

Soil Physics

- 1929–1937 **Short, Multineedle Frequency Domain Reflectometry Sensor Suitable for Measuring Soil Water Content**
Jinghui Xu, Xiaoyi Ma, Sally D. Logsdon, and Robert Horton
- 1938–1945 **Micro-Chilled-Mirror Hygrometer for Measuring Water Potential in Relatively Dry and Partially Frozen Soils**
Kunio Watanabe, Megumi Takeuchi, Yurie Osada, and Kazumasa Iбата
- 1946–1956 **Prediction of the Soil Water Characteristic from Soil Particle Volume Fractions**
Muhammad Naveed, Per Moldrup, Markus Tuller, T. P. A. Ferrè, Ken Kawamoto, Toshiko Komatsu, and Lis Wollesen de Jonge
- 1957–1964 **Models Performance and Robustness for Simulating Drainage and Nitrate-Nitrogen Fluxes without Recalibration**
Jay D. Jabro, Ann D. Jabro, and Steven L. Fales
- 1965–1977 **Changes in Soil Structure and Hydraulic Properties in a Wooded-Shrubland Ecosystem following a Prescribed Fire**
Karletta Chief, Michael H. Young, and David S. Shafer

Soil Physics Note

- 1978–1986 **An Analytical Solution to the One-Dimensional Heat Conduction–Convection Equation in Soil**
Linlin Wang, Zhiqiu Gao, Robert Horton, Donald H. Lenschow, Kai Meng, and Dan B. Jaynes
- 1987–1991 **A Novel Method to Determine the Volume of Sensitivity for Soil Moisture Sensors**
Yurui Sun, Wenyi Sheng, Qiang Cheng, Jin Chai, Yuliang Yun, Yandong Zhao, Xuzhang Xue, Peter Schulze Lammers, Lutz Damerow, and Xiang Cai
- 1992–1998 **Non-Invasive In Situ Measurement Gas Diffusivity of Topsoil**
Katharina Weltecke, Martina M. Friedrich, and Thorsten Gaertig
- 1999–2005 **Analysis of the Role of Tortuosity and Infiltration Constants in the Beerkan Method**
Paolo Nasta, Laurent Lassabatere, Maziar M. Kandelous, Jirka Šimůnek, and Rafael Angulo-Jaramillo

Soil Chemistry

- 2006–2018 **Speciation of Phosphorus in a Fertilized, Reduced-Till Soil System: In-Field Treatment Incubation Study**
Raju Khatiwada, Ganga M. Hettriarachchi, David B. Mengel, and Mingwei Fei
- 2019–2030 **Impacts of Sampling Dissolved Organic Matter with Passive Capillary Wicks Versus Aqueous Soil Extraction**
Julia N. Perdrial, Nico Perdrial, Adrian Harpold, Xiaodong Gao, Rachel Gabor, Kelsie LaSharr, and Jon Chorover
- 2031–2040 **Trace Elements in Benchmark Soils of Oklahoma**
Jaben R. Richards, Jackie L. Schroder, Hailin Zhang, Nicholas T. Basta, Yanling Wang, and Mark E. Payton
- 2041–2050 **The Impact of Different Root Exudate Components on Phenanthrene Availability in Soil**
Bingqing Sun, Yanzheng Gao, Juan Liu, and Yandi Sun

Soil Chemistry Note

- 2051–2054 **Chemical Properties of Aluminum Tridecamer Transferred onto Chelating Resin**
Mayumi Etou, Satoru Hagiwara, Tomoyuki Saito, Hiroaki Noma, Yoshihiro Okaue, and Takushi Yokoyama

Soil Biology & Biochemistry

- 2055–2067 **Temperature and Moisture Effects on Microbial Biomass and Soil Organic Matter Mineralization**
Denis Curtin, Michael H. Beare, and Guillermo Hernandez-Ramirez

Soil Biology & Biochemistry Note

- 2068–2073 **Carbon and Nitrogen Mineralization of a Semiarid Shrubland Exposed to Experimental Nitrogen Deposition**
Marcelo S. Biudes and George L. Vourlitis

Soil Fertility & Plant Nutrition

- 2074–2082 **Increase of Soil pH in a Solar Greenhouse Vegetable Production System**
He Song, Jingheng Guo, Tao Ren, Qing Chen, Baoguo Li, and Jingguo Wang

Pedology

- 2083–2096 **Upland and Lowland Soil Resources of the Ancient Maya at Tikal, Guatemala**
Richard L. Burnett, Richard E. Terry, Ryan V. Sweetwood, David Webster, Tim Murtha, and Jay Silverstein
- 2097–2115 **Efficiency Comparison of Conventional and Digital Soil Mapping for Updating Soil Maps**
Bas Kempen, Dick J. Brus, Jetse J. Stoorvogel, Gerard B.M. Heuvelink, and Folkert de Vries
- 2116–2127 **Using Digital Elevation Models as an Environmental Predictor for Soil Clay Contents**
Mogens H. Greve, Rania Bou Kheir, Mette B. Greve, and Peder K. Bocher
- 2128–2135 **Manganiferous Soils in Maryland: Regional Extent and Field-Scale Electromagnetic Induction Survey**
Rebecca R. Bourgault and Martin C. Rabenhorst

Soil & Water Management & Conservation

- 2136–2142 **Calibration and Use of Neutron Moisture and Gamma Density Probes in Rocky Soils**
Ieyasu Tokumoto, James L. Heilman, Kevin J. McInnes, Cristine L.S. Morgan, and Ray H. Kamps
- 2143–2153 **Relationships Among Water Stable Aggregates and Organic Matter Fractions Under Conservation Management**
Kristen S. Veum, Keith W. Goyne, Robert Kremer, and Peter P. Motavalli
- 2154–2163 **Fall Conservation Deep Tillage Stabilizes Maize Residues into Soil Organic Matter**
Ana B. Wingeyer, Daniel T. Walters, Rhae A. Drijber, Daniel C. Olk, Timothy J. Arkebauer, Shashi B. Verma, David A. Wedin, and Charles A. Francis
- 2164–2173 **Winter Annual Cover Crop Impacts on No-Till Soil Physical Properties and Organic Matter**
M.K. Steele, F.J. Coale, and R.L. Hill

- 2174–2183 **Soil Organic Carbon Predictions by Airborne Imaging Spectroscopy: Comparing Cross-Validation and Validation**
Antoine Stevens, Isabel Miralles, and Bas van Wesemael
- 2184–2194 **Accounting for Surface Cattle Slurry in Ammonia Volatilization Models: The Case of Volt'Air**
L. Garcia, S. Générumont, C. Bedos, N.N. Simon, P. Garnier B. Loubet, and P. Cellier
- 2195–2207 **Long-Term Tillage and Crop Rotations for 47–49 Years Influences Hydrological Properties of Two Soils in Ohio**
Sandeep Kumar, Atsunobu Kadono, Rattan Lal, and Warren Dick
- 2208–2220 **Influence of Herbicide and Soil Amendments on Soil Nitrogen Dynamics, Microbial Biomass, and Crop Yield in Tropical Dryland Agroecosystems**
Pratibha Singh, R. P. Singh, and Nandita Ghoshal
- 2221–2229 **Soil Carbon Stability Responds to Land-Use and Ground-cover Management in Southern Appalachian Agroecosystems**
Samantha K. Chapman, Reena U. Palanivel, and J. Adam Langley

Forest, Range & Wildland Soils

- 2230–2240 **Storage and Stability of Soil Organic Carbon in Aspen and Conifer Forest Soils of Northern Utah**
Mical Woldeeslassie, Helga Van Miegroet, Marie-Cécile Gruselle, and Nickoli Hambly
- 2241–2255 **The Quantitative Soil Pit Method for Measuring Belowground Carbon and Nitrogen Stocks**
Matthew A. Vadeboncoeur, Steven P. Hamburg, Joel D. Blum, Michael J. Pennino, Ruth D. Yanai, and Chris E. Johnson
- 2256–2264 **Soil-Quality Effects of Grassland Degradation and Restoration on the Qinghai-Tibetan Plateau**
S. K. Dong, L. Wen, Y. Y. Li, X. X. Wang, L. Zhu, and X. Y. Li
- 2265–2277 **Soils Associated with Biotic Activity on Frost Boils in Arctic Alaska**
G. J. Michaelson, C. L. Ping, and D. A. Walker
- 2278–2288 **Soil Accumulation of Nitrogen and Phosphorus Following Annual Fertilization of Loblolly Pine and Sweetgum on Sandy Sites**
L. C. Kiser and T. R. Fox

Nutrient Management & Soil & Plant Analysis

- 2289–2296 **Residual Poultry Manure Nitrogen Supply to Corn the Second and Third Years after Application**
Dorivar A. Ruiz Diaz, John E. Sawyer, and Daniel W. Barker
- 2297–2306 **Spatial Distribution and Chemical Speciation of Soil Phosphorus in a Band Application**
Gourango Kar, Derek Peak, and Jeff J. Schoenau
- 2307–2317 **Controlled Release Urea Improved Nitrogen Use Efficiency, Activities of Leaf Enzymes, and Rice Yield**
Yuechao Yang, Min Zhang, Y.C Li, Xiaohui Fan, and Yuqing Geng
- 2318–2326 **Predicting Soil Phosphorus-Related Properties Using Near-Infrared Reflectance Spectroscopy**
Dalel Abdi, Gaëtan F. Tremblay, Noura Ziadi, Gilles Bélanger, and Léon-Étienne Parent

Wetland Soils

- 2327–2341 **Multi-scale Modeling of Soil Series Using Remote Sensing in a Wetland Ecosystem**
Jongsung Kim, Sabine Grunwald, Rosanna G. Rivero, and Rick Robbins

Book Reviews

- 2342 **Carbon Credits from Peatland Rewetting, Climate–Biodiversity–Land Use**
Reviewed by Alex Chow

Errata

- 2343 **Strategies for Soil Quality Assessment Using Visible and Near-Infrared Reflectance Spectroscopy in a Western Kenya Chronosequence**
Rintaro Kinoshita, Bianca N. Moebius-Clune, Harold M. van Es, W. Dean Hively, and A. Volkan Bilgili
- 2344 **Facilitated Transport of Copper with Hydroxyapatite Nanoparticles in Saturated Sand**
Dengjun Wang, Scott A. Bradford, Marcos Paradelo, Willie J.G.M. Peijnenburg, and Dongmei Zhou