

European Journal of **Soil Science** – *an International Journal*

Carbon and organic matter

- 129 S. P. P. GROVER AND J. A. BALDOCK
Carbon chemistry and mineralization of peat soils from the Australian Alps
- 141 C. GRINAND, B. G. BARTHÈS, D. BRUNET, E. KOUAKOUA, D. ARROUAYS, C. JOLIVET,
G. CARIA AND M. BERNOUX
Prediction of soil organic and inorganic carbon contents at a national scale
(France) using mid-infrared reflectance spectroscopy (MIRS)
- 152 N. DAL FERRO, A. BERTI, O. FRANCIOSO, E. FERRARI, G. P. MATTHEWS AND F. MORARI
Investigating the effects of wettability and pore size distribution on
aggregate stability: the role of soil organic matter and the humic fraction
- 165 J. H. ZHANG, S. J. NI AND Z. A. SU
Dual roles of tillage erosion in lateral SOC movement in the landscape
- 177 X. M. YANG, H. T. XIE, C. F. DRURY, W. D. REYNOLDS, J. Y. YANG AND X. D. ZHANG
Determination of organic carbon and nitrogen in particulate organic matter
and particle size fractions of Brookston clay loam soil using infrared
spectroscopy
- 189 M. S. DEMYAN, F. RASCHE, E. SCHULZ, M. BREULMANN, T. MÜLLER AND G. CADISCH
Use of specific peaks obtained by diffuse reflectance Fourier transform
mid-infrared spectroscopy to study the composition of organic matter
in a Haplic Chernozem

Physical processes and functions

- 200 D. E. SMILES, C. J. SMITH AND J. KIRKHAM
On the use of solute water fronts to measure nitrate adsorption
in a Red Ferrosol
- 211 T. KRUEGER, J. N. QUINTON, J. FREER, C. J. A. MACLEOD, G. S. BILOTTA, R. E. BRAZIER,
J. M. B. HAWKINS AND P. M. HAYGARTH
Comparing empirical models for sediment and phosphorus transfer from
soils to water at field and catchment scale under data uncertainty
- 224 K. LAUER, N. WAGNER AND P. FELIX-HENNINGSSEN
A new technique for measuring broadband dielectric spectra of undisturbed
soil samples

Biological interactions

- 239 G. CHEN
S. typhimurium and *E. coli* O157:H7 retention and transport in agricultural
soil during irrigation practices
- 249 A. HEINEMEYER, D. TORTORELLA, B. PETROVIČOVÁ AND A. GELSOMINO
Partitioning of soil CO₂ flux components in a temperate grassland
ecosystem
- 261 N. GOUTAL, F. PARENT, P. BONNAUD, J. DEMAISON, G. NOURRISSON, D. EPRON
AND J. RANGER
Soil CO₂ concentration and efflux as affected by heavy traffic in forest
in northeast France

Continued from outside back cover

- 272 I. MIRALLES, R. ORTEGA, G. ALMENDROS, F. GIL-SOTRES, C. TRASAR-CEPEDA, M. C. LEIRÓS AND M. SORIANO
Modifications of organic matter and enzymatic activities in response to change in soil use in semi-arid mountain ecosystems (southern Spain)

Soil development, variability, characterization and distribution

- 284 A. JAFARI, P. A. FINKE, J. VAN DE WAUW, S. AYOUBI AND H. KHADEMI
Spatial prediction of USDA- great soil groups in the arid Zarand region, Iran: comparing logistic regression approaches to predict diagnostic horizons and soil types
- 299 B. HAGGARD, D. C. WEINDORF AND A. L. HISCOX
Evaluation of the predictive capabilities of Landsat 7 ETM+ on 50-cm mean annual soil temperature in the Transylvanian Plain, Romania
- 311 Book reviews