging Methods

Authors	Titel
K. Amirhosseini, M. Müller, M. Potthoff, O. Gailing	Comparison of DNA collection methods for earthworm DNA barcoding
T. Calogiuri, A. Vidal, ..., M. Hagens	The role of earthworms in enhanced mineral weathering: from carbon capture to sustainable fertilisation
P. Euteneuer, K.R. Butt	A novel approach for farmers to estimate active earthworm abundance
O. Falconer, O. Schmidt	Casting for earthworms: A novel methodology for the vertically stratified sampling of earthworm communities in situ.
N. Garcia-Knight, F. Reverchon, R. Gonzalez-Amaru, S.M. Contreras- Ramos, I. Barois	Microbial thresholds as indicators of compost pathogen suppression : a comparison in Biocomplete - and vermicompost extracts
F. Gavinelli, F. Popović, ..., G. Concheri	Refinement of the QBS-e Index: Improving Earthworm-Based Soil Quality Assessment in European Agroecosystems and Semi-Natural Environments
M. Grüneberger, S. Gérard, R. Kukowski, K. Nagahawatte, H. Phillips	TimeWorm - 40 years of global earthworm diversity changes
Z. He, H. Russello, D. Mehrotra, M. Sancho Vittrup, Q. Geissmann	Non-invasive field monitoring of earthworm surface activity via red-light imaging and deep learning
E. Hernández-Hernández, I. Barois, M. Álvarez-Jiménez, C. Hernández	Citrus waste vermicompost as a sustainable substrate for rabbit forage production
T. Huisman, A. Vidal, A. Munnaf	Monitoring earthworm activity using soil sound signatures and machine learning
S. Jaikishun, K.S. Shivdat	Potential use of neem leaves-based vermiwash extract as biopesticide on Horned Grasshoppers (Orthoptera Acrididae)
Sun Li, Yunlong Li, Hao Jiang, Yanmeng Bi, ZhenjunSun	Combination of vermicomposting lake silt with active soil formation on site for recovering barren mountainous
D. Mehrotra, Z. He, Q. Geissmann	Autonomous behavioural monitoring in earthworms: a scalable platform for high-throughput ethological studies
A. Nobre, M.K. Doherty, ..., L. Cunha	Linking Soil Carbon, Earthworms, and Microbial Communities under Bio-Based Fertilisation in Grassland Soils
C. Ott, P. Hartmann, ..., H. Puhlmann	Biodiversity in forest soils: establishing a long-term monitoring of soil organisms in forest soils of south-western Germany
L.G.A. Riggi, A. van Hout, ..., A. Edlinger	From spades to sequences: Comparing approaches for earthworm monitoring in the Netherlands
A. Robinson, J. Rogers, ..., A. Johnson	Meet the Megadrill – a novel solution for collecting soil monolith mesocosms
S.A. Schneider, D.S. Müller-Stöver, M.G. Manzeke-Kangara, P.J. Watt	Using eDNA to monitor earthworms across agricultural regimes
N.L. Schon, P.-C. Hsu, S. Loeffen, K. Devey	Using qPCR to assess earthworm species and abundance: a New Zealand example
N.A. Streveler, P. Ganault, L. Saint-André, M. Aubert	Developing ecoacoustic tools to detect, identify and monitor soil biodiversity.
Z. Sun, G. Jiang, Y. Bi, H. Jiang	Research on earthworm field mesocosm from pot to plot
M. Tekin, E.J. Rhodes, M. Hodson	Worms in motion: Tracing spatiotemporal patterns of earthworm bioturbation
R.N. Ter Borg, M. Larsbo, ..., T. Keller	Where do earthworms prefer to be? A laboratory study on the temperature preferences in <i>Aporrectodea caliginosa</i>
Y. Wu, Y. Li	Earthworm antimicrobial peptide EWAMP-R can induce apoptosis-like death in <i>Escherichia coli</i> by targeting ClpX