



ISTRO INFO

**A Publication of the
International Soil Tillage Research Organization**

June 2009

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ISTRO INFO – June 2009

Having just completed my slide set and scanned the ISTRO Board Member packet for the up-coming 18th International Soil Tillage Research Organization (ISTRO) conference, my next task is to prepare my final issue of ISTRO INFO. It has been a real pleasure serving as your Assistant Secretary General and being able to communicate with all our members and their colleagues on a quarterly basis for the past six years. As I have written many times, the quality of a newsletter is only as good as the information that is provided, and thanks to all of you, the activities of ISTRO are a real pleasure to write about.

I am anxiously waiting for my flight to Turkey later this week where our ISTRO President Engin Cakir and his Conference Planning Committee have developed an excellent program for all of us who will be able to attend the triennial meeting in Izmir. At the end of that meeting, I will be taking over as Secretary General, so responsibilities for ISTRO INFO will be transferred to Blair McKenzie who will become our new Assistant Secretary General. Please send all future conference announcements, Working Group reports and updates, and Branch reports and updates directly to him. Obviously I will forward information sent to me, but Blair will become the new pen for this communiqué. If you are attending the conference in Izmir, be e sure to attend the General Assembly meetings where you will be able to congratulate the winners of our various scholarships. Engin and his team have also organized an excellent program and a very interesting set of stops for our Wednesday field excursion. If you cannot join us for this conference in Turkey, be sure to start planning now for the 19th Triennial ISTRO Conference in Uruguay. ISTRO President-elect Oswaldo Ernst and his organizing team have already begun planning for that event.

Thank you again for this opportunity to serve you and, as always, please share this information with all your friends and co-workers, and invite them to join you as a member of ISTRO.

Doug Karlen

Assistant Secretary General

18th Triennial Conference Information

I hope that everyone is busy preparing for our 18th Triennial ISTRO Conference in Izmir, Turkey. In case you have had a last-minute change in plans and realize you can now attend the conference, please know that on-site registration is available. Activities will begin on Sunday, June 14, when the ISTRO Board convenes at 13:00 hr at Sürmeli Efes Hotel & Resort. The Opening Session for the Conference will begin at 1800 hr that same day. If you are registered, you should have received a summary statement outlining any remaining expenses that you will need to pay when you register.

Young Researcher Scholarships

Congratulations to Julia Krüemmelbein who was selected to receive the “**Cees van Ouwerkerk Scholarship**” for 2009 and to our B “**Low-Income Country**” scholarship recipients who were Sheng Li, a Chinese citizen currently serving as a Visiting Fellow with Agriculture and Agri-Food Canada, Ranjan Bhattacharyya from India, currently a post-graduate student in Environmental Sciences at the University of Wolverhampton in U.K., and Mohammad Reza Mosaddeghi from Iran who is currently working in the Department of Soil Science, College of Agriculture at Bu-Ali Sina University in Hamadan, Iran. These scholarships will cover the cost of airfare, registration, lodging, meals, banquet dinner, field day tour and a CD from the ISTRO meeting. All of these recipients have developed excellent career paths and we look forward to many more years of productive research, teaching and technology transfer from all of them. Congratulations again!

Crop Rotation and No-Tillage Conference in Shortandy, Kazakhstan

Soil Conservation Farming Systems, developed under leadership of Academician A.I. Barayev and widely adopted during 1960-1970s, slowed down processes of wind erosion and stabilized grain yields in Kazakhstan. These systems were also adopted in the steppe belt of the Former Soviet Union including West Siberia, South Ural and to a lesser extent the Volga area, Northern Caucasus and South Ukraine. The system focuses on using grain-fallow rotations and conservation tillage. The long-term practice of summer fallow has been a weak point of the system leading to soil erosion, organic

matter losses and saline seepage, according to scientists from the USA, Canada and Kazakhstan. Chemical fallow, green manure and cover crops have been suggested as alternatives to traditional summer fallow. One of radical methods for avoiding summer fallow could be the adoption of crop rotations with no fallow. Positive research results and practical adoption cases are widely available in both Canada and Kazakhstan. This type of farming system may become promising for rain-fed agriculture of Central Asia, Russia and Ukraine.

The world trend in modern Conservation Agriculture is no-tillage which is found as the best solution for addressing issues of land degradation, including soil erosion, organic matter losses and soil salinity. In many countries, no-till has been practiced on a large scale. One of major advantage of no-till is saving resources: land, machinery and labor. The rate of adoption varies from region to region, from country to country. No doubt that in each particular eco-region success of no-till will depend on soil, weather and crops. The challenge for science is to identify the best technologies for successful adoption of no-till.

In response to this need, the Ministry of Agriculture of RK, CIMMYT, FAO, Washington State University, KGFRI, KAI, EURASIA Co, Farmer's Federation and No-Till Association of RK are organizing a conference in Shortandy, Kazakhstan, for 8 to 10 July, 2009. Kazakhstan was selected to organize the Conference because in this region of Central Asia, long-term research and large areas of no-till adoption and crop rotation with no summer fallow have already been adopted. No-tillage has also been found to be the best solution for irrigated agriculture, with substantial research data supporting the success of permanent raised bed planting and no-tillage in Central Asia, India, Pakistan and Turkey.

Due to the quarterly timing of ISTRO INFO, early registration for this conference has closed, so for more information, please contact Mekhlis Suleimenov at m.suleimenov@cgjar.org, Larissa Geronina at l.geronina@cgjar, Arman Baitassov a.baitassov@cgjar.org, or Sagat Ishmukhanbetov at: s.ishmukhanbetov@cgjar.org.

Estonia Branch Plans 2010 Conference

The Estonian Branch of ISTRO and the Estonian Research Institute of Agriculture (www.eria.ee), in collaboration with the Scientific Creative Association “SCA Ecofiller” and non-profit Organization “Estonian Excellence Centre for Rural Development,” are organizing a conference entitled “Risks in Agriculture: Environmental and Economic Consequences” for June 8-10, 2010, in Tallinn, Estonia. Tallinn can be reached by direct flight, bus, train and boats from Helsinki or Stockholm. English will be the official language for the Conference.

Several topics related to Agricultural Risks will be addressed. This includes: weather, soil compaction, weeds, crop damage and diseases, bacilluses, vermin, etc. Complex interactions associated with the machine-soil-plant system, energy and environmental/economic consequences of adapted tillage systems will be discussed.

For more information please contact Dr. Hab. Eng at edvin.nugis@eria.ee.

Bulgarian Branch Finalizing International Conference

The Bulgarian Soil Tillage Organization is finalizing their plans for an international conference at the “*Orhided*” hotel, in Albena on September 1 to 5, 2009. The conference themes are:

1. Soil tillage and degradation processes
2. Cropping systems and global climatic changes
3. Energy crops – technologies and ecological aspects
4. Agricultural engineering and energy saving technologies

For more information please see www.tillage.hit.bg or contact the conference secretariats (Dr. M. Benkova, Dr. P. Yankov) at istrobg@mail.bg or istrobg@gmail.com.

Croatia Branch Plans Conference on Soil Tillage

The Organizing Committee of the Croatia Soil Tillage Research Organization – CROSTRO and International Soil Tillage Research Organization – ISTRO, invites all ISTRO members and other interested persons to an international scientific conference

entitled “Soil Tillage, An Open Approach” in Osijek, Republic of Croatia, from the 9th to 11th of September 2010. Conference themes will be:

1. Soil tillage in function of environmental protection
2. Conservation tillage – direct seeding – no-tillage
3. Soil biotic and abiotic degradations – causes and consequences
4. Soil tillage – new approach – technologies – perspectives

The scientific and professional presentations will promote correct application of agrotechnical measures, the newest state-of-the-art information and techniques, and alternative approaches in agricultural production – all in scope of soil tillage. English will be the official language for the conference. For more information, see the website: <http://suncokret.pfos.hr/~hdpot/simpozij.htm> or contact Dr. Bojan Stipešević – Branch President at: Bojan.Stipesevic@pfos.hr

New ISTRO Board Members

Congratulations to Jean Roger-Estrade, Blair McKenzie and Xinhua Peng who were elected to serve on the ISTRO Board. The new Board members and their positions are:

President: *Oswaldo Ernst*

Secretary-General: *Douglas Karlen*

Assistant Secretary-General: *Blair McKenzie*

President-Elect: *Xinhua Peng*

Board Member: *Jean Roger-Estrade*

Past President: *Engin Cakir*

Thank You to Retiring Board Members

Thank you to our retiring ISTRO Officers: Past President: *Rainer Horn*, Secretary-General: *Jan van den Akker*, and Board Member: *Laura Alakukku*. We appreciate your years of dedicated service to ISTRO and hope to see you at many of the future ISTRO meetings and conferences. Best wishes to all of you and thanks again for your dedicated service.

Attention Soil Science Historians

The International Union of Soil Scientists (IUSS) has announced that all proceedings of 18 World Congresses (1927-2006) have been scanned and are available as PDFs on the IUSS website (under World Soil Congresses). Members of the IUSS now have full access to more than 32,000 pages of soil science literature that has been published in these Proceedings. Each volume is one PDF – some are rather large (500 Mb) and may take some time download but it gives you access to hundreds of articles. You can search through a PDF with the <CTRL F> command and type your keyword or author name or any combination. If ISTRO members are interested in being able to access these files, please contact a Board member so that we can determine how such arrangements might be made.

Hungarian Branch Report

During the past three years, members have shown great activity in scientific research on soil tillage and in related fields (soil physics, soil and environment conservation, crop production, mechanization) and promoted the application of their research results. They presented and discussed the results in national (21 events, 66 presentations) and international (19 events, 78 presentations) conferences, at soil tillage (12) and crop production demonstrations, including energy and green manure plants (49), and ploughing contests (2 international, 10 national). Themes of the conferences were: soil quality, mulch tillage, soil and water conservation tillage, mitigation of climate damages, water quality, crop quality, N-fertilization and leaching, environmental sound management, sustainable land use, GPS system, etc. Themes of the demonstrations were: soil conservation tillage, mulch tillage following maize under wheat, soil management under extreme climate conditions, alleviation processes, farming on dry and wet soils, crop (wheat, maize, sunflower, sugar beet, w. oilseed rape) quality and developing steps, multifunctional crop production. Although they honoured the advanced traditions in soil management, many new improving systems were elaborated and adopted. The new ideas and methods were published in textbooks (16), in special articles of farmers' journals (89) and leaflets (34). They provided advice for farmers concerning the EU and national initiatives. Many of the Hungarian ISTRO members have been able to develop and pursue beneficial scientific and educational cooperative research projects with other scientists in central or western Europe and in the U.S. The Hungarian Branch of ISTRO has given moral and financial support to young

scientists. Other financial support was provided for honouring scientific students' activity and for organization of memorial conferences (e.g., for classic soil tillage authors).

Congratulations to all Branch members for your active and enthusiastic support of the goals of ISTRO.

Are You Enthusiastic About Soil Science?

The declining number of soil science students is a concern in many universities. As international leaders, we can sit down and grumble, or we can do something about it. One of the remedies is to show the great variety of soil science jobs. Melissa Peart from Australia tells her story in a video available at: <http://www.abc.net.au/acedayjobs/cooljobs/profiles/s2442995.htm>. Melissa enjoyed science in school and originally wanted to study history and be an archaeologist. But when she heard about a degree in land and water science at Sydney University, she turned her attention to the environment. The course covered natural resources and sustainability, specifically looking at agriculture, soil, hydrology, geology and geographical information systems. It also offered plenty of field trips. After finishing her honours in soil salinity, Melissa was recruited by a consultancy group, where she worked for three years. Great Bits: "I find there's a good balance in my job. It doesn't involve me just sitting in front of a computer. I get to travel and go out into the field to do soil and groundwater testing. It's an awesome job and I'd love to keep doing this for a very long time."

Africa Soils Information Network

Knowledge about the condition and trend of African soils is highly fragmented and dated. There is an urgent need for accurate, up-to-date and spatially referenced soil information to support agriculture in Africa. This coincides with developments in technologies that allow for accurate collection and prediction of soil properties. The Africa Soil Information Service (AfSIS) will develop a practical, timely, cost-effective, soil health surveillance service to map soil conditions, set a baseline for monitoring changes and provide options for improved soil and land management. The system will facilitate the identification of areas at risk of soil degradation and corresponding preventive and rehabilitative soil management interventions based on analysis of what works and what doesn't. This project will build on recent advances in digital soil mapping, infrared spectroscopy, remote sensing, statistics, and integrated soil fertility management.

Dissemination and training will make the project's outcomes highly accessible to farm communities, public and private extension services, national agricultural research and soil survey organizations, the fertilizer sector, project and local planners, national and regional policymakers and scientists. The efforts in Africa are part of a wider global effort to digitally map the world's soil resources. For more information, see <http://Africasoils.net>.

Final Comments

As I stated in the opening article, this will be my last issue of ISTRO-INFO. It has been a real pleasure to serve you during the past six years as your Assistant Secretary General. I know that Blair McKenzie will carry on the quarterly tradition of for this newsletter and that with your help its content will be even better and more useful than in the past. Please help Blair with his new task by sharing any new ideas for research, questions on how to solve a lingering problem, or ideas on how to better communicate with policy makers wherever you can. Decide now to have your voice heard through ISTRO INFO now and in the future. ISTRO depends on YOU!

Doug Karlen

Assistant Secretary General