



ISTRO INFO

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

June 2006

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ISTRO INFO – June 2006

Greetings from Iowa USA! I hope everyone's plans are moving along well in preparation to participate in our 17th Triennial Conference in Kiel, Germany on August 28th through September 3rd. The Organizing Committee has developed an excellent program that will include 13 symposia, special lectures, oral and poster presentations, and extra time for renewing friendships and making new ones as we share the experience over a good German beer. There will also be a special symposium on "Soil Protection Strategies" that will not only broaden the scope of our ISTRO meeting but also strengthen the soil and land use focus with respect to sustainability. Each session will be opened with a plenary lecture by a renowned scientist to stimulate our minds and provide sustenance for many vigorous discussions.

On Tuesday evening following dinner, there will be a Roundtable Discussion in the Auditorium that will examine the interactions between soil management and soil sustainability. A discussion on the effects of tillage as well as arable and forest management strategies on the environment (including global change aspects) will be led by a group of eight distinguished scientists. Wednesday will be devoted to midterm excursions that will provide opportunities for conference participants to see different areas and types of studies being conducted in the area.

In addition to the meeting you will want to take some personal time to also enjoy the beautiful city of Kiel with its fjord atmosphere and the surrounding regions that were mostly formed by glaciers and are now some of the most productive areas in central Europe. For more information about the conference and registration materials if you have not yet signed up, please see the Conference website at:

<http://www.soils.uni-kiel.de/istro.htm>.

Cheers,

Doug Karlen

Assistant Secretary General

AGORA Provides Access to Scientific Journals

The United Nations Food and Agricultural Organization (FAO) in cooperation with the World Health Organization (WHO), Cornell's Mann Agriculture Library, the Rockefeller Foundation and major scientific publishers (including Elsevier, the publisher of *Soil and Tillage Research*) have signed an agreement to establish Access to Global Online Research in Agriculture (AGORA). This initiative is designed to provide students, researchers, and academics in developing countries with free access to a wealth of scientific information. AGORA provides access to over 700 journals from 23 of the world's leading academic publishers. CABI provides free search access to these journals through its Abstracting service, while Elsevier alone provides access to 230 different journals covering a wide range of agriculture, life science, and environmental literature.

The purpose for AGORA is to ultimately help increase crop yields and food sources to help feed an ever-increasing world population. For example, the oceanography titles were recently used to assist 3rd world members of the International Association of Aquatic and Marine Science Libraries and Information Centers (IASMLIC) in developing an aquaculture plan. For more information about AGORA please see the following website: <http://www.aginternetwork.org/en>.

Invitation to Annual Scientific Conference in Romania

The Academic Board of the Faculty of Agriculture, Iasi, Romania invites ISTRO members to attend the Annual Scientific Conference entitled "Agriculture Between Tradition and Intensification" that will be held on the 19th and 20th of October 2006. The conference will address current agricultural problems from four different perspectives: Fundamental research, Soil, Water and Environmental Protection, Agricultural Technologies, and Economic Sciences and Humanities. Registration fees (50 € before July 15th and 70 € after this date) include a book of abstracts (including the program), a CD with the scientific papers of the conference, coffee/tea breaks and the conference banquet. For more information please see: <http://www.univagro-iasi.ro/simpozion/index.php?lang=en&pagina=home.html>.

Scholarships Awarded to Young Researchers

Congratulations to Jose Doerner, winner of the Cees van Ouwerkerk Scholarship, and to Olga Gate, Jose A. Terra, and Nilvania Aparecida de Mello, winners of the other three scholarships to the ISTRO Conference in Kiel, Germany. I also want to acknowledge Mehari Tekeste, Guillermo Siri-Prieto, Marian Dobre, and Anita Chaudhary who received honorable mention for their excellent accomplishments. These young scientists have all begun excellent scientific careers that will ensure that ISTRO will be in good hands for many years to come. Congratulations to all of you!

FAO Establishes Conservation Agriculture Websites

The United Nations Food and Agriculture Organization (FAO) recently posted new websites for the Conservation Agriculture (CA) program in three different languages. Conservation Agriculture is a systems approach for resource-saving agricultural crop production that strives to achieve acceptable profits together with high and sustained production levels while concurrently conserving the environment. It is based on enhancing natural biological processes above and below the ground. Interventions such as mechanical soil tillage are reduced to an absolute minimum, and the use of external inputs such as agrochemicals and nutrients of mineral or organic origin are applied at an optimum level and in a way and quantity that does not interfere with, or disrupt, the biological processes. Three principles which are closely linked to each other are used to characterize CA. These include: (1) Continuous minimum mechanical soil disturbance, (2) Permanent organic soil cover, and (3) Diversified crop rotations in the case of annual crops or plant associations in case of perennial crops.

Conservation Agriculture holds tremendous potential for all sizes of farms and agro-ecological systems, but its adoption is perhaps most urgently required by smallholder farmers, especially those facing acute labor shortages. It is a way to combine profitable agricultural production with environmental concerns and sustainability and it has been proven to work in a variety of agro-ecological zones and for many different farming systems. For these reasons, the FAO is actively involved in promoting CA, especially in developing and emerging economies. As a systems approach, CA can only work

optimally if each of the different technical areas are considered simultaneously in an integrated way.

As a result, staff from several Divisions and Services of FAO took the initiative to create an informal workgroup consisting, in the beginning, of members from the Crop and Grassland Service AGPC, the Land and Plant Nutrition Management Service - AGLL; Animal Production Service - AGAP, and Agricultural and Food Engineering Technologies Service - AGST (formerly AGSE). It is understood that the multidisciplinary nature of CA will always require the rich mix of expertise available to FAO as it works to promote the concept worldwide. For more information about CA, you are invited to access the new sites in:

English at <http://www.fao.org/ag/ca/en>;

French at <http://www.fao.org/ag/ca/fr>; or

Spanish at <http://www.fao.org/ag/ca/es>.

ISTRO INFO Once Again Helps Connect Agricultural Researchers

As reported in the March issue of ISTRO INFO, this Newsletter once again led to an exchange of emails that may result in enhanced international collaboration. This time, I was contacted by Prof. Dr. Dmitry Kurtener, a member of our St. Petersburg ISTRO Branch, with questions regarding soil quality assessment and the potential use for information he has developed regarding the quality of spatio-temporal information. Dmitry suggested that the technical approach used for evaluation of the quality of geo-referenced data may be very useful for assessing soil quality. We are pursuing this discussion and hopefully will be able to meet in Kiel to discuss these ideas even further.

My purpose for sharing this is to encourage others to let me know how ISTRO INFO is helping you. I also want to encourage everyone to send announcements, Committee or Branch Reports, questions, or any other type of information or request that may be of interest to your colleagues for inclusion in future issues. ISTRO INFO is put together for the sole purpose of information exchange, so please don't hesitate to use it to help you!

4th Australian Controlled Traffic Farming (CTF) Conference

The Australian Controlled Traffic Farming Association (ACTFA) invites ISTRO members and other interested persons to attend the 4th Australian Controlled Traffic Farming Conference (CTF06) on September 27 to 29, 2006, at Ballarat University in Victoria, Australia. CTF06 will be a farm-focused forum for growers, advisers, research scientists, and technology providers to share information on the science and practice of more profitable and sustainable farming systems. A dynamic committee consisting of 17 farmers, agronomists and industry specialists have developed a comprehensive program with a variety of presentations suitable for both early adopters and experienced practitioners. Conference sessions will include: (1) Broad acre controlled traffic and minimum tillage, (2) Stubble management, inter-row operations and mixed farming systems, (3) Raised-bed farming, and applications in cotton, cane, and horticulture, (4) Farm layout, soil impacts, resource conservation, and environmental impacts, (5) GPS and guidance technology for farming – equipment developments, (6) GIS, yield mapping, imagery, spatial information and their applications, and (7) Farm systems – how do we change?

The presentations will include experiences of Australia's most progressive and innovative growers from grain, cotton, horticulture and sugarcane industries, plus technical presentations updating the latest research and agronomy findings. The Conference will also include a Trade Show for technology, machinery, systems and science and a Field Day of farming systems and modern technologies.

For those who may not be familiar with CTF, it is an Australian-designed farming system through which wheels work more efficiently on permanent traffic lanes, and crops grow better in permanent beds. The agricultural community has rapidly accepted CTF with widespread adoption exceeding two million hectares across all cropping industries. CTF, sometimes referred to as raised-bed farming, tram-lining or tram-tracking, provides a framework for efficient use of a wide range of farm machinery, GPS systems, GIS software, and measuring and monitoring systems across grain, cotton, sugar, and horticultural industries.

Historical Ballarat is located approximately one hour from Melbourne Airport and on the fringe of the rapidly evolving high rainfall cropping zone of South West Victoria. A mix of social, formal, and hands-on activities will ensure an enjoyable learning experience for all who attend. Conference early bird registration (before July 17) is \$100 for students and \$325 for all others. For more information, please see: www.actfa.net or contact the Sally Brown Conference Connections, PO Box 108, Kenmore Qld 4069, 07 3201 2808, sally.brown@uq.net.au.

Final Comments

Once again, I want to remind everyone to send me any type of information that you feel would be useful for your ISTRO colleagues to have. I will continue to develop issues of ISTRO INFO on a quarterly basis provided I have something useful to communicate. I also want to encourage anyone who is still debating about attending the 17th Triennial Conference in Kiel to please join your colleagues for what promises to be an awesome program.

In the next issue I will present a brief summary of the events that occur during the conference and at the Board Meetings. Again, if you have any ideas or requests for information to share please let me know by email (karlen@nstl.gov) or see me in Kiel.

Cheers,

Doug Karlen

Assistant Secretary General