



Online Event 4th-8th May 2020

SSS12.3/EOS2.4

**Knowledge transfer to society: soil education
and evidence syntheses in agro-environmental
sciences**

**ONLINE POSTER SESSION
4th May 2020
10:45–12:30**

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Convener: Calogero Schillaci

Co-conveners: Pasquale Borrelli, Alessia Perego, Nicola Randall, Elena Valkama, Jacqueline Hannam, Manuel Esteban Lucas-Borja

[Displays](#) | Chat Monday, 04th May, 10:45–12:30



Dr. Calogero Schillaci
Postdoctoral research associate
University of Milan, Italy



Dr. Alessia Perego
Assistant Professor
University of Milan, Italy



Dr. Jacqueline Hannam
Senior Research Fellow
Centre for Environment and Agricultural Informatics



Dr. Elena Valkama Senior Scientist
Natural Resources Institute Finland – LUKE



Prof. Manuel Esteban Lucas-Borja
University of Castilla-La Mancha, Albacete, Spain



Dr. Nicola Randall,
Researcher at Harper Adams University



Dr. Pasquale Borrelli
Visiting scientist at Kangwon National University



UNIVERSITÀ
DEGLI STUDI
DI MILANO



Harper Adams
University



SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Convener: Calogero Schillaci

Co-conveners: Pasquale Borrelli, Alessia Perego, Nicola Randall, Elena Valkama, Jacqueline Hannam, Manuel Esteban Lucas-Borja

[Displays](#) | Chat Mon, 04 May, 10:45–12:30

Aim

Bring together experiences

- Evidence syntheses in agro-environmental science (10 contributions)
- Soil education (8 contributions)

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Discuss

WHAT and WHAT?

- Development and key concepts of soil education
- Effectiveness of systematic searching for agro-environmental sciences

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Bring
together

Experience

- Methodologies
- Ideas
- Approaches

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Evidence syntheses in agro-environmental science

Effect of conservation agriculture on soil organic carbon sequestration in Mediterranean region. A systematic map.

Tommaso Tadiello and Marco Acutis

1 University of Milan, Department of agricultural and Environmental Sciences, Landscape, Agroenergy Department, Milan via Celoria 2 21133 Italy (tommaso.tadiello@unimi.it)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-796.html>

Effects of nitrogen fertilization on yield and nitrogen-use efficiency of durum wheat in Tunisia: a meta-analysis

Amir Souissi^{1,2}, Haithem Bahri³, Hatem Cheikh M'hamed¹, and Mohamed Annabi¹

1 National Institute of Agricultural Research of Tunisia (INRAT), Carthage University, Agronomy Laboratory (LR16INRAT05), Hedi Karray Street, 2049 Ariana, Tunisia (mannabi@gmail.com)

2 National Institute of Agronomy of Tunisia, Carthage University, Avenue Charles Nicolle 1082 Tunis Tunisia (souissiamir89gmail.com)

3 National Research Institute for Rural Engineering, Water and Forests (INRGREF), Carthage University, Agronomy Laboratory (LR16INRAT05), Hedi Karray Street, 2049 Ariana, Tunisia (haithem.bahri@gmail.com)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-1139.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Evidence syntheses in agro-environmental science

A bibliometric analysis: How important is salicylic in response to the salinity from NaCl?

Muhittin Kulak and Nagihan Kilic

Igdir University, Vocational School of Technical Sciences, Department of Herbal and Animal Production, Turkey
(muhyttynx@gmail.com)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-1302.html>

Extracting value from scientific literature with scientometric methods and tools: a case study of permafrost and civil engineering

Frederique Bordignon

Ecole des Ponts ParisTech, Direction de la Documentation, France (frederique.bordignon@enpc.fr)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-4566.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Evidence syntheses in agro-environmental science

A global bibliometric perspective on soil erosion modelling

Nejc Bezak¹ and the Soil Erosion Modelling Team*

¹University of Ljubljana, Faculty of civil and geodetic engineering, Ljubljana, Slovenia

(nejc.bezak@fgg.uni-lj.si)

*A full list of authors appears at the end of the abstract

Pasquale Borrelli, Christine Alewell, Pablo Armando Alvarez Figueroa, Jamil Alexandre Ayach Anache, Jantien Baartman, Cristiano Ballabio, Marcella Biddoccu, Artemi Cerda, Devraj Chalise, Changjia Li, Songchao Chen, Walter Chen, Anna Maria De Girolamo, Gizaw Desta, Detlef Deumlich, Nikolaos Efthymiou, Gunay Erpul, Peter Fiener, Michele Freppaz, Francesco Gentile, Andreas Gericke, Nigussie Haregeweyn, Bifeng Hu, Amelie Jeanneau, Konstantinos Kaffas, Mahboobeh Kiani-Harchegani, Ivan Lizaga Villuendas, Luigi Lombardo, Manuel López-Vicente, Manuel Esteban Lucas-Borja, Michael Märker, Chiyuan Miao, Matjaž Mikoš, Markus Möller, Victoria Naipal, Mark Nearing, Stephen Owusu, Panos Panagos, Dinesh Panday, Edouard Patault, Cristian Patriche, Laura Poggio, Raquel Portes, Laura Quijano Gaudes, Mohammad Reza Rahdari, Mohammed Renima, Giovanni Francesco Ricci, Jesús Rodrigo-Comino, Sergio Saia, Aliakbar Nazari Samani, Calogero Schillaci, Kim Hyuck Soo, Diogo Noses Spinola, Paulo Tarso Oliveira, Hongfen Teng, Resham Thapa, Konstantinos Vantas, Diana Vieira, Jae E. Yang, Shuiqing Yin, Demetrio Antonio Zema, Guangju Zhao

https://presentations.copernicus.org/EGU2020/EGU2020-2919_presentation.pdf

Soil Erosion Modelling Team

Marcella Biddoccu, Pasquale Borrelli, Anna Maria De Girolamo, Nigussie Haregeweyn, Konstantinos Kaffas, Andreas Gericke, Demetrio Antonio Zema, Konstantinos Kaffas, Aliakbar Nazari Samani, Francesco Gentile, Jantien Baartman, Victoria Naipal, Detlef Deumlich, Chiyuan Miao, R. Diana Vieira, Gunay Erpul, Michael Märker, Sergio Saia, Y. Calogero Schillaci, Nikolaos Efthymiou, Edouard Patault, Hongfen Teng, Mohammad Reza Rahdari, Pablo Alvarez, Dinesh Panday, Raquel Portes, Artemi Cerda, Siro Madupati, Laura Quijano, Nig. Bifeng Hu, Cristian Patriche, Laura Poggio, Diogo Noses Spinola, Paulo Tarso Oliveira, Shuiqing Yin, Luigi Lombardo, Giovanni Francesco Ricci, Amelie Jeanneau, M. D. M. Freppaz, Chiyuan Miao, Panos Panagos, Resham Thapa, Manuel Esteban Lucas-Borja, Dinesh Panday, Mahboobeh Kiani-Harchegani, Gizaw Desta, Amelie Jeanneau, Christine Alewell, Jamil Alexandre Ayach Anache, Manuel López-Vicente

Solicited contribution

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Evidence syntheses in agro-environmental science

Pedotransfer function to predict soil bulk density in Mediterranean agro-ecosystems, a systematic map. Marco Acutis¹ and the SDAE 2019 team*

1University of Milano, 1Department of Agricultural and Environmental Sciences - Production, Landscape, Agroenergy, Milano, Italy (marco.acutis@unimi.it)

*A full list of authors appears at the end of the abstract

SDAE 2019 team:

Perego A., Valkama E., Märker M., Sacco D., Saia S., Veronesi F., Lipani A., Lombardo L., Amato G., Bosino A., Cogato A., Conradt S., Damatirca C., Gamper H., Köhl K., Moss C., Pareja-Serrano E., Tedone L., Tiscornia G., Schillaci C.

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-16930.html>

Outcome of the Statistical analysis of spatial data in agro-environmental research

Lake Como School of Advanced Studies, August 26-30, 2019

<https://sdae.lakecomoschool.org/>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Evidence syntheses in agro-environmental science

Ecosystem-based solutions for gravitational natural hazard mitigation: a review on the use of protection forests for disaster risk reduction in mountain areas

Silvia Cocuccioni¹, Francesca Poratelli², Cristian Accastello², Stefan Steger¹, Stefan Schneiderbauer^{1,3}, and Filippo Brun²

1 Institute for Earth Observation, Eurac Research, Italy (silvia.cocuccioni@eurac.edu)

2 Department of Agriculture, Forest and Food Sciences (DISAFA), University of Turin, Grugliasco, Italy

3 Institute for Environment and Human Security, United Nations University, GLOMOS program

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-7577.html>

A systematic synthesis of agricultural management impacts on crop yield, soil quality, and environment

Madaline Young¹, Wim de Vries^{1,2}, and Gerard H. Ros^{1,3}

1 Wageningen University & Research, Wageningen, Netherlands

2 Wageningen Environmental Research (Alterra), Wageningen, Netherlands

3 Nutrient Management Institute, Wageningen, Netherlands

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-796.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science

Evidence syntheses in agro-environmental science

Barley ideotyping for the adaptation to heat stress in the Mediterranean basin. A bibliometric search approach

Agostino Fricano¹, Erica Mica¹, Raffaella Battaglia¹, Alessandro Tondelli¹, Calogero Schillaci², and Alessia Perego²

¹ Council for Agricultural Research and Economics, Research Centre for Genomics and Bioinformatics, Italy
(agostino.fricano@crea.gov.it)

² University of Milan, Department of Agricultural and Environmental Sciences University of Milan, Italy

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-21316.html>

From local studies to global patterns: Example of systematic reviews on local land use change to study global change processes

Ziga Malek¹ and Peter Verburg^{1,2}

¹ Vrije Universiteit Amsterdam, Institute for Environmental Studies (IVM), Environmental Geography, Netherlands
(z.malek@vu.nl)

² Swiss Federal Institute for Forest Snow and Landscape Research, Birmensdorf, Switzerland

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-21475.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science | Posters only

Soil Education

Soil Education for General Public and School Students in Taiwan

Hung-Yu Lai^{1,2}, Wen-Yu Tseng¹, Yu-Shan Yen¹, Kuei-San Chen¹, and Chang-Jun Fong¹

1 National Chung Hsing University, Department of Soil and Environmental Sciences, Taichung, Taiwan (soil.lai@nchu.edu.tw)

2 Innovation and Development Center of Sustainable Agriculture, National Chung Hsing University (ORCID 0000-0002-9866-0706)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-87.html>

How much do Japanese university students know about soil? A survey of university students who received science education in Japanese schools

Emi Yokoo¹, Aiki Masuda², Akiko Deguchi³, and Hideaki Hirai⁴

1 Utsunomiya Girls' High School, Utsunomiya, Tochigi, Japan (emuyokoomobile.821@au.com)

2 Sakushin Gakuin High School, Utsunomiya, Tochigi, Japan (fancyaiki1121@gmail.com)

3 Akiko Deguchi, School of Education, Utsunomiya University, Japan (deguchia@cc.utsunomiya-u.ac.jp)

4 Hideaki Hirai, School of Agriculture, Utsunomiya University, Japan (fancyaiki1121@gmail.com)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-4029.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science | Posters only

Soil Education

Highlighting the importance of topsoil in human life through a soil education program

Aiki Masuda¹, Emi Yokoo², Hideaki Hirai³, and Akiko Deguchi⁴

1 Sakushin Gakuin High School, Utsunomiya, Tochigi, Japan (fancyaiki1121@gmail.com)

2 Utsunomiya Girls' High School, Utsunomiya, Tochigi, Japan (emuyokoomobile.821@au.com)

3 School of Agriculture, Utsunomiya University, Japan (hiraihideaki1960@gmail.com)

4 School of Education, Utsunomiya University, Japan (deguchia@cc.utsunomiya-u.ac.jp)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-4030.html>

Do we need to new set of soil principles to guide the cross-sector engagement of soil education

Damien Field

The University of Sydney, Sydney Institute of Agriculture, School of Life and Environmental Sciences, Sydney, Australia
(damien.field@sydney.edu.au)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-8810.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science | Posters only

Soil Education

Analyses of interest and recognition of necessity on soil by elementary school pupils and junior high school students based on a questionnaire survey on soil in Japan

Hideaki Hirai^{1,4}, Mitsuru Toma^{2,4}, and Ikuko Akahane³

1 School of Agriculture, Utsunomiya University, Utsunomiya, Japan (hiraihideaki1960@gmail.com)

2 Graduate School of Science and Technology for Innovation, Yamaguchi, Japan (mtoma@yamaguchi-u.ac.jp)

3 Institute for Agro-Environmental Sciences, NARO, Ibaraki, Japan (redwing@affrc.go.jp)

4 Soil Education Committee, Japanese Society of Soil Science and Plant Nutrition

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-14833.html>

“Soil Education Manual - Toolbox for DIY program at your classroom” by International Union of Soil Sciences (IUSS)

Takashi Kosaki^{1,2}, Rattan Lal^{1,3}, and Laura Bertha Reyes Sánchez^{1,4}

1 International Union of Soil Sciences (IUSS), Vienna, Austria

2 Aichi University, Global Liberal Arts, Nagoya, Japan (kosakit8@vega.aichi-u.ac.jp)

3 The Ohio State University, Columbus OH, USA

4 National Autonomous University of Mexico, Cuautitlán Izcalli, Estado de México

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-21359.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science | Posters only

Soil Education

How to give visibility to soil: attractive and innovative educational initiatives of Spanish Society of Soil Science (SECS)

Montserrat Díaz-Raviña, Maria Teresa Barral-Silva, Manuel Arias-Estévez, and Jorge Mataix-Solera

President of the SECS Biology Section, Instituto Investigaciones Agrobiológicas de Galicia del CSIC (IIAG-CSIC), Soil Biochemistry, Santiago de Compostela, Spain (mdiazr@iiag.csic.es)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-22011.html>

An innovative and attractive comic to transmit the message of soil importance to the Society: Living in the soil

Montserrat Díaz-Raviña, Maria Teresa Barral-Silva, Manuel Arias-Estévez, and Jorge Mataix-Solera

President of the SECS Biology Section, Instituto Investigaciones Agrobiológicas de Galicia del CSIC (IIAG-CSIC), Soil Biochemistry, Santiago de Compostela, Spain (mdiazr@iiag.csic.es)

<https://meetingorganizer.copernicus.org/EGU2020/EGU2020-22019.html>

SSS12.3/EOS2.4

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science | Posters only

SSS12.3/EOS2.4

**Knowledge transfer to society: soil education
and evidence syntheses in agro-environmental
science**

**Thank you very much for your
participation!**

Knowledge transfer to society: soil education and evidence syntheses in agro-environmental science | Posters only

Announcement

Dr. Alessia Perego

Co-convenor to our session as guest editors invite the authors to submit a manuscript on these or related topics, to the special issue:

Special Issue "Environmental Impact Assessment of Sustainable Agriculture: Enhancing Soil Fertility and Crop Production"

A special issue of [Sustainability](#) (ISSN 2071-1050) IF 2.59, Q2.