ISTRO INFO
NEWSLETTER
of the
International Soil Tillage Research Organisation

Lars J. Munkholm

In 2008, Hartemink[1] declared, "Soils are back on the global agenda". He argued that the renewed interest in soils were driven by problems with soil degradation, the influence of soil on climate change and vice versa, as well as new concerns about feeding a growing population. The interest in these topics have only risen since 2008. There is especially a very strong focus on the role and potential of soil as carbon sink and thus as a measure to mitigate global warming. The awareness of the impact of climate change on soil is also increasing. Recently, IPPC published a report on climate change, soil degradation and sustainable land management etc. (https://www.ipcc.ch/report/srccl/). Here they evaluate the risks to humans and ecosystems from changes in land-based processes as a result of climate change. The importance and severity of e.g. soil erosion is estimated to increase with increasing global warming. This highlights the need to find sustainable solutions to limit erosion – and soil degradation in general - in a changing climate. I am sure that such solutions will be discussed intensely at the upcoming World Soil Day under the headline "Stop Soil Erosion, Save our Future!"

⌘ Sharing World Soil Day experiences

On the 5th of December, we all celebrate World Soil Day. You might be involved in the organisation of an event, or you might attend one. We encourage you to send us a summary of the event (maximum 1 page) – do not forget to include photo's. We will combine the reports and distribute the different World Soil Day experiences with all ISTRO-members in January. Please send the summary to istroinfo@agro.au.dk by Friday 17th of January the latest. Please include 'World Soil Day 2019 @ [name institution]' in the subject of the e-mail.
Visit FAO's webpage for more information on the World Soil Day and for the registration of events: http://www.fao.org/world-soil-day/about-wsd/en/

⌘ ISTRO Secretary General – New Editor of Soil and Tillage Research

Blair McKenzie (right) doing visual soil evaluation with Bruce Ball (left). Photo: Joanne Cloy

Dear ISTRO colleagues, I hope that adding the co-editorship Soil & Tillage Research to my role in ISTRO can work for the good of both parties. I have always believed that the strong link with Soil & Tillage Research was one of the scientific strengths of ISTRO. The combination of a research organisation and a scientific journal is something that is not common and delivers important synergy. Along with the other editors of Soil & Tillage Research, I will be looking to the ISTRO community to continue to contribute to this link by responding positively to invitations to conduct reviews for the journal whenever possible. If anyone wants to contact me on this or anything to do with ISTRO, you are always welcome.

Best wishes Blair

[1]Hartemink, A.E., 2008. Soils are back on the global agenda. Soil Use and Management 24, 327-330.

⌘ News on Soil and Tillage Research

In 2019, Soil and Tillage Research experienced an increasing upward trend in terms of both submission (~1300) and accepted papers (~290).

Over the last 12 months, submissions have increased by ~20% and the number of accepted papers by ~50%. Our acceptance rate is a healthy 24%, with a desk rejection rate of ~45%. In 2019, the countries that have contributed the most in terms of submitted papers are China (~46%), Brazil, India, Iran and the USA. The top countries for accepted papers are China, Brazil, Australia, the USA, and Iran. The 2018 Journal Impact Factor is 4.675, +0.851 increase compared to 2017 JIF, which reflect the high quality of the papers published.

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Most Cited Articles, 2018 (Published IF Window 2016-2017)

Citations	Citations (lifetime)	Article Title	Authors	Publication Year	Document Type
36	106	In situ effects of biochar on aggregation, water retention and porosity in light-textured tropical soils	Obia A.,Mulder J.,Martinsen V.,Cornelissen G.,Borresen T.	2016	Article
31	71	Impacts of rainfall intensity and slope gradient on rill erosion processes at loessial hillslope	Shen H.,Shen H.,Zheng F.,Zheng F.,Wen L.,Wen L.,Han Y.,Han Y.,Hu W.,Hu W.	2016	Article
29	65	Estimating the soil clay content and organic matter by means of different calibration methods of vis-NIR diffuse reflectance spectroscopy	Nawar S.,Buddenbaum H.,Hill J.,Kozak J.,Mouazen A.M.	2016	Article
26	70	Response of soil organic carbon and nitrogen stocks to soil erosion and land use types in the Loess hilly-gully region of China	Li Z.,et al.	2017	Article
21	53	Long-term monitoring of soil management effects on runoff and soil erosion in sloping vineyards in Alto Monferrato (North-West Italy)	Biddoccu M.,Biddoccu M.,Ferraris S.,Ferraris S.,Opsi F.,Opsi F.,Cavallo E.,Cavallo E.	2016	Article
21	35	Application of firefly algorithm-based support vector machines for prediction of field capacity and permanent wilting point	Ghorbani M.A.,et al.	2017	Article
20	45	Leaching and fractionation of heavy metals in mining soils amended with biochar	Puga A.P.,Melo L.C.A.,de Abreu C.A.,Coscione A.R.,Paz-Ferreiro J.	2016	Article
18	39	Coupling effects of plastic film mulching and urea types on water use efficiency and grain yield of maize in the Loess Plateau, China	Liu Q.,Chen Y.,Liu Y.,Wen X.,Liao Y.	2016	Article
18	45	Crop yield, plant nutrient uptake and soil physicochemical properties under organic soil amendments and nitrogen fertilization on Nitisols	Agegnehu G.,Nelson P.N.,Bird M.I.	2016	Article
17	43	Changes in microstructural behaviour and hydraulic functions of biochar amended soils	Ajayi A.E.,Holthusen D.,Horn R.	2016	Article

Source: Scopus Last Updated: Oct 20

Marianna Taffi, Publisher, Elsevier

⌘ PhD graduate awarded 3-year membership

ISTRO has awarded a 3-year membership to Dr (Bob) Zhiwei Zeng, who recently graduated from University of Manitoba, Canada. His thesis entitled "Soil-tool-residue interactions: Measurements and modelling" has resulted in five refereed articles of which two are published in Soil and Tillage Research. The thesis will be published on the ISTRO webpage.

If you want to nominate a new PhD graduate for a 3-year membership please send an e-mail to Blair (Blair.McKenzie@hutton.ac.uk).

⌘ Vacant PhD positions at University of Guelph

University of Guelph is about to initiate the project "Structural stability of agricultural soils in Ontario" and have two vacant PhD positions. One of the PhD students will focus on soil compaction and the other on soil crusting. High-resolution X-ray computed tomography (CT) scanning will be used in both the studies, in conjunction with infield measurements and other laboratory analysis.

For more information, please contact Dr. Richard Heck (rheck@uoguelph.ca) or Dr. Adam Gillespie (agilles@uoguelph.ca). They will begin evaluating applications on November 1, 2019, and the position will remain open until filled.

⌘ Upcoming Meetings and Events

November 2019
14th International Conference of the East and Southeast Asia Federation of Soil Science Societies. November 2–8, 2019 in Taipei, Taiwan. Webpage: http://esafs2019.cssfs.org.tw/

ASA-CSSA-SSSA International Annual Meeting. November 10–13, 2019 in San Antonio, Texas, USA. Webpage: https://www.acsmeetings.org/

15th Annual conference on Crop science and Agriculture. November 18–19, 2019, Bali, Indonesia. Webpage: https://crops-agri.foodtechconferences.com/

29th Soil Science Society of East Africa Conference and Exhibition – Sustainable Land and Water Management and Climate Smart Agriculture. November 18–22, 2019 in Naivasha, Kenya. Webpage: https://taa.org.uk/

LOTEX2019, 2nd conference on long-term field experiments. November 20–21, 2019 in Nyíregyháza, Hungary. Webpage: http://konferencia.unideb.hu/en/lotex2019

Soil and SDGs: challenges and need for action, organised by the European Commission. November 25th, 2019 in Brussels, Belgium. Webpage: www.soil-conference.org

December 2019
World Soil day 2019, December 5, Worldwide. Stop Soil Erosion, Save our Future! Webpage: http://www.fao.org/world-soil-day/about-wsd/en/

Early Career Soil Modeling Workshop. December 8th in San Francisco, USA. Webpage: https://www.czen.org/content/invitation-joint-early-career-researchers%E2%80%93-soil-science-networking-event-agu-2019

4th Thünen Symposium on Soil Metagenomics - Understanding and Managing Soil Microbiomes. December 11–13, 2019 in Braunschweig, Germany. Webpage: https://www.soil-metagenomics.org/

March 2020
Intersoil 2020 – International Conference on Soil, Sediments and Water. March 2–3, 2020 in Brussels, Belgium. Webpage: https://www.webs-event.com/webs/en/event/intersoil/accueil

Global Symposium on Soil Biodiversity (GSOBI20). March 10–12, 2020 in Rome, Italy (FAO Headquarters). Webpage: http://www.fao.org/global-soil-partnership/resources/highlights/detail/en/c/1183872/

April 2020
International Soil Classification Congress, April 16–24, 2020, México. Webpage: http://iscc2020.org/

May 2020
EGU General Assembly, May 3–8, 2020 in Vienna, Austria. Webpage: https://egu2020.eu/

ISCRAES 2020 - International Symposium on Climate-Resilient Agri-Environmental Systems, May 19-22, 2020 in Dublin, Ireland. Webpage: http://www.iscraes2020.org/

May-June 2020
Global conference on sandy soils – Properties and management, May 31st – June 4th, 2020 in Madison, USA. Webpage: https://sandysoils.org/

July 2020
3rd Annual Congress on Plant Science & Biosecurity, July 6-8, 2020 in Osaka, Japan. Webpage: https://acpb2020.com/

8th International Crop Science Congress, June 21–25, 2020 in Saskatoon, Canada. Webpage: https://www.icsc2020.com/

August 2020
Eurosoil. August 24–28, 2020 in Geneva, Switzerland. Webpage: http://eurosoil2020.com/

September 2020
13th Agriculture in Nature and Environment Protection. September 8-10, 2020 in Osijek, Croatia.

⌘New Books

Soils and Landscape Restoration
1st Edition Pre-order

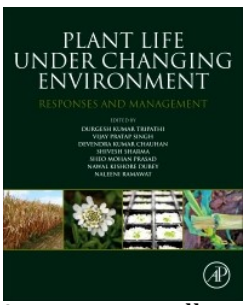
Editors: John Stanturf, Mac Callaham

Soils and Landscape Restoration provides a multi-disciplinary synthesis of the sustainable management and restoration of soils in various landscapes. This book presents applicable knowledge of above- and below-ground interactions and biome specific realizations along with in-depth investigation of particular soil degradation pathways. The book focuses on severely degraded soils (e.g., eroded, salinized, mined) and well as restoration of wetlands, grasslands, and forests.

More information on this book:
https://www.elsevier.com/books/title/author/9780128131930

Plant Life under Changing Environment 1st Edition Responses and Management

Editors: Durgesh Kumar Tripathi, Vijay Pratap Singh, Devendra Kumar Chauhan, Shivesh Sharma, Sheo Prasad, Navneet Kumar Dubey, Naleeni Ramawat

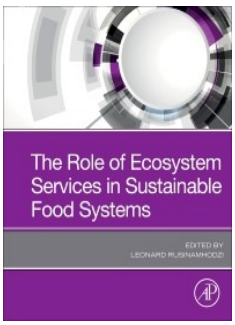


Plant Life under Changing Environment: Responses and Management presents the latest insights, reflecting the significant progress that has been made in understanding plant responses to various changing environmental impacts, as well as strategies for alleviating their adverse effects, including abiotic stresses.

More information on this book:
https://www.elsevier.com/books/plant-life-under-changing-environment/tripathi/978-0-12-818204-8

The Role of Ecosystem Services in Sustainable Food Systems – 1st Edition

Editors: Leonard Rusinamhodzi

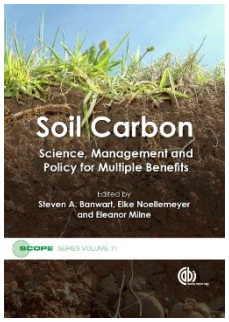


The Role of Ecosystem Services in Sustainable Food Systems reveals the operational definition, concepts and applications of ecosystem services of sustainable food systems. Concepts, methodologies and the tools needed to understand ecosystem services in the broader food system are discussed, as well as different perspectives from case studies of ecosystem services derived from key sustainable food production systems used by farmers.

More information on this book:
https://www.elsevier.com/books/the-role-of-ecosystem-services-in-sustainable-food-systems/rusinamhodzi/978-0-12-816436-5

Soil Carbon – Science, Management and Policy for Multiple Benefits

Editors: Steven A. Banwart, Elke Noellemeyer, Eleanor Milne

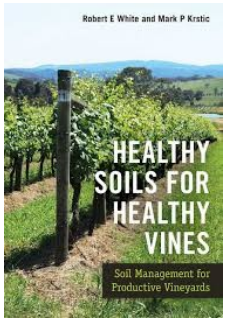


This book brings together the essential evidence and policy opportunities regarding the global importance of soil carbon for sustaining Earth's life support system for humanity. Covering the science and policy background for this important natural resource, it describes land management options that improve soil carbon status and therefore increase the benefits that humans derive from the environment. It is the principal output from a SCOPE rapid assessment process project.

More information on this book: https://www.cabi.org/bookshop/book/9781786395504/

Healthy Soils for Healthy Vines – Soil Management for Productive Vineyards

By: Robert White and Mark Krstic



Healthy Soils for Healthy Vines provides an understanding of vineyard soils and how to manage and improve soil health for best performance. It covers the inherent and dynamic properties of soil health; how to monitor soil and vine performance; and how vineyard management practices affect soil health, fruit composition and wine sensory characters. It also covers the basic tenets of sustainable winegrowing and their significance for business resilience in the face of a changing climate.

More information on this book: https://www.cabi.org/bookshop/book/9781789243161/

ISTRO INFO is the newsletter of the **International Soil Tillage Research Organisation**. (www.istro.org).

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