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CSA NEWS

2006 ANNUAL MEETINGS EDITION

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AWARDS



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EVENTS & SYMPOSIA

Welcome to Indianapolis!

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Sunday, 12 November

9

Highlights include the Smithsonian Soils Exhibit reception, First-Time Attendee Orientation session, E.T. and Vam York Distinguished ASA Lectureship, and the Opening Reception.

Monday, 13 November

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Featured events include the African Green Revolution symposium led by Pedro Sanchez; Women in Agronomy, Crops, Soils, and Environmental Sciences Luncheon; and the Calvin Sperling Biodiversity Memorial Lectureship.

Tuesday, 14 November

16

Preview of the Howard M. Taylor Memorial Lecture on Root Soil Relationships, Industry-Academia symposium, William Patrick Wetland Biochemistry Memorial Lectureship, Francis E. Clark Distinguished Lectureship on Frontiers in Biology, and the Betty Klepper Endowed Lectureship.

Wednesday, 15 November

20

Events include the Nyle C. Brady Frontiers of Soil Science Lectureship and the Early Career Social.



EXHIBITORS

2006 Exhibitors

21

Dozens of exhibitors will be featuring new and exciting opportunities for you to learn about the latest in research equipment and supplies in Exhibit Hall B at the Indiana Convention Center.



AWARDS

ASA Awards

34

CSSA Awards

42

SSSA Awards

50

CSA News is the official magazine, distributed monthly, for members of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America. Visit us online at www.asa-cssa-sssa.org/news.html.

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The views in CSA News do not necessarily reflect endorsement by the Publishers.

NO-TILLAGE SEEDING IN CONSERVATION AGRICULTURE

Second Edition

C. J. Baker, K. E. Saxton, W. R. Ritchie, W. C. T. Chamen, D. C. Reicosky, F. Ribeiro, S. E. Justice, and P. R. Hobbs

This book is a much-expanded and updated edition of a previous volume, published in 1996 as "No-tillage Seeding: Science and Practice". The base objective remains to describe, in lay terms, a range of international experiments designed to examine the causes of successes and failures in no-tillage. The book summarizes the advantages and disadvantages of no tillage and highlights the pros and cons of a range of features and options, without promoting any particular product.

(CABI Publishing)

September 2006 352 pp.
978-1-84593-116-2 \$150.00

THE ENCYCLOPEDIA OF SEEDS

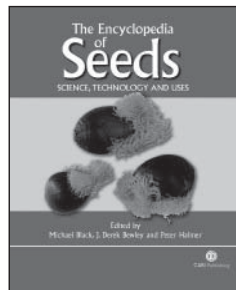
Science, Technology and Uses

Edited by **J. D. Bewley, M. Black, and P. Halmer**

This is the first scholarly reference work to cover all the major scientific themes and facets of the subject of seeds. It outlines the latest fundamental biological knowledge about seeds, together with the principles of agricultural seed processing, storage and sowing, the food and industrial uses of seeds, and the roles of seeds in history, economies and cultures.

(CABI Publishing)

September 2006 1000 pp.
978-0-85199-723-0 \$350.00



Forthcoming!

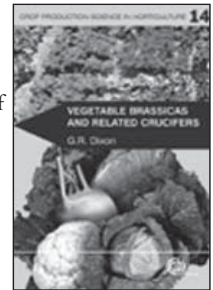
VEGETABLE BRASSICAS AND RELATED CRUCIFERS

G. R. Dixon and M. H. Dickson

The Brassica crops provide the greatest diversity of products derived from a single genus. This book covers the Occidental crops derived from *B. oleracea* (cole or cabbage group) and Oriental types from *B. rapa* (Chinese cabbage and its relatives). Both groups are of immense importance for human nutrition, containing vital vitamins and cancer preventing substances.

(Crop Production Science in Horticulture)
(CABI Publishing)

January 2007 300 pp.
978-0-85199-395-9 paper \$75.00



Forthcoming!

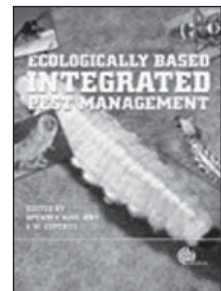
ECOLOGICALLY-BASED INTEGRATED PEST MANAGEMENT

Edited by **O. Koul and G. W. Cuperus**

Integrated pest management (IPM) is a sustainable approach to managing pests through biological, cultural, physical and chemical means. By reviewing several cases in which ecologically-based IPM was used, this book succeeds in analyzing the effectiveness of numerous methods - from the ecological consequences of chemical control practices to the ecology of predator-prey and parasitoid-host systems.

(CABI Publishing)

November 2006 448 pp.
978-1-84593-064-6 \$160.00



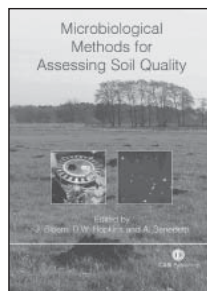
MICROBIOLOGICAL METHODS FOR ASSESSING SOIL QUALITY

Edited by **J. Bloem, D. W. Hopkins, and A. Benedetti**

With growing concern about the protection of soil quality and biodiversity many countries have established regional and national programs to monitor soil quality. This book reviews the theory and practice of a range of the various microbiological methods used within these programs. A census is given of the main methods used in over 30 European microbiological laboratories.

(CABI Publishing)

2006 320 pp.
0-85199-098-3 \$120.00



MATHEMATICAL MODELS IN AGRICULTURE

Second Edition

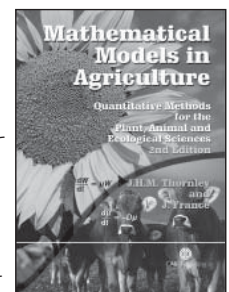
J. Thornley and J. France

This is a completely rewritten and expanded version of the successful 1984 book of the same name published by Butterworths. The book is designed to be a textbook, and is suitable for self-study, with exercises and answers. The need of many students to grasp every step of a mathematical model is appreciated and catered for.

This book will appeal to graduate students and researchers in agriculture, including crop, environmental, and animal sciences.

(CABI Publishing)

August 2006 550 pp.
978-0-85199-010-1 \$275.00



Welcome to Indianapolis!

Navigating—and Conquering—the Annual Meetings Maze

Going to the Annual Meetings, especially as a first-time attendee, can be overwhelming with all the paper sessions, symposia, exhibits, business meetings, etc. Those new to the meetings are invited to attend the First-Time Attendee Orientation session on Sunday evening from 6:00–6:45 pm in the Indiana Convention Center, Sagamore 6, Second Floor. In the meantime, here are some tips to help you find your way and reap the benefits of attending our program-rich event—a science in itself!

Pick up your preregistration packet or register on-site at the Registration Center in the Convention Center, Maryland Street Lobby West, First Floor, beginning Sunday at 10:00 am. You can also purchase Society food function tickets here.

There are a few meetings and workshops during the day on Saturday and Sunday with the meetings beginning in earnest Sunday evening. The technical sessions begin on Monday and are held through noon on Thursday.

If you have questions while at the meetings, visit The Society Center in the Exhibit Hall. Helpful staff will answer your questions and provide information about certification, foundation, membership, publications, science policy, and the Smithsonian Soils Exhibit. You can also renew your membership for 2007 here! Want to check your email or upload your presentation? Room 111–112 has computers and printers available and is open Sunday through Thursday.

The meetings are a great place to network and get more involved. You can learn about division activities by attending their business meetings (many feature a social), which are open to all. We hope you make the most of your Annual Meetings experience!

Thank You Member Leaders!

The Societies celebrate and thank all of the 1,803 dedicated member leaders who serve ASA–CSSA–SSSA and our professions as volunteers to the boards of directors, committees, divisions, branches, editorial boards, and as reviewers. If you have served the Societies in 2006, we invite you to stop by the Exhibit Hall to view our thank you sign and pick up a volunteer ribbon at The Society Center.

Welcome U.S. Canola Association

The U.S. Canola Research Conference is being held in conjunction with this year's ASA–CSSA–SSSA Annual Meetings. Over 65 papers will be presented on canola topics, including agronomy, nutrition, biofuel, and industrial applications.

"The canola industry has evolved since our last conference in February 2003. Our board felt it was time to gather researchers and industry together to discuss the research and developments that have taken place," says Dale Thorenson of the U.S. Canola Association.

The conference begins with poster viewing on Monday afternoon. Canola oral sessions are scheduled for Tuesday on biofuel and industrial applications and nutrition and Wednesday on agronomy.



U.S. Canola Association schedule of events.

DATE/TIME	EVENT
Monday, 13 November (Exhibit Hall)	
4:00–6:00 pm	Canola: I. From Breeding to Production Canola: II. Planting Date, Harvest, and Economics Canola: III. Disease and Insects Canola: IV. Weed Control, Water Use, Seed Technology, and Biofuel Economics
Tuesday, 14 November (Convention Center, Room 123–124)	
8:10–11:25 am	Biofuel and Industrial Applications
1:00–4:45 pm	Nutrition/Industry Production
Wednesday, 15 November (Convention Center, Room 123–124)	
7:50–12:10 pm	Canola Agronomy: I
1:05–4:35 pm	Canola Agronomy: II

The Society Center Offers a Little Bit of Everything

Join us at The Society Center, located inside the entrance to Exhibit Hall ABC in the Convention Center. For the first time, all of the Societies' services will be located in one area for your convenience.

Need help? Staff will be on hand to answer questions and help you take advantage of our full range of programs and services. Interested in the Societies? Learn more about what we've been doing for members this year, and what we have planned for next year. Looking for scientific information? Buy books or subscribe to a journal.

The Society Center is more than just a place to go when you need help or information—it's a place to relax and catch up with colleagues. Comfortable seating and a large, open space make for a relaxing, fun environment. Come visit with us—we'd like to spend time with you.

Membership

- Renew your membership for 2007, or join the Societies (you can even bring a colleague or student with you and join together)
- Learn about our websites and new online log in
- Pick up materials to take back with you and share with colleagues



Publications

- Browse our bookstore to view our publications
- Buy books or subscribe to our journals
- See what's new



Science Policy

- Contact your Congressional delegation using the Societies' grassroots advocacy resource
- Learn more about the issues on the table during this session and what you can do
- Share your concerns with Director of Science Policy Karl Glasener, Congressional Science Fellow Kit Batten, and Science Policy Intern Rebecca Blue



Certification

- Hear more about why certification is important
- Learn how to find certified practitioners
- Find out how to become certified yourself



Smithsonian Soils Exhibit

- See the latest mock-ups
- Hear about the project's progress
- Make a donation



Foundation

- Discover how you can make a difference
- Find out about exciting programs that can use your help
- Learn about the different funds and make a donation



Be sure to join us for the grand opening of The Society Center during the Opening Reception in the Exhibit Hall at 8:00 pm on Sunday

Mapping the Societies' Future

Over the past year, each of the ASA, CSSA, and SSSA Boards of Directors along with key staff met independently to define the strategic direction for each Society's future. Using the same strategic-planning process and consultant-facilitator, each Board defined its mission, vision, and goals that will serve as the maps for future Society activities.

Each of the boards of directors will be meeting during the Annual Meetings to hone a 12- to 18-month implementation plan for high-priority strategies and to agree upon a set of milestones within the time frame. The boards will seek member participation in the process through specific task forces and ad hoc committee work.

The process and the results of these strategic-planning sessions have been highlighted in *CSA News* and will be presented to members in several ways during the Annual Meetings, including: at the boards of directors meetings, at individual division business meetings, at the all-division business meetings, on signage, and as handouts available at these events and at The Society Center in the Exhibit Hall.

Celebrating ASA's Centennial at Next Year's Meetings

The American Society of Agronomy (ASA) will celebrate its 100th anniversary during next year's Annual Meeting in New Orleans, 4-8 Nov. 2007. ASA began its rich history on 31 Dec. 1907, and Mark A. Carleton was named the first ASA president.

Many special activities are being planned to celebrate ASA's centennial during the meetings in New Orleans, including a special Mardi Gras street parade and ticketed riverboat dessert cruise. Save the date and plan to include a companion to join you in the festivities as we celebrate ASA's scientific contributions over the last

100 years. Honoring our past is a wonderful way to gain inspiration and invigorate our Society—we hope you can join us for the celebration!



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A Golden Opportunity

Make a Contribution at the Meetings and Double the Value of Your Gift

To celebrate the inaugural class of the Golden Opportunity Scholars Institute at this year's Annual Meetings, an anonymous donor will match gifts made to the Golden Opportunity Fund at the meetings—up to \$10,000.

Visit The Society Center in the Exhibit Hall to support the Golden Opportunity Scholars Fund or the Wyman E. Nyquist Golden Opportunity Scholars Support Fund, or for more information on the program.

Other ways to make a donation: online at: https://secure.asa-cssa-sssa.org/asf/donate_online.php, or mail a check, payable to ASF with the fund name on the memo line, to 677 S. Segoe Road, Madison, WI 53711-1086, Attention: Bonnie Lueck. For gifts of stock or a planned gift, email blueck@a-s-f.org or call 608-268-4947.

Win an MP3 Player

Stop by The Society Center in the Exhibit Hall and sign up to win a Spin MP3 Player—256 MB courtesy of the Agronomic Science Foundation. With this digital MP3 player, you can upload your favorite songs or listen to FM radio (stores up to 40 preset stations). It also includes a retractable USB drive to store data and music files and a digital voice recorder. Don't get stuck somewhere listening to elevator music—take your music with you wherever you go!

What is the Role of the Scientific Community in Policy Making?

Should scientists take part in policy-making activities, particularly lobbying? Discuss this and other policy-related issues at the science policy section of The Society Center, located inside the entrance to Exhibit Hall ABC in the Convention Center. There you can learn more about the Societies' Science Policy program, which has been very active in Washington, DC since 1986, and meet the Science Policy Office staff—Director of Science Policy Karl Glasener, Congressional Science Fellow Kit Batten, and Science Policy Intern Rebecca Blue. In a time of declining state support for research, our agronomic, crop, and soil scientists are looking to the federal government for support. Toward that end, the Science Policy Office strives to inject science into policy making to influence federal funding for and legislation impacting our sciences. So stop on by to learn more, and let us hear your thoughts concerning the role of the scientific community in policy making.



Karl Glasener



Organic, Sustainable Agriculture Events

Two years ago, the Societies' Committee on Sustainable and Organic Agriculture (COSA) was established with the goal of providing a forum for Society members who are interested in sustainable and organic agriculture. COSA members advocate for policies and programs that address the needs of organic and sustainable agriculture, and they cultivate a learning environment to improve the knowledge and practice of systems research.

The committee consists of 15 members, each of whom belong to at least one Society. The members work in a variety of geographic regions, professional vocations, and possess various levels of experience. COSA welcomes the involvement of early career members.

All of the members have practice in, or are working on, research issues in organic and sustainable agricultural production. The interdisciplinary nature of the collective members allows for a broad range of perspectives to be expressed during monthly committee conference calls and other activities.

COSA will host three events this year at the Annual Meetings, with much appreciated help from: USDA-CSREES's National Sustainable Agriculture Research and Education (SARE) program, the Western SARE program, North Central SARE, North Eastern SARE, Competitive Programs unit at CSREES, ASA's A-8 Division, the Ecological Society of America, and the Societies' special program fund.

Sustainable and Organic Agriculture Roundtable

The full COSA committee will host the Sustainable and Organic Agriculture Roundtable/Reception on Monday from 6:00 to 8:30 pm at the Hilton hotel, Indianapolis Ballroom on the second floor. The roundtable will feature locally produced gourmet cuisine and a presentation by the Hilton's executive chef and local growers.

The roundtable will focus on participatory research methods with talks by Cornell University's Laurie Drinkwater and USDA-ARS's Jeffrey Steiner. Participants will also hear a report out from the Sunday workshop on how



Attendees of this year's Sustainable and Organic Agriculture Roundtable/Reception on Monday will have the opportunity to taste locally produced gourmet cuisine and hear presentations by the Hilton hotel's executive chef and local growers.

to revitalize public plant and animal breeding (see below). A panel and discussion will follow.

Systems Research in Sustainable Agriculture

Two COSA subcommittees have been busy planning other events for the Annual Meetings. The systems research subcommittee will be co-sponsoring a symposium titled: "The Role of Systems Research in Sustainable Agriculture." The symposium will be all day on Wednesday at the Indiana Convention Center, Room 206-207 on the second floor. Symposium speakers include Deb Stinner and Richard Moore, Nancy Creamer, John Westra, Laurie Drinkwater, Larry Phelan, Chuck Francis, Sue Ellen Johnson, and others.

The presentations at this event will be informative for those who seek to establish or improve agroecosystem research, education, and practice. Speakers will also offer advice on how to build biodiversity in agroecosystems and how to identify the characteristics of organic and sustainable agriculture.

Public Plant and Animal Breeding

The subcommittee on public plant and animal breeding will be hosting the Public Plant and Animal Breeding panel discussion on Sunday from 1:30 to 5:30 pm at the Hotel Marriott in Marriott Ballroom 1 on the second floor. This workshop will include a panel discussion on the "Challenges to Public Breeding Programs and Opportunities to Engage," and an action-planning session—"Building an Action Plan Framework from Seeds and Breeds."

Earn CEUs at the Meetings

Individuals certified through ASA and SSSA (Certified Crop Adviser, Certified Professional Agronomist, Certified Professional Soil Scientist, and Certified Professional Soil Classifier) can earn Continuing Education Units (CEUs) during the Annual Meetings.

View the Division A-9 Professional Practitioners section of the Program Book for sessions specifically targeted towards certified individuals. Additionally, all states and provinces now allow CCAs to self-report up to 20 CEUs, while CPAg, CPSS, and CPSC individuals can self-report all 40 CEUs following the meetings. CCAs may only receive CEUs for structured oral presentations; open poster sessions do not qualify for CCA CEUs. To self-report CEUs following the meetings, visit these links for the self-reporting forms:

- CCA: www.agronomy.org/cca/ceu_reporting_form.html
- CPAg: www.agronomy.org/certification/ceu_reporting_form.html
- CPSS/CPSC: www.soils.org/certification/ceu_reporting_form.html

For certification-related questions, please visit The Society Center in the Exhibit Hall.

Sunday, 12 November

Celebrate the Progress

Smithsonian Soils Exhibit Reception

You're invited to attend a light reception from 5:00 to 6:00 pm in Room 122 of the Indiana Convention Center on Sunday to celebrate the progress and receive an update about the Smithsonian Soils Exhibit. At the event, you can see the computer-generated renderings of the media components for the Smithsonian Soils Exhibit and talk with Exhibit Curator Pat Megonigal (also an SSSA member), as we look ahead to completing the fundraising and final design in 2007 and towards a gala opening in 2008. During last year's successful Matching Challenge Grant, members gave more than \$53,000 total (plus the \$40,000 matched amount from ASA-CSSA-SSSA-ASF).

While at the Annual Meetings, stop by The Society Center in the Exhibit Hall for more information on the Smithsonian Soils Exhibit and to make a gift to the project. If you've been thinking about contributing, but haven't, "Now's the Time!" If you've already given or pledged, thank you; please consider an additional gift or fulfill your pledge during the Annual Meetings.



First-Time Attendees: Maximize Your Experience at Sunday's Orientation

Those new to the Annual Meetings and the Societies are invited to attend the Annual Meetings orientation session from 6:00–6:45 pm Sunday evening in the Indiana Convention Center, Sagamore 6, Second Floor. We'll help you conquer the meeting maze and provide valuable tips to maximize your experience, including:

- Welcome and introduction to Indianapolis
- Navigating the Program Book
- "Must attend" meetings and sessions
- Networking and socializing opportunities
- Guide to the Convention Center
- Light refreshments

Please plan to attend. All attendees and guests are welcome!



If you're new to the Societies or the Annual Meetings, Sunday's orientation session can help you maximize your experience in Indianapolis.

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Organic Food Pioneer to Give York Lecture

On Sunday evening, Gene Kahn, Officer and Vice President of Sustainable Development for General Mills, Inc., will give the E.T. and Vam York Distinguished ASA Lecture. His presentation is titled, "In Search of Sustainability" and will take place at 7:00 pm in the Indiana Convention Center, Sagamore 4-5, Second Floor.

Kahn is a pioneer in the organic food and farming movement. He founded Cascadian Farm, Inc. in 1971, after leaving the University of Washington's Graduate School of English Literature.



Gene Kahn

In the beginning, he sold produce out of the back of his truck and ultimately transformed the business from its inception as a small organic farm to

a major producer of branded, certified, organic products, known as Small Planet Foods. General Mills bought Small Planet foods in 2000, and in 2003, Kahn took on his current role with General Mills after leading Cascadian Farm/Small Planet Foods as President and CEO for 32 years.

An internationally recognized speaker and educator on issues relating to organic and sustainable agriculture, Kahn learned the food business from various corporate partnerships he led, including Welch's National Grape Cooperative and a partnership with the General Electric Pension Fund and Roy Disney. He served as a charter member of the National Organic Standards Board where he chaired the crop standards committee and helped to develop the first organic standards for Washington state, which led to its organic certification program. In addition, he co-founded The Food

E.T. and Vam York Distinguished ASA Lectureship

7:00 pm Sunday, Indiana Convention Center, Sagamore 4-5, Second Floor

Alliance, a Kellogg Foundation program to develop marketing programs in sustainable agriculture. In 1997, Kahn was given the "Steward of Sustainable Agriculture" award at the annual Ecological Farming Conference. That year he also received the "Socially Responsible Business Award" on behalf of the company.

The E.T. and Vam York Distinguished ASA Lectureship was established by Dr. and Mrs. E.T. York in recognition of the importance of agronomic science and Dr. York's impact on the profession as evidenced by his contributions to research, education, and administration. The lectureship is made possible by a gift from Dr. and Mrs. York to the Agronomic Science Foundation.

Opening Reception to be Held in the Exhibit Hall

Everyone is encouraged to attend the Opening Reception on Sunday evening from 8:00 to 11:00 pm.

For the first time, the Opening Reception will be held in the Exhibit Hall on the first floor of the Indiana Convention Center. The exhibits will be open and ready for business, and attendees are encouraged to walk the aisles and mingle with old friends and network with new acquaintances. Society staff and leadership will be present at The Society Center to welcome all attendees to Indianapolis.



Career Placement Center Connects Employers, Job Seekers

If you're looking for a job, grad school, or the right employee, be sure to stop by the Career Placement Center in the Wabash Ballroom.

- Employers, visit the Career Placement Center at the Annual Meetings to post your position announcements for free (including internships, graduate school postings, and professional employment). You can also review resumes and register for a free table to conduct interviews all week. If you have a position to post or if you're interested in interviewing, please visit the Career Placement Center in the Wabash Ballroom.
- Applicants can view the job board and leave messages and resumes for employers to view and interview all week. Don't forget to register online and submit your interview schedule at www.careerplacement.org.



Monday, 13 November

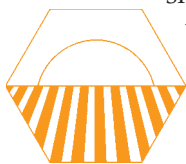
SSSA to Hold All-Divisions Meeting

Last year for the first time, SSSA held an all-divisions business meeting. There will be another meeting this year on Monday from 7:45–9:00 am in the Indiana Convention Center, Sagamore 5, Second Floor. During this time, no sessions are scheduled. The purpose of this meeting is to allow members to hear from the Executive Committee, headquarters staff, and selected Board members about the business the Society has been involved with in the last 12 months.



Rattan Lal

In the past, these persons attended the division business meetings. Since some members of the Society go to more than one business meeting, many of the items discussed were repeated. Also, little time was available for questions. This meeting will cover Society business, allowing divisions more time at their respective meetings to conduct the business specific to the division. Also, President-Elect Rattan Lal will give a short presentation on the theme of the Annual Meeting—"Soil Science in a Changing Climate."



Visit the Exhibit Hall to See the Latest Equipment

Featuring new and exciting opportunities for you to learn about the latest in research equipment and supplies are the dozens of exhibitors in Exhibit Hall B at the Indiana Convention Center. See pages 21–32 for a listing of exhibitors. Exhibit Hall hours are:



- Sunday, 8:00–11:00 pm (Opening Reception)
- Monday through Wednesday, 9:00 am–6:00 pm

'Center Stage' to Feature Smithsonian Exhibit

Be sure to stop by the Exhibit Hall at 5:00 pm on Monday to learn more about the Smithsonian Soils Exhibit. The newly created "Center Stage" raised stage area will be the site for attendees to learn more about the exhibit.

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African Green Revolution Symposium Features Pedro Sanchez

A joint ASA-CSSA-SSSA symposium, titled “The African Green Revolution,” will be held Monday morning from 9:25 am–12:25 pm in the Indiana Convention Center, Sagamore 4, Second Floor. It will feature Dr. Pedro Sanchez, Director of Tropical Agriculture and Senior Research Scholar at the Earth Institute of Columbia University and Co-Chair of the Hunger Task Force of the United Nations’ (UN) Millennium Project. He is a World Food Prize laureate and Fellow of the American Association for the Advancement of Science (AAAS), MacArthur Foundation, ASA, and SSSA.

As the Betty Klepper Lecturer during the 2003 Annual Meetings, Sanchez described the efforts of the UN Millennium Project, commissioned by UN Secretary General Kofi Annan, to eliminate poverty, improve education and literacy, promote equality, and achieve environmental sustainability, and challenged us to become more engaged in achieving these goals. The objective of the Hunger Task Force, one of 10 such working groups, is to reduce world hunger by half before 2015. The task force has focused initial efforts on Africa and will work on strategies for South Asia next. These two regions together account for over half of the world’s 800 million hungry people. According to Sanchez, solving the problem of hunger in these regions will necessitate drastic increases in agricultural productivity. This will require restoration of soil fertility, improved water management, improved germplasm and seed supply systems, and a shift to high-value products.

Sanchez says the purpose of the symposium will be to “energize the membership” with a progress report that will include the broad policy picture, initial results of the Millennium Villages Project, and the outcome of the Africa Fertilizer Summit (held last June in Abuja, Nigeria).



Pedro Sanchez (left), Director of the Millennium Villages Project of Columbia University’s Earth Institute, discusses the condition of the soil in Ethiopia with Awash Teklehaimanot, Director of the Malaria Program at the Institute.

Students: Take Advantage of Monday’s Professional Development Programs

In addition to the Student Mentor Program, this year’s meetings offer four new programs to help students learn about the benefits of certification, interviewing techniques, and job/graduate school opportunities.

Graduate School Workshop—8:00–9:30 am, Indiana Convention Center, Room 120, First Floor

This informal workshop is open to anyone interested in going to graduate school and is conducted in small groups of three discussion tables, each covering a specific topic. Students can rotate among the tables, as each topic will be covered three times, followed by a short, larger group discussion. Topics covered are: Do I really want to go to graduate school? How do I write a graduate school application, and what’s important when interviewing departments? What opportunities are available for financial support? Patrick Byrne, from Colorado State University, will serve as moderator.

CCA Program—11:00 am–12:00 pm, Indiana Convention Center, Room 120, First Floor

This program is open to anyone interested in becoming a Certified Crop Adviser (CCA). Hear Christopher Voglewede, Dow AgroSciences LLC and past chair of the Indiana CCA Board, talk about why certification is important and the benefits it provides. Learn how certification can give you the competitive edge and make a real difference in the job market and career advancement. The program will include a discussion with plenty of time for questions.

Student Mentor Program—12:00–1:30 pm, Marriott Downtown, Marriott Ballroom 4, Second Floor

The program provides an opportunity for students and mentors to discuss professional opportunities and challenges in the workplace. It is a way for mentors (members) to give back to the profession and provide information for students to learn about the inner workings of the real



Students can take advantage of valuable professional development programs on Monday to learn about the inner workings of the real world from mentors, the benefits of certification, interviewing techniques, and job/graduate school opportunities.

world. More importantly, students will gain networking information for later follow-up. The luncheon program will accommodate 40 students on a first-come, first-serve basis.

Mock Interview Workshop—1:30–3:00 pm, Indiana Convention Center, Room 120, First Floor

This workshop is open to undergraduate students and will cover interviewing principles through mock interviews. After the interviews, students will be asked to do a self evaluation and will receive an evaluation from the interviewer. The program moderator, Dudley Smith from Texas A&M University (retired), will also advise students on how to prepare for future interviews through advanced organization, interviewing techniques, and follow-up. Space is limited, and students will be asked to sign-up for interviews during the SASES (Students of Agronomy, Soils, and Environmental Sciences) Sunday morning business meeting.

Job Opportunities Outside of Academia—3:00–5:35 pm, Indiana Convention Center, Room 121, First Floor

This program provides a forum for industry representatives to talk about specific programs and opportunities in their companies. Representatives will make presentations and conclude with a panel discussion. An informal reception will follow. The program is sponsored by the Early Career Member Committee and SASES.

Manuscript Central Training Sessions

Two Manuscript Central training sessions will be held on Monday from 12:00–1:00 pm and 5:00–6:00 pm at the Westin Indianapolis hotel, Senate 1–3, Second Floor.

These sessions are intended for everybody who has and will use the Manuscript Central submission and tracking system—authors, reviewers, associate editors, technical editors, and editors of *Crop Science* and the new *The Plant Genome* supplement. Bring your questions and experience. We will run a manuscript through its course and show tips and tricks for using the system.

Improving Nutrient Management via Enhanced-Efficiency Fertilizers

New fertilizer products are being developed and marketed that may improve crop nutrient utilization and reduce possible environmental contamination. Divisions S-4, S-8, and A-9 are co-sponsoring a symposium on this topic on Monday at 1:00 pm in the Indiana Convention Center, Room 103. The objectives of this symposium are to present information on the available fertilizer technologies for enhanced efficiency, review current research that has examined the uses of these materials under different cropping systems and climatic regions, and evaluate the environmental and economic costs and benefits of these materials.

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Women Group's Luncheon to Feature Keynote Speaker on Gender, Diversity

This year, the popular Women in Agronomy, Crops, Soils, and Environmental Sciences Luncheon features Vicki Wilde, leader of the Gender and Diversity (G&D) Program of the Consultative Group on International Agricultural Research (CGIAR). Wilde will present the keynote address during the luncheon, which will be held on Monday from 11:30 am–1:30 pm at the Marriott Ballroom 9-10, Second Floor.



Vicki Wilde

The G&D Program helps the CGIAR Centers leverage their staff diversity to increase research and management excellence by promoting such activities as:

• Diversity-positive recruitment
• International teamwork
• Cross-cultural communications
• Advancement for women

Wilde authors a monthly electronic newsletter, *G&D News*, that highlights new G&D Working Papers and international events, as well as workshops, emerging issues, and the latest trends

in gender and diversity within CGIAR and around the globe. The G&D Program website includes working papers and reports about diversity in international organizations; best links for diversity, women and science, and mentoring; and gender and diversity news and trends. A wide range of issues are addressed, such as: attracting and retaining women scientists, stemming the "leaky pipeline," and identifying the advanced leadership skills needed by women.

All attendees and guests are welcome to attend this event, regardless of gender. Luncheon tickets are available for purchase at the Registration

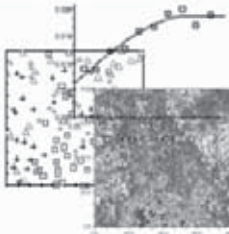
Center, Maryland Street Lobby West on the first floor of the Convention Center. The committee extends a special invitation to undergraduate, graduate, and early career attendees and encourages established professionals to invite a younger attendee to join you at the lunch to support and sustain gender and diversity in our professions.

In addition, all those interested are invited to attend the ACS526 Women in Agronomy, Crops, Soils, and Environmental Sciences Committee Meeting that follows the Monday luncheon from 1:30–3:00 pm at the Marriott Albany Room, Second Floor.



Gender and diversity issues will be discussed at Monday's Women in Agronomy, Crops, Soils, and Environmental Sciences Luncheon—all are invited to attend.

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Renowned Botanist, Conservationist to Give Sperling Biodiversity Lecture

Peter H. Raven, one of the world's leading botanists and advocates of conservation and biodiversity, will present the Calvin Sperling Biodiversity Memorial Lectureship on Monday afternoon at 4:15 pm in the Indiana Convention Center, Sagamore 4, Second Floor. Dr. Raven is president of the Missouri Botanical Garden and George Engelmann Professor of Botany at Washington University in St. Louis. He also serves as Chair of both the National Geographic Society's Committee for Research and Exploration and the National Research Council's Division of Earth and Life Studies.



Peter Raven

Raven's scientific studies have concentrated on the plant family Onagraceae, the evening primrose family, which he and his students and associates have made

Calvin Sperling Biodiversity Memorial Lectureship

4:15 pm, Indiana Convention Center, Sagamore 4, Second Floor

a model for plant systematics and evolution. He has also published widely on biogeography, particularly of the Southern Hemisphere; on folk taxonomy; and on co-evolution, including pollination studies. For nearly 35 years, Raven has headed the Missouri Botanical Garden, an institution he has nurtured to become a world-class center for botanical research, education, and horticulture display.

Described by *TIME* magazine as a "Hero for the Planet," Raven champions research around the world to preserve endangered plants and animals and is a leading advocate for building a sustainable environment. He has received numerous awards, including the National Medal of Science, the highest award for scientific accom-

plishment in the United States. He has held Guggenheim and John D. and Catherine T. MacArthur Foundation Fellowships and has been awarded a number of honorary degrees by universities throughout the world.

Raven has served in leadership roles for a number of scientific organizations, including president of the American Association for the Advancement of Science and home secretary of the U.S. National Academy of Sciences. He has written numerous books and publications, both popular and scientific, including *Biology of Plants* (co-authored with Ray Evert and Susan Eichhorn), the internationally best-selling textbook in botany, and *Environment* (co-authored with Linda Berg), a leading textbook on the environment, now in its fifth edition.

The Calvin Sperling Biodiversity Memorial Lecture is supported through contributions to the Agronomic Science Foundation and is administered by CSSA.

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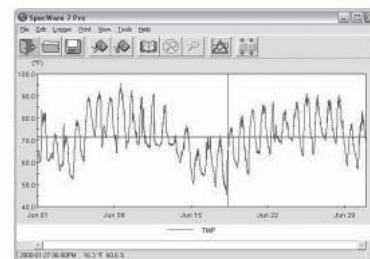
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Taylor Lecture Examines Effects of Root Distribution on Water Uptake

Meine Van Noordwijk, regional coordinator of the World Agroforestry Centre (ICRAF) in Southeast Asia, will present the Howard M. Taylor Memorial Lecture on Root Soil Relationships on Tuesday morning at 8:25 am in the Indiana Convention Center, Room 107, First Floor. The title of the lecture is "Root Distribution Effects on Tree and Crop Water Uptake in Agroforestry: Competition and Facilitation."

As a principal ecologist based at ICRAF's regional headquarters in Bogor, Indonesia, Dr. Van Noordwijk is responsible for shaping the content and assuring the quality, relevance, integration, planning, implementation, and effective delivery of ICRAF's activities in the region. This includes managing the scientific agenda, raising funds, establishing and facilitating partnerships and alliances, managing all staff in the region, and liaising with donors, ICRAF staff

Howard M. Taylor Memorial Lecture on Root Soil Relationships

8:25 am, Indiana Convention Center, Room 107, First Floor

in other regions, and ICRAF management. Before joining ICRAF in 1993, he was a senior research officer in the Root Ecology Section at the DLO Institute for Soil Fertility Research in Haren, the Netherlands, concentrating on the relationships among soil fertility, nutrient use efficiency, and root development of crops and trees in various temperate and tropical agroecosystems. He also worked for two years as a lecturer in botany and ecology at the University of Juba (Sudan).

His research experience includes modeling tree-soil-crop interactions in above- and belowground resource capture in a wide range of agroforestry technologies, biodiversity and environmental aspects of agroforestry, watershed functions, scaling of results from plot to landscape level, nutrient cycling, organic residue management and fertilizer use efficiency, and developing and refining agroforestry alternatives to slash-and-burn agriculture. Born and educated in the Netherlands, he has bachelor's and master's (cum laude) degrees in biology from the University of Utrecht (the Netherlands) and a Ph.D. from the Agricultural University of Wageningen (the Netherlands).

The Howard M. Taylor Memorial Lecture features a distinguished scholar in the field of soil-root relationships, stimulating scientific discussion and recognizing outstanding scientists. SSSA administers the program through contributions made to the Agronomic Science Foundation.



Meine Van Noordwijk

Symposium, Q&A, Roundtable Discussion

Overcoming Roadblocks to Successful Industry-Academia Collaboration

What is the state of industry-extension interactions, the nature of public and private knowledge-transfer groups, and how have they changed in the last 10 years? From an industry perspective, what are some potential roadblocks to successful collaboration, and how can they be overcome? From an academia perspective, what creates a successful partnership? What is the changing role of the USDA in collaborations? Outside of agriculture, what is the broad perspective of collaboration across the university landscape, and is the extension model holding us back?

Join us on Tuesday from 9:15-11:45 am in Room 121 on the first floor of the Convention Center as our speakers, Paul Carter (Pioneer Hi-Bred), Donald J. Blackburn (Dow AgroSciences), Michael J. Singer (the University of California-Davis), Joe Jen (California Polytechnic State University), and Victor Lechtenberg (Purdue University) address these questions. The final portion of the symposium will allow for Q&A and roundtable discussions.

To disseminate the information from the presentations and the roundtable, the ideas and discussions will be developed into an article for *CSA News* and the web.

Understanding the nature of the relationships of public and private knowledge-transfer groups is important to developing win-win collaborative opportunities. This unique session provides a venue to explore collaboration from many perspectives, while allowing for interaction and discussion among industry, academia, and government attendees. Join us Tuesday morning.

Manuscript Writing Workshop

Jump start your professional career and learn about the publishing game through this hands-on workshop on Tuesday from 8:30-10:30 am in the Indiana Convention Center, Room 120. Graduate students will review the sequence of steps in creating a publishable manuscript and participate in a writing



Ruth Yanai



J. Michael Kelly

and discussion exercise. M.S. and Ph.D. students that have analyzed, summarized, and reviewed their data will benefit most from this workshop. All students will have the opportunity to learn how to break the manuscript creation process down into an orderly sequence of manageable tasks. J. Michael Kelly, Virginia Tech, and Ruth Yanai, SUNY-ESF, will conduct the workshop.

Patrick Lecture Focuses on Phosphorus Memory in Wetlands, Aquatic Systems

The inaugural William Patrick Wetland Biochemistry Memorial Lecture will feature K. Ramesh Reddy, Graduate Research Professor and Chair of the Soil and Water Science Department (SWSD) at the University of Florida. The presentation, titled, "Phosphorus Memory in Wetlands and Aquatic Systems: Implications to Ecosystem Restoration," will be held on Tuesday at 9:30 am in the Indiana Convention Center, Room 110, First Floor.

Dr. Reddy conducts research on biogeochemical cycling of nutrients in wetlands and aquatic systems. His areas of expertise and research include: biogeochemistry, wetlands and aquatic systems, soil and water quality, and ecosystem restoration. He has carried out research for 30 years on biogeochemical cycling of nutrients in natural and managed ecosystems as related to water quality. His early research as a biogeochemist focused on the fate of nutrients in flooded rice

William Patrick Wetland Biochemistry Memorial Lectureship

9:30 am, Indiana Convention Center, Room 110, First Floor

paddies, followed by applying biogeochemical principles to study nutrient/contaminant behavior in various ecosystems including freshwater and coastal wetlands, and lakes, as related to water quality and eutrophication. Reddy developed an interdisciplinary program on biogeochemistry of wetlands and aquatic systems at SWSD's Wetland Biogeochemistry Laboratory (WBL). Since its establishment in 1987, the WBL has provided a home for graduate students of various disciplines and postdoctoral associates and visiting scientists.

Reddy has published 300+ refereed journal articles and book chapters and edited five books. He has served on numerous advisory committees, including the U.S. National Committee

on Soil Science of the National Academy of Sciences and the U.S. EPA Committee on Developing Nutrient Criteria for Wetlands. He has received numerous awards and honors and is a Fellow of the World Innovation Foundation, American Association for the Advancement of Science, SSSA, and ASA.

The William Patrick Wetland Biochemistry Memorial Lectureship was established as a memorial to Division S-10 co-founder Dr. William Patrick, Jr., who won international acclaim for his pioneering contributions to the biogeochemical processing and cycling of nutrients, heavy metals, and pesticides in wetland soils. The lectureship is supported through contributions to the Agronomic Science Foundation and is administered by SSSA.



Ramesh Reddy

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Clark Lecture Honors Dean A. Martens

This year, the Francis E. Clark Distinguished Lectureship on Frontiers in Soil Biology will be awarded to the late Dean A. Martens, soil scientist with USDA-ARS's Southwest Watershed Research Center in Tucson, AZ, in memorial. The lecture series, "Characterization of Soil Biotransformations and Implications for Ecosystem Function," will take place on Tuesday at 1:45 pm in the Indiana Convention Center, Sagamore 4, Second Floor. It will bring together Dean's research colleagues to summarize and celebrate the breadth of his research and retrace his professional steps.



Dean Martens

Dean was known for his intense scientific curiosity and passion for the understanding of soil biochemistry to be applied in the field. A major component of his research was development of analytical methods, many which have or will become standard in the profession.

Don Suarez (USDA-ARS U.S. Salinity Laboratory) will review his work that greatly improved analysis of selenium and arsenic species; Dan Olk (USDA-ARS) will summarize Dean's recent work on soil amino compounds, carbohydrates, and phenols; Warren Dick (The Ohio State University School of Environment and Natural Resources) will review his research on

residue and nutrient management under reduced tillage systems; and Jeanne McLain (USDA-ARS U.S. Arid-Land Agricultural Research Center) will summarize how Dean combined his many skills during the last phase of his career to consider the linkages between soil-plant and atmospheric processes.

Immediately after the symposia, Husein Ajwa, a long-time friend and colleague, will accept the award on Dean's behalf. The Francis E. Clark award will be contributed to Sophie Marten's college education fund in recognition of Dean's commitment to education. Colleagues and friends in the audience will then be invited to make statements of remembrance.

The Francis E. Clark Distinguished Lectureship on Frontiers in Biology features a distinguished scholar in the field of soil biology or a closely related area. The lectureship honors Francis Clark's lifelong commitment to the greater understanding of soil, plant, and microbial interactions and of nutrient cycling in terrestrial ecosystems. The program focuses on topics in soil biology that are of interest to teachers, researchers, and students and emphasizes new frontiers in all aspects of soil biology and the importance of soil biology in addressing agricultural, environmental, and socioeconomic issues. Funds for the lectureship are provided through contributions to the Agronomic Science Foundation, and the program is administered by SSSA.

Division S-3 Soil Quality Working Group's Annual Meeting

Please plan to attend the SSSA S-3 Soil Quality Working Group's annual meeting on Tuesday from 5:30 to 7:30 pm at the Westin hotel, Senate 1-3, Second Floor. We will have updates on projects such as the Conservation Effects Assessment Project, soil quality assessment tools, crop residue removal for biomass energy production, farmer extension education projects, international efforts, and more. Opportunities to collaborate with NCERA-59 on an e-journal and educational website and with SWCS on a soil quality workshop for its next annual meeting will be discussed.

Go One on One with the Agronomy Journal Editor

Thinking about writing an article for *Agronomy Journal* but want to learn more about the submission/review process? Do



you have ideas on how to make the journal better or have any problems/concerns you'd like to discuss? *Agronomy Journal* Editor Calvin Pearson wants to talk with you. He'll be at the Westin hotel in the Council meeting room on the first floor on Tuesday from 3:00–5:00 pm. Please plan to attend!



Francis E. Clark Distinguished Lectureship on Frontiers in Biology

1:45 pm, Indiana Convention Center, Sagamore 4, Second Floor

Before You Leave:

Renew

Renew your ASA-CSSA-SSSA Membership for 2007 at The Society Center in the Exhibit Hall or at Registration. Headquarters staff are available to answer your questions about renewing your membership or joining the Societies as well as adding a journal subscription, changing divisions, or learning more about the different membership categories.

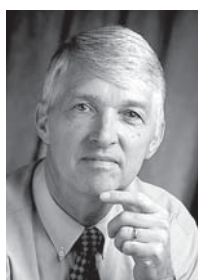
ASA-CSSA-SSSA members receive discounts on publishing in our respected journals and presenting at our Annual Meetings, a subscription to *CSA News*, and access to our online Membership Directory. In 2007, look for enhanced career services and educational initiatives, and greater outreach and advocacy efforts. Renew today!



Roger Beachy to Give Klepper Lecture

Roger Beachy, founding president of the not-for-profit Donald Danforth Plant Science Center in St. Louis, MO, will give the Betty Klepper Endowed Lecture on Tuesday afternoon at 3:40 pm in the Marriott hotel, Marriott Ballroom 6, Second Floor. Dr. Beachy is an internationally known scientist who pioneered the development of virus resistance in plants through the use of transgenic technology. He and his co-workers discovered that insertion of the gene coding for viral coat protein conferred to the plant resistance to attack by the virus. Using this technology, he developed the world's first transgenic food crop, a tomato resistant to infection by TMV and related viruses.

Beachy has received a number of honors for his research. He is a member of the U.S. National Academy of Sciences and in 2001 received the Wolf Prize in Agriculture. He is a



Roger Beachy

Fellow of the American Association for the Advancement of Science, the American Academy of Microbiology, and the Academy of Science of St. Louis.

As president of the Donald Danforth Plant Science Center since 1999, Beachy has been responsible for developing and implementing the Center's strategic direction, recruiting its staff, and formulating its research programs. He is in-

Betty Klepper Endowed Lectureship

3:40 pm, Marriott, Marriott Ballroom 6, Second Floor

involved in a variety of efforts with regard to rationalizing regulations that control commercialization of agricultural biotechnology.

From 1991 to 1998, he headed the Division of Plant Biology at The Scripps Research Institute, a leading biomedical research center in La Jolla, CA. He was also professor and Scripps Family Chair in Cell Biology and co-director of the International Laboratory for Tropical Agricultural Biotechnology (ILTAB) at Scripps. Beachy was a member of the Biology Department at Washington University in St. Louis from 1978 to 1991, where he was professor and director of the Center for Plant Science and Biotechnology.

Research under Beachy's direction has led to a number of patent applications. He has edited or contributed to 50 book articles, and his work has produced more than 220 journal publications. He serves on numerous boards and committees, including the board of the International Crops Research Institute for the Semi-Arid Tropics in Hyderabad, India; the board of the NIDUS Center for Scientific Enterprise; and other voluntary boards in the St. Louis region.

The Betty Klepper Endowed Lectureship was established by Betty Klepper, through a gift to the Agronomic Science Foundation, to highlight the importance of crop science. CSSA administers the program.

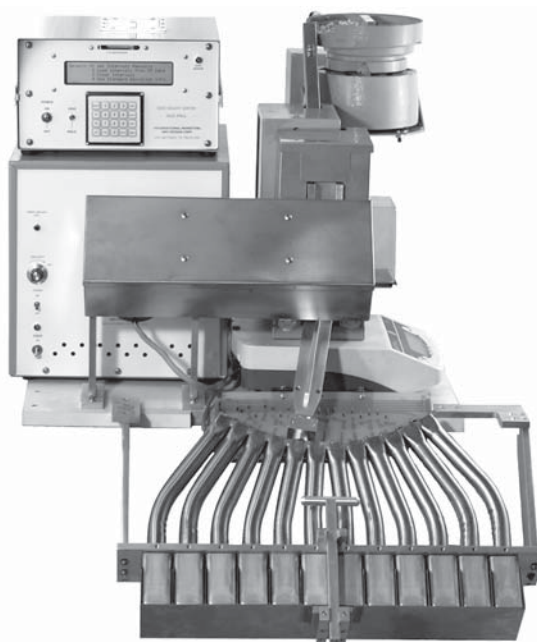
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Brady Lecture Explores Soil Science Changes in a Changing Climate

The first Nyle C. Brady Frontiers of Soil Science Lecture will feature Christian Feller, Director of Research and soil scientist at the Institut de Recherche pour le Développement (IRD). The lecture, "Soil Science (Changes) in a Changing Climate," will be held at the Marriott hotel, Marriott Ballroom 5-6 on Wednesday at 4:00 pm.

Dr. Feller's program focuses mainly on soil organic matter studies (properties, dynamics, and functions) applied to soil fertility and environmental services. Recently, he was largely involved in studying the impact of agroecological practices on soil-plant carbon sequestration for tropical and subtropical areas, and especially for no-till systems. Feller is also interested in the history of soil science, publishing a number of articles and book chapters on the subject. He currently serves as vice-president (2006–2010) of the International Union of Soil Science's Commission 4.5, "History, Philosophy, and Sociology in Soil Science."

Nyle C. Brady Frontiers of Soil Science Lectureship

4:00 pm, Marriott, Marriott Ballroom 5-6, Second Floor

interested in the history of soil science, publishing a number of articles and book chapters on the subject. He currently serves as vice-president (2006–2010) of the International Union of Soil Science's Commission 4.5, "History, Philosophy, and Sociology in Soil Science."

Feller has authored or co-authored more than 150 research publications and edited or co-edited four books. He served as a scientific editor for the *French Soil Science Review* ("Etude et Gestion des Sols") and co-editor of a number of books, most recently the *Advances in Soil Science* collection. Feller is active in the American and French soil science societies and is member of the Académie d'Agriculture de France (French Academy of Agriculture).

The Nyle C. Brady Frontiers of Soil Science Lecture honors the contributions of Nyle Brady to the profession and showcases a distinguished scientist who has made significant contributions to new and innovative research in soil science. SSSA administers the program through contributions made to the Agronomic Science Foundation.

Awards Ceremony, Reception to Follow Lecture

For the first time, SSSA is having an awards ceremony followed by a reception rather than the SSSA luncheon. In past years, the luncheon acted as both a business meeting and awards ceremony. At a time when we should be congratulating award winners and new Fellows, we were hurrying to the next session. Therefore, the Executive Committee decided to dedicate a time when we could properly congratulate these deserving individuals. The awards ceremony and reception will be held immediately following the first Nyle C. Brady Frontiers of Soil Science Lecture.



Christian Feller

Social for Early Career Attendees

All early career meeting attendees (including undergrads, grads, postdocs, and anyone in the early stages of a career) and those interested in supporting early career activities are invited and encouraged to attend the Early Career Social on Wednesday from 4:30–6:30 pm in the Marriott hotel, Ballroom 3, Second Floor.

The Early Career Member Committee improved the special programming for early career attendees, and this year also targeted SASES—the Students of Agronomy, Soils, and Environmental Sciences—to get them integrated more with the Annual Meetings.

"Our hope is that the meetings will open doors to opportunities for future collaborations by forming a network of young researchers all over the world," says Palle Pedersen, committee chair. "By offering programming directed toward early career members and students, we hope to build cross-country relationships."

The Early Career Social will feature light refreshments, a cash bar, and new this year, music! Please plan on attending the event, and feel free to bring a guest.



Symposium on Managing Crop Nitrogen for Weather

The weather controls a great deal of the variation in crop response to nitrogen. Divisions S-8 and S-4 are co-sponsoring a symposium titled "Integrating Weather Variability into Nitrogen Recommendations," on Wednesday from 7:55 am to 3:45 pm in the Convention Center, Room 104.

Sixteen invited speakers from across Europe and North America will discuss the history of recommendation and decision support systems, the application of process-based models to describe losses and crop uptake, tools for in-season crop assessment, and relationships among soil water, yield potential, and optimum rates.

Learn More about ASA's Centennial

If you're curious about the activities surrounding ASA's centennial celebrations at next year's Annual Meetings, or want to learn how to get involved, attend a special "Center Stage" presentation on the raised stage area in the Exhibit Hall on Wednesday at 5:00 pm. Attendees will also view a brief video about New Orleans, the site of the 2007 Annual Meetings.



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The Association of Women Soil Scientists (AWSS) is a nonprofit organization of women and men in soil science who promote communication and dialogue among professional soil scientists and provide assistance and encouragement for women in the soil science field. For more information, we can be found on the web at www.awss.org.
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Booth 318

Kincaid has manufactured seed research equipment for over 38 years and prides itself in building high quality planting, threshing, and harvesting equipment with centralized distribution for fast, reliable service. Kincaid is the leader in "Twin-Plot" harvesting technology and continues to develop new ideas in planting and harvesting equipment. We will be featuring our new Kincaid 8-XP Non Stop Harvesting plot combine at this year's show along with a new Twin-Plate precision planter and the very popular Kincaid/Great Plains No-till plot seeding drill. We are taking plot harvesting into the next decade and would enjoy visiting with you about it.

REPRESENTATIVE: Ryan Blubaugh

LECO Corp.

3000 Lakeview Avenue
St. Joseph, MI 49085
Phone: 269-983-5531
Fax: 269-982-8977

www.leco.com

Booth 522

Since the introduction of the first rapid carbon determinator in 1936, industries around the world have trusted LECO Corp. to deliver technologically advanced products and solutions for organic and inorganic analysis. Today, we offer a full line of instrumentation for organic analysis and elemental determination in foods, feeds, plants, soils, fertilizers, and energy, including the TruSpec® Elemental Determinator—available in N, CN, CHN, NS, CNS, and CHNS configurations. A number of optional add-on kits and modules are also available for the TruSpec, including a microkit, oxygen module, and both liquid and solid autosamplers.

LI-COR Biosciences

4421 Superior Street
Lincoln, NE 68504
Phone: 402-467-3576
Fax: 402-467-2819

www.licor.com

Booth 414

Visit LI-COR's booth (414) to see the latest instrumentation for environmental research, including portable photosynthesis systems, dataloggers, radiation sensors, leaf area measurement equipment, and gas analyzers, including the LI-840, LI-7000, and LI-7500 CO₂/H₂O analyzers. Also featured is the LI-8100 Automated Soil CO₂ Flux System, an automated system dedicated solely to measurements of soil CO₂ flux. The LI-8100 is a versatile system that allows you to make both short-term survey and long-term unattended measurements of soil CO₂ flux with interchangeable chambers. The LI-8100 now features a new Multiplexer (LI-8150) for connection of up to 16 long-term chambers at one time. REPRESENTATIVES: Chris Mantzios, Bill Miller, Rick Garcia, Tim Stalker, Steve Karmazin

LIGNIN, LLC

440 Maple Street NE
Albuquerque, NM 87106
Phone : 505-765-5742
Fax : 505-765-8168

www.ligninusa.com

Booth 508

Committed to helping soil-testing laboratories increase their productivity, LIGNIN, LLC offers products to help with scooping, weighing, dispensing, pH testing, and grinding. It is also a distributor of flow injection analyzers from FIALab, Inc and autosamplers from Elemental Scientific, Inc. Based on Cartesian-style industrial robots, the weighing system, soil scooper, and pH analyzer relieve tedium and monotony while improving consistency and throughput. A five-channel pH tester will be on display.

REPRESENTATIVE: Keith Hensley

Martin Machine Company

504 E. Fourth, P.O. Box 25
Ivesdale, IL 61851
Phone: 217-564-2440
Fax: 217-564-2440

www.blockdigester-magnum.com

Booth 515

Martin Machine Company manufactures Magnum Kjeldahl Block Digesters for elemental analysis. Magnum Digesters feature 4-inch-deep places to allow more digesting surface with near-even heat transfer. Choose from two models, the Magnum 56 and the Magnum 120 for 100-mL tube size, and 20 place 250-mL or 40 place 250-mL blocks can also be drilled for a combination of both sizes. Magnum Digesters are controlled by the F-4 controller, which has 40 profiles and 256 steps that can be stored in the profile memory and features Auto Start, Name your Profile and has a built-in Serial Capability for Computer Interface and data acquisition. Software, digestion glassware, and other accessory items are also available.

REPRESENTATIVE: David Martin, Stella Martin



Massage Connection, Inc.

819 E. 64th Street, Box A-7
Indianapolis, IN 46220
Phone: 317-257-3370

Booth 102

Take a few minutes to relax and enjoy a chair massage! Chair massage is a simple, fun, and affordable pick-me-up that feels good and promotes health. In a very short period of time, it can relieve mental and physical stress, and leave you feeling both rested and energized. Chair massage is a brief massage which:

- Lasts 10–15 minutes up to 20—your pick! Fee is \$1 per minute.
- Usually covers the head, neck, shoulders, back, arms, and hands.
- Reduces muscle tension and the pain it causes.
- Calms the nervous system and increases circulation, which boosts energy and alertness.
- Provides a complete change of pace, so the body and mind can relax and renew energy reserves.

New Orleans Convention & Visitors Bureau

2020 St. Charles Ave.
New Orleans, LA 70130
Phone: 800-672-6124

www.neworleanscvb.com

Booth 317

ASA will be celebrating its 100th Anniversary at the 2007 ASA-CSSA-SSSA Annual Meetings in New Orleans! Plan ahead for your trip to New Orleans! The New Orleans Metropolitan Convention & Visitors Bureau (www.neworleanscvb.com) is the driving force behind New Orleans' most important industry, tourism. Today the cultural riches, sensual indulgences, and unparalleled service that define the New Orleans experience continue to flourish, as they have for centuries. The most celebrated and historic core of the city—including the French Quarter, Central Business District, Warehouse and Arts District, Magazine Street, and Garden District—not only remains intact, both physically and spiritually, but is thriving. The New Orleans CVB is proudly welcoming visitors and business travelers everyday.

REPRESENTATIVE: Kirk Landry

NTech Industries Inc.

740 South State Street
Ukiah, CA 95482
Phone: 707-467-3747
Fax: 707-467-3750

www.ntechindustries.com

Booth 528

NTech Industries Inc. manufactures the GreenSeeker® & Weed-Seeker® active light, ground based, optical sensors for both plant and crop research. The GreenSeeker® sensor can be used day or night, in any atmospheric conditions. The GreenSeeker® Hand Held sensor is in use by many researchers around the world. Uses include data collection of reflectance measurements (typically NDVI) in both small and large plots to indicate plant vigor and biomass. GreenSeeker® sensors can be used with a GPS receiver to provide georeferenced data for mapping and analysis. The GreenSeeker® RT200 system is used for VR application of crop inputs using real-time data.

REPRESENTATIVES: Ted Mayfield, John Mayfield, David Smith

OI Analytical

P.O. Box 9010
College Station, TX 77842-9010
Phone: 979-690-1711
Fax: 979-690-0440

www.oico.com

Booth 226

OI Analytical will feature the new FS 3100 Automated Chemistry Analyzer for continuous-flow analysis of soil and plant nutrients. The FS 3100 determines ammonia, nitrate, ortho-phosphate, total nitrogen, and total phosphorus in extracts, digests, and water samples via flow injection (FIA) or segmented flow (SFA) analysis. Analytical methods supplied with the FS 3100 contain complete protocols and supporting data documenting the range, detection limit, precision, and accuracy for specific analytes.

Potash & Phosphate Institute

655 Engineering Drive, Suite 110
Norcross, GA 30092-2837
Phone: 770-447-0335
Fax: 770-448-0439

www.ppi-ppic.org

Booth 424

We invite all participants at the 2006 ASA-CSSA-SSSA Annual Meeting to visit our exhibit and meet staff members who will be present on a rotating schedule. The Potash & Phosphate Institute (PPI) is a not-for-profit organization with a long history of agronomic research and education programs. Information will also be available from the Foundation for Agronomic Research (FAR), an affiliated organization. Sample issues of *Better Crops with Plant Food* and display copies of various other publications and communications items will be featured. Learn more about our websites, www.ppi-ppic.org and www.farmresearch.com, as well as upcoming events and current program focus.

REPRESENTATIVES: Terry Roberts, Paul Fixen, Don Armstrong, Harold Reetz

PP Systems

110 Haverhill Road, Suite 301
Amesbury, MA 01913
Phone: 978-834-0505
Fax: 978-834-0545

www.ppsystems.com

Booth 502

See the latest high quality, portable research instrumentation for measurement of photosynthesis and chlorophyll fluorescence, soil respiration, CO₂ and H₂O infrared gas analysis, portable VIS/NIR spectrometer for measurement of leaf and canopy reflectance, and a wide range of environmental sensors. We are also the proud distributor for Hansatech Instruments (chlorophyll fluorescence, chlorophyll content, and oxygen), Gill Instruments (ultrasonic anemometers), and Skye Instruments (data loggers, light sensors, plant moisture, and environmental sensors).

REPRESENTATIVE: Tim Doyle

Qubit Systems Inc.

4000 Bath Road, 2nd Floor
Kingston, ON K7M 4Y4 Canada
Phone: 613-384-1977
Fax: 613-384-9118

www.qubitsystems.com

Booth 516

Qubit Systems Inc. provides accurate, low-cost equipment for measuring biological activity in plants and soils and for monitoring environmental conditions. Our new chlorophyll fluorometers

and imaging systems can be used in the lab and field for screening photosynthetic performance of leaves, plants, and crops. Our complete lab packages include all the hardware, software, and experimental protocols required to investigate processes such as CO₂ exchange (photosynthesis and respiration), O₂ exchange, chlorophyll fluorescence, and nitrogen fixation. Our CO₂ analyzers start at \$1475, and our O₂ sensors are only \$420! Complete laboratory packages start at only \$1700. See www.qubitsystems.com.

Seed Research Equipment Solutions LLC

210 E. 10th Avenue
South Hutchinson, KS 67505
Phone: 620-728-1280
Fax: 620-728-1270

www.sresweb.com

Booth 408

Seed Research Equipment Solutions LLC. (SRES) designs, builds, and modifies agriculture seed research equipment. Our very latest product, the "Classic" design, is ideally suited for strip trials, long plots, and controlled by a PLC. The primary product line is the SRES/Monosem "Advanced" precision vacuum planter setup for traditional research plots. We build research planters, configured to customer specifications, in both mounted and pull type models. We will be displaying a SRES/Monosem "Classic" and "Advanced" precision vacuum planter along with our newest product in our line of research equipment, a hi-speed, precise, and affordable seed counter.

REPRESENTATIVES: Carrol Langenhorst, Stacy Unruh, Brian Winkelman



Soil Measurement Systems LLC

7090 N. Oracle Rd, #178-170
Tucson, AZ 85704
Phone: 520-742-4471
Fax: 520-544-2192

www.soilmeasurement.com

Booth 426

We will have on display a setup for Hydraulic Conductivity and Column Leaching studies, our Tension Infiltrimeters, now with pressure transducers for data collection, all Stainless Steel Suction Lysimeters, the CP40II Cone Penetrometer with integrated GPS, different size acrylic Flow Cells (Soil Columns), and Tensiometers.

REPRESENTATIVES: Annemarie Wierenga, Marc Wierenga

Soilmoisture Equipment Corp.

801 S. Kellogg Avenue
Goleta, CA 93117
Phone: 805-964-3525
Fax: 805-682-2189

www.soilmoisture.com

Booth 228

Many clients, worldwide, rely on Soilmoisture agronomic equipment. Tensiometers, Ceramic plate extractors, TRASE TDR moisture measuring, and a wide range of soil sampling equipment make it possible to characterize the moisture-holding capacities and characteristics of soils. Our tools transformed irrigation practices, allowing for the establishment of soil-moisture standards now used worldwide. We continue to add new and innovative equipment and systems that make a difference in more efficient research or in solving the complex problems of today's technical world. If you have a new idea or are just looking for a solution that involves water, moisture, or dielectrics, give us a call. Let us add your idea or solution to the growing list of accomplishments that now span over 50 years.

REPRESENTATIVE: Alle Van Calker

Spectrum Technologies

12360 S. Industrial Drive East
Plainfield, IL 60585
Phone: 815-436-4440
Fax: 815-436-4460

www.specmeters.com

Booth 324

Spectrum Technologies, Inc. offers a full line of affordable measurement technology for soil quality, nutrient levels, light, weather, and other factors directly affecting plant development. Record rainfall, leaf wetness hours, temperature and humidity fluctuations, and other weather events with our Watch-Dog data logging line, which ranges from stand-alone units to full weather stations. The comprehensive software allows the user to graph the data, run standard reports, create custom reports, export data to Excel, and import other weather data. Software is available for 17 disease models and 60 insect models. Over 15,000 customers across the globe count on Spectrum's easy-to-use, dependable technology.

REPRESENTATIVES: Doug Kieffer, Mike Thurow

Springer

233 Springer Street
New York, NY 10013
Phone: 212-460-1500
Fax: 212-348-4505

www.springer.com

Booth 316

Springer is a leading publisher of books, journals, and electronic products. Visit our booth (316) to purchase our latest agronomy and soil science publications at a 20% discount and to pick up free sample copies of our numerous outstanding journals. Springer publishers will be on hand to answer any questions you may have. Visit www.springer.com for more information on latest products.

Stevens Water Monitoring Systems

5465 SW Western Avenue, Suite F
Beaverton, OR 97005
Phone: 503-569-8000
Fax: 503-469-8100

www.stevenswater.com

Booth 427

The Stevens' Hydra Probe II offers a unique advantage over other soil probes by providing an all-in-one, in-situ system that measures 10 different parameters simultaneously. The Hydra Probe instantly calculates soil moisture, conductivity, salinity, and temperature as well as supplying voltage outputs for research applications. The data add science to soil management for better understanding of soil conditions. The result is optimized analysis of soil for scientific study and for enhanced quality and yield of turf and crops. Visit us in booth 427 for a solution to your soil monitoring needs.

REPRESENTATIVES: Fred Holloway, Keith Bellingham

Systema Scientific, LLC

900 Jorie Boulevard, Suite 35
Oak Brook, IL 60523
Phone: 630-645-0600
Fax: 630-645-0601

www.easychem.com

Booth 111

Nutrient analysis made easy! A new generation of laboratory analyzer for ion analysis, the EasyChem utilizes the most advanced discrete technology available for environmental applications. EasyChem has been specifically designed with respect to USEPA methods, dynamic ranges, MDLs, PQLs, and a wide variety of sample matrices. EasyChem offers flexibility to perform multiple parameters on selected samples with no operator intervention with easy-to-use Windows-based software.

REPRESENTATIVES: Craig Chinchilla, Vince Ellangarb, Don Roddy

Swift Machine & Welding Co.

1881 Chaplin Street W
Swift Current, SK S9H 0H4 Canada
Phone: 877-773-2215
Fax: 306-773-2215

www.swiftmachine.com

Booth 517

Swift Machine manufactures Forage Plot Harvesters (Ride-on and Walk-Behind), Swathers, and now we are manufacturing a new Seeder. We are able to customize our equipment to meet specific requirements.

REPRESENTATIVES: Evelyn Dyck, Ken Dyck

The Haworth Press, Inc.

10 Alice Street
Binghamton, NY 13904
Phone: 607-722-5857
Fax: 607-722-6362

www.HaworthPress.com

Booth 510

Haworth Food & Agricultural Products Press is the imprint of The Haworth Press, Inc., which is entirely devoted to the areas of agriculture/horticulture, fisheries/aquaculture, and food science and technology. HFAPP is directed by an international editorial board of specialty advisors from academia, industry, and practitioners. In addition to the development of new books and journals that deal with cutting-edge basic science and scholarship, HFAPP aims to develop materials that introduce practical materials for advanced readers/practitioners in the agriculture and food industries. A 25% conference discount will be offered, and free journal samples copies will be available.

The Samuel Roberts Noble Foundation

P.O. Box 2180
Ardmore, OK 73402
Phone: 580-224-6232
Fax: 580-224-6240

www.noble.org

Booth 329

The Samuel Roberts Noble Foundation, Inc. is based in Ardmore, OK. The mission of the Noble Foundation is to: assist agriculture producers and other managers of natural resources in achieving their financial, production, stewardship, and quality-of-life goals through consultation, education, research, and demonstration; enhance plant productivity and utility through fundamental, translational, and applied research; and assist community service, health research and delivery systems, education, and other nonprofit organizations through grants and employee involvement.

US Borax Inc.

P.O. Box 1093
Forrest City, AR 72336
Phone: 870-630-0895
Fax: 870-630-0896

www.borax.com/agriculture

Booth 524

U.S. BORAX is the world's leading producer of boron fertilizers. The California-based company has been at the forefront of crop research since 1940 and continues to break new ground in boron science. This investment in agronomic research pays off for growers in their efforts to maximize crop yield and quality. For decades, the company's product line—including Granubor® for bulk blends, Fertibor® for suspensions, and Solubor® for foliar applications—has been synonymous with boron fertilizer. REPRESENTATIVE: Larry Jayroe

USDA Agricultural Research Service

5601 Sunnyside Avenue
Beltsville, MD 20705-5144
Phone: 301-504-3271
Fax: 301-504-1740

www.ars.usda.gov

Booth 123

The Agricultural Research Service (ARS) is the principal in-house research agency of the U.S. Department of Agriculture responsible for solving problems of national importance related to food and agriculture. ARS employs about 8,000 people; 2,000 of them are scientists, at over 100 research facilities strategically located in major farm and rangeland ecosystems throughout the United States and in several foreign countries. Careers for individuals with a scientific background (B.S., M.S., Ph.D.) span a variety of life, physical science, and engineering disciplines. To learn more about scientific career opportunities with ARS, visit the ARS Careers web site at: www.ars.usda.gov/careers.

USDA-NRCS Plant Materials Program

Bldg 509, BARC-East
Beltsville, MD 20705
Phone: 301-504-8175
Fax: 301-504-8741

<http://plant-materials.nrcs.usda.gov>

Booth 125

The USDA Natural Resources Conservation Service Plant Materials Program focuses on using plants as a natural way to address today's natural resource challenges. Through a nationwide network of Plant Materials Centers and Specialists, the Plant Materials Program selects conservation plants and develops innovative planting technology. The Program cooperates with a variety of public, private, and Tribal partners; provides new technology for national conservation initiatives such as the Farm Bill; and works one-on-one with public and private landowners to solve critical land management challenges like drought, wildfire restoration, and invasive species.

REPRESENTATIVES: Paul Salon, Mike Hubbs, Joe Williams

Vaisala Inc

10-D Gill Street
Woburn, MA 01801
Phone: 781-933-4500
Fax: 781-933-8029

www.vaisala.com

Booth 519

Vaisala booth will feature the CARBOCAP® carbon dioxide transmitters, which provide excellent accuracy and reliability in measuring CO₂ in applications such as soil respiration and ambient CO₂ monitoring. Also featured will be the WXT510 weather transmitter, which measures wind speed and direction, liquid precipitation, barometric pressure, temperature, and relative humidity. Visit Vaisala at Booth 519.

REPRESENTATIVES: Penny Hickey, Dick Gronholm

Veris Technologies

601 N. Broadway
Salina, KS 67401
Phone: 785-825-1978
Fax: 785-825-6983

www.veristech.com

Booth 127

Veris Technologies produces on-the-go soil sensing equipment for soil electrical conductivity, near-infrared soil spectroscopy, and soil pH. New for 2006 is the Veris NIR Spectrophotometer, the first commercially available system for mapping visible and near-infrared optical properties of soils on-the-go.

REPRESENTATIVES: Eric Lund, Colin Christy, Giyoung Kweon

WesternAg Innovations

3-411 Downey Road
Saskatoon, SK, S7N 4L8 Canada
Phone: 306-978-1777
Fax: 306-978-4140

www.westernag.ca

Booth 119

Western Ag Innovations markets the use of Plant Root Simulator (PRS)TM-probes. The PRSTM-probe consists of either cation- or anion-exchange resin membrane encased in a plastic probe, which is inserted into the soil to measure nutrient supply in situ with minimal disturbance. Since the early 1990s, the PRSTM-probe has been used to study soil nutrient dynamics by more than 200 researchers in over 20 countries. The PRSTM-probes are a convenient and economical means of quantifying both spatial and temporal variations in nutrient supply rates for all nutrient ions simultaneously; making them an essential tool in agronomic, turf, forestry, and environmental research.

REPRESENTATIVES: Ryan Hangs, Andrea Redman, Gary Kruger

Wintersteiger

217 Wright Brothers Drive
Salt Lake City, UT 84116
Phone: 801-355-6550
Fax: 801-355-6541

www.wintersteiger.com

Booths 124, 126, 128, 225, 227, 229

Wintersteiger is the worldwide leading manufacturer for agricultural research equipment. Our product range includes four different size plot combines ranging from our Classic combine for small plots to the Split combine for harvesting four rows of corn or soybeans. Our newest product, the Delta combine, is on display. Features include a cab with air conditioning, the Harvestmaster electronic data recording system, and several options for harvesting anything from small grain to row crops including a crop row header. Also on display is the Hege 1000 seeder and small equipment like stationary thresher LD350, Hege 11 seed treater, and our seed counter.

REPRESENTATIVES: Fritz Hoeckner, Sean Soyer, Ron Flynn

ASA-CSSA-SSSA Awards Programs

Scholarships • Awards • Fellows



*Exceptional Achievement • Distinguished Service
Professional Commitment*

2006 ASA Awards Program

Thursday, 16 Nov., 11:30 am – 1:15 pm

Marriott Downtown, Indianapolis
Marriott Ballroom 7-10



Larsen, a former employee dedicated to agronomy and the economics of fertilizer management in commercial crop production.

Nancy Bohl

Nancy Bohl is an agronomist for Ag Advisory Ltd., an independent crop consulting business in Algona, IA. She also helps with her fiancé's livestock and grain farming operation in north central Iowa. Bohl received a M.S. in soil science from the University of Wisconsin–Madison and B.S. in agricultural education and environmental science from Iowa State University. Her main interests include soil fertility, nutrient management, and manure management.



ASA–CSSA–SSSA Congressional Science Fellow

The ASA–CSSA–SSSA Congressional Science Fellow spends a year in Washington, DC as a special assistant to a member of Congress or Congressional committee. The fellowship provides practical contributions of science and technical knowledge in government while providing a public policy learning experience.

Kit Batten

Kit Batten is a Ph.D. ecologist who, before her Congressional Science Fellowship, worked as a postdoctoral associate for the National Ecological Observatory Network (NEON)



at the American Institute of Biological Sciences. She received a B.A. in chemistry from Oberlin College and a M.S. and Ph.D. in ecology from the University of California–Davis. Her research focused on examining how invasive plants changed the soil microbial community in a serpentine grassland and looked at impacts of these changes on native plant performance and ecosystem function. Dr. Batten works on climate change legislation, energy policy, Connecticut agricultural issues, land conservation and management, fisheries policy, and Endangered Species Act reauthorization for Sen. Joseph Lieberman (D-CT).

Frank D. Keim Graduate Fellowship

This fellowship honors and recognizes the unparalleled academic advising of the late Frank D. Keim. Criteria include academic excellence, leadership activities, and future plans related to the agronomic sciences. It is funded through the Agronomic Science Foundation.

Heather Clodfelter

Heather Clodfelter is a graduate student in the Department of Crop Sciences at the University of Illinois, who is currently working on a M.S. in crop production. She earned her B.S.



in crop sciences from the University of Illinois. Her research focuses on corn hybrid responses to varying nitrogen fertilizer rates. Clodfelter was recently nominated to present a poster at the North Central Extension/Industry Soil Fertility Workshop in Iowa. She is also a recipient of the University of Illinois Fellowship.

Harry J. Larsen/ Yara Memorial Scholarship

The Harry J. Larsen/Yara Memorial Scholarship is provided to a meritorious graduate student studying practical soil fertility and crop production. It is funded through the Agronomic Science Foundation by Yara America Inc. in memory of Harry J.

J. Fielding Reed Scholarship

The J. Fielding Reed Scholarship was established in recognition of Dr. Reed's lifelong commitment to advancing the knowledge of agriculture through his work in soil science and natural resources and his passion for educating students. It recognizes an outstanding undergraduate senior pursuing a career in the soil or plant sciences. It is funded through the Agronomic Science Foundation.

Lauren Smith

Lauren Smith is a senior in Agronomy at Kansas State University (KSU). She is active in the Wheat State Agronomy Club, Alpha Zeta, Sigma Alpha, and the soil judging team. Smith has conducted undergraduate research



into the genetics of drought tolerance in wheat for the College of Agriculture Honors Program. She will continue this research for a M.S. at KSU.

Hank Beachell Future Leader Scholarship

The scholarship was established in recognition of Henry A. Beachell's commitment to advancing the knowledge of agriculture through his work in rice breeding and development. The purpose of this scholarship is to expand the agricultural knowledge of undergraduate students participating in activities that enhance their university studies. It is funded through the Agronomic Science Foundation.

Nicholas Chammoun

Nick Chammoun is a crop science undergraduate in the Crop and Soils Science Department at the University of Georgia. He also has a double major in agricultural engineering in the Department of Agricultural and Biological Engineering with an emphasis on mechanical systems. His area of research is in production agronomy and biofuels. He is currently involved in three research projects focusing on the effects on plant growth from pyrolysis products.



W.L. Nelson Award

The Werner L. Nelson Award for Diagnosis of Yield-Limiting Factors recognizes outstanding performance in the development, acceptance, and/or implementation of diagnostic techniques and approaches in the field. The selection criteria is the creativity and innovation of the nominee. The award is supported through a contribution by the late Dr. Nelson to the Agronomic Science Foundation.

Agronomic Awards

ASA recognizes these individuals with the Agronomic Resident Education, Agronomic Extension Education, Agronomic Service, Carl Sprengel Agronomic Research, International Service in Agronomy, Environmental Quality Research, and Agronomic Industry Awards for their outstanding contributions to agronomy through education, national and international service, and research. In addition, Monsanto presents the Professional Certification Service Award, the Certified Crop Adviser Program presents the CCA of the Year Award, and Syngenta Crop Protection presents the Crop Protection Recognition Award.

William R. Raun

Bill Raun is a Regents Professor in the Department of Plant and Soil Sciences at Oklahoma State University (OSU). He also holds the Melvin D. and Mary E. Jones Distinguished Professorship of Agronomic Sciences. He received a B.S. and M.S. at OSU and Ph.D. from the University of Nebraska. From 1986–1991 he worked for the International Maize and Wheat Improvement Center (CIMMYT) as a regional agronomist based in Guatemala City. Since 1992, his work at OSU has focused on improved nitrogen use efficiency for cereal production. Along with Dr. John Solie and Dr. Marvin Stone, he developed spectral/climatological indices to predict wheat and corn yields in-season and subsequently applied them to adjust for fertilizer N rates. From 1992 to present, 42 graduate students have completed advanced degrees under Dr. Raun's direction. He also serves as an *Agronomy Journal* technical editor.



Agronomic Resident Education Award

Stephen C. Mason

Stephen C. Mason is a professor in the Department of Agronomy and Horticulture at the University of Nebraska. He also is a principal investigator in INTSORMIL, the international sorghum and millet collaborative research program. Dr. Mason received a B.S. from the University of Missouri and M.S. and Ph.D. from Purdue University. His courses focus on crop management and career preparation. His research focuses on management of the summer annual crops sorghum, pearl millet, and maize in the USA, Central America, and West Africa. He is an ASA Fellow and coordinator of INTSORMIL's Central America Regional Program. He has been chair of the former Subdivision A1-a Student Activities and Division A-6 International Agronomy.



Agronomic Extension Education Award

Deanna L. Osmond

Dr. Deanna Osmond is a professor and Extension leader in the Soil Science Department at North Carolina State University (NCSU). Osmond received a B.S. in agronomy from Kansas State University, M.S. in soil science from NCSU, and Ph.D. in agronomy from Cornell University. Her program focuses on agricultural productivity and environmental stewardship, with particular emphasis on water quality. She provides training to certify nutrient management planners in North Carolina. In addition, she has been active with the Southern CSREES Nutrient Management Team.



Agronomic Service Award

C. Jerry Nelson

C. Jerry Nelson is Curators Professor of plant sciences and senior advisor for the Asian Affairs Center at the University of Missouri. He received his B.S. and M.S. degrees from the University of Minnesota and Ph.D. from the University of Wisconsin. He researched fructan, leaf growth and tillering of grasses, and persistence and autotoxicity of alfalfa. He is co-editor of the popular *Forages* textbook. Dr. Nelson was elected Fellow and president of ASA and CSSA and received the Crop Science Research Award. He nurtured the Certified Crop Adviser program within ASA, helped initiate and develop the series of International Crop Science Congresses, and was elected



the first president of the International Crop Science Society.

Carl Sprengel Agronomic Research Award

Kenneth G. Cassman

Ken Cassman is the Heuermann Professor of agronomy and director of the Nebraska Center for Energy Sciences Research at the University of Nebraska. His research and educational efforts focus on the ecological intensification of cereal-based cropping systems in the U.S., Asia, Latin America, and North Africa with the dual goals of ensuring food security and protection of environmental quality. Dr. Cassman received a B.S. from University of California–San Diego and M.S. and Ph.D. from the University of Hawaii.



CCA of the Year Award

Edmund Ruff

Edmund Ruff is an off-campus instructor with farmers enrolled in the Farm Business and Production Management Program at Southwest Wisconsin Technical College. Ruff received B.S. and M.S. degrees from Iowa State University in agriculture education. He teaches crop management, livestock management, and financial management classes. He works with 50 farmers in his program by improving production skills through hands-on training conducted at each student's farm. He has been a CCA since 1998.



ASA–CSSA–SSSA Early Career Professional Award

The Early Career Professional Award recognizes professionals who have made an outstanding contribution in agronomy, crop science, and/or soil science within seven years of completing their terminal degree.

Joel Pedersen

Joel A. Pedersen is an assistant professor in the Department of Soil Science at the University of Wisconsin–Madison. Dr. Pedersen earned his B.S. degree from the University of California–Irvine, his M.S. at the California Institute of Technology, and Ph.D. at the University of California–Los Angeles. He has expertise in the fate, transport, and bioavailability of organic toxicants and novel pathogens in terrestrial and aquatic environments. Major research thrusts include the environmental transmission of prion diseases and the mobility and bioavailability of antibiotics in soils and subsurface environments.



International Service in Agronomy Award

Cassava Team

The Cassava Team receiving this award represent more than 70 people that were actively involved in the Nippon Foundation Cassava Project



Cassava Team members include: Watana Watananonta (second from left), Reinhardt Howeler (fourth from left), and Tran Ngoc Ngoan (fifth from left).

in Thailand, Vietnam, and China, helping farmers in 99 villages conduct over 1,000 farmer participatory research (FPR) trials to identify the best cassava varieties and agronomic practices for each region and to extend those farmer-selected practices to other farmers and neighboring communities. This has had a significant impact on cassava yields and income, especially in Vietnam and Thailand. Receiving the team award:

Dr. Reinhardt Howeler, soil scientist/agronomist at the Centro Internacional de Agricultura Tropical (CIAT) in Cali, Colombia; 1970–present (1970–1986 stationed in Colombia; 1986–present in Thailand).



Mr. Watana Watananonta, senior advisor on field crops at the Department of Agriculture, Ministry of Agriculture and Cooperatives of Thailand; formerly the coordinator of Nippon Foundation Cassava Project in Thailand; formerly director of the Rayong Field Crops Research Center, 1995–1999.

Dr. Tran Ngoc Ngoan, vice rector of Thai Nguyen University, Vietnam; formerly coordinator of the Nippon Foundation Cassava Project in Vietnam.

Environmental Quality Research Award

Lajpat R. Ahuja

Laj Ahuja is a soil physicist and research leader at the USDA-ARS, Agricultural Systems Research Unit, Fort Collins, CO. He received B.S. and M.S. degrees in India and a Ph.D. from the University of California–Davis.



Dr. Ahuja's research includes: physics and modeling of infiltration; chemical transfer to runoff from surface and subsurface sources and transport to groundwater through soil matrix and macropores; simplified methods for determining soil hydraulic properties, their spatial variability, and their intrinsic scaling relations for different soils; quantifying the effects of soil management practices on soil properties and processes; and synthesis of interdisciplinary knowledge to develop process-level models of agricultural systems. He was associate editor and technical editor and is currently book review editor for *Soil Science Society of America Journal*. He received the Don and Betty Kirkham Soil Physics Award and is a Fellow of ASA and SSSA.

Agronomic Industry Award

Paul Carter

Paul Carter is research coordinator, Agronomy Sciences, with Pioneer Hi-Bred International. Dr. Carter received his B. S. degree at North Dakota State University and his M.S. and Ph.D. degrees from the University of Minnesota. Carter's team at Pioneer provides technical support to Pioneer field sales employees and conducts agronomic field research. Before joining Pioneer, he was a professor and Extension agronomist at the University of Wisconsin–Madison. He has been active in ASA and CSSA.



Monsanto Professional Certification Service Award

David J. Harms

David Harms is CEO of Crop Pro-Tech Inc., a regional agricultural consulting firm with offices in Iowa, Illinois, and Indiana. Crop Pro-Tech is involved in crop monitoring, contract research, and crop consulting. Harms has also worked on international projects. He is past president of the National Alliance of Independent Crop Consultants and past president of the American Society of Agricultural Consultants. He chaired the Crops Certification Board, ARCPACS, and the NCWSS consultants group. Harms received a B.S. from the University of Illinois.

Syngenta Crop Protection Recognition Award

Neil Hansen

Neil Hansen is an associate professor of soil science at Colorado State University (CSU) with specialization in soil and water conservation in both dryland and irrigated crop production systems. Dr. Hansen received a B.S. and M.S. from Brigham Young University and Ph.D. from the University of Minnesota. He teaches the senior capstone course in soil and crop management at CSU, advises graduate students, and has achieved success in both research and outreach programs. He serves as an associate editor for *Soil Science Society of America Journal*.



ASA Fellows

ASA has been selecting outstanding members to the position of Fellow since 1924. Colleagues within the Society nominate worthy members, and the Fellows Committee carefully ranks the nominees to determine the final selection. Chosen for their professional achievements and meritorious service, the 21 Fellows named in 2006 bring the total number to 1,591.



Glen Aiken

Glen Aiken is a research animal scientist with the USDA-ARS Forage-Animal Production Research Unit in Lexington, KY. He also serves as a Forage Agronomist. Dr. Aiken received a B.S. and M.S. from Texas A&M University and Ph.D. from the University of Florida. His research program focuses on the plant-animal interface. Aiken served as an associate editor and is currently a technical editor for *Crop Science*. He has been active in the American Society of Animal Science, American Registry of Professional Animal Scientists, and the American Forage and Grassland Council.



Paul Carter

Please see Dr. Paul Carter's biographical summary and photo for the *Agronomic Industry Award*.

Thomas Carter, Jr.

Thomas E. Carter, Jr. is a research geneticist with the USDA-ARS Soybean and Nitrogen Fixation Research Unit, Raleigh, NC. He also serves as professor of crop science at North Carolina State University (NCSU). Dr. Carter received his B.S. and M.S. from the University of Georgia and his Ph.D. from NCSU. His breeding program is one of the few in North America that investigates the genetic diversity that exists in the soybean. Carter has served on the ASA and CSSA Boards of Directors, as associate editor of *Crop Science*, and as a reviewing member of the Soybean Germplasm Registration Committee. He is a Fellow of CSSA.



vania State University, M.S. from University of Maine, and Ph.D. from the State University of New York. His research is focused on the biogeochemistry of nutrients in agricultural, forested, and aquatic ecosystems. David served as an associate editor for the *Soil Science Society of America Journal*, is currently as associate editor for the *Journal of Environmental Quality*, and has frequently served as a proposal panel member for USDA and NSF.

Jorge A. Delgado

Jorge Delgado is a soil scientist with the USDA-ARS Soil Plant Nutrient Research Unit, Fort Collins, CO. Dr. Delgado is a Fellow of SSSA and the Soil and Water Conservation Society. He is also a faculty affiliate with the Department of Soils and Crops and the Department of Horticulture and Landscape Architecture of Colorado State University and Ad Honorem professor with the Chinese Academy of Sciences, Center for Agricultural Resources Research, Shijiazhuang, Hebei, China. He serves as co-research advisor for M.S. and Ph.D. students and on graduate student committees. Delgado received a B.S. from the University of Puerto Rico and M.S. and Ph.D. from Louisiana State University. Delgado's research focuses on conducting site-specific and regional-scale evaluations. His applied research is being used by Extension, USDA-Natural Resources Conservation Service, and farmers. Since 2001, he has been research editor of the *Journal of the Soil and Water Conservation Society* and chair of the SWCS Editorial Board. He served as chair of Division S-6 Soil and Water Management and Conservation (2004).



James Anderson

James Anderson is a professor in the Department of Agronomy and Plant Genetics at the University of Minnesota. He received a B.S. degree from the University of Minnesota, M.S. degree from the University of Kentucky, and Ph.D. from Cornell University. Dr. Anderson has been working in the areas of wheat breeding and genetics since 1989. He has served on the editorial board of *Crop Science* and received CSSA's Young Crop Scientist Award in 1998.



Mark B. David

Mark David is a professor in the Department of Natural Resources and Environmental Sciences at the University of Illinois-Urbana-Champaign. Dr. David earned a B.S. from The Pennsyl-



M.C. Engelke

Dr. Milt Engelke is a professor and Texas Agricultural Experiment Station (TAES) Faculty Fellow with Texas A&M University. He received a B.S. from the University of Wisconsin–Platteville, and M.S. and Ph.D. from the University of Wisconsin–Madison in agronomy and plant breeding and genetics. He served as chair of Division C-5 Turfgrass Science (2001). He has served on the Golf Course Superintendent Association of America (GCSAA) teaching faculty since 1985. He is active in ASA, CSSA, Turfgrass Producers International, International Turfgrass Society, and the Turfgrass Breeders Association. He has been recognized with GCSAA's Distinguished Service Award and the Distinguished Alumni Award from UW–Platteville. Stationed at the TAES in Dallas, his program focuses on breeding and developing turfgrass cultivars and agronomic systems for the Southwest. He has been involved in the development and release of 19 turfgrass cultivars in six different species.



ment course along with co-teaching courses in Advanced Crop and Soil Management Systems and Tropical Crop and Soil Management Systems. He and a team of scientists have developed seed science courses through continuing education. Dr. Fenwick is the advisor to CSU's Agronomy Club and has served as chair of the former Subdivision A-1a Student Activities. He is the recipient of numerous teaching, advising, and service awards from the College of Agriculture and the university.

Jay Gan

Jay Gan is a professor and environmental chemist in the Department of Environmental Sciences at University of California–Riverside. He also serves as the water quality Extension specialist. Dr. Gan received his degrees from Zhejiang University in China. His program focuses mainly on environmental chemistry, fate, transport, and risk mitigation of organic chemicals such as pesticides. Gan served as an associate editor for *Journal of Environmental Quality* for two terms and has been active in ASA, the American Chemical Society, and the Society of Environmental Chemistry and Toxicology.



analysis of physical, mechanical, and hydraulic processes in structured unsaturated agricultural and forest soils at various scales (from single aggregates to the landscape). He investigates not only the soil functions but also the coupled processes in between soil mechanics, hydraulics, and chemistry in order to also forecast the sensitivity of soils for various land-use approaches. At present, 29 Ph.D. students finished under his guidance.

Tom Kaspar

Tom Kaspar is a plant physiologist at the USDA-ARS National Soil Tilth Laboratory in Ames, IA. He also serves as a USDA collaborator/professor with the Agronomy Department at Iowa State University. Dr. Kaspar received a B.S., M.S., and Ph.D. from Iowa State University. His research program focuses mainly on crop and soil management to improve water quality and soil productivity. Kaspar is an associate editor for *Soil Science Society of America Journal* and a consulting editor for *Plant and Soil*. He has served on numerous committees and service functions for ASA and SSSA.



Jack Fenwick

Jack R. Fenwick is coordinator of the Resident Instruction Program and associate professor in the Department of Soil and Crop Sciences at Colorado State University (CSU). He received a B.S. in agronomy and agricultural education and M.S. and Ph.D. degrees in agronomy from Purdue University. He taught high school biology and agricultural education in Remington, IN. His responsibilities include teaching the Introductory Crop Manage-



Rainer Horn

Rainer Horn is a professor of the Institute of Plant Nutrition and Soil Science (chair of Soil Science) at the Agricultural and Food Science faculty of the Christian Albrechts University zu Kiel, Germany. Dr. Horn's research program primarily focuses on the



Ann Kennedy

Ann Kennedy is a soil scientist in the Land Management and Water Conservation Research Unit, USDA-ARS at Pullman, WA. She also serves as an adjunct scientist in the Department of Crop and Soil Sciences at Washington State University. Dr. Kennedy received her B.A. at the University of Missouri–St.



Louis, her M.S. from the University of Missouri–Columbia, and her Ph.D. from North Carolina State University. Her program focuses on plant–microbe interactions and soil quality in dryland cropping systems. Kennedy served as the research leader of the USDA-ARS Land Management and Water Conservation Research Unit from 1996–2001. She served as associate editor for the *Journal of Arid Soil Research and Rehabilitation* and associate technical editor for the *Journal of Soil and Water Conservation*. She works with K–12 teachers to bring science experiments into the classroom as a means to encourage young students’ interest in science.

Sally D. Logsdon

Sally Logsdon is a research soil scientist with USDA-ARS at the National Soil Tilth Laboratory in Ames, IA. She is also an associate professor/collaborator in the Agronomy Department at Iowa State University. Her research responsibilities are to quantify landscape and management effects on plant-available water and to determine the dependence of soil electrical and thermal properties on soil structure under different management practices. Dr. Logsdon has been active in ASA and SSSA where she has been a member for 26 years, serving as associate editor and technical editor for the *Soil Science Society of America Journal* and on ASA and SSSA award committees. Currently she serves as SSSA editor-in-chief.



Richard Lowrance

Richard Lowrance is a research ecologist and lead scientist at the Southeast Watershed Research Laboratory, USDA-ARS. Dr. Lowrance received his B.S. degree in Biology from the University of South Alabama and his Ph.D. in Ecology from the University of Georgia. His program focuses mainly on nutrient cycling and water quality in agricultural watersheds. Lowrance served as an associate editor for the *Journal of Environmental Quality* and on the Publications Board for the Soil and Water Conservation Society. He has been active in SSSA, the Soil and Water Conservation Society, the American Water Resources Association, and the Suwannee Basin Working Group.



Ravendra Naidu

Ravi Naidu is the managing director of the Cooperative Research Centre for Contamination Assessment and Remediation of the Environment, which he helped establish in 2005. He is also the inaugural director of the Australian Research Centre for Environmental Risk Assessment and Remediation. He has researched environmental contaminants, bioavailability, and remediation for over 20 years. Dr. Naidu has co-authored over 300 technical publications and co-edited eight books in the field of soil and environmental sciences including field remediation of contaminated sites. His current research focus is environmental analytical chemistry, speciation and bioavailability, and risk-based land management. He works closely with industries, regulators, and re-



searchers throughout Australia. He received a B.S. from the University of the South Pacific, M.S. from the University of Aberdeen, and Ph.D. from Massey University, New Zealand.

William Payne

Bill Payne is professor and crop physiologist at the Texas A&M University Agricultural Research and Extension Center in Amarillo, TX. Dr. Payne received his B.A. degree in chemistry at Wabash College, IN and his M.S. and Ph.D. degrees in soil science at Texas A&M University. His program focuses on optimization of water use in diverse cropping systems of the world through the identification of new species, improved cultivars, and crop management technologies suited to local environmental conditions. Payne has served as associate and technical editor for *Agronomy Journal*, editor of two books published by ASA, program chair of Division A-6 International Agronomy, Representative to the ASA Board of Directors, and on various other committees. He is active in ASA, CSSA, SSSA, the International Union of Soil Sciences, and American Association for the Advancement of Science.



Chandra Reddy

Chandra Reddy is a professor of agronomy in the Department of Plant and Soil Science at Alabama A&M University. He also serves as dean of the graduate school. Dr. Reddy earned his B.S. and M.S. degrees from Andhra Pradesh Agricultural University, India and Ph.D. degree from University of Florida. His program focuses on crop production and soil conservation. Reddy has been active in minority and international student education and an active member of several national and international agricultural societies.



Susan Riha

Susan Riha is a professor in the Department of Earth and Atmospheric Sciences and an adjunct professor in the Department of Crop and Soil Sciences at Cornell University. She holds the Charles L. Pack Chair and is currently director for Sponsored Research in the College of Agriculture and Life Sciences at Cornell. She received her B.A. degree from Smith College, her M.S. degree from the University of Massachusetts, and her Ph.D. from Washington State University. Her program focuses primarily on soil-plant-atmosphere dynamics. Dr. Riha has served as an associate editor for the *Journal of Environmental Quality*, as a member of the U.S. National Assessment of The Potential Consequences of Climate Variability and Change, and as a member of the U.S. National Committee for Soil Science.



Craig Roberts

Craig Roberts is professor of agronomy and state forage Extension specialist at the University of Missouri. His undergraduate degrees are from Florida College and the University of North Alabama, and his graduate degrees are from the University of Arkansas. He holds a Ph.D. in agronomy with a minor in biochemistry. Dr. Roberts conducts research in the area of forage quality with specializations in near-infrared spectroscopy and fescue toxicosis, and his research findings support his educational programs in fescue toxicosis and grazing systems. He currently serves as CSSA editor-in-chief.



Harold M. van Es

Harold van Es is a professor of soil and water at Cornell University, holding a position in Extension, research, and teaching in the Department of Crop and Soil Sciences. Dr. van Es is a native of the Netherlands and received degrees from the University of Amsterdam, Iowa State University, and North Carolina State University. His research and Extension activities focus on soil physical quality, chemical fate and transport, precision agriculture, and pedometrics. He teaches an undergraduate course in soil and water management and a graduate course in applications of space-time statistics.



Glenn Wilson

Glenn Wilson is a physical hydrologist with the USDA-ARS National Sedimentation Laboratory, Oxford, MS. Dr. Wilson received his B.S. and M.S. degrees from Louisiana State University and his Ph.D. degree from the University of Arkansas. His current research interests are ephemeral gully erosion and streambank failure processes and past research has included forest hydrology, preferential flow, solute transport, and landfill cover performance. Wilson has served as an associate editor for *Water Resources Research* and the *Soil Science Society of America Journal* and is currently the technical editor for the *Soil Science Society of America Journal*, Division S-1 Soil Physics. He has also served as the S-1 Board Representative on the ASA and SSSA Board of Directors.



2006 CSSA Awards Program

Tuesday, 14 Nov., 3:00–3:40 pm

Marriott Downtown, Indianapolis
Marriott Ballroom 6

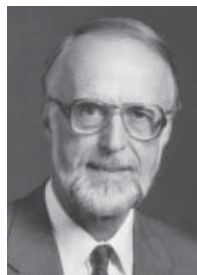


CSSA Presidential Awards

Don Duvick

Prior to his death in May 2006, Don Duvick was presented with the 2006 CSSA Presidential Award from CSSA President Steve Fales.

Donald N. Duvick received a B.S. in agriculture from the University of Illinois (1948) and Ph.D. in botany from Washington University, St. Louis (1951). Duvick then went to work for Pioneer as a plant breeder and retired as senior vice president of research in 1990. Duvick's interests were plant breeding and genetics, preservation and use of genetic diversity, conservation of natural resources, vocal music performance, field botany, natural history, and archaeology. He was elected to the National Academy of Sciences and was a charter member of CSSA and was active in ASA and CSSA, holding a number of offices, including CSSA president (1987) and ASA president (1992). He was a Fellow of both ASA and SSSA (1980).



University and her M.A. and Ph.D. at Duke University. Dr. Klepper has served on editorial boards of five scientific publications and was editor of *Crop Science* from 1992–1995. She served on the Agronomic Science Foundation Board of Trustees for six years. She is a fellow of ASA, CSSA, SSSA, and the American Association for the Advancement of Science and served as CSSA president in 1997. Her research developed plant-centered systems for describing cereal development and for quantifying crop root system growth patterns and water uptake in agricultural soils.

Golden Opportunity Scholars

CSSA has named the inaugural class of Golden Opportunity Scholars who will begin a year-long mentoring program at the Annual Meetings. Fifteen undergraduates, chosen for their academic achievements and interest in crop science, have been selected to participate in special activities at this year's meetings. The students are given financial support to attend the meetings and will be paired up with a CSSA member/mentor for the coming year.

Betty Klepper

Betty Klepper is a retired research leader of the USDA Columbia Plateau Conservation Research Center at Pendleton, OR. She earned her B.A. summa cum laude from Vanderbilt



Raechel Baumgartner

Raechel Baumgartner is a student in the Agronomy Department at Iowa State University (ISU). She is majoring in agronomy with an emphasis in plant breeding. She plans



to continue her studies after graduating in May 2007. Her goal is to work on improving human food crops by enhancing nutritional content and breeding for native disease and insect resistance. She would like to be involved in developing more sustainable agricultural practices. She is a member of the ISU Crops Judging Team and currently holds officer positions in ISU's Agronomy Club and the Biological Sciences Club.

Gabrielle Cates

Gabrielle L. Cates is a crop science major at Alabama A&M University. She will graduate in the spring of 2008. As a member of a service organization, Cates enjoys working to improve the environment as well as the quality of human life. She hopes to research various methods of sustainable agriculture and to further her education with graduate school.



Anna Flaig

Anna Flaig is a student in the Food and Resource Economics Department at the University of Florida majoring in international food and resource economics with minors in plant sciences and international humanitarian assistance. Flaig will graduate in May 2008. Her goal is to work in Africa to increase in agricultural production. She is a member of the Agronomy and Soil Sciences Club, AgEcon Club, Gator Collegiate Cattle Women's Club, Dairy Science Club, and an Ambassador for the College of Agricultural and Life Sciences. She plans on going to graduate school in



developmental economics and plant sciences.

Sharon Gray

Sharon Gray is a senior in the School of Life Sciences at the University of Illinois–Urbana-Champaign. She is majoring in Integrative Biology with a minor in the Environmental Fellows Program. Gray plans to graduate in December 2006. After going to graduate school in agriculture and global climate change, she hopes to be involved in research as well as teaching in an academic institution. Her undergraduate studies have focused on the effects of climate change on soybeans. Gray has also been involved in environmental service with the Youth Conservation Corps, and has been active in various volunteer programs in Urbana-Champaign.



Addie Hall

Addie Hall is a junior in the Department of Genetics, Development, and Cell Biology at Iowa State University, majoring in genetics. After graduating in May 2008, she plans to attend graduate school to study plant genetics. Her goal is to become a professor and researcher of crop genetics at an academic institution. Her college study has involved the steroid hormone pathway in Arabidopsis and transposons in maize. Hall studied drought resistance in rice through the World Food Prize at the International Rice Research Institute in the Philippines.



Sydney Jarrett

Sydney Jarrett is in the Department of Crop Sciences at the University of Illinois–Urbana-Champaign. In addition to her major, this sophomore is also working on a College of Agriculture, Consumer, and Environmental Sciences International Studies minor. After graduating in 2008, Jarrett plans to continue working toward graduate degrees with hopes of becoming a breeder for a major seed company. The SASES chapter at Illinois, where she is the 2006 club secretary, has been named Best Club in the College of ACES.



Summer Kluck

Summer Kluck is a junior in the Department of Agronomy and Plant Genetics at the University of Minnesota. She is majoring in applied plant science with an emphasis on plant improvement and a minor in horticulture science. She will graduate in December 2007 and plans to attend graduate school for plant breeding. Her ambition is to do research for a private company or academic institution. Kluck is a member of the Crops and Soils Club and secretary of the Horticulture Club.



Danielle Lowenstein

Danielle Lowenstein is a third-year student in the Agronomy Department at the University of Florida. She is majoring in plant science with a



specialization in crop production and management. She is a member of her local SASES chapter, a representative to her university's Agricultural and Life Science College Council, and a participant in the 2006 SASES national speech competition. After graduating in May 2008, Lowenstein plans to pursue graduate study. Her goal is to work in international agricultural development.

Andrew Miller

Andrew Miller is a senior majoring in agronomy at Iowa State University. He plans to graduate in May 2007 and will continue with graduate school, studying forage production physiology. He is a member of the ISU Agronomy Club. Currently, he is on exchange at the University of Arizona. His goal is to become a field production research specialist for the USDA or private industry.



Charlie Nealis

Charlie Nealis is a senior at the University of Florida, majoring in food and resource economics with a minor in agronomy. He plans to graduate in December 2006. His goal is to work with public education and state Extension to enhance student awareness of agricultural careers and higher education opportunities. Nealis is vice president of his local SASES chapter, a volunteer at a local elementary school, and was a research assistant for a DEP-funded turfgrass research grant. He plans on going to graduate school in agricultural education and communication.



Casey Reynolds

Casey Reynolds is a senior student at the University of Florida. She is majoring in geography with a minor in plant science. After Reynolds graduates in May 2007, she plans on going to graduate school to extend her education in the field of crop science. Her goal is to work for the benefit of agriculture in areas that face impending pressure from surrounding urban development and increasing environmental pressures.



Chris Schaefer

Chris Schaefer is a student in the Plant Science Department at South Dakota State University. He is a junior majoring in agronomy with a science specialization, along with minors in chemistry and biology. He hopes to attend graduate school and study either plant breeding or soil science. Schaefer is planning to work in research in private industry or at an academic institution. He has been a member of his local SASES chapter for three years and has been the president for a year. He is also a Student Association senator, an ambassador for the College of Agricultural and Biological Sciences, and a member of the Soil Judging Team. He is scheduled to graduate in May 2008.



Taslima Stephen

Taslima Stephen is a junior in the Department of Plant and Soils Sciences at the Alabama A&M University. She is majoring in crop science with a double minor in chemistry and soil science. Upon graduating in the spring of 2008, she plans to attend graduate school to study water management and conservation. Her aim is to work in the public or private sector in improving and maintaining water quality and how to solve irrigation problems for small-scale farmers. Stephen is a member in her school's MANRRS club and is president of the Caribbean Student Association (2006–2007).



Jared Walter

Jared Walter is a senior majoring in crop science at the University of Illinois. He plans to graduate in May 2007 and his goal is to become a researcher in private industry. His study focuses mainly on weed science and genetics. Walter is a member of Field and Furrow Agronomy Club, Department of Crop Science Student Ambassadors, and Nabor House Co-operative Fraternity. He plans to go to graduate school in weed science.



Steve Wilkens

Steve Wilkens is a junior at the University of Wisconsin-Platteville where he is majoring in horticulture and soil and crop science, with an emphasis in plant breeding and



genetics and a minor in biotechnology. After graduating in May 2008, he plans to attend graduate school to study plant breeding. His goal is to become a researcher with private industry or at an academic institution. He would like to focus on improving crop yield and disease resistance in agronomic crops. Wilkens is the president of his Agronomy/SWCS club, was a member of the 2005 National Champion Crop Judging Team, and is a member of four honor societies.

ASA-CSSA-SSSA Congressional Science Fellow

Kit Batten

Please see Dr. Kit Batten's biographical summary and photo in the ASA Award Section for Congressional Science Fellow.

Gerald O. Mott Scholarship

The Gerald O. Mott Scholarship is provided to a meritorious student who has completed at least one year of graduate work leading to an M.S. or Ph.D. degree in a field of emphasis within crop science and who has outstanding potential for leadership. The scholarship is supported through a contribution by Mrs. Lorraine Mott and family and contributions to the Agronomic Science Foundation.

Lucia Gutierrez

Lucia Gutierrez is a Ph.D. student co-majoring in plant breeding and ecology and evolutionary biology at Iowa State University with a minor in statistics. She is also a fellow of The Land Institute. She received her undergraduate degree in agronomy (Ingeniera Agronoma) from the Univer-



sity of the Republic of Uruguay. Her dissertation focuses mainly on the study of genetic diversity in barley and wild relatives; improving tools to understand evolution, selection, and domestication through the comparison of molecular and phenotypic data. Gutierrez is a member of CSSA, the Agronomy Alumni Association of Uruguay, the Ecology and Evolutionary Biology Graduate Club, and the Agronomy Graduate Club at Iowa State University.

Pioneer Fellowship in Plant Sciences

The Pioneer Fellowship in Plant Sciences promotes graduate education in the area of plant sciences, emphasizing plant breeding and genetics. The intention of the fellowship is to attract the highest quality students whose careers will continue to advance the science of plant improvement. Funds for the fellowship are made available by gifts from Pioneer Hi-Bred International Inc. through the Agronomic Science Foundation and administered by CSSA. Two recipients were selected in 2006.

Paul Nelson

Paul T. Nelson is a doctoral student in the Crop Science Department at North Carolina State University under the mentorship of Dr. Major M. Goodman. He received his B.S.



degree from Brigham Young University and his M.S. degree from North Carolina State University. Nelson's graduate research is focused on applied maize breeding with special emphasis on the use of tropical maize germplasm in temperate U.S. maize breeding programs.

Christopher Boomsma

Christopher Boomsma is a Ph.D. student in maize physiology and cropping systems in the Department of Agronomy at Purdue University. He received his B.A. degree in agriculture-plant sciences from Dordt College in Sioux Center, IA. His doctoral research seeks to elucidate the physiological mechanisms associated with intraspecific competition and plant-to-plant variability in maize as affected by nitrogen rate, plant density, and genotype. Prior to beginning his Ph.D. program, he was an intern at Pioneer Hi-Bred International Inc. and a research assistant at Argonne National Laboratory. He is a member of ASA, CSSA, and SSSA.



Calvin O. Qualset

Cal Qualset is emeritus professor at the University of California-Davis. He earned his B.S. from the University of Nebraska and M.S. and Ph.D. from the University of California-Davis. His research on plant genetic resources, genetics of crop traits, and breeding new varieties of cereal crops spans the past 40 years. He was the founding director of the University of California Genetic Resources Conservation Program and served in several capacities as administrator of departmental and college programs at the University of California-Davis. He is a former president of CSSA and ASA.



NCCPB Genetics and Plant Breeding Award for Industry

The Genetics and Plant Breeding Award for Industry is administered by CSSA and is financially supported by the National Council of Commercial Plant Breeders. The award is presented to a crop scientist who has made significant contributions in genetics and plant breeding during his or her career in the private sector. These contributions to plant science may be made through basic, applied, or developmental research in genetics and plant breeding.

ASA-CSSA-SSSA Early Career Professional Award

Joel Pederson

Please see Dr. Joel Pederson's biographical summary and photo in the ASA Award Section for the Early Career Award.

Frank N. Meyer Medal for Plant Genetic Resources

The Frank N. Meyer Medal for Plant Genetic Resources is presented in commemoration of Frank N. Meyer who served for 13 years as Agricultural Explorer in the Office of Foreign Seed and Plant Introduction and who died while exploring in China. The memorial award was created in recognition of his contribution to the horticultural economics in America and service in the field of foreign plant introduction.

Delbert C. Hess

Delbert Hess is retired from both Cargill Inc. where his final position was vice president of international seeds and from CIMMYT where he was the director of the maize program. He is currently employed on a part-time basis by Bayer Crop



Science as a breeding and business consultant. Dr. Hess received his B.S. from Texas Tech University and his M.S. and Ph.D. from the University of Wisconsin. He has been involved in agricultural research, especially plant breeding and in supervising breeding and business activities throughout his professional career. Hess is well known for his successful cotton breeding efforts that resulted in several cotton varieties that have been widely grown in the southwestern USA.

Monsanto Crop Science Distinguished Career Award

The Monsanto Crop Science Distinguished Career Award is presented by CSSA and is financially supported by the Monsanto Company. The award is presented to a crop scientist who has exhibited an outstanding record of service during a minimum of 25 years.

Gary H. Heichel

Gary H. Heichel is retired head of the Department of Crop Sciences, University of Illinois, and professor emeritus of plant physiology. He received degrees from Iowa State and Cornell Universities.



Dr. Heichel is recognized for research on analysis of energy use by cropping systems, carbon dioxide assimilation and photosynthate partitioning, and nitrogen fixation and cycling by perennial legumes in cropping systems. As a department head, Heichel fostered the successful restructuring of academic units and hired many new faculty during times of fiscal stress, focused renewed vigor into academic programs, and facilitated greater endowment funding. During his presidencies of CSSA and ASA, he sensitized the Societies to issues of professional ethics, fostered changes

in program direction to attract new clientele, and led discussions about the restructuring of relationships among the Societies.

Young Crop Scientist Award

This award is designed to recognize a young scientist who has made an outstanding contribution in any area of crop science by the age of 37. Specifically, the recipient is cited for teaching abilities, effectiveness in extension and service activities, significance and originality of basic and applied research, and effectiveness in administrative areas.

Jean-Luc Jannink

Jean-Luc Jannink is an associate professor in the Department of Agronomy at Iowa State University. Dr. Jannink received his B.A. degree from Haverford College in Pennsylvania, his M.S. at the University of Maine, and his Ph.D. at the University of Minnesota, majoring in plant breeding with a minor in sustainable agriculture. His research focuses on oat improvement and on the application of genetic markers to crop improvement. Dr. Jannink serves as an editor of *Theoretical and Applied Genetics* and has been active on the Oat Registration Subcommittee of the Crop Science Society, on the Multi-state Research Committee NCR-204: The Interface of Molecular and Quantitative Genetics in Plant and Animal Breeding, and in the American Oat Workers Conference.



Fred V. Grau Turfgrass Science Award

The Fred V. Grau Turfgrass Science Award is presented by CSSA and is supported by a fund developed by Division C-5 Turfgrass Science. The award is presented in recognition of significant career contributions in turfgrass science. The principal criteria for selecting the recipient are significance and originality of research, teaching effectiveness, implementation of programs in extension and/or industry, administrative effectiveness, and total impact on turfgrass science.

Arden A. Baltensperger

Arden Baltensperger is a professor emeritus of agronomy in the Plant and Environmental Sciences Department at New Mexico State University (NMSU) and a consultant to Pennington/Seeds



West. Dr. Baltensperger has served as head of the Agronomy Department at NMSU and president of ASA. His recent research has been primarily on the genetics, breeding, and development of seed propagated turf-type bermudagrass resulting in cultivars with wide acceptance. His first variety, 'NuMex Sahara', has generated over \$1 million in royalties to the NMSU Agricultural Experiment Station and the U.S. Golf Association that helped finance the research. His most recent release, 'Princess 77', was the first dense, fine-textured seed propagated intraspecific hybrid bermudagrass.

Seed Science Award

The Seed Science Award is presented by CSSA and is financially supported by Pioneer Hi-Bred International Inc. The award recognizes distinctive service to the development and use of quality seeds in agriculture. The principle criteria for the award are significance and originality of research, contributions to extension and service activities, educational activities relative to training seed scientists, international contributions, and professional interactions with seed-related organizations.

Marc Cohn

Marc Alan Cohn is a professor and seed biologist in the Department of Plant Pathology and Crop Physiology at the Louisiana State University Agricultural Center in Baton Rouge, where he has conducted research and taught since 1978. He serves as editor-in-chief of the journal *Seed Science Research*. Dr. Cohn received his B.A. from Northeastern University in Boston and his M.S. and Ph.D. degrees from Cornell University in the laboratory of Dr. Ralph Obendorf. His research program focuses on weed seed dormancy and seed recalcitrance of marsh plants important for coastal stabilization. Cohn has been a member of CSSA for 35 years and has served as an associate editor of *Crop Science*. He is a life member of the American Society of Plant Biologists, a charter member of the International Seed Science Society, and a member of the Weed Science Society of America and the Association of Official Seed Analysts.



International Service in Crop Science Award

The International Service in Crop Science Award recognizes creativity and innovation in bringing about specific changes in practices, products, and/or programs in the crops area at the international level.

Richard Pratt

Rich Pratt is a professor and maize breeder in the Department of Horticulture and Crop Science at The Ohio State University. Dr. Pratt received B.S. and M.S. degrees at the University of Arizona and his Ph.D. at Purdue University. His program focuses mainly on improvement of host-resistance to foliar pathogens of maize. He also teaches courses in plant breeding, scientific writing, and international agriculture. Pratt served as an associate editor of *Crop Science* for six years and is a member of the editorial board of the *African Crop Science Journal*.



tional programs in the management of corn, soybean, and wheat and of crop rotations. He helps producers and agronomic professionals solve difficult diagnostic problems in growing crops, and he applies economics to input decisions. He has served as ASA North Central Branch president and is currently a member of the CSSA Board, representing Division C-3. He has received the Senior Faculty Award for Excellence in Extension from the University of Illinois and the ASA Agronomic Extension Education Award and is an ASA and CSSA Fellow.

Crop Science Research Award

The Crop Science Research Award is presented for excellence in research. The principal criteria for choosing the recipient are significance and originality of basic and applied research contributions in crop science; excellence in creative reasoning and skill in obtaining significant data; and total impact of contributions on crop science and other fields, nationally and internationally.

Dennis B. Egli

Dennis B. Egli is a professor in the Department of Agronomy at the University of Kentucky–Lexington. He earned a B.S. from The Pennsylvania State University and M.S. and Ph.D. from the University of Illinois. Dr. Egli's research interests include seed growth and development, the relationship between seed growth characteristics and yield, environmental effects on seed quality, evaluation of seed vigor, and the relationship between seed quality (germination and vigor) and field performance. He has served as associate editor and technical editor for *Agronomy Journal* and *Crop Science*.



Crop Science Extension Education Award

The Crop Science Extension Education Award recognizes excellence in Extension teaching activities in the area of crop science.

Emerson Nafziger

Emerson D. Nafziger is professor of crop production and Extension specialist in the Crop Sciences Department of the University of Illinois. He received degrees from The Ohio State University and Purdue University before receiving his Ph.D. at the University of Illinois. Dr. Nafziger conducts applied research and educa-



CSSA Fellows

The Society is continuing a time-honored tradition this year with the presentation of Fellows. The Society has been electing outstanding members to the position of Fellow since 1985. Colleagues within the Society nominate worthy members, and the CSSA Fellows Committee carefully ranks the nominees to make the final selection. CSSA has chosen 10 individuals based on their professional achievements and meritorious service to receive this honor in 2006.



Bruce B. Clarke

Bruce Clarke is a professor and vice chair in the Department of Plant Biology and Pathology at Rutgers University. He also serves as the Extension turfgrass pathologist in New Jersey and is the director of the Rutgers Center for Turfgrass Science. Dr. Clarke received his B.S. in forest management and his Ph.D. in plant pathology from Rutgers University. His research and extension programs focus on the etiology and control of turfgrass diseases and IPM strategies to reduce fungicide use. Clarke served as an associate editor for *Plant Disease*, has been active in Division C-5 Turfgrass Science, and also in ASA, the International Turfgrass Society, the American Phytopathological Society, and the Golf Course Superintendents' Association of America.



Wanda W. Collins

Wanda Collins is the director of the USDA-ARS Plant Sciences Institute, at the Beltsville Agricultural Research Center in Maryland. She received her B.S., M.S., and Ph.D. degrees from the Departments of Plant Pathology and Genetics at North Carolina State University. Dr. Collins provides administrative oversight in the Plant Sciences Institute for 14 laboratories and more than a hundred scientists. Collins is also active in the American Society for Horticultural Science and has served as its president. She is a Fellow of the American Society for Horticultural Science and the American Association for the Advancement of Science.



M.C. Engelke

Please see Dr. M.C. Engelke's biographical summary and photo for ASA Fellow.

Roch E. Gaussoin

Roch Gaussoin is a professor of agronomy and horticulture and Extension turfgrass specialist at the University of Nebraska-Lincoln. Dr. Gaussoin received his B.S. and M.S. degrees from New Mexico State University and his Ph.D. from Michigan State University. His research program focuses on turfgrass weed management and the management and construction of golf greens. He provides state-wide support of turfgrass extension programs and also serves as the departmental Extension coordinator for horticulture. Gaussoin served as an editor for the *International Turfgrass Research Society Journal* from 1998 to 2005. He currently serves as an associate editor for *Crop Science* and the acquisitions editor for *Applied Turfgrass Science*. He has served as the board representative and is the chair-elect for Division C-5 Turfgrass Science.



Daniel Wayne Gorbet

Daniel Gorbet is a professor and agronomist with the University of Florida, located at the North Florida Research and Education Center in Marianna. He has been a peanut breeder with the university since 1970. Dr. Gorbet received his B.S. at Texas A&M University and his M.S. and Ph.D. from Oklahoma State University. The University of Florida peanut breeding program is the oldest such program on peanuts in the USDA and has focused on cultivar development and genetics. Gorbet is a Fellow of ASA and the American Peanut Research and Education Society (APRES). He



has served as associate editor for *Crop Science* and president of APRES. Gorbet has been primary or co-developer of 19 peanut cultivars in the USA, one in Bolivia, and four in Australia.

Kevin B. Jensen

Kevin B. Jensen is a research geneticist at the USDA-ARS Forge and Range Research Lab at Logan, UT. He received his B.S. and M.S. degrees from Utah State University and his Ph.D. degree from Texas A&M University. Dr. Jensen's research focuses on (1) acquisition and incorporation of germplasm materials from all parts of the world, (2) characterization of new germplasm derived through plant exploration and wide hybridization, (3) broadening the genetic base of rangeland and pasture plants, and (4) providing an array of improved grasses for upgrading private and public lands in the western USA. He served on the ASA membership committee and as CSSA representative on the International Nomenclature Board of Crop Plants. He serves on germplasm and forage improvement organizations and as associate editor and technical editor of *Crop Science*.



William E. Kuhn

Bill Kuhn retired as a research director at Pioneer Hi-Bred International, Inc. after 32 years of service in September 2006. Dr. Kuhn received his B.S. at Purdue University and his M.S. and Ph.D. at the University of Minnesota. His career focused on maize product development research, where he was initially a corn breeder and then administrator focused on supporting the development of superior maize hybrids for growers in North America and Europe. Kuhn has been active in public service by serving in numerous leadership roles with the American Seed Trade Association, three ARS/USDA project reviews, and in the development and completion of the Latin American Maize Project.



Stephen C. Mason

Please see Dr. Stephen Mason's biographical summary and photo in the ASA Award Section for the Agronomic Resident Education Award.

K. Raja Reddy

K. Raja Reddy is a research professor and plant physiologist in the Plant and Soil Sciences Department at Mississippi State University. Dr. Reddy earned all of his degrees from Sri Venkateswara University, India. His research focuses on environmental control of plant growth and development, crop simulation model development and applications, and global change biology and remote sensing applications in natural resource management. In addition, he teaches graduate courses in the Plant and Soil Sciences Department in Environmental Plant Physiology and Global Change Biology. Reddy has been active in ASA, CSSA, Biological Systems Simulation Workgroup, Association of Agricultural Scientists of India Origin, and the Beltwide Cotton Conferences.



Craig Roberts

Please see Dr. Craig Roberts' biographical summary and photo in the ASA Award Section for ASA Fellow.

2006 SSSA Awards Program

Wednesday, 15 Nov., 4:45–5:30 pm

Marriott Downtown, Indianapolis
Marriott Ballroom 5–6



the processes affecting patterns of 15N in wetland plants and soils and demonstrated a new application of such patterns to indicate phosphorus pollution.

ASA–CSSA–SSSA Congressional Science Fellow

Kit Batten

Please see Dr. Kit Batten's biographical summary and photo in the ASA Awards Section for Congressional Science Fellow.

Francis and Evelyn Clark Soil Biology Scholarship

The Francis and Evelyn Clark Soil Biology Scholarship was established to recognize the importance of soil biology and the understanding of soil, plant, and microbial interactions and of nutrient cycling in terrestrial ecosystems. The scholarship is supported by a gift from Dr. and Mrs. Francis Clark to the Agronomic Science Foundation. The selection process is administered by SSSA.

Lori Biederman

Lori Biederman is a doctoral candidate in the Department of Rangeland Ecology and Management at Texas A&M University. Biederman has a M.S. degree in conservation biology from the University of Minnesota and a B.A. degree in biology from Gustavus Adolphus College. Her dissertation research examines the use of amendments to direct soil food web development in a prairie restoration. She is a member of SSSA, Society for



Ecological Restoration International, Ecological Society of America, and the Society of Nematologists.

Emil Truog Soil Science Award

The Emil Truog Award is presented by SSSA and is supported through funds originally derived from Society members and a bequest from Dr. Truog's estate. Dr. Truog served as chair of the Soil Science Department at the University of Wisconsin from 1939 to 1953 and was one of the founding members of SSSA. The Emil Truog Award is given to a Ph.D. recipient who has made an outstanding contribution to soil science as evidenced by his or her Ph.D. dissertation. The awardee must have received the Ph.D. degree during the preceding calendar year.

Patrick Inglett

Patrick Inglett is currently a post-doctoral research associate in the Soil and Water Science Department of the University of Florida. Dr. Inglett received his B.S. degree from the Georgia Institute of Technology and his M.S. and Ph.D. degrees from the University of Florida. His dissertation titled, "Stable Nitrogen Isotopic Ratios as an Indicator of Wetland Eutrophication: A Case Study in the Florida Everglades," investigated



Don & Betty Kirkham Soil Physics Award

The Don and Betty Kirkham Soil Physics Award recognizes midcareer soil scientists who have made outstanding contributions in the area of soil physics. The principal criteria for the award are significance and originality of basic and applied research in soil physics, quality and impact of teaching soil physics at undergraduate and graduate levels, and total impact of contributions on soil science and other fields, nationally and internationally, as well as on the world community at large. The award is supported by the Lena and Maria Vander Ploeg Fund and the Don and Betty Kirkham Fund, both established in the Agronomic Science Foundation.

Per Moldrup

Per Moldrup is an associate professor in the Department of Biotechnology, Chemistry, and Environmental Engineering at Aalborg University, Denmark. Dr. Moldrup received his M.S. and Ph.D. from Aalborg University in collaboration with the University of California–Davis. His program focuses on applied soil physics in environmental engineering, with emphasis on gas, solute, and colloid transport processes in the soil vadose zone. Moldrup has served as an associate editor for *Soil Science Society of America Journal*. He is a Fellow of SSSA and is chair-elect of Division S-1 Soil Physics.



Early Career Professional Award

Joel Pederson

Please see Dr. Joel Pederson's biographical summary and photo in the ASA Award Section for the Early Career Award.

Irrrometer Professional Certification Service Award

The Irrrometer Professional Certification Service Award recognizes an outstanding certified professional who has demonstrated adherence to the certification goals and personal growth, impact on associates, and the public at large. Service involving consulting, cooperation with industry, community development, and/or public extension and research programs is strongly solicited. The award is administered by SSSA and supported by the Irrrometer Company through the Agronomic Science Foundation.

Peter C. Fletcher

Peter Fletcher is a consultant providing soils expertise to town, state, and federal agencies. He presents educational workshops for nonprofit groups, professional societies, and state



and federal agencies. Fletcher is an adjunct instructor at the University of Massachusetts–Amherst and Bridgewater State College, Bridgewater, MA. He has more than 25 years of field mapping experience as a soil scientist with the USDA–Natural Resources Conservation Service, where he has authored or coauthored three published soil survey reports. He received a B.S. from Miami University, Oxford, OH and a M.S. in soil science from the University of Massachusetts–Amherst.

Marion L. & Chrystie M. Jackson Soil Science Award

The Marion L. and Chrystie M. Jackson Soil Science Award recognizes midcareer soil scientists who have made outstanding contributions in the areas of soil chemistry and mineralogy. The principal criteria for the award are significance and originality of research, excellence in creative reasoning, quality of teaching, and total impact of contributions on soil science and other fields. The award is administered by SSSA and supported through a contribution by Dr. and Mrs. Marion L. Jackson to the Agronomic Science Foundation.

Gary M. Pierzynski

Gary M. Pierzynski is a professor of soil and environmental chemistry in the Department of Agronomy at Kansas State University with a teaching and research appointment. He received his B.S. in crop and soil science (1982) and his M.S. in soil environmental chemistry (1985) from Michigan State University. He received his Ph.D. in soil chemistry (1989) from The Ohio State University. Dr. Pierzynski's research interests include trace element chemistry, remediation of trace element-contaminated soils, phosphorus bioavailability, water quality, risk assessment, and land application of by-products. He currently serves as editor of the *Journal of Environmental Quality*. Pierzynski teaches courses on environmental quality, plant nutrient sources, soil and environmental chemistry, and advanced soil chemistry. He is the senior author on the textbook *Soils and Environmental Quality*, now in its third edition. He has received numerous awards, including ASA and SSSA Fellow and SSSA's Soil Science Education Award.



Soil Science Distinguished Service Award

The Soil Science Distinguished Service Award is presented in recognition of outstanding service to soil science. Selection is based on the nominee's contributions during his or her career. Members eligible for the award must have 25 years or more of active membership in the Society and have ceased full-time professional employment. The Society has selected two individuals in 2006.

George E. Ham

George Ham began his career as a faculty member in the Department of Soil Science at the University of Minnesota. His research was on improving nodulation and nitrogen fixation in soybeans. Dr. Ham then went to Kansas State University (K-State) and served in these positions: head of the Agronomy Department, associate dean and associate director for research with K-State Research and Extension, and interim dean of the College of Agriculture and director of K-State Research and Extension. He served the following assignments for SSSA: Monograph Committee, Budget and Finance Committee, CAST Board of Directors representative, and the Agronomic Science Foundation Board of Trustees. He received his B.S., M.S., and Ph.D. degrees from Iowa State University. He served as an associate editor of *Agronomy Journal* and authored numerous scientific publications and articles.



William W. McFee

Bill McFee is professor emeritus and former head of the Department of Agronomy at Purdue University. He was president of SSSA in 1991–1992 and of ASA in 1996–



1997. He devoted long and distinguished service to professional societies, education, soil science, and the university. He encouraged the Societies' development of a strong influence on national and state policies and served as the Society's representative to The Council of Scientific Society Presidents for three years. In 1970, he helped develop and then directed for 18 years one of the first environmental science undergraduate programs. Purdue University, SSSA, and ASA have honored him for his teaching accomplishments. His research accomplishments include contributions in tree nutrition, mineland reclamation, and impact of atmospheric deposition on soils. He co-authored a national study of acid rain and helped organize the National Atmospheric Deposition Network (NADP), which provides the best current measure of inputs of SO_x, NO_x, and numerous other substances to land and waters of the USA.

Soil Science Achievement Awards

The Society recognizes the following individuals with the Research Award, Education Award, Industry Award, Applied Research Award, Professional Service Award, and International Soil Science Award for their outstanding achievements in soil science through education, research, and national and international service. Recipients of these awards are productive, competent individuals known for original and significant research and for an outstanding ability to inspire the qualities of sound thinking, objectivity, integrity, and cooperativeness in students and others with whom they associate.

Soil Science Research Award

Charles Rice

Chuck Rice is a professor of soil microbiology in the Department of Agronomy at Kansas State University. Dr. Rice received his B.S. degree at Northern Illinois University and



his M.S. and Ph.D. degrees from the University of Kentucky. His program focuses mainly on microbial ecology and C and N dynamics in cultivated and native grassland soils. Rice has served on several SSSA committees and has been active in SSSA, IUSS, ASA, American Society for Microbiology, and the American Association for the Advancement of Science.

oped with others an online Masters in Soil Science program. Dr. Vepraskas is co-editor of the book *Wetland Soils*. His research develops better ways to identify wetland soils, determines their rates of formation, and improves methods to restore them. Vepraskas has recently served as a technical editor for *Soil Science Society of America Journal* and is currently on the editorial board of *Geoderma*.

Soil Science Industry Award

Neal Christensen

Neal Christensen is a regional agronomist for Agrilience covering the Pacific Northwest. Dr. Christensen received his B.S. degree in Crop Management at the University of Idaho.



He then attended Kansas State University and received a M.S. in Agronomy and a Ph.D. in Soil Management. He is responsible for training retail dealer agronomists across the Pacific Northwest and Montana, working with producers to solve production problems that will improve profit and also works with Croplan Genetics in seed sales and corn silage production.

Soil Science Education Award

Michael J. Vepraskas

Michael J. Vepraskas is a professor of soil science at North Carolina State University. He received degrees from the University of Wisconsin–Madison and Texas A&M University. He currently teaches courses on soil physics and wetland soils, also offered on the internet. In addition, he has devel-



Soil Science Applied Research Award

Ardell Halvorson

Ardell Halvorson is a soil scientist with USDA-ARS at Fort Collins, CO. Dr. Halvorson received his B.S. degree in Soil Science from North Dakota State University and his M.S. and Ph.D. degrees in agronomy (soil chemistry) from Colorado State University. His research program focuses on developing sustainable no-till, irrigated cropping systems for the Great Plains and determining nitrogen fertility needs of irrigated cropping systems and the effects of irrigated cropping systems and nitrogen fertilization on residual soil nitrogen, soil carbon sequestration, greenhouse gas emissions, and global warming potential. He has served as associate editor of *Agronomy Journal* and chair of Division S-8 Nutrient Management and Soil and Plant Analysis. Halvorson is a Fellow of SSSA and ASA and a Certified Professional Agronomist and Soil Scientist.



Soil Science Professional Service Award

G. Wade Hurt

Wade Hurt is a soil scientist with USDA-Natural Resources Conservation Service. He is on the staff of the National Soil Survey Center located in Lincoln, NE and is housed with the Soil and Water Science Department at the University of Florida. He also serves as NRCS National Leader for Hydric Soils. Hurt received his B.S. degree from Mississippi State University. His work focuses mainly on hydric and subaqueous soils and soil interpretations for nutrient and pesticide management. Hurt has been active in SSSA and has served on its Glossary Committee.



International Soil Science Award

J. Keith Syers

Keith Syers is a professor of natural resources at Mae Fah Luang University in Chiang Rai, Thailand. He also serves as dean of the School of Science and director of the Center for Natural Resources and Environmental Management. Dr. Syers received his B.S. and Ph.D. degrees from the University of Durham (United Kingdom) and his doctor of science degree from the University of Canterbury (New Zealand). His program currently focuses on curriculum development for international graduate programs in natural resources and environmental management and research on biofuels and the efficiency of phosphate fertilizer use. He chairs the Scientific Advisory Committee of the World Phosphate Institute and is a visiting professor with the Institute of Subtropical Agriculture (Chinese Academy of Sciences).



SSSA Fellows

The Society is continuing a time-honored tradition this year with the presentation of Fellows. The Society has been electing outstanding members to the position of Fellow since 1976. Colleagues within the Society nominate worthy members, and the SSSA Fellows Committee carefully ranks the nominees to determine the final selection. SSSA has chosen 14 individuals based on their professional achievements and meritorious service to receive this honor in 2006.



Ronald Amundson

Ronald Amundson is professor of pedology in the Division of Ecosystem Sciences at the University of California–Berkeley. Dr. Amundson earned his B.S. degree from South Dakota State University and his M.S. and Ph.D. degrees from the University of California–Riverside. His research focuses on the use of stable and radioactive isotopes to study the soil carbon and nitrogen cycles and the soil processes of arid regions. In addition to his SSSA and ASA affiliations, Amundson is on the editorial board for *Geology* and is a long-time member of the Geological Society of America and the American Geophysical Union.



agement, and whole-farm nutrient management. His research focuses on soil test evaluation and calibration, fertility management in reduced tillage systems, nutrient management, and agricultural phosphorus and the environment. He is an advisor to state and federal government agencies and other organizations on nutrient management and water quality issues. He also teaches courses in soil fertility and nutrient management.

Craig A. Beyroudy

Craig Beyroudy is professor and head of the Department of Agronomy at Purdue University. He received his B.S. degree in soil science from Cal Poly State University in San Luis Obispo and his M.S. and Ph.D. degrees from Purdue in Soil Chemistry. His research program has focused on root ecology, soil fertility and plant nutrition, nutrient uptake kinetics, and phytoremediation of contaminated soils. He has taught several courses in soil science and has presented numerous soils-related short courses for external stakeholders. Dr. Beyroudy has served as associate editor for *Agronomy Journal* and the *Journal of Agronomic Education* and has served his professional Society on a variety of committees including Defining Soil Science Competencies and Training of Soil Scientists.



Douglas B. Beegle

Douglas Beegle is a professor of agronomy in the Department of Crop and Soil Sciences at The Pennsylvania State University. He received his B.A. from Lycoming College and M.S. and Ph.D. degrees at Penn State. Dr. Beegle is the state Extension soil fertility and nutrient management specialist for Pennsylvania. He conducts Extension education programs in soil fertility, soil testing, manure man-



Oliver A. Chadwick

Oliver Chadwick is a professor and chair of the Geography Department at the University of California–Santa Barbara. He received his B.S. degree in biology from George Washington University, M.S. degree in horticulture from Cornell University, and Ph.D. in soil science and Quaternary geology from the University of Arizona. Prior to moving to the University of California–Santa Barbara, he spent eight years as a NASA research scientist. Dr. Chadwick's research covers the following areas: organic and mineral fluxes in soils and ecosystems, soil–vegetation–landscape relationships, evolution of landscapes over Quaternary time scales, isotopic fractionations during weathering and soil development, soil response to change in environmental factors, and modeling variation in soil properties in space and time.



Arthur T. Corey

Arthur T. Corey is a professor emeritus, Colorado State University (CSU), where he served at various times in the Civil Engineering, Agricultural Engineering, and Chemical Engineering Departments. Dr. Corey received his B.S. from the University of Maryland, his M.S. from Colorado A&M, and his Ph.D. from Rutgers University. He began his professional career as a physicist in the petroleum industry. His research and teaching at CSU was in the fields of multiphase flow in soils and porous rocks, ground water hydraulics, irrigation, agricultural drainage, and engineering mechanics.



Randy A. Dahlgren

Randy Dahlgren is a professor of soil science and biogeochemistry in the Department of Land, Air, and Water Resources at the University of California–Davis. He serves as director of the Kearney Foundation of Soil Science and director of the TMDL Research and Technical Support Program. Dr. Dahlgren received his B.S. degree from North Dakota State University and his M.S. and Ph.D. degrees from the University of Washington. His research program in biogeochemistry examines hydrological, biological, and geochemical processes and their interactions in terrestrial and aquatic ecosystems. The major goal of his research is to gain a mechanistic understanding of ecosystem-scale biogeochemical processes for the purpose of predicting how natural processes and management practices affect ecosystem sustainability and environmental quality. Dahlgren serves on the editorial boards of *Ecology/Ecological Monographs*, *Plant and Soil*, *Japanese Society of Soil Science and Plant Nutrition*, and *Journal of Integrated Field Sciences*. He teaches a wide range of courses, including introductory soil science, contemporary issues in environmental sciences, a summer field course in California soil resources, and a graduate course in biogeochemistry.



Achim Dobermann

Achim Dobermann is a professor of soil science and nutrient management in the Agronomy and Horticulture Department at the University of Nebraska–Lincoln. Dr. Dobermann received his M.S. and Ph.D. degrees from the University of Leipzig in Germany. His research and extension programs focus on soil spatial variability, crop yield potential, greenhouse gas emissions, and fine-tuning of nutrient management practices to improve yields, profitability, and environmental quality in cereal cropping systems of North America and Asia.



Robert B. Harrison

Rob Harrison is a professor of forest soil science at the University of Washington. He received his B.S. degree in forest soils from North Carolina State University, an M.S. in soils from the University of New Hampshire, a Ph.D. in soil chemistry from Auburn University, and was a postdoc at Oak Ridge National Lab. His program focuses mainly on long-term forest productivity including C sequestration, nutrient cycling, and effects of soil amendments. Dr. Harrison is an associate editor of *Forest Science* and is active in graduate and undergraduate teaching, with over 15,000 students taking one or more of his courses.



Dean Hesterberg

Dean Hesterberg is a professor of soil chemistry in the Department of Soil Science at North Carolina State University. He received a B.S. degree from Southern Illinois University–Carbondale, an M.S. degree from Purdue University, and a Ph.D. degree from the University of California–Riverside. Between 1988–1993, he was a Research Chemist at Chevron Oil Field Research Company in La Habra, CA and then a soil chemist at the Institute for Soil Fertility Research in Haren, the Netherlands. His program focuses mainly on the molecular chemistry of phosphorus and heavy metals in soils. Dr. Hesterberg served as an associate editor for *Journal of Environmental Quality* and is incoming chair of Division S-9 Soil Mineralogy.



James W. Jones

James W. (Jim) Jones is a Distinguished Professor in the Agricultural and Biological Engineering Department at the University of Florida. Dr. Jones received his B.S. degree from Texas Tech University, his M.S. degree from Mississippi State University, and his Ph.D. degree from North Carolina State University. His research program focuses on development and application of cropping systems models for analysis of climate impacts on crop production and of agricultural and natural resources management options. He has been active in a number of international research, teaching, and service activities in developing and developed countries.



Ann Kennedy

Please see Dr. Ann Kennedy's biographical summary and photo in the ASA Awards Section for ASA Fellow.

Paul McDaniel

Paul McDaniel is a professor of Soil and Land Resources in the Department of Plant, Soil, and Entomological Sciences at the University of Idaho. Dr. McDaniel earned his B.S. from the University of Kentucky, M.S. from Montana State University, and Ph.D. from North Carolina State University. His research program focuses on the properties, use, and management of soils formed in loess and volcanic ash. McDaniel teaches courses in pedology, soil mineralogy, soil and site evaluation, and introductory soil science. He is a technical editor for the *Soil Science Society of America Journal* and has been active in the Western Society of Soil Science.



Walter J. Rawls

Walter Rawls is the research leader of the USDA-ARS Hydrology and Remote Sensing Laboratory in Beltsville, MD. Dr. Rawls received his B.S. and M.S. from Virginia Polytechnic Institute and his Ph.D. from Georgia Institute of Technology. His research program focuses on the development and application of infiltration and soil hydraulic properties in agricultural hydrology. In addition to SSSA, Rawls has been active in the American Society of Agricultural Engineers, American Society of Civil Engineers, and American Water Resources Association. He has served as associate editor for *Transactions of the American Society of Agricultural Engineers* and *Applied Engineering in Agriculture*. Rawls also is an adjunct faculty member at the University of Maryland.



William Schlesinger

William H. Schlesinger is the James B. Duke Professor of Biogeochemistry and dean of the Nicholas School of the Environment and Earth Sciences at Duke University. Completing his A.B. at Dartmouth and Ph.D. at Cornell, he joined the faculty at Duke in 1980. He is the author or coauthor of many scientific papers on subjects of environmental chemistry and global change and the widely adopted textbook *Biogeochemistry: An Analysis of Global Change*. He was among the first to quantify the amount of carbon held in soil organic matter globally, providing subsequent estimates of the role of soils and human impacts on soils in the global carbon cycle. Dr. Schlesinger was elected a member of the National Academy of Sciences in 2003, and was president of the Ecological Society of America for 2003-2004.



"Take a course in good water and air, and in the eternal youth of Nature you may renew your own."

- John Muir

Renew your own by renewing your ASA-CSSA-SSSA membership for 2007. Our new online member services make it even easier to access the information you need to stay updated on the latest developments in your field and to network with colleagues around the world.

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Vaisala Measures Carbon Dioxide in Ecological Applications



Vaisala CARBOCAP® Carbon
Dioxide Probe GMP343

Carbon Dioxide Probe - GMP343

The GMP343 is an accurate and reliable instrument designed for ecological measurements. The body is IP67-classified and is suitable for harsh environments.



- Weighs less than one pound
- Consumes less than one watt of power
- Diffusion or flow-through models
- Compensation options for temperature, pressure, humidity and oxygen
- Measures up to 5000 ppm CO₂
- Accessories for in-soil measurement

Vaisala CARBOCAP® Carbon Dioxide
Transmitter Series GMT220

Carbon Dioxide Probe - GMT220

- Wide measurement range;
0... 2000 ppm, up to 20% CO₂
- Accessories for in-soil measurements
- Low cost



Measuring CO₂ in soil using
the GMT220 probe



Vaisala Weather Transmitter WXT510

Multi-Sensor Weather Transmitter

- Measures wind speed and direction, liquid precipitation, barometric pressure, temperature and relative humidity
- Simple to install, easy to integrate
- Single digital output for all parameters
- Durable and virtually maintenance-free
- Compact, only 9 1/2" tall

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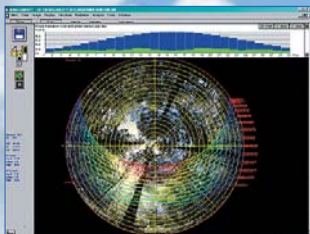
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Based on High Resolution Scanners and Digital Cameras
Compatible with most PC computers

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Canopy structure and solar radiation analysis from hemispherical images

Systems come with a digital point & shoot or a DSLR camera, a calibrated fisheye lens (180°) and a self-leveling mount with remote controller and electronic compass.



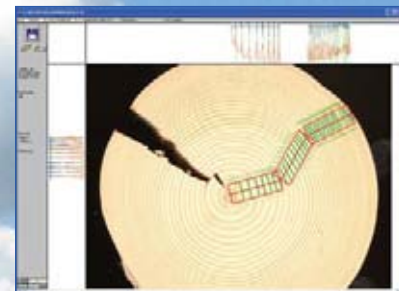
WinCELL™

Anatomical analysis and quantification of wood-cell structure parameters over annual rings



WinDENDRO™

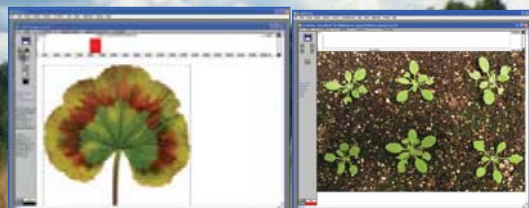
Tree-ring detection and measurement with adjustable sensitivity, cross-dating, wood density measurement, stem analysis



WinCAM™

Color area measurement in function of specific colors, object length and diameter

Applications: soil area covered with grass, plant diseased areas, growth monitoring,...



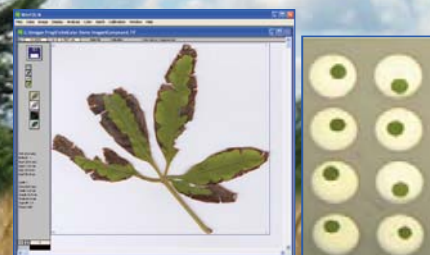
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Seed and needle morphological analysis, diseased area, classification, object count,...



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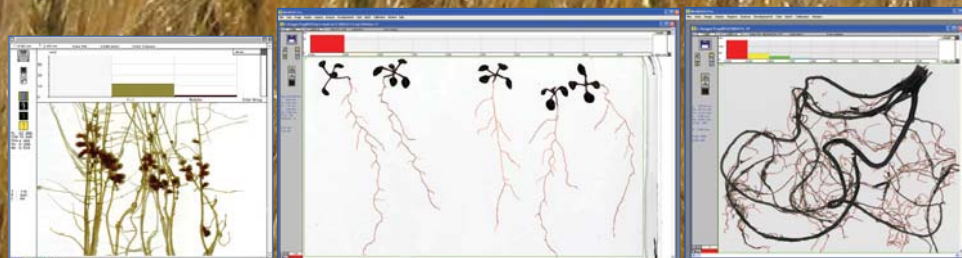
Leaf area, morphological analysis, diseased area, pest damage, foliar disk analysis,...



WinRHIZO™

Washed root morphology, link, topology and architecture

More applications with color images, e.g. root disease, measurement of thin lateral vs. main roots, Arabidopsis seeds germination, mycorrhizae, leaf area, nodules, roots in growth pouch or Petri dish



WinRHIZO™ Tron

Software for interactive analysis of roots in minirhizotron and soil

Root morphology, topology and architecture of several consecutive images in time of the same location, compatible with most imaging acquisition devices



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