



VOL. 281

## CONTENTS

1 NOVEMBER 2016

Environmental factors controlling soil organic carbon storage in loess soils of a subhumid region, northern Iran M. Ajami, A. Heidari, F. Khormali, M. Gorji and S. Ayoubi .....	1
Effect of biochar application on soil hydrological properties and physical quality of sandy soil T. Głab, J. Palmowska, T. Zaleski and K. Gondek .....	11
Spatial and temporal distributions of sulfur species in paddy soils affected by acid mine drainage in Dabaoshan sulfide mining area, South China C. Yang, G. Lu, M. Chen, Y. Xie, C. Guo, J. Reinfelder, X. Yi, H. Wang and Z. Dang .....	21
Acidification of animal slurry affects the nitrogen dynamics after soil application D. Fangueiro, S. Surgy, I. Fraga, F.G. Monteiro, F. Cabral and J. Coutinho .....	30
The effects of rock fragment shapes and positions on modeled hydraulic conductivities of stony soils H. Hlaváčiková, V. Novák and J. Šimůnek .....	39
Cover crops prevent the deleterious effect of nitrogen fertilisation on bacterial diversity by maintaining the carbon content of ploughed soil J. Verzeaux, A. Alahmad, H. Habbib, E. Nivelle, D. Roger, J. Lacoux, G. Decocq, B. Hirel, M. Catterou, F. Spicher, F. Dubois, J. Duclercq and T. Tetu .....	49
Sensor mapping of Amazonian Dark Earths in deforested croplands M. Söderström, J. Eriksson, C. Isendahl, D.P. Schaan, P. Stenborg, L. Rebellato and K. Piikki .....	58
Mapping soil organic matter concentration at different scales using a mixed geographically weighted regression method C. Zeng, L. Yang, A.-X. Zhu, D.G. Rossiter, J. Liu, J. Liu, C. Qin and D. Wang .....	69
Methane flux in montane and subalpine soils of the Central and Northern Alps K. Hofmann, S. Farbmacher and P. Illmer .....	83
Impacts of topographic attributes on Soil Taxonomic Classes and weathering indices in a hilly landscape in Northern Iran M. Osat, A. Heidari, M. Karimian Eghbal and S. Mahmoodi .....	90
Mapping the soils of an Argentine Pampas region using structural equation modelling M.E. Angelini, G.B.M. Heuvelink, B. Kempen and H.J.M. Morrás .....	102
Comparing soil carbon estimates in glaciated soils at a farm scale using geospatial analysis of field and SSURGO data E.A. Mikhailova, A.H. Altememe, A.A. Bawazir, R.D. Chandler, M.P. Cope, C.J. Post, R.Y. Stiglitz, H.A. Zurqani and M.A. Schlautman .....	119
Crack formation in a mediterranean rainfed Vertisol: Effects of tillage and crop rotation R.J. Lopez-Bellido, V. Muñoz-Romero, F.J. Lopez-Bellido, C. Guzman and L. Lopez-Bellido .....	127
Corrigendum to "The role of soil series in quantitative land evaluation when expressing effects of climate change and crop breeding on future land use" [Geoderma 259–260 (2015) 187–195] A. Bonfante and J. Bouma .....	133