

WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION

HOT NEWS

Issue 05, 2014



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Cover photo: Terrace to control soil loss in slope farmlands, Zhuanglang County, Gansu Province, China

This issue is edited by Ms. Mao Juan, contributors including Prof. Li Rui, Dr Will Mahoney, Dr. Shabbir A. Shahid, Dr. Amir Kassam, Dr. Subasana Shrestha and Dr. Du Pengfei.



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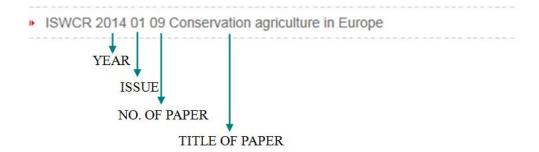
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Welcome to download and share these excellent study fruits. And welcome to submit your own achievements associated with soil and water conservation to us through iswcr@foxmail.com. Wish you enjoy it!



Call for Pictures Submission

Dear WASWAC members,

As you know, there are some beautiful and meaningful pictures in the covers of ISWCR and Hot News. So far, all pictures were taking from China.











There is an urgent need to put more pictures international. Under this circumstance, we cordially hope that you, as a member of WASWAC or an author of paper in ISWCR, are able to submit some pictures with the style of soil and water conservation to us.

While available, please let us know the position of picture shows, and also make sure that you have the copyright of the pictures. Your contribution will be much appreciated!

Please send pictures to waswac@foxmail.com or waswac@foxmai

Thanks a lot.

The editorial board of ISWCR and Hot News





WASWAC Delegation Attended the 17th Annual Meeting and Scientific

Conference of Philippine Society of Soil Science and Technology and visited

Philippine organizations of Soil and Water Conservation

Headed by President Li Rui and Adviser Samran Sombatpanit, the WASWAC delegation attended the 17th Annual Meeting and Scientific Conference of Philippine Society of Soil Science and Technology on 7-9 May 2014 at Aklan State University, Aklan, the Philippines. The delegation consisted of 12 people from China, Thailand and Philippines. After shared the research achievements with Philippine scientists WASWAC at the conference the delegation visited Philippine Bureau of Soil and Water Management (BSWM) and Philippine National senators dealing with laws on environment and conservation.



The Rostrum of the 17th Annual Meeting and Scientific Conference of Philippine Society of Soil Science and Technology



The new president (in the middle) of Philippine Society of Soil Science and Technology meet with the WASWAC President Li Rui (at the Right side)and Adviser Samran Sombatpanit, (At the Left side)



The past president of of Philippine Society of Soil Science and Technology giving the certification of award to WASWAC Adviser Samran Sombatpanit





The past president of of Philippine Society of Soil Science and Technology giving the certification of award to WASWAC President Li Rui



WASWAC delegation visits Philippine National senators dealing with laws on environment and conservation.



WASWAC delegation visit Philippine Bureau of Soil and Water management.







October 15-17, 2014

Ciudad

CICES VII (7th Biannual Conference of the IECA Iberoamerican Chapter)

Colonial, Antigua, Guatemala

> CICES VII will bring together members of IECA as well as representatives from the public, corporations, government, and academia in Latin America, Spain, and North America to promote trade, technology and exchange of knowledge regarding erosion and sediment control, thereby contributing to economic, environmental and social development of Latin America. The conference will be held in Spanish.

For additional information, contact:

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www.murdoch.edu.au

Faculty of Veterinary and Life Sciences Agricultural Science

Conference on Conservation Agriculture for Smallholders in Asia and Africa, 7-11 December, 2014

The Regional Conference on Conservation Agriculture for Smallholders in Asia and Africa will be held in Mymensingh, Bangladesh from 7 to 11 December 2014. The call for papers has gone out, with submission due by the 30 June 2014.

The abstract style guide can be downloaded from

http://www.scac2014.org/Call for Papers.aspx#.U3q04vmSx8E

We invite you to submit an abstract for this conference under the themes of:

1.Machinery: Design and development of CA-based crop establishment and herbicides spraying machinery, implements and tools for smallholders;



- 2. Weed management: Suitable integrated weed management options (chemical, mechanical, crop rotation and biological);
- 3. Soil, water and agronomic management for CA on smallholder farms;
- 4. Commercialisation, adoption and continuous improvement of CA-based technologies;
- 5. Policy and institutional framework for the adoption of CA.

The conference website is available at http://www.scac2014.org

International Conference on Natural Resource Management for Food Security and Rural Livelihoods to be organized by Soil Conservation Society of India, New Delhi, 10-13 February 2015, New Delhi, India. The conference aims to address the issues and challenges ahead for management of natural resources to meet the food demands and economic sustainability during the 21st century. The focus of the Conference will be to protect, conserve and develop the natural resources and use them on sustainabe basis to alleviate hunger, enhance livelihood security and improve the quality of life. Scientists, scholars, students, academicians, extension workers, policy makers, farmers, farm organizations and other stakeholders from the field of natural resource management across the continents are invited to submit the abstract of their papers and attend the conference to deliberate on the issues. For details and updates visit website: www.soilcsi.in or contact icscsi2015@gmail.com



WCA-2014 provides an ideal platform to showcase your novel technologies and products in China. It is developed to offer comfort to delegates while maximizing exhibitor exposure, the coffee breaks and poster sessions will all take place in the exhibition area promoting frequent repeated opportunities for delegates to visit the exhibition.





Details at: http://www.bitcongress.com/WCA2014/

Natural resources green technology & sustainable development



26th-28th November 2014, Zagreb, Croatia

For more information, please go to http://www.sumins.hr:8080/GREEN2014/





1. Postdoctoral Opportunity - Digital Soil Mapping



The University of Arizona Center for Environmental Physics and Mineralogy and Environmental Pedology lab solicit applications from prospective postdoctoral scientists to conduct collaborative soil science research focused on the application of geospatial, statistical, and field measurement techniques to the digital soil mapping (DSM) of soil physical, chemical, and biological properties and soil-landscape classification. Project work will span spatial scales ranging from small first order catchments to areas over 250,000 ha, and span diverse environments from arid and semiarid ecosystems to wet tropical forests, with a particular focus on the Southwest US. Required qualifications include a Ph.D. in soil science or closely related field.

Preferred qualifications include a strong background in soil and landscape modeling techniques, including geospatial and geostatistical analyses, use of remote sensing products such as LandSat and MODIS, digital terrain modeling, and geographic information system applications. We have immediate need for an individual that can assist in project management, including data analysis and modeling, working with graduate students and other postdoctoral scientists, and active participation in grant and manuscript writing. A particular focus of this position in the near term will include working across sites that are part of the Critical Zone Observatory (CZO) network with the aim of developing cross-CZO publications and DSM techniques. Current project funding extends over a 3-5 year period with the potential to transition the position to an Assistant Research Scientist appointment with the CEPM.

Interested applicants should submit a cover letter of interest and a curriculum vitae to Prof. Craig Rasmussen (crasmss@cals.arizona.edu) for consideration. Please feel free to contact Craig Rasmussen for further discussion.

Deadline by 28 June 2014.

More information at: http://www.earthworks-jobs.com/soil/arizona14051.html



2. Agricultural Application Engineering Assistant Cooperative Extension Specialist



The University of California, Division of Agriculture and Natural Resources (UC ANR), seeks a Cooperative Extension Specialist to provide statewide leadership in the area of application engineering extension and applied research with the goal of improving agricultural productivity and reducing the impact of pesticides and other agricultural chemicals on the environment. Perennial specialty crops such as almond, pistachio, citrus, stone fruit and grape will be the area of primary focus.

The Cooperative Extension Specialist is responsible for developing new and evaluating existing practices and technologies in agricultural engineering to benefit agricultural production through improvements in the efficacy and/or efficiency of pest management and to minimize the impact of agricultural chemicals on air and water quality. This position will have a key role in leadership and coordination to maximize benefit to stakeholders and all Californians.

The successful candidate will develop an extramurally-funded research and education program; forge strong interactions with local county partners and agricultural industry clientele, as well as with UC colleagues, especially the Department of Biological & Agricultural Engineering at UC Davis; contribute to core research and extension goals established within ANR; and assist in establishing an innovative multi-disciplinary extension and applied research program in their field of expertise.

The CE Specialist will provide overall leadership for planning and coordination of statewide extension education in application engineering in perennial specialty crop systems in California.

MAJOR RESPONSIBILITIES: This position will have a major role in addressing these Strategic Initiatives:

- ♣ Enhance competitive sustainable food systems reduce grower costs through a more efficient application of pesticides, fertilizers, labor and energy.
- Manage endemic and invasive pests and diseases efficient management of invasive and endemic pests in specialty crops is essential, with effective pesticide application to control or eradicate the pests or diseases in a safe manner.
- ♣ Improving water quality, quantity and security encourage the use of equipment and practices that



limit the contamination of both subsurface and surface water through aerial drift and surface runoff of pesticides and nutrients.

♣ Enhance the health of Californians and California's agricultural economy - Making improvements in conventional and organic pesticide application practices yields healthy produce for Californians.

EDUCATION AND EXPERIENCE: A minimum of a Ph.D. is required, though other advanced degrees are encouraged, with a background in agricultural engineering with a preferred emphasis on spray application technology, machinery design, and/or environmental quality. Demonstrated excellence in applied agricultural research and extension is highly desirable. Excellent written, oral and interpersonal communication skills are required.

SALARY: Beginning salary will be in the Cooperative Extension Specialist Series, Assistant Rank and commensurate with applicable experience and professional qualifications. For information regarding Cooperative Extension salary scales, please refer to the University of California website: http://ucanr.edu/sites/anrstaff/files/187040.pdf.

For a full position vacancy announcement and application procedures, please visit our website http://ucanr.edu/jobs. To assure full consideration, application packets should be submitted by July 23 2014 to <a href="maintenancement-announcemen

The University of California offers an attractive benefits package. For more information, please visit the UC Benefits Web site: http://ucnet.universityofcalifornia.edu/

Copy from: http://www.earthworks-jobs.com/fas/ucanr14051.html

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New frameworks open up innovative possibilities for conservation and development in the Hindu Kush Himalayas

17 May 2014, Chengdu, Sichuan, China



This week 40 experts from around the globe came together to finalize new frameworks for long-term monitoring of the environment and socioeconomic situation and ecosystem management in seven transboundary landscapes in the Hindu Kush Himalayan region. Participants from Austria, China, India, Nepal, Pakistan, Republic of Korea, and the United Kingdom shared their ideas and experiences at a three-day consultation held in Chengdu, China. The consultation was followed by a two-day field trip to the ecosystem management and monitoring sites in the Sichuan Province of China.

The event was jointly organized by ICIMOD, Chengdu Institute of Biology (CIB) and the Chinese Committee of ICIMOD (CN-ICIMOD) with support from the Department for International Development (DFID), the German Federal Ministry for Economic Cooperation and Development (BMZ)/Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ), and the Austrian Development Agency (ADA).

Dr Gopal Rawat and Dr Nakul Chettri from ICIMOD presented two papers outlining the draft frameworks for ecosystem management and for long-term environmental and socioeconomic monitoring respectively. Other participants provided guiding feedback on the papers. Dr Eklabya Sharma, Director of Programme



Operations at ICIMOD said that an ecosystem approach to resources management is necessary for sustaining ecosystem goods and services at the 'landscape level'. He added that it is important to monitor both biophysical and socioeconomic status to ensure informed decision making and to effectively address emerging development trends in the Hindu Kush Himalayas.

Prof. Zhao Xinquan, Director of the Chinese Academy of Sciences, and Prof. Wei Fangqiang, Deputy Director of the Institute of Mountain Hazards and Environment at the Chinese Academy of Sciences, expressed appreciation for the collaboration between ICIMOD and CN-ICIMOD. "As countries give increasing priority to economic development, the challenges of biodiversity conservation are steadily mounting," said Prof. Xinquan, "and the trade-offs between the two could be balanced through an appropriate approach to management substantiated by better science for informed decision making".

In his keynote address, Prof. S.P. Singh from the Institute of Technology and Science, Dehradun, India said that the Hindu Kush Himalayas provide essential goods and services to many communities and that the 'ecosystem approach' is necessary for sustaining the flow of goods and services. Likewise, Prof. Eun-Shik Kim, Chair of the International Long-Term Environmental Research (ILTER) under the East Asia-Pacific Regional Network, shared the lessons learned from ILTER and emphasized the importance of site-based research and monitoring. He also said that ICIMOD would receive backup technical assistance for the initiatives implemented through its partners in the Hindu Kush Himalayas.

Mr Philip Bubb from UNEP-WCMC highlighted the need to understand the complex ecosystem dynamics and develop appropriate indicators for effective monitoring, especially in the context of climate change and globalization.



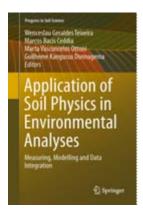




Application of Soil Physics in Environmental Analyses:

Measuring, Modelling and Data Integration

By W.G. Teixeira, M.B. Ceddia, M.V. Ottoni, G.K. Donnagema (Eds.). Progress in Soil Science Series. 2014. Springer, Dordrecht. ISBN 978-3-319-06012-5, 476 pages.



The importance to preserve soil and water is widely recognized. Soil physics has grown considerably in the last years, however, those advances are thoroughly dispersed. In this volume, the authors will bring together the effectiveness of new field and lab sensors and the state-of-the-art in modeling and data analysis.

The topics have been divided as follows:

Part 1 - Integrating data in soil physics proposes re-establishing the knowledge chain, linking tacit knowledge to cutting edge science. The use of field soil data or what has been called hydropedology, is discussed and exemplified.

Part 2 - Data analysis in soil physics and pedotransfers functions presents the analysis of data in state-space and geostatistical approaches.

Part 3 – Different approaches to characterize soil physical quality indicators is focused on new techniques used to characterize, map and interpret soil physical parameters. The challenge of assessing soil physical quality is discussed from the simplest to the most complex indicators.

Part 4 - Sensors and monitoring in soil physics centers the discussion on equipment and sampling techniques for monitoring soil physical parameters. Technological advances are addressed, such as X-ray tomography, which provides a means to evaluate pore topological properties in a noninvasive way. A comparison with in situ and remotely sensed data of soil moisture and limitations in using these data for hydrological modeling



are also discussed.

Part 5 - Creating data bases and models applied to soil physics discusses alternative approaches for modeling water flow and solute transport in the vadose zone. A review of multi-component solute transport models and examples of their use in agricultural and environmental applications are given. The phenomenon of dynamic non-equilibrium in soil water flow is discussed as the need of a paradigm change. Root water uptake is also covered with advanced approaches and the last two chapters address the challenges to develop soil data bases.

Keys to soil taxonomy

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This edition includes findings from United Arab Emirates which Dubai based International Center for Biosaline Agriculture jointly will Environment Agency Abu Dhabi submitted to USDA-NRCS to consider inclusion into the revised version. This edition is free to download.

More information please contact with Dr. Shabbir A. Shahid at s.shahid@biosaline.org.ae





WASWAC MEMBERSHIP APPLICATION/RENEWAL FORM (Issued 120501)

(For applicants from all countries)

Name: (Ms./Mrs./Mr./Prof./Dr.)			Gender: □F □I	M	
Institution:					
Postal address:					
State/Province:					
Phone:	Fax:				
Emails (Please give at least 2 addresses to	o ensure uninterrupted contact):	(1)			
(2)	(3)				
My specialized field(s):					
Please sign me up for the WASWAC	membership in category*:	1(IM)□2(L	M)□3(OM)□4(SM&GM)	
Membership for the year(s)	@US\$	=	US\$		
Donation for developing country membership, etc.			US\$		
Donation to the Moldenhauer I		US\$			
		Total	US\$		

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