

Changes in the hydraulic properties of a clay soil under long-term irrigation with treated wastewater G. Bardhan, D. Russo, D. Goldstein and G.J. Levy	1
An approximate point source method for soil infiltration process measurement L. Mao, Y. Li, W. Hao, X. Mei, V.F. Bralts, H. Li, R. Guo and T. Lei	10
The release of phosphorus in alkaline vertic soils as influenced by pH and by anion and cation sinks K.O. Andersson, M.K. Tighe, C.N. Guppy, P.J. Milham and T.I. McLaren	17
Estimation of effective hydraulic parameters in heterogeneous soils at field scale J. Lai and L. Ren	28
Comparing adjacent cultivated and “virgin” soils in wind erosion affected environments can lead to errors in measuring soil degradation L.A. Iturri, F. Avecilla, G.G. Hevia and D.E. Buschiazzo	42
Short term clay mineral release and re-capture of potassium in a <i>Zea mays</i> field experiment A. Paola, B. Pierre, C. Vincenza, D.M. Vincenzo and V. Bruce	54
Spatial variability of shallow soil moisture and its stable isotope values on a karst hillslope J. Yang, H. Chen, Y. Nie, W. Zhang and K. Wang	61
Forest floor chemical transformations in a boreal forest fire and their correlations with temperature and heating duration C. Santín, S.H. Doerr, A. Merino, R. Bryant and N.J. Loader	71
How do emission rates and emission factors for nitrous oxide and ammonia vary with manure type and time of application in a Scottish farmland? M.J. Bell, N.J. Hinton, J.M. Cloy, C.F.E. Topp, R.M. Rees, J.R. Williams, T.H. Misselbrook and D.R. Chadwick	81
The influence of clay-to-carbon ratio on soil physical properties in a humid sandy loam soil with contrasting tillage and residue management G.T. Getahun, L.J. Munkholm and P. Schjønning	94
Unexpected calcium sources in deep soil layers in low-fertility forest soils identified by strontium isotopes (Lorraine plateau, eastern France) L. Bedel, A. Poszwa, G. van der Heijden, A. Legout, L. Aquilina and J. Ranger	103

(continued from back cover)

Assessment of the soil organic carbon stock in Spain J.A. Rodríguez Martín, J. Álvaro-Fuentes, J. Gonzalo, C. Gil, J.J. Ramos-Miras, J.M. Grau Corbí and R. Boluda	117
Behaviors of exogenous Pb in P-based amended soil investigated with isotopic labeling method coupled with Tessier approach Z.-Y. Huang, J. Li, Y.-L. Cao, C. Cai and Z. Zhang	126
Characteristics of soil freeze–thaw cycles and their effects on water enrichment in the rhizosphere A. Musa, L. Ya, W. Anzhi and N. Cunyang	132
Background value of magnetic susceptibility in forest topsoil: Assessment on the basis of studies conducted in forest preserves of Poland A. Łukasik, T. Magiera, J. Lasota and E. Błońska	140
Soil-water repellency characteristic curves for soil profiles with organic carbon gradients N.S. Wijewardana, K. Müller, P. Moldrup, B. Clothier, T. Komatsu, S. Hiradate, L.W. de Jonge and K. Kawamoto	150
A unified Perc Test–Well Permeameter methodology for absorption field investigations W.D. Reynolds	160
Does phyllosilicate mineralogy explain organic matter stabilization in different particle-size fractions in a 19-year C_3/C_4 chronosequence in a temperate Cambisol? O. Fernández-Ugalde, P. Barré, I. Virto, F. Hubert, D. Billiou and C. Chenu	171
Spatial distribution and chemical composition of soil organic matter fractions in rhizosphere and non-rhizosphere soil under European beech (<i>Fagus sylvatica</i> L.) G. Angst, I. Kögel-Knabner, K. Kirfel, D. Hertel and C.W. Mueller	179
Electromagnetic induction: A support tool for the evaluation of soil CO_2 emissions and soil organic carbon content in olive orchards under semi-arid conditions E. Lardo, A. Arous, A.M. Palese, V. Nuzzo and G. Celano	188
Tree or soil? Factors influencing humus form differentiation in Italian forests A. Andreatta, G. Cecchini, E. Bonifacio, R. Comolli, S. Vingiani and S. Carnicelli	195
Cell wall compositional changes during incubation of plant roots measured by mid-infrared diffuse reflectance spectroscopy and fiber analysis K.E. White, J.B. Reeves III and F.J. Coale	205
Quantification and minimization of uncertainty by geostatistical simulations during the characterization of contaminated sites: 3-D approach to a multi-element contamination J.-P. Boudreault, J.-S. Dubé and D. Marcotte	214
Modelling soil organic carbon 1. Performance of APSIM crop and pasture modules against long-term experimental data G.J. O'Leary, D.L. Liu, Y. Ma, F.Y. Li, M. McCaskill, M. Conyers, R. Dalal, S. Reeves, K. Page, Y.P. Dang and F. Robertson	227
Effect of breakdown and dispersion of soil aggregates by erosion on soil CO_2 emission S. Wei, X. Zhang, N.B. McLaughlin, X. Yang, A. Liang, S. Jia and X. Chen	238
Quantification of soil macropores under alpine vegetation using computed tomography in the Qinghai Lake Watershed, NE Qinghai–Tibet Plateau X. Hu, Z.-C. Li, X.-Y. Li and L.-y. Liu	244