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Hot News

Issue 9, 2019



WORLD ASSOCIATION OF SOIL AND WATER CONSERVATION

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Editors: Dr. Du Pengfei, Dr. Zhao Ying.



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WASWAC Website: www.waswac.org

The Fourth WASWAC World Conference was successfully held

Soil and Water Resources Management for Climate Smart Agriculture and Global Food and Livelihood Security

At New Delhi, India, November 5th-9th, 2019



The 4th WASWAC World Conference was successfully held at New Delhi, India, during the period of November 5-9, 2019. The theme of the conference is “Soil and Water Resources Management for Climate Smart Agriculture and Global Food and Livelihood Security”. This conference was jointly organized by WASWAC, International Soil Conservation Organization (ISCO) and Soil Conservation Society of India (SCSI), hosted by the SCSI, and co-sponsored by the Indian Council of Agricultural Research (ICAR), DST-SERB, NABARD, ISSSR, NBA, NRAA, CSIR and ISRO, and supported by IUSS and ESSC.

This conference received a lot of greeting messages from both host country government and many international organizations, including the Hon’ble Vice-President of India, Minister of Agriculture & Farmers’ Welfare, Rural Development and Panchayati Raj, Minister for Jal Shakti, MS Swaminathan Research Foundation, India Department of Agricultural Research & Education and Indian Council of Agricultural Research, International Crops Research Institute for the Semi-arid Tropics, International Rice Research Institute, International Water Management Institute, International Union of Soil Sciences, Soil and Water Conservation Society, Indian Council of Agricultural Research, Watershed Management Society of Iran.

At the opening ceremony, President of WASWAC, Prof. Li Rui, gave the welcome speech. Then Chief Guest Dr. Trilochan Mohapatra introduced conference related publications.



Opening ceremony of the WASWAC World Conference IV

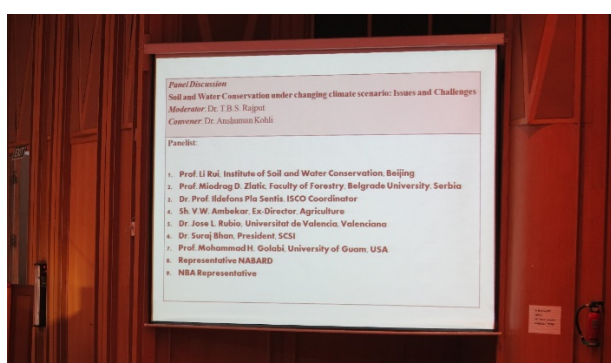


Welcome speech of Prof. Li Rui, president of WASWAC



Introduction of conference related publications

The panel discussion topic is “Soil and Water Conservation under changing climate scenario: Issues and Challenges”. Prof. Li Rui from Institute of Soil and Water Conservation, Prof. Miodrag D. Zlatic, from Belgrade University, Dr. Samir A El-Swaify from ISCO, Sh. V.W. Ambekar, ex-director of Agriculture, Dr. Jose L. Rubio from Universitat de Valencia, Dr. C.P. Reddy from MoRD, GoI, Dr. Suraj Bhan from SCS, Prof. Mohammad H. Golabi from University of Guam, representatives from NABARD and NBA attended the panel discussion.



Panel discussion of the conference

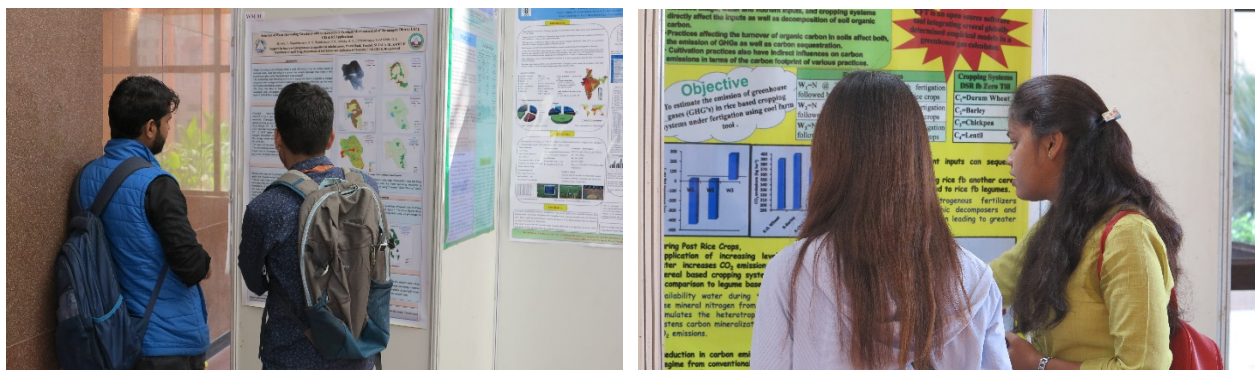
The five days conference provided a fruitful discussion concerning the following topics: soil degradation assessment and remediation, water resource conservation and management, climate smart techniques for sustainable agriculture, land use planning and management for food and livelihood security, biodiversity conservation and strategic soil and water

management, future strategies for resource conservation to mitigate climate change, next generation nutrient and water management in agriculture, socio economics issues in resources management for livelihood security, policy interventions in soil and water management for global food security, bio-industrial approaches to watershed for food and livelihood security, geospatial techniques and simulation modeling for soil and water management, and new paradigms in soil health and nutrient management.

Several awards set up by WASWAC have been given out at the conference and 11 scientists and experts won the awards. The conference itself also set up some awards for the presentations, such as best oral presentation, best poster and so on.



Oral presentations and discussions at the conference



Poster presentations and discussions



Best oral presentation award



Best poster presentation award

WASWAC set up an exhibition booth for introduction of the association and its official journal *International Soil and Water Conservation Research*. Many attendees at this conference showed great interests in joining the association and read about the journal.





Attendees filling forms to join WASWAC

Beside the five day academic communication, attendees also enjoyed an Indian cultural performance at the welcome ceremony. The traditional dancing performance added a lot of fun to the conference.



Indian cultural performance at the welcome ceremony

WASWAC awards were released during the 4th World Conference

WASWAC issued its awards during the WASWAC World Conference IV.

The winners of WASWAC Award for the period of 2017-2019 are listed as follows. Congratulations for all the winners who have made great contribution to soil and water conservation.

Award Type	Year	Winner	Country
Norman Hudson Memorial Award	2017	Edoardo A. C. Costantini	Italy
	2018	Rainer Horn	Germany
	2019	Jose Luis Rubio	Spain
Distinguished Research Award	2019	Rachid Mrabet	Morocco
		Zhanbin Li	China
		Pasquale Borrelli	Switzerland
Distinguished Extensionist Award	2019	Seyed Hamidreza Sadeghi	Iran
		Amir Kassam	UK
		Donald C. Reicosky	USA
Special Contribution Award	2019	Julian Dumanski	Canada
		Suraj Bhan	India



Prof. Edoardo A.C. Costanini



Prof. Rainer Horn



Prof. Jose Luis Rubio



Prof. Rachid Mrabet



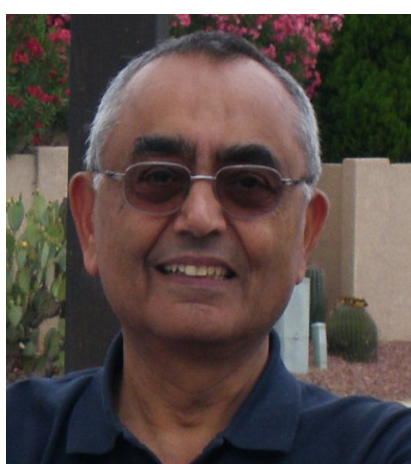
Prof. Zhanbin Li



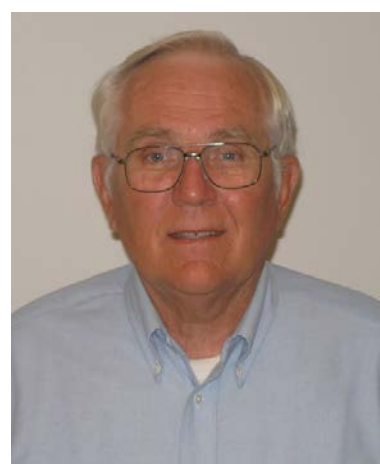
Prof. Pasquale Borrelli



Prof. Seyed Hamidreza Sadeghi



Prof. Amir Kassam



Prof. Donald C. Reicosky



Prof. Julian Dumanski



Prof. Suraj Bhan

According to the BASIC RULES FOR WASWAC AWARDS, the Award Committee (WASWAC AC) issued the Announcement of WASWAC Award (2019) on November, 2019. Many positive responses have been received in the following several weeks. Based on the nomination results, primary selection

was made by WASWAC AC, then the primary selected candidates name list was submitted to WASWAC Council for voting to reveal the final winners.

The basic introduction for the awardees are as follows:

Prof. Edoardo A.C. Costanini

Research fields

- ✚ Soil Conservation; Soil Genesis and Paleopedology: Digital Soil Mapping: Soil Databases; Forest soils: Soil, Crop and Food Quality(soil component of the terroir effect)
- ✚ Recent research activities Coordination of international projects such as "Monitoring for Soil Protection." Restoring optimal Soil functionality in degraded areas within organic Vineyards, "Arid lands restoration and combat of desertification setting up a drylands and desert restoration hub “
- ✚ Chair of the of the Pillar 4"Enhance the quantity and quality of soil data and information: data collection, analysis, validation, reporting monitoring and integration with other disciplines" of the European Soil Partnershp, FAO initiative " Global Soil Partnership
- ✚ National Coordinator of the project "Soil organic carbon map of Italy"
- ✚ Coordinating expert of the Focus Group on soil salinization of the EU DGAGRI- European Innovation Partnership

Main research achievements

- ✚ Methodologies for the interdisciplinary research work between Pedology, Geomophology and Agronomy highlighting the relationships between soil suitability for vine cultivation, wine quality and soil erosion through a teritorial approach. For the first time the consequences of excessive land levelling and bulldozing on vine grape production and wine quality were highlighted
- ✚ Introduction of the concept of soil heritage among geosites, with the pioneer work on the recognition of soils as part of our cultural heritage and following researches on pedodiversity
- ✚ First time demonstration and reporting of the ubiquity and different nature and genesis of soils derived by aeolian depositions in Italy

- ✚ Creation and application of methodologies and ICT tools (Decision Support Systems based on Digitized Soil Spatial Information) actually supporting the implementation of Soil and water conservation measures in the National and Regional Planning of the Agricultural Policies

Prof. Rainer Horn

Research fields including:

- ✚ swell/ shrink processes in soils – aggregate formation and quantification of their functions and definition of mechanical and hydraulic boundaries and rigidity limits,
- ✚ soil mechanical processes and properties in structured arable, forest and grassland soils under various climatic and land use systems / from arctic to aridic conditions,
- ✚ mechanical strength analyses on various scales – from micro- to macro- and development of scale independent transfer parameters for extrapolation; development of FEM model approaches for coupled processes,
- ✚ quantification of (an)isotropic soil flux and stress functions,
- ✚ development of long-term impermeable waste deposit capping systems,
- ✚ micro- and macroscale transport processes in structured arable soils under various tillage systems,
- ✚ soil – plant root interactions – how far can hydraulic and gaseous fluxes as well as physicochemical processes be forecasted in soils,
- ✚ development of dynamic hydraulic and pneumatic flux models based on retention curve and X-Ray CT data analyses,
- ✚ analysis of groundwater pumping effects on hydraulic properties of mineralized peaty soils – remediation approaches
- ✚ cemetery soils – how far can they be classified for long term optimal body mineralisation and what kind of soil amelioration is applicable as a requirement for the reuse of these sites; development of a cemetery soil use manual for Germany

Service to the Society:

- ✚ Chair Division S-1 (Soil Physics) of Soil Science Society of Germany, 1990 - 1996
- ✚ Chair Commission I (Soil Physics) of the International Soil Science Society, ISSS 1994 – 1998

- ✚ Chair Commission A Soil Structure of the International Soil Tillage Research Organisation ISTRO 1994 – 2000
- ✚ Vice President ISTRO (2000-2003)
- ✚ President International Soil Tillage Research Organisation ISTRO 2003 – 2006
- ✚ Chair Working Group PT (International Soil Science Society) Pedotechnique, 1990 -1994;
- ✚ Chair Working Group SM (International Union of Soil Science) Environmental Soil Mechanics 1998 -
- ✚ Chair Commission 3.4 soil technology and soil management IUSS (2002 – 2006)
- ✚ Chair Division 3 IUSS 2010-2014
- ✚ President of the German Soil Science Society (2008-2011)
- ✚ President elect of the International Union Soil Sciences (IUSS) (2013- 2014)
- ✚ President of the International Union Soil Sciences (IUSS) (2014- 2016)
- ✚ Past President of the International Union Soil Sciences (IUSS) 2017- 2018
- ✚ Member of the Intergovernmental technical Panel Soils ITPS - FAO (since 2016 2018)
- ✚ Member of the Sino European Panel on Land and Soil (EU Brussels)

Prof. José Luis Rubio

Dr. José Luis Rubio has 40 years of activity dedicated to the investigation of soils and their processes of degradation and conservation with numerous contributions to the scientific literature.

He has been a pioneer in numerous aspects related to combating desertification, environmental security and socio-economic consequences of land degradation.

He has made significant contributions in institutional aspects, advisory responsibilities and influence on public opinion.

He has been a significant actor and leader in the promotion of soil conservation worldwide

Contribution to knowledge:

- ✚ Pioneer in development of empirical models of water erosion, restoration of degraded ecosystems, use of rainfall simulators, integrated mapping methodologies and study of the impact of forest fires.

- ✚ Contributor to development of land restoration and conservation measures in different dry lands of the world
- ✚ Development of soil bioengineering for soil conservation after forest fires
- ✚ Development of global protocols for the legal and institutional frameworks of the sustainable use of the soil
- ✚ Promoter of the concept of soil and environmental security

Prof. Rachid Mrabet

Research and expertise

- ✚ Agro-ecology – Conservation Agriculture – Climate smart agriculture
- ✚ Soil quality and carbon modeling & sequestration
- ✚ Erosion assessment & modeling
- ✚ Hydrology & soil physics
- ✚ Soil fertility and fertilizers
- ✚ Natural resources management
- ✚ Irrigation & Salinity
- ✚ Cropping system modeling and yield forecasting
- ✚ Cereal-legume-livestock integrated production systems
- ✚ Drought and Climate Change Adaptation
- ✚ Oasis & Rangeland management & rehabilitation
- ✚ Food security and governance
- ✚ Desertification & Erosion

Honors and award received

- ✚ Hassan II Grand Prize for Innovation and Research in Agriculture, 2009.
- ✚ Best Lecturer for Soil & Tillage Research in 2009.
- ✚ Van Ouwerkerk Memorial Award, ISTRO, Brisbane, Australia, 2003.
- ✚ International Soil Tillage Research Organisation (ISTRO) Award, Fort Worth, USA, 2000
- ✚ International Erosion Control Association (IECA) Award, Reno, Nevada, USA, 1994

Prof. Li Zhanbin

Position: Associate President and Professor of Xi'an University of Technology; Guest Researcher and Ph.D. Candidate' supervisor of Institute of Soil and Water Conservation, Chinese Academy of Sciences and Ministry of Water Resources

Research interests: Catchment sediment and Eco-Hydraulics research

Concurrent Academic: Associate Chairman of Soil and Water Conservation Commission of International Union of Soil Sciences (IUSS); Chairman of State Key Laboratory of Soil Erosion and Dry-land Farming on the Loess Plateau; Chief Editor of Journal of Soil and Water Conservation (in Chinese)

Academic Achievement: Published more than 10 Books; Published more than 200 International Journal papers

Scientific Achievement

- ✚ Created catchment erosion energy theory and prediction runoff and sediment evolution in Loess Plateau
- ✚ Catchment sediment control technology based on dispersion reduction of runoff erosion energy theory
- ✚ Improving safety of gully remediation project and runoff and sediment utilization

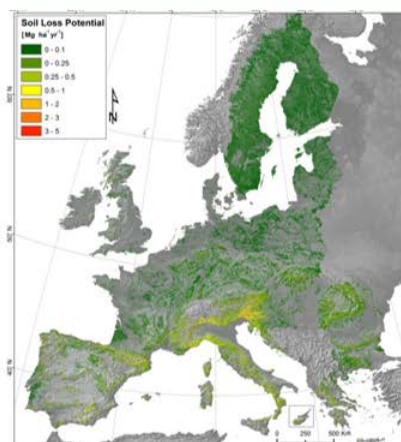
Prof. Pasquale Borrelli



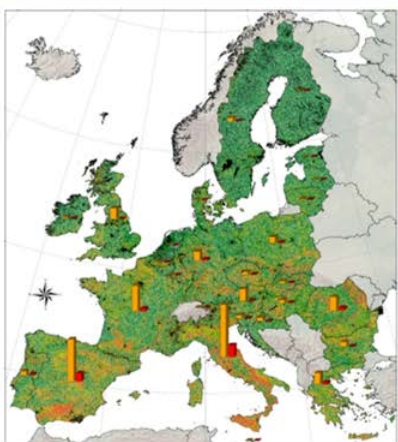
Achievements:

- ✚ Pan-European Scale Soil Erosion Assessments
- ✚ Global Soil Erosion Modelling Platform (GloSEM)

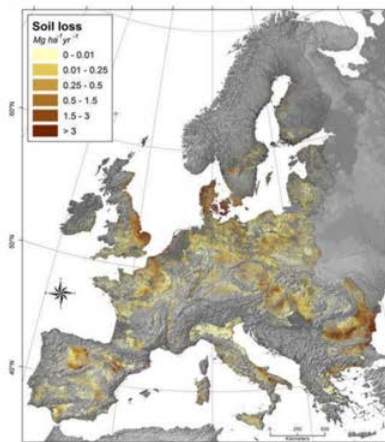
Erosion in Forests



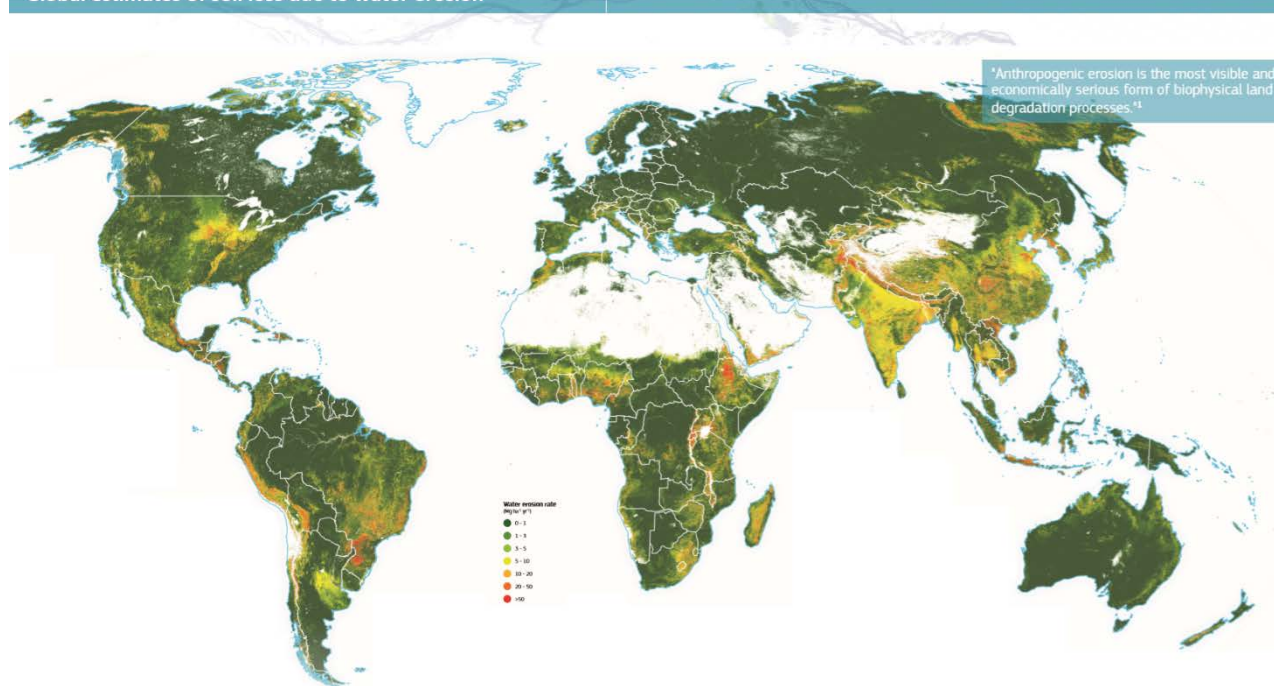
Water Erosion



Wind Erosion



Global estimates of soil loss due to water erosion



Prof. Seyed Hamidreza Sadeghi

Experience

- ✚ Head, Department of Watershed Management Engineering, Tarbiat Modares University from May 2018 to present.
- ✚ Head, Department of Watershed Management Engineering, Tarbiat Modares University from May 2015 to Oct. 2016.
- ✚ Full Professor at Tarbiat Modares University, Tehran, Iran since Jun. 2011.

- ✚ Member of Planning and Evaluation Committee of International cooperation, Tarbiat Modares University since Jun. 2011.
- ✚ Member of Scientific and International Cooperation Committee of Tarbiat Modares University since Mar. 2011.
- ✚ Dean, International Campus of Tarbiat Modares University, Noor from 2010-2014.
- ✚ Dean, Faculties of Natural Resources and Marine Sciences, Tarbiat Modares University since 2010.
- ✚ Vice Dean, College of Natural Resources and Marine Sciences, Tarbiat Modares University since 2009.
- ✚ Associate Professor at Tarbiat Modares University, Tehran, Iran since 2006.
- ✚ Head, Department of Watershed Management Engineering Tarbiat Modares University, from May 2004 to 18 Jun., 2011.

Main publication:

- ✚ Indexed Papers (ISI, Scopus, English Journals): 110
- ✚ Extensional Peer Reviewed Papers (Mainly in Persian): 14
- ✚ Congresses papers: 320
- ✚ Research project leader/Coleader: 16
- ✚ Books (Translated, written and edited): 13
- ✚ Innovation: 2

Prof. Amir Kassam**Achievements:**

- ✚ 15 Books and edited volumes, and 5 special issues of journals.
- ✚ 260 plus published articles in journals and conference proceedings, and chapters in books related to: agroecology, land resources assessment for development, agronomy and crop physiology, soil-plant-water relationships, sustainable production intensification, Conservation Agriculture, System of Rice Intensification, ecosystem services, soil health and sustainable soil management, and food and agriculture systems.

- ✚ Team Member that established the FAO Agro-Ecological Zones (AEZ) Methodology and made an assessment of crop and land potentials for the developing regions (1978-80).
- ✚ Team Member that established the FAO Human Supporting Capacity Methodology and made an assessment of the Human Supporting Capacity potential for the developing regions (1981-82).
- ✚ Formulating and supporting the establishment of large rural development programmes in Pakistan and India (1982-89).
- ✚ Working with and advising international and national organizations in the fields of: land resources evaluation for development; sustainable agricultural and rural development; and agricultural research, education and training, and extension.
- ✚ Championing the globalization and mainstreaming of Conservation Agriculture (since 2000).
- ✚ Championing the globalization of the System of Rice Intensification (since 2000).
- ✚ Establishing and delivering a full semester course at Reading University on Rethinking Agriculture: Implementing Solutions, based on Conservation Agriculture (2010-2015).

Awards:

- ✚ 1966-67: King George VI Memorial Fellowship Award by the English Speaking Union, UK.
- ✚ 1991-2014: Fellow of the Society of Biology (FRS), UK.
- ✚ 2002: Award for Excellence in Science and Technology, Aga Khan National Council for the UK.
- ✚ 1995-2004: Honorary Principal Research Fellow, School of Agriculture, Policy and Development, Reading University, UK
- ✚ 2005-current: Visiting Professor, School of Agriculture, Policy and Development, Reading University, UK
- ✚ 2005-current: Officer of the Order of the British Empire (OBE) awarded by the Queen for services to tropical agriculture and to rural development.
- ✚ 2009: Merit Award for services to agriculture development, Tropical Agriculture Association (TAA), UK.
- ✚ 2012-current: Honorary Member, European Conservation Agriculture Federation (ECAAF), Brussels, Belgium.

✚ 2015-current: Fellow of the Royal Society of Biology (FRSB), UK.

Prof. Donald C. Reicosky

His early research dealt with soil-water-plant-atmosphere relationships, with emphasis on measuring evapotranspiration, photosynthesis and plant water-status as related to soil water deficits and tillage. He focused on environmental quality issues related to tillage and residue management with emphasis on soil carbon management and losses of carbon dioxide following intensive tillage. His research used a canopy gas exchange measurement technique to evaluate short-term tillage-induced CO₂ flux from soil that has enhanced our understanding of soil carbon management. The incumbent's research findings demonstrate environmental quality issues associated with tillage and residue management and emphasized the importance of soil carbon management and use of conservation agriculture or no-till to minimize carbon losses in agricultural production systems.

His research attracted international attention through requests for reprints and scientific presentations at farmer run No Till or Direct Seed Associations around the world in Argentina, Brazil, Chile, Paraguay, Australia, New Zealand, China, Japan, Denmark, France, Belgium, Italy, Spain, Germany, Kazakhstan, Uzbekistan, Russia, Finland, India, Ukraine and Moldova as well as in the US and Canada. Invited keynote technical presentations at the first two World Congresses of Conservation Agriculture and at numerous national and international policy groups support the international significance of this research.

Prof. Julian Dumanski

Major achievements:

- ✚ Extensive research and travel in temperate and tropical regions
- ✚ Executive and advisory positions in national and international research institutions
- ✚ Development of research paradigm on Sustainable Land Management
- ✚ Lead author for 1st climate Change report for Canada, agriculture chapter
- ✚ Senior collaborator on World Bank Program on land quality indicators
- ✚ Lead author on first GEF program on land degradation

- ✚ Linking national and international research institutions, e.g. CGIAR, to capture environmental benefits under the international environment conventions, e.g. FCCC, CBD, CCD
- ✚ Collaborated and advised WASWC head office in reorganization of WASWC, including launching the IJSWCR
- ✚ Published over 200 scientific and technical reports

Recognition/ Executive Positions

- ✚ Distinguished Graduate in Agriculture, U. of S., 1986
- ✚ Founding Director, Soil Conservation, Canada, 1987
- ✚ Merit Award, Gov. Of Canada, 1998
- ✚ IPCC award for contribution to Nobel Peace Prize, 2007
- ✚ Vice President, Agricultural Institute of Canada, 1985
- ✚ Executive Member, International Board Soil Research and Management, Chairman of Program Committee, 1988 - 1994
- ✚ Chairman, International Working Group on land evaluation, IUSS, 1986 - 1988
- ✚ External reviewer, CSIRO Division of Water and Land Research, 1984

The Award ceremony was held in November 6 during the WASWAC World Conference IV.





WASWAC awards 2019 ceremony

Congratulations again for these winners!

The WASWAC Council Meeting was Held

During the 4th WASWAC World Conference, the WASWAC council meeting was held on November 6th.



Professor Suraj Bhan (WASWAC Deputy President) and Professor Sanjay Arora, made a Welcome and Congratulation address on behalf of host of the fourth WASWAC World Conference and the Academic Committee of conference.

President Li Rui and Prof. Ning Duihu, the secretary-general of WASWAC, gave a summary report on working team development, membership development, publication and publicity, research projects, conferences and trainings, communications, and financial situation in the last three years and what will be done in the following three years.

Professor Duihu Ning, (WASWAC Secretary General and Chairman of WASWAC Award Committee) made a Report of WASWAC Awards 2019 on behalf of WASWAC Award Committee. He reported the process and procedures of award evaluation in 2019, which were conformed the WASWAC award rules and regulation. The WAWAC award 2019 evaluation result is approved, totally 11 scientists from 11 countries shared the honors.



Prof. Suraj Bhan, Prof. Li Rui and Prof. Ning Duihu are giving lecture

Professor Miodrag Zlatic (WASWAC past President, the Chairman of WASWAC Nomination Committee) made a Report of WASWAC Council and president Election-2019 on behalf of WASWAC Election-2019 Nomination Committee, Prof. Ning Duihu will serve as the next term President of WASWAC.

Dr. Liqin Qu (Editor of ISWCR) made a report of Publication (International Soil and Water Conservation Research) on behalf of WASWAC Publication Committee. Her report focuses on the ISWCR development in recent there year from the perspective of editorial team, publication flow, academic influence and recent strategies.

Dr. Bin Wang (Chairman of WASWAC Youth Committee) made a report of Youth Committee on behalf of WASWAC Youth Committee. The report released the Executive summary of Youth Committee, introduced the recent activities and future development plan.



Prof. Miodrag Zlatic, Dr. Qu Liqin and Dr. Wang Bin are making presentations

Dr. Pengfei Du (Secretary of WASWAC) made a brief basic introduction on WASWAC Conference guidelines. He made an introduction on WASWAC World Conference, summarized the guidelines for holding WASWAC World Conference, and pointed out the WASWAC's action in providing necessary supports.

Then, the representative from Czech and Iran made the application for holding the fifth WASWAC World Conference and the third International Youth Forum of Soil and Water Conservation.



Dr. Du Pengfei, Prof. Borislav Sarapatka and Prof. Seyed Hamidreza Sadeghi are giving lectures

After discussion and voting, Czech was chosen to hold the fifth WASWAC World Conference in 2022, and Iran was chosen to hold the third International Youth Forum of Soil and Water Conservation in 2021.



Announcement of Czech Republic and Iran to be the next host of WASWAC World Conference and Youth Forum Professor Jose Rubio (WASWAC Deputy President, Chairman of WASWAC International cooperation Committee) made a brief presentation around the vision and mission of WASWAC and highlighting some principles as a conceptual framework for cooperation. He pointed out the target groups for cooperation, identified some thematic areas for cooperation and exposed some specific examples WASWAC can boost in the cooperation area.

Many suggestions for WASWAC development were proposed during the following discussion. The secretariat will summarize them and gradually put them into effect.



Discussion