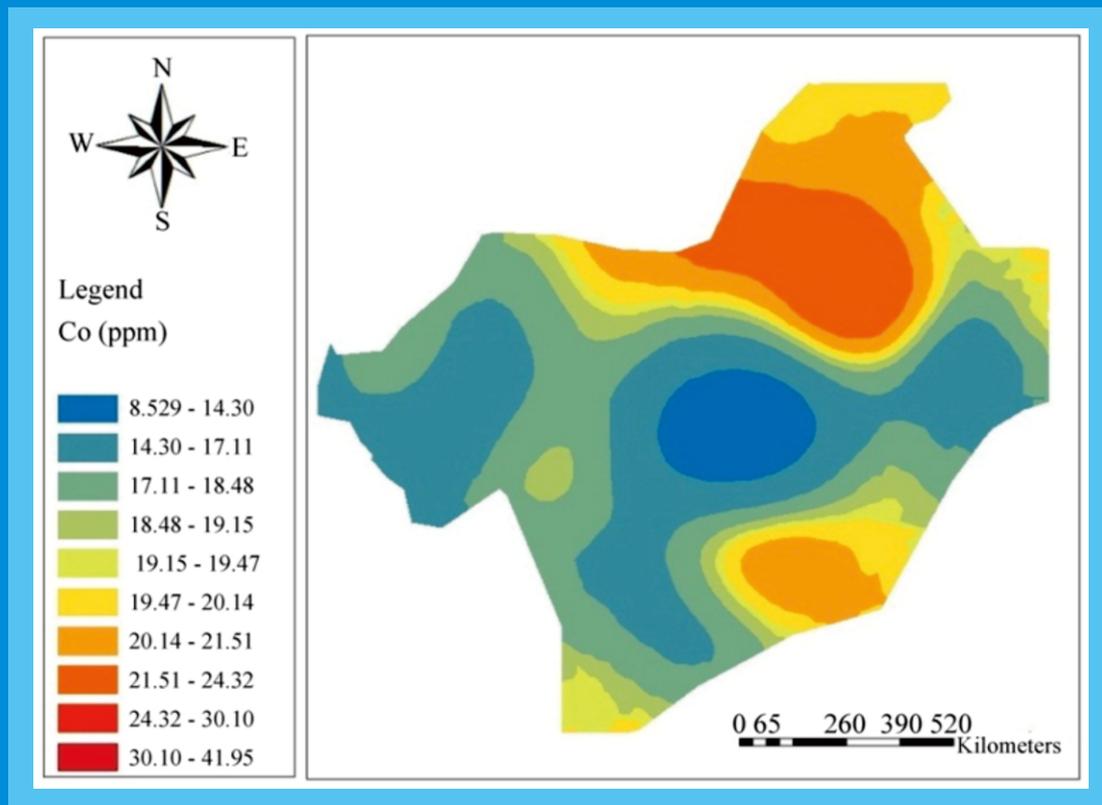




Open Journal of Soil Science



ISSN: 2162-5360



Journal Editorial Board

ISSN: 2162-5360 (Print), 2162-5379 (Online)

<http://www.scirp.org/journal/ojss>

Editor-in-Chief

Dr. Haiyan Chu

Chinese Academy of Sciences, China

Editorial Board

Dr. Thomas John Aspray

Heriot Watt University, UK

Dr. Jie Chen

Shanghai Jiao Tong University, China

Dr. Wilfredo A. Dumale, Jr.

University of Tokyo, Japan

Prof. Thomas E. Fenton

Iowa State University, USA

Prof. W. G. Dilantha Fernando

University of Manitoba, Canada

Dr. Bente Foereid

Cornell University, USA

Dr. Adriel Ferreira da Fonseca

State University of Ponta Grossa, Brazil

Dr. Rima B. Franklin

Virginia Commonwealth University, USA

Dr. Bin Gao

University of Florida, USA

Dr. Daniel Hirmas

University of Kansas, USA

Dr. Kamlesh Jangid

National Centre for Cell Science, India

Dr. Michael B. Jenkins

USDA-ARS, USA

Dr. Antonio Jordán López

University of Seville, Spain

Prof. Mehmet Rüştü Karaman

Gaziosmanpasa University, Turkey

Prof. Tasios Karathanasis

University of Kentucky, USA

Dr. Usama F. A. Karim

University of Twente, Netherlands

Prof. Arno Kleber

Dresden University of Technology, Germany

Dr. Sandeep Kumar

The Ohio State University, USA

Prof. Dar-Yuan Lee

National Taiwan University, Chinese Taipei

Dr. Ana Teresa Lima

University of Waterloo, Canada

Prof. Francisco Jose Martín Peinado

University of Granada, Spain

Dr. Julia Martínez Fernández

University of Murcia, Spain

Dr. Maren Oelbermann

University of Waterloo, Canada

Dr. Feifei Pan

University of North Texas, USA

Dr. Álvaro Ramírez-Gómez

Polytechnic University of Madrid, Spain

Dr. Shambhu Prasad Sah

University of Helsinki, Finland

Dr. Yang-Hsin Shih

National Taiwan University, Chinese Taipei

Prof. Berrin Tansel

Florida International University, USA

Dr. Xinhua (Frank) Yin

University of Tennessee-Knoxville, USA

Dr. Kefeng Zhang

Zhejiang University, China

Guest Reviewers

Dionisios Gasparatos

Zhiming Qi

TABLE OF CONTENTS

Volume 2 Number 2

June 2012

Tillage and Rice-Wheat Cropping Sequence Influences on Some Soil Physical Properties and Wheat Yield under Water Deficit Conditions S. Kumar, P. K. Sharma, S. H. Anderson, K. Saroch.....	71
Review Paper: Challenges and Limitations in Studying the Shrink-Swell and Crack Dynamics of Vertisol Soils T. M. Dinka, R. J. Lascano.....	82
A Technical Note: Orientation of Cracks and Hydrology in a Shrink-Swell Soil T. M. Dinka, R. J. Lascano.....	91
Evaluation of Shear Strength and Cone Penetration Resistance Behavior of Tropical Silt Loam Soil under Uni-Axial Compression S. I. Manuwa, O. C. Olaiya.....	95
Formation and Changes of Humic Acid Properties during Peat Humification Process within Ombrotrophic Bogs O. Purmalis, M. Klavins.....	100
Spatial Variation in Soil Chemistry on a Sub-Antarctic Island E. C. Conradie, V. R. Smith.....	111
Acacia trottilis and Calotropis procera: Do They Substantially Promote Soil Carbon Sequestration? T. S. Ksikisi.....	116
Concentration, Distribution and Comparison of Total and Bioavailable Heavy Metals in Top Soils of Bonab District in Zanjan Province A. H. Parizanganeh, V. Bijnavand, A. A. Zamani, A. Hajabolfath.....	123
Effect of Industrial Sludge Application on Soil Nitrogen and Wheat Plant Response S. Bose, A. K. Bhattacharyya.....	133
Comparative Effect of City Finished Compost and NPK Fertilizer on Growth and Availability of Phosphorus to Radish (<i>Raphanus sativus</i> L.) A. Sarker, Md. A. Kashem, K. T. Osman.....	146
Mango Tree Response to Lime Applied during the Production Phase E. V. de Almeida, F. M. Fernandes, R. de M. Prado, A. C. Boliani, L. de S. Corrêa.....	155
Stress-Tolerant Cassava: The Role of Integrative Ecophysiology-Breeding Research in Crop Improvement M. A. El-Sharkawy.....	162
Field Soil Respiration Rate on a Sub-Antarctic Island: Its Relation to Site Characteristics and Response to Added C, N and P A. Lubbe, V. R. Smith.....	187
Changes in Bacterial Density, CO₂ Evolution and Enzyme Activities in Poultry Dung Amended Soil L. Bhoi, P. C. Mishra.....	196

The figure on the front cover is from the article published in Open Journal of Soil Science, 2012, Vol. 2, No. 2, pp. 123-132 by Abdolhossein H. Parizanganeh, Vahid Bijnavand, Abasali A. Zamani and Ali Hajabolfath.

Open Journal of Soil Science (OJSS)

Journal Information

SUBSCRIPTIONS

The *Open Journal of Soil Science* (Online at Scientific Research Publishing, www.SciRP.org) is published quarterly by Scientific Research Publishing, Inc., USA.

Subscription rates:

Print: \$39 per issue.

To subscribe, please contact Journals Subscriptions Department, E-mail: sub@scirp.org

SERVICES

Advertisements

Advertisement Sales Department, E-mail: service@scirp.org

Reprints (minimum quantity 100 copies)

Reprints Co-Ordinator, Scientific Research Publishing, Inc., USA.

E-mail: sub@scirp.org

COPYRIGHT

Copyright©2012 Scientific Research Publishing, Inc.

All Rights Reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording, scanning or otherwise, except as described below, without the permission in writing of the Publisher.

Copying of articles is not permitted except for personal and internal use, to the extent permitted by national copyright law, or under the terms of a license issued by the national Reproduction Rights Organization.

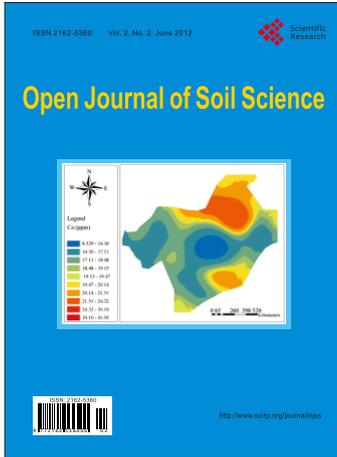
Requests for permission for other kinds of copying, such as copying for general distribution, for advertising or promotional purposes, for creating new collective works or for resale, and other enquiries should be addressed to the Publisher.

Statements and opinions expressed in the articles and communications are those of the individual contributors and not the statements and opinion of Scientific Research Publishing, Inc. We assume no responsibility or liability for any damage or injury to persons or property arising out of the use of any materials, instructions, methods or ideas contained herein. We expressly disclaim any implied warranties of merchantability or fitness for a particular purpose. If expert assistance is required, the services of a competent professional person should be sought.

PRODUCTION INFORMATION

For manuscripts that have been accepted for publication, please contact:

E-mail: ojss@scirp.org



Open Journal of Soil Science

ISSN: 2162-5360 (Print) ISSN: 2162-5379 (Online)

<http://www.scirp.org/journal/ojss>

Open Journal of Soil Science (OJSS) is an international journal dedicated to the latest advancement of soil science. The goal of its journal is to provide a platform for scientists and academicians all over the world to promote, share, and discuss various new issues and developments in different areas of soil science.

Editor-in-Chief

Dr. Haiyan Chu

Chinese Academy of Sciences, China

Editorial Board

Dr. Thomas John Aspray
Dr. Jie Chen
Dr. Wilfredo A. Dumale, Jr.
Dr. Wilfredo A. Dumale
Prof. Thomas E. Fenton
Prof. W. G. Dilantha Fernando
Dr. Bente Foereid
Dr. Adriel Ferreira da Fonseca
Dr. Rima B. Franklin
Dr. Bin Gao
Dr. Daniel Hirmas

Dr. Kamlesh Jangid
Dr. Michael B. Jenkins
Dr. Antonio Jordán López
Prof. Mehmet Rüştü Karaman
Prof. Tasios Karathanasis
Dr. Usama F. A. Karim
Prof. Arno Kleber
Dr. Sandeep Kumar
Prof. Dar-Yuan Lee
Dr. Ana Teresa Lima
Prof. Francisco Jose Martín Peinado

Dr. Julia Martínez Fernández
Dr. Maren Oelbermann
Dr. Feifei Pan
Dr. Álvaro Ramírez-Gómez
Dr. Shambhu Prasad Sah
Dr. Yang-Hsin Shih
Prof. Berrin Tansel
Dr. Xinhua (Frank) Yin
Dr. Kefeng Zhang

Subject Coverage

This journal invites original research and review papers that address the following issues in soil science. Topics of interest include, but are not limited to:

- Soil and Global Change
- Soil Biology and Biochemistry
- Soil Chemistry
- Soil Ecology
- Soil Environment
- Soil Fertility and Plant Nutrition
- Soil Geography
- Soil Improvement Studies
- Soil Microbiology
- Soil Physics
- Soil Remediation
- Soil Resources and Use
- Soil Science in Other Disciplines
- Soil Survey and Evaluation
- Soil Taxonomy
- Soil Tillage

We are also interested in short papers (letters) that clearly address a specific problem, and short survey or position papers that sketch the results or problems on a specific topic. Authors of selected short papers would be invited to write a regular paper on the same topic for future issues of the *OJSS*.

Notes for Intending Authors

Submitted papers should not have been previously published nor be currently under consideration for publication elsewhere. Paper submission will be handled electronically through the website. All papers are refereed through a peer review process. For more details about the submissions, please access the website.

Website and E-Mail

<http://www.scirp.org/journal/ojss>

Email: ojss@scirp.org