

The role of poorly crystalline iron oxides in the stability of soil aggregate-associated organic carbon in a rice–wheat cropping system	
X. Huang, H. Jiang, Y. Li, Y. Ma, H. Tang, W. Ran and Q. Shen	1
Micromapping of microbial hotspots and biofilms from different crops using digital image mosaics of soil thin sections	
E.V. Gutiérrez Castorena, Ma.d.C. Gutiérrez-Castorena, T. González Vargas, L. Cajuste Bontemps, J. Delgadillo Martínez, E. Suástegui Méndez and C.A. Ortiz Solorio	11
Use of X-ray CT scan to characterize the evolution of the hydraulic properties of a soil under drainage conditions	
Y. Périard, S.J. Gumiere, B. Long, A.N. Rousseau and J. Caron	22
An assessment of model averaging to improve predictive power of portable vis-NIR and XRF for the determination of agronomic soil properties	
S.M. O'Rourke, U. Stockmann, N.M. Holden, A.B. McBratney and B. Minasny	31
Plant silicon uptake increases active aluminum minerals in root-zone soil: Implications for plant influence on soil carbon	
S. Hobara, S. Fukunaga-Yoshida, T. Suzuki, S. Matsumoto, T. Match and N. Ae	45
Soil and hydrological responses to wild pig (<i>Sus scrofa</i>) exclusion from native and strawberry guava (<i>Psidium cattleianum</i>)-invaded tropical montane wet forests	
A.M. Strauch, G.L. Bruland, R.A. MacKenzie and C.P. Giardina	53
Responses of soil phosphorus fractions to gap size in a reforested spruce forest	
B. Hu, B. Yang, X. Pang, W. Bao and G. Tian	61
Kinetics of phosphorus forms applied as inorganic and organic amendments to a calcareous soil II: effects of plant growth on plant available and uptake phosphorus	
Y. Audette, I.P. O'Halloran, L.J. Evans, R.C. Martin and R.P. Voroney	70
Approximating the variance of estimated means for systematic random sampling, illustrated with data of the French Soil Monitoring Network	
D.J. Brus and N.P.A. Saby	77
2,4-D mobility in clay soils: Impact of macrofauna abundance on soil porosity	
B. Prado, A.G. Strozzi, E. Huerta, C. Duwig, O. Zamora, P. Delmas, D. Casasola and J. Márquez	87
Soil variables that determine lead accumulation in <i>Bidens pilosa</i> L. and <i>Tagetes minuta</i> L. growing in polluted soils	
M.J. Salazar, J.H. Rodriguez, C.V. Cid, C.E. Bernardelli, E.R. Donati and M.L. Pignata	97

(continued from back cover)

Exchangeable cations in deep forest soils: Separating climate and chemical controls on spatial and vertical distribution and cycling J. James, K. Littke, T. Bonassi and R. Harrison	109
High-resolution X-ray fluorescence core scanning of landslide-dammed reservoir sediment sequences on the Chinese Loess Plateau: New insights into the formation and geochemical processes of annual freeze-thaw layers X. Wang, Z. Jin, L. Chen, J. Xiao and F. Zhang	122
Changes in heavy metal extractability from contaminated soils remediated with organic waste or biochar A. Venegas, A. Rigol and M. Vidal	132
Legacy soil maps as a covariate in digital soil mapping: A case study from Northern Iran M.R. Pahlavan-Rad, F. Khormali, N. Toomanian, C.W. Brungard, F. Kiani, C.B. Komaki and P. Bogaert	141
The distribution and genesis of eroded phase soils in the conterminous United States N.A. Jelinski and K. Yoo	149