



CROPS, SOILS, AGRONOMY

CSA NEWS

2007 ANNUAL MEETINGS EDITION

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ASA Centennial Celebration:

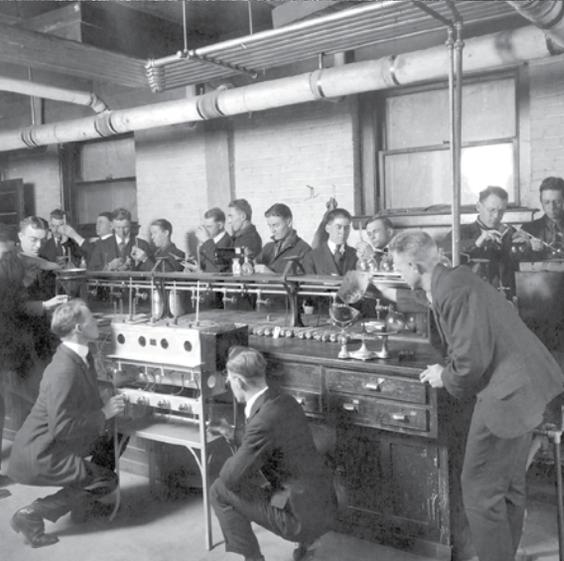
*A Century of Integrating Crops,
Soils, and Environment*

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Photos from top to bottom: 1930s corn stacks/contour farming, Ransom Moore Class at the University of Wisconsin, plant breeder Leslie Dean, and 1961 groundbreaking of the headquarters building.



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EVENTS & SYMPOSIA

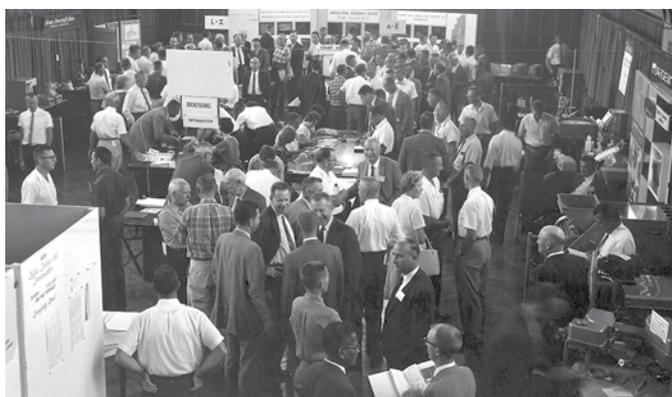
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Highlights include the Betty Klepper Lecture and the Society-wide symposium "The African Green Revolution Takes Shape."
- Wednesday, 7 November** 21
Highlights include the plenary session "Low-Input High-Diversity Biofuels: Is This the Path to Follow?" and the Society-wide symposium "Katrina Disaster and Sustainable Coastal Development."



EXHIBITORS

2007 Exhibitors 23

Dozens of exhibitors will be featuring new and exciting opportunities for you to learn about the latest in research equipment, software, and publications in Exhibit Hall A of the Convention Center.



AWARDS

- ASA Awards** 36
- CSSA Awards** 44
- SSSA Awards** 52

CSA News (www.agronomy.org/csa-news) is the official monthly magazine for members of the American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and Soil Science Society of America (SSSA).

PRESIDENTS

ASA: Jerry L. Hatfield
CSSA: Henry L. Shands
SSSA: Rattan Lal

CHIEF EXECUTIVE OFFICER

Ellen G.M. Bergfeld

EDITORIAL

Editors-in-Chief: Ken Barbarick (ASA), Craig Roberts (CSSA), and Sally Logsdon (SSSA)

Director of Publications: Fran Katz (fkatz@agronomy.org or 608-268-4974)

Managing Editor: Matt Nilsson (news@agronomy.org or 608-268-4968)

Member News Editor: Sara Uttech (membernews@agronomy.org or 608-268-4948)

Production Assistants: Liz Gebhardt, Meg Ipsen, and Pat Scullion

ADVERTISING

Display ads: Alexander Barton (abarton@2bartons.com or 847-698-5069)

Job listings: Melissa Fall (jobs@agronomy.org or 608-273-8080)

CORRESPONDENCE

CSA News welcomes letters, comments, and contributions from members, published on a space-available basis and subject to editing. The deadline is the first of the month preceding publication (e.g., 1 January for the February issue). Address correspondence or questions to:

CSA News, 677 S. Segoe Rd.
Madison, WI 53711-1086

608-268-4968 or news@agronomy.org

For inquiries not directly related to CSA News, call 608-273-8080 or email headquarters@agronomy.org.

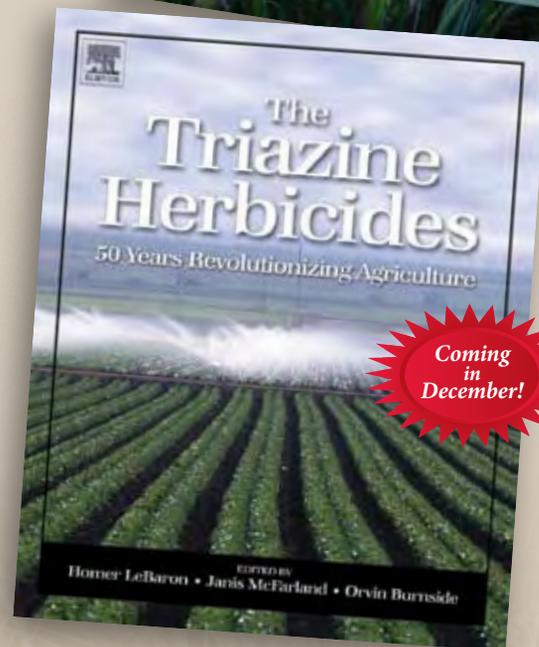
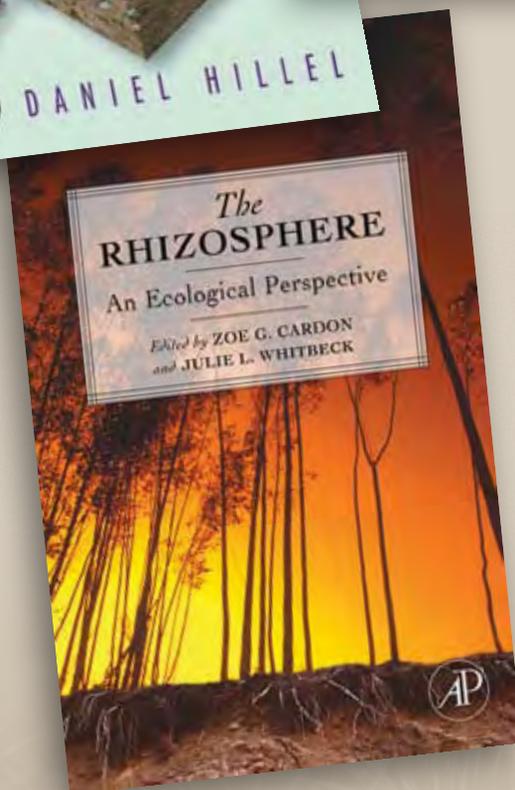
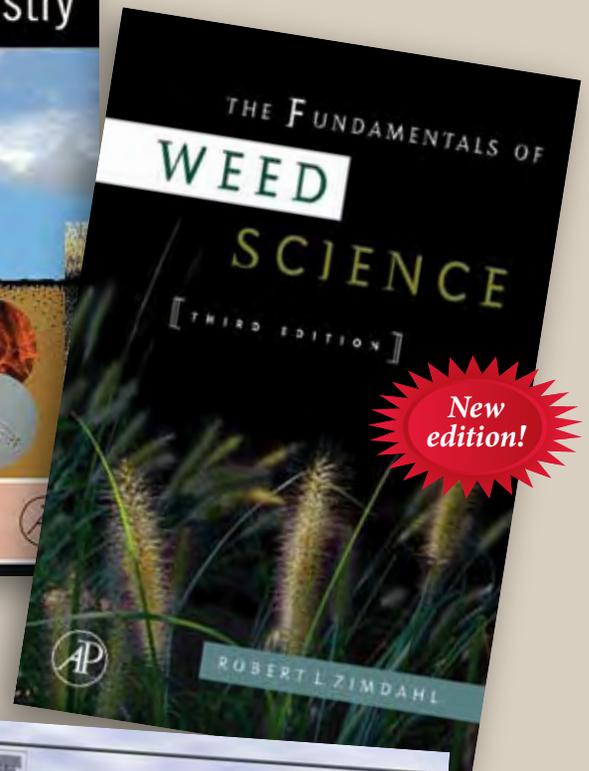
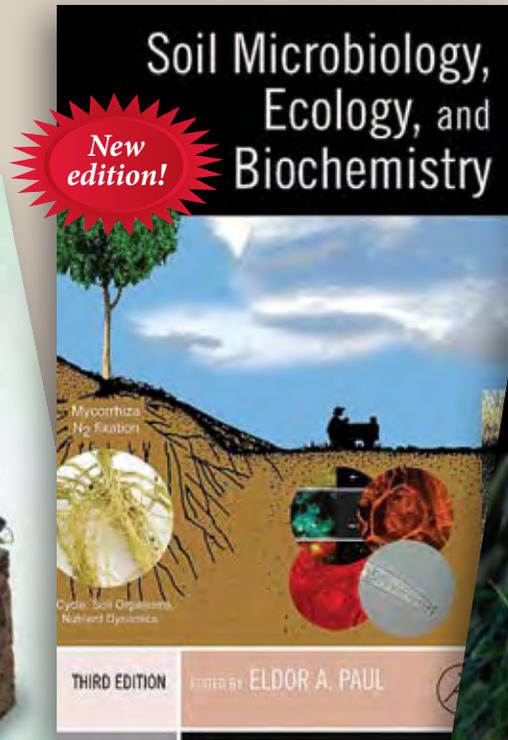
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Visit the **Elsevier booth** in New Orleans
for the latest resources in **agronomy, crop, and soil science!**

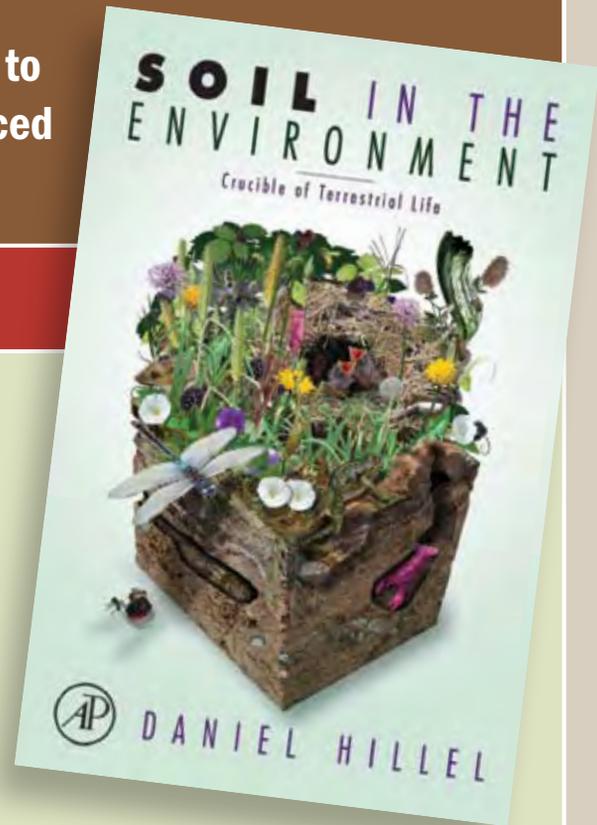


Booths 106-108

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Where:
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booths
106-108**

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S O I L I N T H E E N V I R O N M E N T

About this NEW textbook:

Key for every course in environmental and soil science, forestry, agriculture, and ecology, this textbook discusses soil's role as the central link in the creation of the terrestrial environment. For the first time, Dr. Hillel brilliantly discusses soil as a natural body that serves as the primary habitat for a versatile community of living organisms and is engaged in a dynamic interaction with the atmosphere which influences the planet's climate and hydrological cycle. **Soil in the Environment** offers a larger perspective of soil's impact on the environment by organizing chapters among the three main processes: Physical, Chemical and Biology. This text is not only affordable for students; it also includes a web site with additional exercises, suggested field trips and further web sites with supportive research.



Meetings Overview

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 at the Hilton Riverside,

Elmwood, Third 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!

Most events will be held at the Ernest N. Morial Convention Center. Pick up your badge or register on site at the Registration Center, Hall A Lobby, beginning Sunday at 10:00 am. You can also buy Society event tickets here.

The meetings officially get underway with the York Lecture on Sunday at 7 pm at the Hilton Riverside. Participate in the centennial celebrations by taking part in the free parade, departing the Hilton Riverside at 8 pm. There are then two options: attend the centennial cruise (ticket required) or the graduate student mixer.

The Annual Meetings technical sessions begin on Monday and are held through noon on Thursday.

Visit the Society Center in Exhibit Hall A for information about certification, foundation, membership, publications, science policy, and the Smithsonian Soils Exhibit. You can also renew your membership here.

Want to check your email or upload your presentation? The Email Oasis (Room R01, Second Floor) will have plenty of work stations for attendees.

In the Exhibit Hall, posters are on display Monday–Wednesday from 9:00 am–6:00 pm. Daily setup is 7:00–8:00 am, and removal is 6:00–7:00 pm (each poster may be displayed one day only). A cash bar will be open from 4:00–6:00 pm daily.

Thank You Member Leaders!

The Societies celebrate and thank all of the 1,884 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 2007, please stop by the Exhibit Hall entrance to view our thank you sign and pick up a volunteer ribbon at the Velcro/Dietary/Ribbons booth.

ASA Celebrates Its Centennial

by Jerry Hatfield

The American Society of Agronomy celebrates 100 years! This is a statement that will be repeated several times this week, and our theme of “A Century of Integrating Crops, Soils, and Environment” will be showcased throughout the meetings. It has been a pleasure to have served as ASA’s president this year for many different reasons. My hope is that you enjoy the special events and celebrations that will take place during the week.



Throughout the year, I have received many comments and glimpses of the past from our 50+ year members. They recollected their first meeting experience, how ASA has changed over the years, and how their professional and personal friendships grew because of their affiliation with ASA. As we look back on our own careers, that should be one of the marks of a successful career path because of the people we have helped and those who have helped us. We have all been a part of something very special when you consider an organization that is 100 years old. Each one of us, whether we have 1 or more than 50+ years of membership, has a stake in the past, present, and future of ASA. We have a lot of challenges ahead because the changes we will see in the next 100 years will become more rapid and involve technology that none of us can even imagine today.

Please take time to visit the centennial display in the Exhibit Hall showcasing ASA’s 100 years of progress—it should spark a great deal of pride in what we have done as a professional society. We have not done this alone, and the creation of the Soil Science Society of America and Crop Science Society of America as member organizations has extended our impact and influence. However, it is critical to remember that our Societies work only because of the investment of time, energy, and human capital that each member makes in agronomy, crops, and soils. These are what we can take pride in being part of as members.

ASA is on a strong path toward the future that will continue to enhance our ability to encompass the spectrum from discovery through delivery. I am proud to be a member of this organization and humbled by the experience of having had the opportunity to serve ASA during this year. Please enjoy the week and our celebration!

J. Hatfield, ASA’s 100th President

Society Center Offers a Little Bit of Everything

Join us at the Society Center, located at the center of the Exhibit Hall in the Convention Center. Here are just a few of the things you can do there:

- Renew your membership
- Get answers to questions about Society services
- Browse through the bookstore and buy publications
- Contact your congressional delegation using the Societies' grassroots advocacy resource
- Learn more about the issues on the table during this congressional session and what you can do
- Hear more about why certification is important
- Learn how to find certified practitioners
- See the latest plans for the Smithsonian Soils Exhibit and make a donation
- Make a donation to an ASF fund

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.



Find a Job, Employee at the Career Placement Center

If you're looking for a job, grad school, or the right employee, check out the Career Placement Center in the Convention Center, Rooms R06–R09, Second Floor. The Center is open on Sunday from 1:00–6:00 pm, Monday through Wednesday from 8:00 am–5:00 pm, and Thursday from 8:00–11:00 am.

Employers can visit the Career Placement Center to post position announcements (including internships, graduate school postings, and professional employment), review searchable resumes online, and reserve a table to conduct interviews all week for free. Staff assistance is available with scheduling interviews.

Job seekers can view the job board and leave messages to request interviews with employers. Please remember to bring several copies of your resume to attach to the messages. You can register online to submit your interview schedule at www.careerplacement.org.



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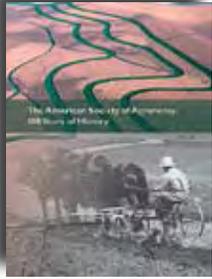
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Centennial Activities in New Orleans

A Century of Integrating Crops, Soils, and Environment

Celebrating ASA's Centennial

A century ago, a group of individuals interested in agronomy met in Chicago on 31 Dec. 1907 for the purpose of organizing the American Society of Agronomy to "increase the dissemination of knowledge concerning soils and crops and the conditions affecting them."



This year, ASA celebrates 100 years of service to the agricultural and scientific communities. In honor of this milestone, special activities are planned for these meetings in New Orleans to look back at the formation and growth of ASA and also look to the future.

As part of the celebration, all attendees will receive, *The American Society of Agronomy: 100 Years of History*, a complimentary book detailing the history of ASA. Also included with the book is the *Prophetic Voices of the Past* CD, which is a tribute to the 100 past presidents of ASA.

“Today we are assembled in the first annual meeting since the organization of the American Society of Agronomy—the first association of the kind in America, and one that will have, without question, a tremendous influence on agricultural investigation and practice.”

—Mark A. Carleton
ASA's first president, 1907–1908



New Orleans Style Celebration on Tap for Sunday Evening

Following the York lecture on Sunday evening, 4 November, take part in our free Mardi Gras parade. Departing from the Hilton Riverside at 8 pm and ending at Spanish Plaza, the half-mile parade winds through the streets of New Orleans to the Mississippi River and will feature a police escort, marching band, beads, and special characters weaving throughout the crowd. All attendees, family, and friends are encouraged to participate in the free parade.

Ticketed guests for the Centennial Dessert Cruise will then board a riverboat at 8:30 pm to enjoy a 90-minute cruise down the Mississippi River. The cruise features an assortment of elegant desserts, live jazz, and complimentary beverages. Centennial Dessert Cruise tickets are \$50 or \$25 for students (limited quantity) and can be purchased at the Registration Center Exhibit Hall A Lobby.



A Century of Integrating Crops, Soils, and Environment

ASA Centennial Display, Timeline

Stop by Exhibit Hall A of the Convention Center to view the ASA Centennial Display and Timeline. This will be your opportunity to walk through ASA's history from 1907 to the present. On display will be a collection of historical artifacts, including journals, books, and photos.

"Highlights in History," a timeline of the history of ASA, will be on display. Also featured will be a pictorial collection of all 100 presidents and a special showing of the *Prophetic Voices of our Past* CD. There will also be special daily showings of the MGM movie short about our first president, Mark A. Carleton.

The ASA Centennial Display and Timeline is where we ask you, our members, to spend some time and share stories of the past. We have invited our emeriti members to be the on-site historians and tell the history of ASA. The display is open from 9 am to 6 pm Monday through Wednesday.



Centennial Reception to Honor First President Mark A. Carleton

The ASA anniversary celebrations culminate with a Centennial Reception on Wednesday, 7 November from 7 to 9 pm in the La Louisiane Ballroom of the Convention Center.

This reception will be a special event at the meetings where we will recognize those in attendance holding 50 years or more of membership in ASA. Also planned is a reprise of the first ASA Presidential Address and a special dedication of a plaque honoring our first president Mark A. Carleton with his great-grandson and namesake in attendance, Mark A. Carleton.



Mark A. Carleton

Please join the Societies in honoring ASA for 100 years of serving the agricultural and scientific communities at this reception. Light refreshments will be served, and the event is free to all Annual Meetings registrants.



Agronomists inspect a corn planter at the 1957 North Central Branch Meeting.



Dr. Henry Beachell (right) and Dr. Robert Chandler inspect experimental rice lines in IRRI fields during the mid-1960s.



Two new activities featured

Exclusive Graduate Student Events

Graduate School Workshop

On Sunday, from 1:30–3:00 pm, Room 201, Second Floor, there will be an informal workshop open to anyone interested in going to graduate school. The workshop 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. Some topics covered are how to write a graduate school application, exploring



your interest in graduate school, and what's important when interviewing departments.

New—Graduate Student Mixer

Graduate students: make plans to join your colleagues at two special first-time activities, designed by grad students for grad students. The first is the Graduate Student Mixer on Sunday evening at the Convention Center, Rooms 208–210, from 8:15–10:15 pm, sponsored by Monsanto. This informal event provides you with the opportunity to meet other grad students in a relaxed setting where you'll enjoy complimentary food and beverages!

New—Graduate Student Lounge

Continuing with the theme of bringing grad students together, we've also created a Graduate Student Lounge, sponsored by Pioneer and their Talent Acquisition Group. Visit the lounge in the Exhibit Hall by the coffee break area and the division tables. Inside, you'll find a relaxing atmosphere, with comfortable chairs, sofa, and table. There will also be a computer for internet/email access. We'll also have refreshments in the morning and afternoon at 10:30 am and 2:30 pm (for the first 50 students) and an interesting lineup of members that grad students can meet during these refreshment sessions. To top it off, stop by with your business card and enter the raffle to win an iPod (gift certificate to the Apple store).



KNOWLEDGE TO GO

Visit The Society Center in Exhibit Hall A at the Ernest M. Morial Convention Center for a complete selection of ASA-CSSA-SSSA publications. Take them home. Have them shipped. Either way, the best in agronomy, crop, and soil science publications will be yours.

VISIT US 
PUBLICATIONS AT THE SOCIETY CENTER, EXHIBIT HALL A

**Show discount of 10% for all attendees.
Members save 20% every day, so receive a total of 30% off purchases at the Annual Meetings!**

Orientation Session for First-Time Attendees

Those new to the Annual Meetings and the Societies are invited to attend the First-Time Attendee Orientation Session from 6:00–6:45 pm Sunday at the Hilton Riverside, Elmwood, Third Floor. We'll help you conquer the meeting maze and provide valuable tips to maximize your experience, including:

- Welcome and introduction to New Orleans
- 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!

Celebrate the Centennial New Orleans Style

Following the York lecture on Sunday evening, 4 November, take part in our free Mardi Gras parade. Departing from the Hilton Riverside at 8 pm and ending at Spanish Plaza, the half-mile parade winds through the streets of New Orleans to the Mississippi River and will feature a police escort, marching band, beads, and special characters weaving throughout the crowd. All attendees, family, and friends are encouraged to participate in the free parade.

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Plenary: No other sessions scheduled at this time

E.T. and Vam York Distinguished ASA Lectureship

Agricultural Technologies to Fight World Hunger

Norman Borlaug and Robert Horsch will address the challenges in developing agricultural technologies to feed the world during this year's E.T. and Vam York Distinguished ASA Lecture at 7:00 pm on Sunday evening. The lecture will open with Dr. Horsch's presentation, "New Investments in Crops, Soils, and Small Holder Farmers—Why the Bill and Melinda Gates Foundation is Supporting Agricultural Development," followed by Dr. Borlaug's presentation, "Challenges for the Crop Scientist in the 21st Century." Borlaug and Horsch are both leaders in agriculture who have utilized technology to fight hunger around the world.

Known as the father of the "Green Revolution," Borlaug has been commended for his contributions to science and his ability to influence political policy for the good of the people. He is one of only five people in history to be awarded the Nobel Peace Prize (1970), the Presidential Medal of Freedom (1977), and the Congressional Gold Medal (2007). He also received the National Medal of Science (2005) among other awards and accolades over his career.

Borlaug worked for 16 years to solve a series of wheat production problems and to help train Mexican scientists. His new wheat varieties and improved crop management practices transformed agricultural production in Mexico during the 1940s and 1950s and later in Asia and Latin America,

E.T. and Vam York Distinguished ASA Lectureship

7:00 pm, Hilton Riverside, Grand Ballroom A-D, First Floor

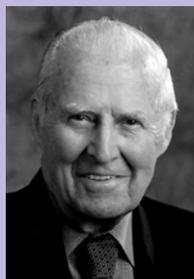
sparkling the Green Revolution. Because of his achievements to prevent hunger and famine around the world, it is said that Borlaug has saved more lives than any other person who has ever lived.

Previously employed by Monsanto, Horsch worked to develop technologies for low-income countries and farmers to improve crop yields and incomes. He has launched programs to transfer and apply this technology to developing countries, train and help educate scientists around the world, and communicate the science, benefits, and risks of agricultural biotechnology in the context of global sustainability and sustainable development.

Horsch joined the Bill and Melinda Gates Foundation as a Senior Program Officer in the Agricultural Development program in November 2006. He has served on the editorial boards of several leading journals in the plant sciences and as an advisor to the National Science Foundation and the Department of Energy. In 1999, he was awarded the 1998 National Medal of

Technology by President Clinton for contributions to the development of agricultural biotechnology.

The E.T. and Vam York Distinguished ASA Lectureship was established in recognition of the importance of agronomic science and Dr. York's impact on the profession. The program is administered by ASA through contributions to the Agronomic Science Foundation.



Norman Borlaug



Robert Horsch

Visit the Exhibit Hall to See the Latest Equipment, Publications

Featuring new and exciting opportunities for you to learn about the latest in research equipment, software, and publications are the dozens of exhibitors in Exhibit Hall A of the Convention Center. See pages 23–34 for a listing of exhibitors. Exhibit Hall hours are Monday through Wednesday, 9:00 am–6:00 pm.

The Green Zone Pavilion

Make plans to visit the Green Zone, the new pavilion dedicated to renewable energy, biofuels, and organic farming. Meet exhibiting companies who specialize in ethanol/biodiesel fuel production and research including cellulosic, wind, and solar energy technologies and implementation, organic farming methods using natural fertilizers and insects, and more!

The new pavilion will present the facts behind the science. The Societies believe it is important to give these new areas a platform to present the exciting technology

behind this movement. Get into the Zone for a sneak peek at the newest green technologies available!



Plenary: No other sessions scheduled at this time

Nyle C. Brady Frontiers of Soil Science Lectureship

Iceland—A Laboratory for Global Solutions to Climate Change

Olafur Ragnar Grímsson, President of Iceland, will give the Nyle C. Brady Frontiers of Soil Science Lecture on Monday at 8:00 am. His presentation is titled, “The Challenge of Climate Change: Iceland—A Laboratory for Global Solutions.”

Grímsson, who has served as Iceland’s President since 1996, has been an advocate for using renewable energy and finding innovative solutions to global warming. He has promoted cooperation among countries in the northern regions of the world, including a recent collaborative project involving Columbia University, the University of Iceland, the University of Toulouse, and Reykjavík Energy to find a way to sequester carbon dioxide deep in the ground for millions of years.

“For centuries, Iceland was a fishing station and an agricultural country,” said Grímsson in January during a New Year’s address to the people of Iceland. “Now it can become a driving force of a new vision for clean energy production all over the world. It is my sincere wish to work to make this a reality; there is a great deal at stake for us all.”



Ólafur Grímsson

Grímsson studied economics and political science at Manchester University, earning both a B.A. and Ph.D.

degree. Returning to Iceland, he was appointed professor in political science at the University of Iceland, specializing in comparative politics and the evolution of the Icelandic political system. He was first elected to the Icelandic parliament in 1978 and served as Minister of Finance from 1988–1991 and leader of the Peoples’ Alliance party from 1987–1995.

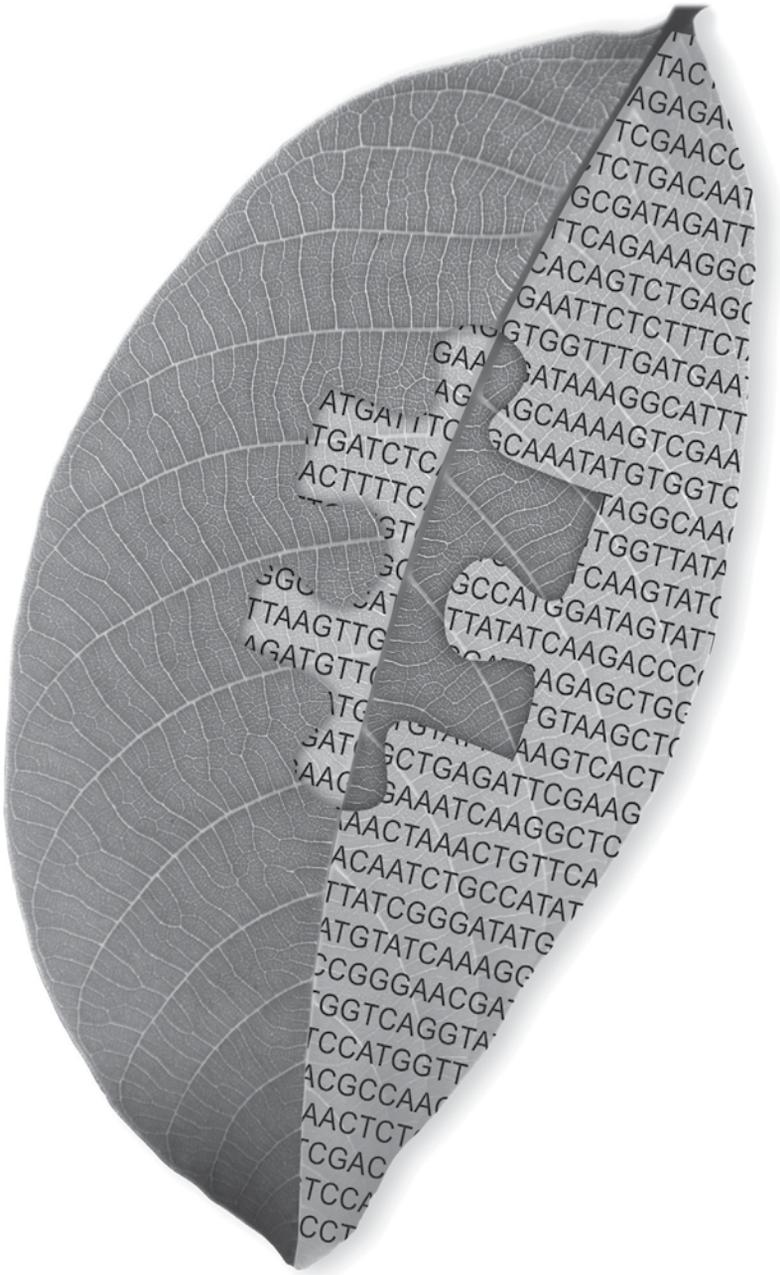
Grímsson was a member of the Economic Council of Iceland, on the board of the Icelandic Broadcasting Service, president of the international association Parliamentarians for Global Action, and a member of the parliamentary assembly of the Council of Europe.

The Nyle C. Brady Frontiers of Soil Science Lecture honors the contributions of Nyle Brady to the profession. Since 1947, Dr. Brady has worked in education, research, and research administration and is recognized around the world as author of the world’s most widely used soil science textbook, *The Nature and Properties of Soils*. SSSA administers the program through contributions made to the Agronomic Science Foundation.

Nyle C. Brady Frontiers of Soil Science Lectureship

8:00 am, Convention Center, La Louisiane Ballroom, First Floor

Do You Know Your Leaf Inside and Out?



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- Quantum Yield
- cDNA-AFLP®
- Electron Transport

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Howard M. Taylor Memorial Lectureship

Comparing Methods for Exploring Root Activity

Peter Gregory, Chief Executive and Institute Director of the Scottish Crop Research Institute, will present "Routes to Roots: Exploring the Growth and Activity of Roots in Soils" as the Howard M. Taylor Memorial Lecturer on Monday morning at 9:30 am in Room 224 of the Convention Center.

Dr. Gregory's talk will contrast soil excavation methods of information gathering about root systems with newer noninvasive techniques, analogous to human body imaging, used to visualize roots. He will also cover some new techniques for investigating the competition for soil phosphate between roots and microbes.

"Roots also modify the soil environment biologically, chemically, and physically to enhance plant growth," Gregory says. "Some pests take advantage of these changes to identify host plants."



Peter Gregory

Gregory contributes to a range of research activities from root imaging to determining the impact of

global environmental change on food systems. He studies the effects of *Sitona*, a weevil pest, on the production of grass and clover crops. Gregory is also involved in the development of a microfocuss X-ray that uses tomography, imaging by sections, to create a picture of roots and soils.

Formerly the leader of the international research project GECAFS, Gregory is currently a member of the group that studies the effects of global environmental change on food systems and human societies as well as the adaptations of food systems in response to global change.

Prior to joining the Scottish Crop Research Institute, Gregory taught in the University of Reading's Soil Science Department. He served as Dean of the Faculty of Agriculture and Food for two years and then as Pro-Vice-Chancellor for Research and Enterprise from 1998 onwards. He also spent six years working as a research scientist at CSIRO in Perth, Australia.

The Howard M. Taylor Memorial Lecture honors the contributions of Dr. Taylor to the profession and is administered by SSSA.

Howard M. Taylor Memorial Lectureship

9:30 am, Convention Center, Room 224, Second Floor

AgriTalk to Broadcast Live from the Meetings

One of the nation's most popular radio programs, AgriTalk, will be broadcasting live from the Annual Meetings on Monday morning from 10:00-11:00 am.

Cutting-edge agricultural research will be featured on the nationally syndicated AgriTalk radio show as the program travels to New Orleans. The show's host, Mike Adams, will feature a number of our scientist members on the broadcast.

Stop by the broadcast station, located in the Exhibit Hall A Lobby near the La Louisiane Ballroom of the Convention Center, to hear the live show as Adams interviews several member scientists. Attendees will be able to ask questions to the scientists during the hour-long program.

St. Louis-based AgriTalk is broadcast each weekday by nearly 100 affiliate radio stations across the country and on the web to more than 100,000 people. The program focuses on agricultural and rural-life issues, and this broadcast will be sponsored by the National Corn Growers Association.



Mike Adams

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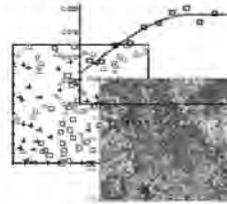


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S.A. Wilde Distinguished Lectureship on Forest Soils

Reflections on 40 Years of Forest Soils Research

Robert Powers, a senior scientist at the Pacific Southwest (PSW) Research Station of the USDA Forest Service, will present "What I've Learned: Reflections from 40 Years of Forest Soils Research" as the S.A. Wilde Distinguished Lecturer on Forest Soils at 11:00 am in Room 219.

"A career spanning four decades is but a historical speck," Powers says, "but the S.A. Wilde Lecture allows me to reflect on the progress of our discipline, as well as on my personal journey and the lessons I've learned."

With over 40 years of forest science experience, Dr. Powers recently decided to focus on his own research. Previously, he oversaw two dozen employees and seven scientists at the PSW station in Redding, CA.

An affiliate faculty professor in Oregon State University's Department of Forest Resources, Powers is also the leader and co-founder of the North American Long-Term Soil Productivity (LTSP) research program. Through a coordinated series of long-term experiments involving government, academic, and private sector partners, the LTSP network examines the consequences of soil disturbances from forest management and how they affect the land's basic capacity to capture carbon for forest growth.

"Science is based on curiosity, and I was curious about the 'whys' of soil components of site productivity," Powers explains. "Both Cooperative Research in Forest Fertilization (CRIFF) and the Regional Forest Nutrition Research Project (RFNRP) showed that fundamental and applied science were not mutually exclusive. Rather, they could be melded through cooperation for the betterment of forest science and forest management."

In addition to his ongoing research, Powers has held many SSSA offices, including Division



Robert Powers

S-7 chair and board representative, and has served a seven-year appointment as associate editor of the *Soil Science Society of America Journal*. In 1994, Powers was elected SSSA Fellow, the first USDA Forest Service employee to receive that honor. Since 1992, he has been on the editorial staff of the journal *Forest Ecology and Management*.

S.A. Wilde Distinguished Lectureship on Forest Soils

11:00 am, Convention Center,
Room 219, Second Floor

Administered by SSSA, the Sergei A. Wilde Distinguished Lectureship on Forest Soils was created to honor S.A. Wilde's leadership role in the evolution of forest soil science during the 20th century.

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Calvin Sperling Biodiversity Memorial Lectureship

Examining Agricultural Challenges in Costa Rica

Dr. Ana Sittenfeld, Director of the Office of International Affairs and External Cooperation and professor of microbiology at the University of Costa Rica, will give this year's Calvin Sperling Biodiversity Memorial Lecture on Monday at 4:15 pm in Room 210. Titled, "Biodiversity and Agricultural Biotechnology at the Crossroads," the presentation will highlight the agricultural challenges in Costa Rica.

"Agricultural expansion [in Costa Rica] has resulted, in the last decades, in poor natural resource management," Sittenfeld says.

According to Sittenfeld, traditional growing methods, including heavy use of agrochemicals to maximize production, have been potentially detrimental to biodiversity. Currently, over 25% of land in Costa Rica is protected as a part of the National System of Conservation Areas; however, imports of agrochemicals have risen in recent years even with no significant increase in crop yields per hectare over the last decade, she says.



Ana Sittenfeld

"The challenge for Costa Rica is to decide whether to continue with unsustainable agricultural practices or to explore other alternatives, such as the introduction of genetically modified (GM) crops and other biotechnologies," Sittenfeld says. "However, as with any other new technology, a careful consideration of potential environmental effects, including gene flow from GM plants to natural variants needs to be considered."

Calvin Sperling Biodiversity Memorial Lectureship
4:15 pm, Convention Center, Room 210, Second Floor

Sittenfeld's research includes the characterization of microbial communities living in extreme environments. Until 2004, she served as director of the Microbial Gene Prospecting MIRCEN (Microbial Resources Center, UNESCO) and coordinator of the Microbial Ecology Department. More recently, she has served on several national and international committees dealing with biodiversity and biotechnology. Additionally, from 1991–1996, Sittenfeld served as the Director of Bioprospecting for the National Institute of Biodiversity (INBio) and was responsible for facilitating the sustainable economic use of biodiversity and biotechnology.

Born in Costa Rica, Sittenfeld received a Ph.D. in microbiology and clinical chemistry in 1978 and a M.S. in microbiology in 1985. As a faculty member, she focuses on biotechnology, microbial ecology, and microbial gene prospecting.

Sittenfeld is a founding member and was first president of the Board of Directors of the Costa Rica–United States Foundation. The organization's mission is to encourage cooperation between the two countries as Costa Rica strives to develop in a sustainable manner and improve the quality of life of its citizens. She has authored or co-authored more than 200 papers and presentations in scientific meetings.

The Calvin Sperling Biodiversity Memorial Lecture was established as a memorial to Calvin Sperling, an economic botanist known for his consistent excellence in field research. Dr. Sperling dedicated his career to conserving biological diversity and improving crop plants worldwide. The program is administered by CSSA.

Featured Society-Wide Symposium

The Role of Statistics in Agricultural Research: Past, Present, and Future

12:55 pm, Convention Center, Room 217, Second Floor

This featured Society-wide symposium will include the following presentations:

- "Fisher, Yates, Nelder, and Thompson: The Development of Statistical Design and Analysis Concepts at Rothamsted," by Roger Payne, VSN International Ltd.
- "The Importance of Statistics in the Era of 'Omics,'" by Rebecca W. Doerge, Purdue University
- "A Mixed Bag of Significant Tricks: Developments for Statistics in Agriculture," by Oliver Schabenberger, Linear Models R & D

You Can Help Double Science Funding

Funding for the agricultural sciences has been flat or declining over the past decade. Meanwhile, funding for the National Science Foundation is on track to double to more than \$10 billion within 10 years. Tired of having your grants rejected even though they received high marks from the review panel? What went wrong and what can ag scientists do?

Please join us at "Doubling Science Funding: You Can Help" on Monday from 1:30–3:00 pm in Room 207 of the Convention Center to learn how to become an effective advocate for our sciences and ultimately reverse this bleak funding trend. Participants will learn through short presentations from experts and a "hands-on" activity how to communicate effectively and efficiently so that Congress will listen and take action. Hope to see you there!



Professional Development Programs for Students, Early Career Attendees

Communicating Science to the Public: 10:00–11:30 am, Room 207, Second Floor

This session is aimed at learning effective ways of communicating science to the media, public policy makers, and the general public. Representatives from private industry, government agencies, and universities will participate. Topics covered include Don't be a Know It All: Stick to Meaningful Bits and Bites; Translating Research Results for Producers and Public; How We Communicate: Science Depends on You; and Communicating Science to Nonscientists: Selling your Story.

CCA Program: 11:00 am–12:00 pm, Room 201, Second Floor

This program is open to anyone interested in becoming a certified crop adviser (CCA). Here two CCAs 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 discussion with plenty of time for questions.

Job Opportunities Outside Academia: 1:25–3:30 pm, Room 211, Second Floor

This program provides a forum for industry representatives to talk about specific programs and opportunities in their companies. Representatives from Dow AgroSciences, LLC; The Catena Group, Inc.; and DeVal Soil



Last year's Job Opportunities Outside Academia session in Indianapolis, IN.

and Environmental Consultants, Inc. will participate and conclude with a panel discussion. The program is sponsored by the Early Career Member Committee and by the Students of Agronomy, Soils, and Environmental Sciences (SASES).

Mock Interview Workshop: 3:30–5:00 pm, Room 201, Second 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. Students will receive advice 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 Sunday morning breakfast and business meeting.

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Plenary: No other sessions scheduled at this time

Betty Klepper Endowed Lectureship

Using 'Biomedical Agriculture' to Combat Diseases

Henry J. Thompson, director of the Cancer Prevention Laboratory and professor in the College of Agricultural Sciences at Colorado State University, Fort Collins, will deliver this year's Betty Klepper Endowed Lecture on Tuesday morning at 8:00 am in the La Louisiane Ballroom, First Floor of the Convention Center. The title of his presentation is "Biomedical Agriculture: A New Approach to Improving the Human Health Attributes of Staple Food Crops."

Long dedicated to nutrition and cancer prevention research, Dr. Thompson is working to unite an array of disciplines in an effort to develop more healthful food crops to address major health concerns. Certain chronic diseases such as cardiovascular disease, diabetes (type 2), and obesity can be prevented in many cases through lifestyle choices, according to Thompson.

"While there has been some success in efforts to breed plants for improved health-related attributes, these examples are remarkably limited in number and scope," Thompson says. "Eating a diversity of food from crop plants can improve health, but crop varieties often differ significantly in their bioactive food components."

Betty Klepper Endowed Lectureship

8:00 am, Convention Center, La Louisiane Ballroom, First Floor

Thompson hopes what his team has coined "biomedical agriculture" will help to identify traits that can be used by plant breeders to improve a crop's human health attributes. In addition to learning about currently unappreciated health benefits of existing food selections, Thompson anticipates that further research will aid the development of new crop selections with improved disease prevention characteristics.

"Future dietary recommendations will be more targeted not only for specific food crops, but also for varieties within a crop," he says. "It is critical that this be done in a manner that will be accepted within the agricultural community so that crops of interest become widely available to consumers."

Thompson served as the head of the Center for Nutrition in the Prevention of Disease at AMC Cancer Research Center in Denver, CO from 1988 to 2002. Before joining AMC, he was professor of Nutritional Sciences at the University of New Hampshire and director of the Human Nutrition Center.

Thompson earned his Ph.D. from Rutgers University in nutritional sciences with an emphasis in biochemistry. Following his doctoral work, he received postdoctoral training in the Department of Molecular Medicine at the Mayo Clinic in Rochester, MN. From 1977 to 1979, he worked as a senior research nutritionist at the IIT Research Institute in Chicago, IL.



Henry Thompson

The Betty Klepper Endowed Lectureship was established by Dr. Klepper to stimulate scientific discussion on cutting-edge crop science issues. The program is administered by CSSA.

Centennial 5K Fun Run/Walk

Join us at the starting line! The Mississippi riverbank is the beautiful setting for the Centennial 5K Fun Run/Walk during the Annual Meetings. All attendees are invited to participate in the event, which will be held Tuesday morning from 6:30 to 9:30 am.

Held near the Convention Center and riverwalk, the race will begin on the jogger's path between the Aquarium and the Mississippi River. Participants will check in at the Canal Street starting line to receive race numbers, course maps, and sign release waivers.

A shotgun start will kick things off. Runners and walkers will receive a computer label upon crossing the finish line, registering their completion time. Completion times will be posted on a master tracking board with winners calculated in the separate categories of runners and walkers.

This ticketed event includes a post-race continental breakfast, race t-shirt, and transportation back to the downtown hotels.

Tickets for the Centennial 5K Fun Run/Walk are \$35 and may be purchased at the Registration Center, Exhibit Hall A Lobby of the Convention Center.



William H. Patrick, Jr. Wetland Biochemistry Memorial Lectureship

Omic Insight into Linking Microbial Diversity, Ecology, and Function

The legacy of Bill Patrick, for whom the William H. Patrick, Jr. Memorial Lectureship is named after, is one of bringing focus to understanding biogeochemical processes in wetlands. According to Dr. James Tiedje, who will give this year's Patrick Lecture on Tuesday at 9:25 am in Room 223 of the Convention Center, the "omic" technologies, especially the genomic ones, have advanced yearly so that we now have the blueprints of the biological machines that drive critical environmental processes. He says two approaches have been most revealing: (i) the study of phylogenetic and functional genes that reveal diversity and patterns that are the outcomes of selection by habitat conditions and (ii) the omic study of example microbes or populations of microbes that can reveal how particular organisms respond to environmental change. Tiedje will discuss both during his presentation, titled "Omic Insight into Linking Microbial Diversity, Ecology, and Function."

Tiedje is University Distinguished Professor of Microbiology and Molecular Genetics and of Crop and Soil Sciences and is Director of the Center for Microbial Ecology at Michigan State University. His research focuses on microbial ecology, physiology, and diversity, especially regarding the nitrogen cycle, biodegradation of environmental pollutants, and use of molecular methods to understand microbial community structure and function. His group

has discovered several microbes that live by halorespiration on chlorinated solvents and is using genomics to better understand ecological functions, endemism, and niche adaptation.

Tiedje has served as Editor-in-Chief of *Applied and Environmental Microbiology* and Editor of *Microbial and Molecular Biology Reviews*. He has over 375 refereed papers, including seven in *Science* and *Nature*. He shared the 1992 Finley Prize of UNESCO (United Nations Educational, Scientific, and Cultural Organization) for research contributions in microbiology of international significance and is Fellow of the American Association for the Advancement of Science, the American Academy of Microbiology, and SSSA and a member of the U.S. National Academy of Sciences. He was President of the American Society for Microbiology in 2004–2005.

The William Patrick Wetland Biochemistry Memorial Lectureship was established as a memorial to S-10 co-founder Dr. William Patrick and is administered by SSSA.



James Tiedje

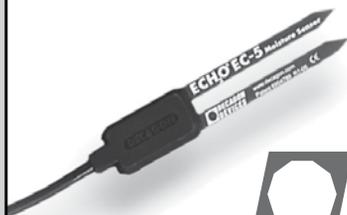
William H. Patrick, Jr. Memorial Lectureship
9:25 am, Convention Center, Room 223, Second Floor

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Professional Development Programs for Students, Early Career Attendees

Writing Manuscripts for Publication: 9:30–11:30 am, Room 211, Second Floor

Jump start your professional career and learn about the publishing game through this hands-on workshop. Offered for the fourth year, graduate students will review the sequence of steps in creating a publishable manuscript and participate in a writing and discussion exercise. M.S. and Ph.D. students that have analyzed, summarized, and reviewed their data will benefit most from this workshop, conducted by J. Michael Kelly, Virginia Tech, and Ruth Yanai, SUNY-ESF. All students will have the opportunity to learn how to break the manuscript creation process down into an orderly sequence of manageable tasks.

Grant-Writing Navigation: 11:30 am–1:00 pm, Room 215, Second Floor

Early career members and graduate students will learn about successful approaches to obtaining competitive grant funding. Participants will be taken through the steps in the grant-writing process including: (1) idea development, (2) project preplanning, (3) using RFPs/guidelines, (4) budgeting, (5) working with collaborators, and (6) an overview of the review process. This presentation draws from the extensive combined experiences of Ron Turco, Purdue University, in proposal development and service on numerous state and federal proposal review panels.

Featured Society-Wide Symposium

The African Green Revolution Takes Shape

1:15 pm, Convention Center, Room R02, Second Floor

This featured Society-wide symposium will include the following presentations:

- “The African Green Revolution Moves Forward,” by Pedro Sanchez, Columbia University
- “The Economics of the African Green Revolution,” by Jeffrey Sachs, The Earth Institute
- “Improving Access to Inputs by Smallholder Maize Farmers: Experience from Malawi,” by Patrick Kabambe, Ministry of Agriculture and Food Security
- “The Millennium Villages,” by Amadou Niang, MDG Center
- “How Well Can Tropical Africa Adapt to Climate Change?” by Philip Thornton, International Livestock Research Institute
- “The African Green Revolution Alliance,” by Akin Adesina, Rockefeller Foundation

Finding Ideas

“Ideas are like rabbits. You get a couple and learn how to handle them, and pretty soon you have a dozen.”

John Steinbeck (1902 - 1968)

Slide from last year's Grant-Writing Navigation session.

Social for Early Career Members: 5:30–7:30 pm, Room 206, Second Floor

Don't miss the party and join us for food, a cash bar, and live music during this social for early career members. All early career attendees (including undergrads, grads, post-docs, and anyone in the early stages of a career) and those interested in supporting early career activities are invited and encouraged to attend. The two-hour event includes a short program, introduction of committee members, and an overview of committee activities during the year. Please plan on attending and feel free to bring a guest.

Navigating Funding Opportunities at the National Science Foundation

This year's Annual Meetings features a unique opportunity for members to learn about scholarship and funding opportunities within the National Science Foundation (NSF). A special session titled, “Navigating Funding Opportunities at the National Science Foundation,” will take place on Tuesday from 1:00–3:00 pm in Room 201 of the New Orleans Convention Center. Officers from the NSF Directorates of Biology, Geosciences, and Education and Human Resources will be the event presenters.

The event will:

- Highlight collaboration and funding opportunities for soil, crop, and agronomic researchers at NSF
- Provide members with a short course on how to write and submit an NSF proposal

Please make plans to join us!



*Francis E. Clark Distinguished Lectureship***A New Look at Microbial Nitrogen Transformations in Agroecosystems**

This year, the Francis E. Clark Distinguished Lectureship on Frontiers in Biology, organized annually by the S-3 Division, will be awarded to James I. Prosser of the University of Aberdeen (UK). The award will take place during a symposium on Tuesday at 1:20 pm in Room 204 of the New Orleans Convention Center. The title of the symposium is "A New Look at Microbial N Transformations in Agroecosystems: Going Beyond (De)nitrification."

Most research in agricultural ecosystems has focused on a limited set of microbial pathways to describe N transformations in the soil, especially bacterial autotrophic nitrification and heterotrophic denitrification. However, it has become increasingly clear that pathways that were previously considered to be merely of academic interest may be of considerable importance to N cycling in agroecosystems. For example, recent studies suggest that archaea may be more abundant than bacteria among ammonia oxidizers in the soil. Nitrifier denitrification may be a more important source of nitrous oxide emission than "classical" nitrification. Processes such as dissimilatory nitrate reduction to ammonium (dnra) and anaerobic oxidation of ammonium (anammox) and methane have only recently been discovered or are still not completely described. In this symposium, an overview will be given of new developments in these fields of research and their implications for N cycling.

**James Prosser**

Speakers of the 2007 Clark Symposium include:

- James I. Prosser (University of Aberdeen, UK): "Soil Nitrification—Versatility, Flexibility, and Diversity"
- Nicole Wrage (Georg August University, Göttingen, Germany): "Nitrifier Denitrification: What We Know, Don't Know, and Thought We Knew"
- Laura van Niftrik (Radboud University, Nijmegen, the Netherlands): "'Impossible' Microbes with Global Implications: Anaerobic Oxidation of Ammonium and Methane"
- Whendee L. Silver (University of California, Berkeley, USA): "The Role of Dissimilatory Nitrate Reduction to Ammonium"

There will be a related session of volunteered contributions on Wednesday morning at 9:25 am in Room 218 of the Convention Center.

Francis E. Clark Distinguished Lectureship

1:20 pm, Convention Center, Room 207, Second Floor

*Leo M. Walsh Soil Fertility Distinguished Lectureship***Understanding Nutrient Behavior in Soils**

This year's Leo M. Walsh Soil Fertility Distinguished Lecture, titled, "Advancing Our Understanding of Nutrient Behavior in Soils Using Advanced Instrumental Methods," will take place on Tuesday at 3:00 pm in Room 220 of the Convention Center. Michael McLaughlin, Chief Research Scientist and Director of the CSIRO Centre for Environmental Contaminants Research in Adelaide, Australia and professor in the School of Earth and Environmental Sciences at the University of Adelaide, will be the presenter.

Dr. McLaughlin, who has worked in three continents, focuses primarily on soil and environmental chemistry. He looks at the behavior and toxicity of nutrients and contaminants in the soil-plant system, the assessment and remediation of contaminated soils, and use of advanced techniques to measure and monitor nutrients and pollutants in the environment.

"Over the last 20 years, many new advanced spectroscopic, chromatographic, and isotopic techniques have become available to examine nutrient speciation and chemistry in soils and plants," McLaughlin says. "The ability to examine microscale reactions of nutrients around fertilizers and plant roots is advancing our understanding of nutrient behavior in soils."

For the past seven years, McLaughlin's team has been examining the reactions of granular and fluid fertilizers in soils, specifically looking at crop acquisition of phosphorus. Previously, McLaughlin worked as a research scientist at the Soil and Irrigation Research Institute in South Africa where he studied the impacts on sustainability of wastewater and sewage biosolid disposal on soils.

McLaughlin also worked at CSIRO Plant Industry in Canberra, Australia on issues relating to acidic soils and reactions of fertilizer phosphorus and fluoride in soils. In the late 1980s, he served as technical manager of the Australian Phosphate Corporation and Honorary Research Fellow at La Trobe University, Melbourne, Australia, where he was responsible for environmental issues relating to fertilizer use in the country.

McLaughlin also manages research related to the Infrared Soil Analysis Service, which uses mid-infrared (MIR) spectroscopy for the rapid nondestructive analysis of soil physical and chemical properties.

The Leo M. Walsh Soil Fertility Distinguished Lectureship honors the contributions of Leo Walsh to the profession and is administered by SSSA.

**Michael McLaughlin**

Leo M. Walsh Soil Fertility Distinguished Lectureship

3:00 pm, Convention Center, Room 220, Second Floor

Wednesday, 7 November

Dig It! The Secrets of Soil

Please join us on Wednesday morning, from 9:30–10:30 am in Room 230 of the Convention Center, for the Smithsonian Soils Exhibit 2008 Opening Preview. You'll get a glimpse of the final exhibit design, hear from the curator and design team members, see a preview of what will debut in Washington, DC next July, and learn more about how the 5,000-square-foot exhibit will travel the country in 2010 and beyond.



Plenary: No other sessions scheduled at this time

LIHD Biofuels: Is This the Path to Follow?

The fourth and final plenary session of this year's Annual Meetings will take place on Wednesday morning at 8:00 am in the Convention Center, La Louisiane Ballroom, First Floor. It will feature two different viewpoints on the topic of low-input high-diversity (LIHD) biofuels. The first is from Mike Palmer, a botany professor from Oklahoma State University. Dr. Palmer will talk about some of the problems he sees with the growth of high-input low-diversity production systems over the years



Ken Cassman

and the benefits of using unplowed diverse grasslands for biofuels instead. Dr. Ken Cassman, Director of the Nebraska Center for Energy Sciences Research at the University of Nebraska, Lincoln, will take an alternative view. He says while grassland systems deserve further consideration, evidence supporting them as a sustainable biofuel feedstock is weak.



Mike Palmer

Low-Input High-Diversity Biofuels: Is This the Path to Follow?
8:00 am, Convention Center, La Louisiane Ballroom, First Floor

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Leadership: Science or Myth?

A two-hour interactive session on leadership will be conducted on Wednesday from 9:30–11:30 am in Room 219 of the Convention Center by Kathryn Helene, Capital Associated Industries, Inc. In the first interactive session, participants will learn about true qualities of leadership as they view them both philosophically and practically. The second session will be a group discussion on leadership competencies where participants will identify characteristics and behaviors for each competency. Finally, a case study will be presented to increase the awareness of leadership skills and how to utilize leadership competencies to lead a team to succeed in a professional situation.

Centennial Reception Wednesday Night

The ASA anniversary celebrations culminate with a Centennial Reception on Wednesday from 7 to 9 pm in the La Louisiane Ballroom of the Convention Center.

This will be a special event where we will recognize those in attendance holding 50 years or more of membership in ASA. Also planned is a reprise of the first ASA Presidential Address and a special dedication of a plaque honoring our first president Mark A. Carleton with his great-grandson and name-sake in attendance, Mark A. Carleton. Please join us in honoring ASA for 100 years of serving the agricultural and scientific communities!

Featured Society-Wide Symposium

Katrina Disaster and Sustainable Coastal Development

1:45 pm, Convention Center, Room R02, Second Floor

This featured Society-wide symposium will include the following presentations:

- “Hurricane Katrina and New Orleans: Science and Restoration Policy,” by Charles Groat, Jackson School of Geosciences, University of Texas, Austin
- “The Sociopolitical-Scientific Process in Coastal Wetland Restoration,” by William L. Jenkins, Louisiana State University System
- “Anatomy of a Disaster: What We Learn from Katrina,” by Ed Link, University of Maryland
- “Drawing Louisiana’s New Map: Addressing Land Loss in Coastal Louisiana and Related Knowledge Gaps,” by Robert Dean, Civil and Coastal Engineering
- “Hurricane Disaster Response Maps of NRCS and the Role of Soil Science in the Politics of Natural Resources Conservation,” by William Puckett, USDA-NRCS

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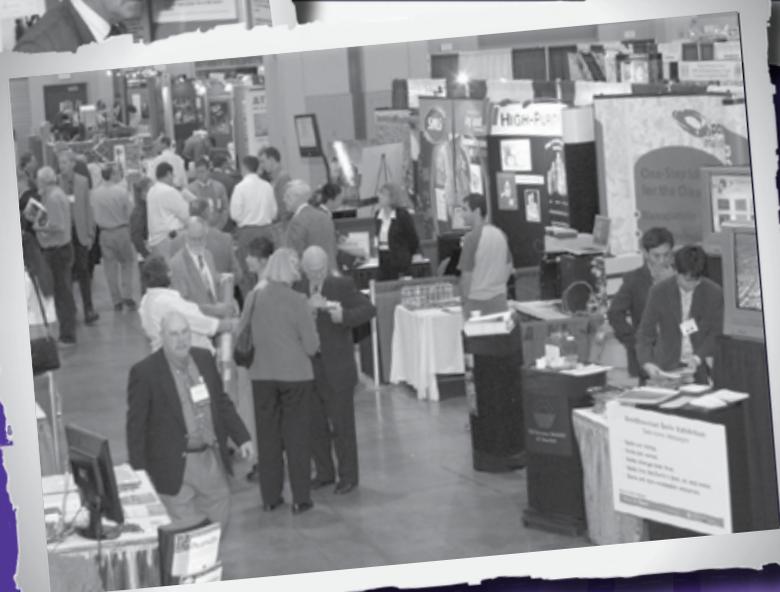
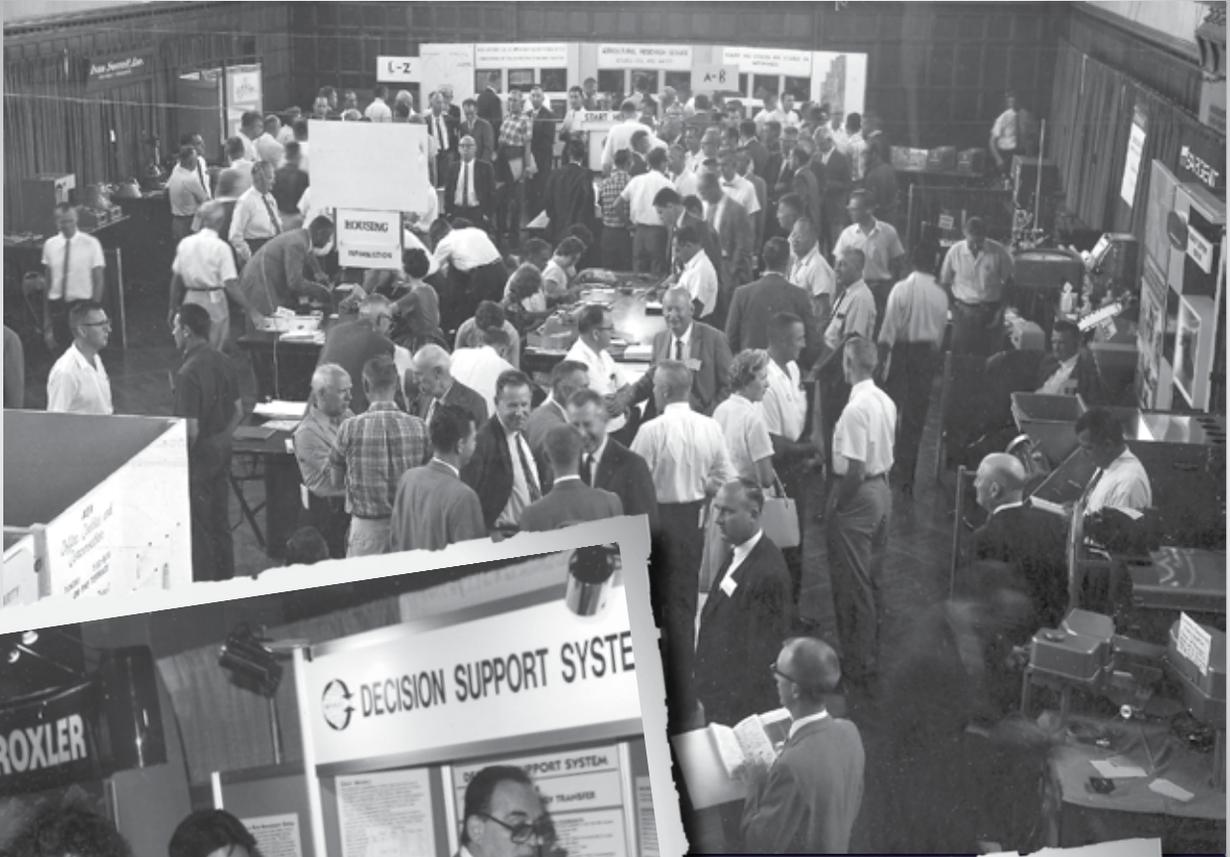
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2007 Exhibitors



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For over 30 years, Agri Drain Corporation has been America's most complete supplier of products for drainage water management, wetlands, ponds, lakes, erosion control, and land improvement. Agri Drain supports soil conservation and water quality practices. When managed correctly, we feel that drainage is one of the few investment opportunities for producers, which will create wealth for generations. For more information regarding the products and services we offer, please feel free to visit our website at www.agridrain.com or call 1-800-232-4742.

REPRESENTATIVE: Charlie Schaefer

Agriculex Inc.

1-59 Suburban Avenue
Guelph, ON N1E 6B8 Canada
Phone: 519-837-0871
Fax: 519-837-4291

www.agriculex.guelph.org

Booth 308

We manufacture specialized equipment for agricultural research—Single Plant Thresher (SPT-1), Belt Thresher (SPT-2), Programmable and Non-Programmable Electronic Seed Counter (ESC-2 and ESC-1), Single Cob Corn Sheller (SCS-2), Batch/Bulk Corn Sheller (BCS-1), Spelt Dehuller (SD-2), Seed Cleaners (CB-1, CB-2, ASC-3), Roller Sorter and Cleaner (RSC-1), and Spherical-Nonspherical Seed Sorter (SNS-1).

REPRESENTATIVES: Godfrey Chu and James Ferguson

Agrilink International

2961 W. MacArthur Boulevard, #132
Santa Ana, CA 92704
Phone: 714-966-1975
Fax: 714-966-1944

www.agrilink.net

Booth 325

Agrilink produces soil moisture and weather-monitoring solutions that assist irrigators, farmers, consultants, and property managers to become more profitable through better strategic irrigation management in a wide range of crops. The innovative new range of AquaSpy soil moisture probes, combined with radio or cellular telemetry and AgWISE online software, ensures you are always in touch with your crop's water use—anywhere, any time. The AquaSpy range of intelligent sensors are based

around “plug and play” solutions that suit all crop, turf, and research applications. The revolutionary new design makes AquaSpy the most accurate multilevel soil moisture probe available and perfect for volumetric soil water studies.

Agronomix Software, Inc.

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Winnipeg, MB R3N 0S4 Canada
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www.agronomix.com

Booth 510

AGROBASE Generation II is a comprehensive relational software system used by agronomists and plant breeders worldwide. Generation II supports many experimental designs, data management, data analysis, customized reports and summaries, G×E analyses, variety testing, plant breeding for many different crops and breeding schemes, image display, and much more. Easily compare varietal performance over years, view the selection history of breeding lines, or view all data for a variety. A dynamic link to GenStat supports more advanced statistical analyses. Come for a demonstration of AGROBASE Generation II version 16.0, our latest release with many new features, and GenStat 10th edition.

REPRESENTATIVES: Dieter Mulitze, Ellen Mulitze, and Roger Payne

Agrotain International

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www.agrotain.com

Booth 310

AGROTAIN International is the world's largest producer of StabilizedNitrogen fertilizers. Marketed under the brands AGROTAIN, AGROTAIN PLUS, SuperU, HYDREXX, UMAXX, and UFLEXX, StabilizedNitrogen fertilizers contain proprietary nitrogen stabilizer technology. This award-winning technology has a proven track record, backed by worldwide research studies. AGROTAIN International's StabilizedNitrogen fertilizers reduce nitrogen losses, and extend plant-available nitrogen for healthier plants and higher yields. AGROTAIN International's products are currently licensed or sold through agricultural, turf and ornamental, or industrial partners in over 55 countries. AGROTAIN International is headquartered in St. Louis, MO.

REPRESENTATIVES: John Hassell, Charles Delaney, and Ben Tompson

ALMACO

99 M Avenue
Nevada, IA 50201
Phone: 515-382-3506
Fax: 515-382-2973

www.almaco.com

Booth 208

ALMACO, www.almaco.com, will be exhibiting our precision agricultural research equipment for planting and harvesting test plots. You are invited to visit our booths to see the latest product developments and services. Exhibits include our precision seeding equipment, several versions of our stationary plot threshers, SkyTrip GPS planting system, and Seed Spector LRX data analysis and collection equipment. Stop by and sign up for our giveaways. Please come and introduce yourself to our new marketing consultant as well as reunite with some familiar faces from ALMACO.

REPRESENTATIVES: Patrick Clem, Todd Vincent, and Shad Mallady

The Green Zone Pavilion

Make plans to visit the Green Zone, the new pavilion dedicated to renewable energy, biofuels, and organic farming. Meet exhibiting companies who specialize in ethanol/biodiesel fuel production and research including cellulosic, wind, and solar energy technologies and implementation, organic farming methods using natural fertilizers and insects, and more!

The new pavilion will present the facts behind the science. The Societies believe it is important to give these new areas a platform to present the exciting technology behind this movement. Get into the Zone for a sneak peek at the newest green technologies available!

Apogee Instruments, Inc.

82 Crockett Avenue
Logan, UT 84321
Phone: 435-792-4700
Fax: 435-787-8268

www.apogeeinstruments.com

Booth 323

Apogee Instruments is a research-intensive company dedicated to the development of innovative environmental sensors. Apogee's goal is to help customers make better measurements, which translates to developing quality instruments and providing a high level of customer support. The product line includes an infrared radiometer for measuring surface temperatures of plant canopies, soils, water, snow, and roads; a pyranometer for measuring total solar radiation; handheld quantum meters and quantum sensors for measuring photosynthetically active radiation; a UV sensor; a portable spectroradiometer; and a soil oxygen sensor for measuring respiration and aeration. All prices and product specifications are available at www.apogeeinstruments.com.

FieldSpec 3 spectroradiometer and AgriSpec spectrometer, field analysis of soils and vegetation has never been easier. ASD's spectrometers are state-of-the-art instruments for superior qualitative measurements from 350–2500 nm, in reflectance, absorbance, or transmittance, and are ideal for assessment of soil and organic resource quality. With ASD's unique modular *Goetz Spectrometer* design providing a wider spectrum than other NIR instruments available, your spectra is created with greater signal-to-noise ratio and more robust data, resulting in more reliable analysis.

REPRESENTATIVE: David Hatchell

Association of Women Soil Scientists

310 Apache Drive
Buffalo, WY 82834
Phone: 2069629674

www.womeninsoils.org

Booth 103

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.womeninsoils.org.

REPRESENTATIVES: Kelly Counts, Dena Marshall, and Jamie Patton

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Booth 407

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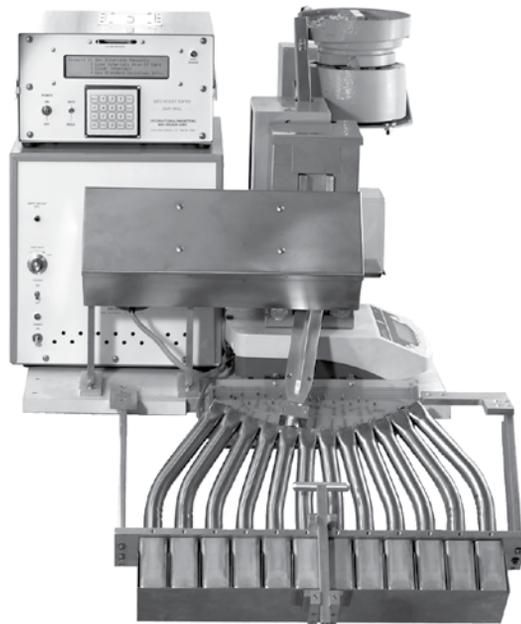
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Booth 326

Ben Meadows has a 50+ year-old tradition of offering the finest gear available for the Outdoor Pro. Check out www.benmeadows.com and discover more about our Project Cooperative with AMS to help make "SOILS: Worlds Underfoot" a reality! Then request your FREE copy of our latest catalog or call us, toll free, at 1-800-241-6401 today!

Bio Chambers Enconair

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Booth 402

Bio Chambers/Enconair will display one of its popular "Big-foot" Plant Growth Chambers specially enhanced for agronomy applications. Please stop by our display to pick up the latest information.

REPRESENTATIVES: Bill Porter and Patti Porter

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Booth 502

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- Purdue University
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- Texas A&M, Extension Horticulture
- Texas Tech University, Dep. of Plant and Soil Science
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Booth 516

BO-fu is a Dutch company that specialized in the field of information technology for agriculture. Our main products are the PTM-48A Photosynthesis and Transpiration Monitor, a new all-in-one instrument for monitoring plant status and environment, and the PM-11 Phytomonitor, a portable weatherproof data-logging system designed for application in plant science and crop growing. Includes a variety of optional sensors for plant and environment including, Photosynthesis Radiation, Total Irradiance, Soil Moisture, Leaf Temperature, Air Temperature and Humidity, Sap Flow Relative Rate, Stem Microvariation, Electronic Point Dendrometer, Fruit Growth, and Stem Auxanometer. The company is also a representative of Israeli seed company in Europe, China, and Mexico.

California Analytical Instruments, Inc.

1312 E. Grove Avenue
Orange, CA 92865
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www.gasanalyzers.com

Booth 109

The Model 1412 Photo-acoustic Field Gas Monitor with microphone detectors is extremely sensitive to measure any infrared

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815 W. 1800 N.
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www.campbellsci.com

Booth 324

Campbell Scientific, Inc. manufactures dataloggers, data acquisition systems, measurement, and control products used worldwide in research and industry. Measurements include environmental, water quality, soil moisture, and flow parameters. Control of irrigation and closed environments are also common. Our instrumentation is known for its flexibility, low power requirements, precise measurements, and dependability in harsh, remote environments. We invite you to visit our exhibit to discuss your research applications and learn about our new products. Our products are backed by over 30 years of environmental measurement experience and an unwavering commitment to customer service.

REPRESENTATIVES: Paul Campbell, Bert Tanner, Jim Bilskie, Jason Ritter, and Mike Hansen

absorbing gas. The analyzer can be configured to measure five gases. Some of the gases of interest for the agricultural, dairy, and waste applications are ammonia (0.2), methanol (0.08), ethanol (0.08), acetic acid (0.04), methane (0.1), CO (0.2), CO₂ (5), N₂O (0.03), DMS (0.4), MSH (1), SF₆ (0.006), and SO₂ (0.3). All the numbers in the parentheses are the minimum detection limits. The analyzer has onboard data storage capability and requires minimal maintenance and semiannual calibrations.

REPRESENTATIVE: Hal Pepper

CID, Inc.

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Booth 514

CID, Inc. designs and manufactures the most portable and accurate field instruments available for environmental and biological research. Fast, precise data collection is at your fingertips with our Hand-Held Photosynthesis System, Portable Area Meter, Root Scanner System, Plant Canopy Imager, and Computer Analysis System. Come see the new CI-210 Portable Plant Imager, a high-speed, high-resolution hand-held scanner. Field-ready for plant pathology and entomological applications, the CI-210 scans and stores up to 200 leaf images in seconds with a full complement of dimensional data. CID, Inc.: Trusted by researchers around the world for over 17 years.

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Conviron

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Booth 224

A leading global supplier of controlled environment systems, Conviron's expertise is applied primarily to agricultural research applications. Our expertise also encompasses a broader spectrum of fields including biotechnology, pharmaceutical, and other life science disciplines. Our extensive product line includes single and multi-tier reach-in and walk-in plant growth chambers, the Aurora Research Greenhouse, tissue culture chambers, plant production rooms, germinators, incubators, dew rooms, and related products for the agronomy research market. Systems

Decagon Devices

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Booth 302

Decagon is the world leader in research-grade instrumentation with applications in agronomy, soil, and crop science. Whether you're looking to measure soil-water inactions or canopy characteristics, we have the instrument for you. Stop by Booth 302 to see demonstrations of new instrumentation.

REPRESENTATIVES: Gaylon Campbell, Colin Campbell, Doug Cobos, Martin Buehler, Matt Galloway, T-jay Clevenger, Bryan Wacker, and Lauren Bissey

Delta-T Devices

130 Low Road
Burwell, CAMBS C85 0EJ United Kingdom
Phone: 44-1638-742922
Fax: 44-1638-743155

www.delta-t.co.uk

Booth 205

Delta-T designs and manufactures instruments for agronomy, soil science, canopy analysis, eco-physiology, solar energy studies, meteorology, and environmental monitoring. This year, we are featuring the new compact WS-GP1 Weather Station, based on the GP1 Data Logger. The WS-GP1 is exceptionally easy to transport and set up on site. Delta-T specializes in soil moisture sensors for research and agricultural applications. Sensor readings can be taken instantaneously with a readout meter or continuously monitored with a data logger. Other products include porometers, canopy analysis systems, solar radiation sensors, data loggers, and image analysis systems for leaf area and root length quantification.

REPRESENTATIVES: Dick Jenkins and Gary Woods

provide precise environmental control of temperature, humidity, CO₂, and light intensity. Conviron's value-added services encompass the entire life cycle of your project—from installation to project commissioning and ongoing support.

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Booth 303

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Booth 201/203

Provides key measurements for plant water relations and carbon-water flux. As the exclusive distributor for ADC BioScientific and Delta-T Devices, we have coordinated three exhibits side by side to offer the widest array of soil, crop, and environmental measurement available. Dynamax is the world's leading producer of sap flow instrumentation and sensors and introduces the new Flow32-1K sap flow system. We will demonstrate ACE, a new soil respiration chamber for automatic CO₂ flux. At the show, we are demonstrating the most portable photosynthesis systems available in the LCi, the LCpro+, and the AM300 portable leaf area meter.

Elsevier

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Phone: 212-989-5800
Fax: 212-663-3990

www.elsevier.com

Booth 106/108

Stop by the Elsevier booth for our most recent publications in agronomy, crop, and soil science. New titles available include: Hillel's new text, *Soil in the Environment*; *Fundamentals of Weed Science* 3rd Edition; *Soil Microbiology Ecology and Biochemistry* 3rd Edition; *The Triazine Herbicides*; *Agroecological Economics*; *Soilless Culture*; and the latest in the *Advances in Agronomy* series. Visit books.elsevier.com for more information on these groundbreaking resources.

New titles on display include the bestselling, *Soil Sampling and Methods of Analysis*, now in its second edition, as well as *Handbook of Turfgrass Management and Physiology*. Also, be sure to sign up for a free trial of our online reference library, AGRICULTUREnetBASE, which gives you hundreds of reference publications at your fingertips. Free sample copies of journals are also available.

REPRESENTATIVES: John Sulzycki and Paul Nieman

elementar Americas Inc.

520 Fellowship Road, Suite B-204
Mt. Laurel, NJ 08054-3407
Phone: 856-787-0022
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www.chnos.com

Booth 410

On display will be the legendary vario MAX CNS analyzer with automatic ash removal and multi-gram sample capacity. We will also be showing the new rapid N cube, N/Protein analyzer, and the SerCon 20-20 Isotope Ratio Mass Spectrometer. The Elementar CUBE analyzers feature the latest in micro-engineering and electronics. Only 18.5 inches wide with integrated samplers of 60 or 120 positions without stacking! The 20-20 IRMS may be coupled with a number of Elementar EAs and is also available with a large assortment of other sample preparation systems, from dual inlet, cyro trapping, to GCC-IRMS.

Environmental Growth Chambers

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www.egc.com

Booth 209

Environmental Growth Chambers (EGC) has over fifty-five years experience in the design and manufacture of controlled environment chambers. EGC has the largest selection of plant growth chambers for agriculture research of any company worldwide. We also produce tissue culture chambers, walk-in controlled environment rooms, lighted and refrigerated incubators, day-lit chambers, root zone cabinets, microprocessor, and central computer systems for control and monitoring. Please stop by to discuss your upcoming projects.

ESRI

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Booth 228

With annual sales of more than \$660 million, ESRI is the world leader in GIS technology. ESRI offers innovative solutions that help create, visualize, analyze, and present information better and more clearly. ESRI's GIS software and solutions lend the power to solve problems you encounter every day. Organizations around the world use ESRI GIS software to make smart and timely decisions. ESRI provides powerful GIS solutions to more than 300,000 clients in more than 200 countries. ESRI offers GIS solutions to help unlock the spatial component of your valuable data and see your organization's information from a new perspective.

Everest Interscience

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Tucson, AZ 85705
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www.everestinterscience.com

Booth 110

Everest will exhibit its latest generation of handheld infrared thermometers. The new Model 6110.4ZL has full-field light sighting with Variable Focus, Variable Field of View, and Variable Target Spot Size that the end-user can adjust. It not only reads the surface temperature of the object being measured, but it measures the ambient air dry bulb and differential temperature. The instrument can be focused from 2 to 20°, making it possible to use one instrument for multiple applications. Also, the new Model 6000.1ZL Infrared Temperature Sensor that is fully self-contained with Variable Focus and Field of View will be highlighted.

Geological Society of America

3300 Penrose Place
Boulder, CO 80301
Phone: 303-357-1000
Fax: 303-357-1070

www.geosociety.org

Booth 119

The Geological Society of America (GSA), founded in 1888, is a broad, unifying, international scientific society. GSA is dedicated to catalyzing and communicating new ways of thinking about natural systems among geoscientists within and across disciplines, encouraging cooperative research among earth, life, planetary, and social scientists, with dissemination of that research through quality meetings, fostering dialogue on geoscience issues, and supporting earth science education. Our 20,500+ members, from more than 85 countries, are dedicated to the expansion of geological inquiry in the service of humankind. The Society serves as a venue for establishing and maintaining professional relationships that span a lifetime.

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Booth 204/301

Giddings Machine Company has been leading the soil exploration

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REPRESENTATIVE: Doug Mohrlang

Gillison's Variety Fabrication, Inc.

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Booth 207

Our Hydropneumatic Elutriation System, which separates roots from soil materials, combines the kinetic energy of pressurized spray jets and the low energy of air flotation. Washing times range from 3 to 10 minutes and are a function of soil texture, plant species, concentration of the dispersing agent, and soaking time. Gillison's Variety Fabrication, Inc. has constructed a quantitative system that efficiently separates roots from compacted soils without destroying small lateral roots, nodules, and other fragile root structures. Gillison's Variety Fabrication, Inc. is celebrating 30 years in business.

REPRESENTATIVES: Ron Gillison and Dianne Gillison

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www.gdmdata.com

Booth 409

Gylling Data Management has sold research management software since 1982, including these Windows programs:

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- ARM Trial Database for customized report generation.

REPRESENTATIVES: Steven R. Gylling and Peter M. Claussen

Hortau

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St. Romuald, QC G6W 5M6, Canada
Phone: 418-839-2852
Fax: 418-839-2851

www.hortau.com

Booth 503

Hortau was founded in May 2002 by Dr. Jean Caron, agronomist and professor of soil physics at Laval University and by Jocelyn Boudreau, P.Eng. in agricultural engineering. The company develops and markets innovative high-tech irrigation management

Crop Circle ACS-470

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Booth 505

Please visit Holland Scientific's booth (505) to view the latest in active, real-time, ground-based light-sensing and variable-rate application technology. This year, we will be introducing our new Crop Circle ACS-470 plant canopy sensor. This new sensor has three spectrally configurable measurement channels and interfaces directly to our line of GIS dataloggers. Holland Scientific will also show our new Crop Circle Mapping/VRA system. This sensor-based, variable-rate application system allows a user to connect up to eight Crop Circle ACS-210/270 sensors to an applicator and eliminates the need for producer-managed high-N reference strips or regions.

REPRESENTATIVES: Kyle Holland and Aaron Schepers

International Marketing & Design

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www.seedcounters.com

Booth 501

The Old Mill line of five seed counters are being shown as well as four major new developments. The Seed Weight Sorter determines the weight of individual seeds (corn, soybean, cotton, sunflower, wheat, oats, barley, rice, and sorghum) and sorts them into up to 12 weight groups. The Seed Count/Weight Analyzer is an automatic unit for obtaining weight per thousand seeds. The Seed Packeting by Weight unit provides rapid packeting for high-count applications. A Seed Treatment Dust Filter System Accessory protects counter operators when handling treated seeds. All of these plus the Model U bar code reading, label printing, and automatic data logging counter will be demonstrated.

REPRESENTATIVES: Bob Decker and Alex Navarro

systems. The whole solution is based on the measurement of soil tension and on wireless technology. Hortau's Intelligent Irrigation Management solutions are dedicated to ensure the best results in yields, water preservation, irrigation costs reduction, and agricultural production quality.

International Conference on Precision Agriculture

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Fax: 217-762-8655

www.icpaonline.org

Booth 508

The International Conference on Precision Agriculture (ICPA) has embarked on a new journey. IPNI and Colorado State will host the Conference in Denver in the technological hub, "The Denver Tech Center." The 9th ICPA is envisaged to be the largest ever, with more than 500 attendees from all over the U.S. and 35 countries. ICPA is a unique opportunity to learn about the technology of precision farming and to network with scientists from universities and industry throughout the world. Abstracts for volunteer papers and posters will be accepted until 30 Nov. 2007 and may be submitted online at www.icpaonline.org.

International Plant Nutrition Institute

655 Engineering Drive, Suite 110
Norcross, GA 30092-2837
Phone: 770825-8080
Fax: 770-448-0439

www.ipni.net

Booth 507

We welcome all ASA-CSSA-SSSA Annual Meeting participants to visit us in New Orleans. Our exhibit introduces the International Plant Nutrition Institute (IPNI), which officially began operating 1 Jan. 2007. It is a not-for-profit organization whose mission is to develop and promote scientific information about the responsible management of plant nutrition for the benefit of the human family. IPNI supersedes the Potash & Phosphate Institute (PPI), which was familiar to many. IPNI has a more global focus and expanding scope of programs, including increased

emphasis on nitrogen, environmental issues, fertilizer best management practices, and much more. Contact: Don Armstrong (email: darmstrong@ipni.net; phone: 770-825-8080).

REPRESENTATIVES: Terry Roberts, Paul Fixen, and Adrian Johnston

Irrrometer Company, Inc.

P.O. Box 2424
Riverside, CA 92516-2424
Phone: 951-689-1701
Fax: 951-689-3706

www.irrometer.com

Booth 424

The Irrrometer Co., Inc. of Riverside, CA has been manufacturing soil moisture measurement and control equipment to optimize irrigation since 1951. Irrrometer tensiometers and Watermark soil moisture sensors are in use worldwide for research, production agriculture, landscape water management, and environmental applications. Soil moisture scheduling is a widely recognized method of efficiently applying irrigation water, increasing yield and quality, and preventing the leaching of applied nutrients. Irrrometer also offers an extensive line of Soil Solution Access Tubes, or suction lysimeters, for suction extract analysis of soil water for nutrient management and environmental sampling purposes.

REPRESENTATIVE: Tom Penning

Kincaid Equipment Manufacturing

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www.kincaidseedresearch.com

Booth 425

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

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Booth 504, 506

HarvestMaster products for agricultural research are engineered, manufactured, and marketed by Juniper Systems. Armed with Field Research Software, the ultra-rugged Allegro Field PC and Archer Field PDA are ideal for fast, reliable data collection, whether on-the-ground or combine-mounted. The new HM800 Plot Harvest Data System incorporates leading-edge technology for collecting on-combine grain measurement data. The Twin Plot High Capacity, Single Plot High Capacity, and the Classic GrainGage precisely and quickly measure grain weight, moisture, and test weight on a wide variety of crops. These models all include the EM Grain Moisture Sensor for moisture and test weight measurement.

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.

Lachat Instruments, a Hach Company Brand

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Loveland, CO 80539
(970) 669-3050
(800) 247-7613

www.lachatinstruments.com

Booth 226

Lachat Instruments provides comprehensive solutions for ion analysis requirements based on the technologies of flow injection analysis, ion chromatography, and discrete analysis. Our products are designed to increase productivity, improve data quality and guarantee accuracy of results, and increase profits by reducing labor costs and reagent consumption.

Leco Corp

3000 Lakeview Avenue
St. Joseph, MI 49085
Phone: 269-983-5531
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www.leco.com

Booth 102

Since the introduction of the first rapid carbon determinator in 1936, industries around the world have trusted LECO Corporation 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, CHNS, and Micro configurations. A number of additional options are also available for the TruSpec, including an oxygen module and liquid autosampler.

LI-COR Biosciences

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

www.licor.com

Booth 215/217/219

Visit LI-COR's booth (215–219) to see the latest instrumentation for environmental and biological research, including portable photosynthesis systems, dataloggers, radiation sensors, leaf area measurement equipment, and infrared gas analyzers. Stop by to see the LI-8100 Automated Soil CO₂ Flux System, an automated system dedicated solely to measurements of soil CO₂ flux. Also shown for the first time is the new LI-6400XT Portable Photosynthesis System, which now features removable data storage, ethernet networking capabilities, and bar code reader compatibility. LI-COR will also feature the 4300 DNA Analysis System for TILLING, Ecotilling, DNA sequencing, microsatellites, and AFLP for genomic research and discovery.

REPRESENTATIVES: Chris Mantizos, Bill Miller, Kristin Feese, Liukang Xu, Pat Morgan, Rick Garcia, and Michelle Fosler

Martin Machine Company

504 E. Fourth Street
Ivesdale, IL 61851
Phone: 217-564-2440
Fax: 217-564-2440

www.blockdigester-magnum.com

Booth 116

Martin Machine Company manufactures the Magnum Series Block Digestion Systems for elemental analysis that feature 4-inch-deep places to allow more digesting surface with near even heat transfer. Martin Machine Company offers two basic sizes to choose from, the Magnum 120 and the Magnum 56 sample Blocks using 100ML Tubes. Blocks can also be drilled for the size of tubes preferred in your application or a combination of sizes. Magnum Block Digesters are controlled with the F-4 programmable controller, which has 40 profiles and 256 steps that can be stored in memory. Software and accessories are also available.

REPRESENTATIVE: David Martin

NTech Industries Inc.

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

www.ntechnologies.com

Booth 113

NTech Industries Inc. manufactures the GreenSeeker and WeedSeeker 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 can be used with a GPS receiver to provide geo-referenced data for mapping and analysis. The GreenSeeker RT200 system is used for VR application of crop inputs using real-time data.

REPRESENTATIVES: Ted Mayfield, David Smith, and Jack Gerhardt

OI Analytical

151 Graham Road
College Station, TX 77845
Phone: 979-690-1711
Fax: 979-690-0440

www.oico.com

Booth 328

OI Analytical will feature the 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 phosphorous 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.

Onset Computer Corp

470 MacArthur Boulevard
Bourne, MA 02532
Phone: 508-759-9500
Fax: 508-759-9100

www.onsetcomp.com

Booth 520

Onset, "the HOBO data logger company," manufactures a broad range of data logger and weather station products that are used to measure temperature, humidity, light intensity, soil moisture, and a wide range of other parameters. Innovative product design and high-volume, in-house manufacturing assure affordable, accurate, and reliable data logger performance. Onset products are used in a broad range of environmental research, commercial, industrial, and educational applications.

REPRESENTATIVES: Eileen Sandherr and Mark McPike

PP Systems

110 Haverhill Road, Suite 301
Amesbury, MA 01913
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www.ppsystems.com

Booth 404

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).

Prentice Hall

One Lake Street
Upper Saddle River, NJ 07458
Phone: None Provided
Fax: None Provided

www.prenhall.com

Booth 406

Prentice Hall is proud to be the leading provider of agricultural educational products for students. Please be sure to stop by our booth or visit our website at www.prenhall.com/agriculture to see what we have new and what we have planned.

REPRESENTATIVE: Jimmy Stephens

Qubit Systems Inc.

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Kingston, ON K7M 4Y4, Canada
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Fax: 613-384-9118

www.qubitsystems.com

Booth 120

We provide accurate, affordable 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 large-scale rapid screening of photosynthetic performance in plants and crops. Our complete lab packages include all the hardware and software required to investigate processes such as carbon dioxide exchange (photosynthesis and respiration), oxygen exchange, chlorophyll fluorescence, and nitrogen fixation. Our carbon dioxide analyzers start at \$1,475, and our oxygen sensors are only \$420! Complete laboratory packages start at only \$1,700.

REPRESENTATIVE: Dr. Steve Hunt

Rite in the Rain

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www.riteintherain.com

Booth 206

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The Samuel Roberts Noble Foundation, Inc.

2510 Sam Noble Parkway
Ardmore, OK 73401
Phone: 580-224-6232
Fax: 580-224-6240

www.noble.org

Booth 123

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.

Seed Research Equipment Solutions LLC

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Booth 126/128/225

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Spectrum Technologies

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Plainfield, IL 60585
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Fax: 815-436-4460

www.specmeters.com

Booth 127

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 WatchDog 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: Nathan Cross, Doug Kieffer, and Mike Thurow

Stevens Water Monitoring Systems

12067 NE Glenn Widing Drive, Suite 106
Portland, OR 97220
Phone: 503-469-8000
Fax: 503-469-8100

www.stevenswater.com

Booth 406

Stevens designs and manufactures advanced technology products for groundwater, water resources flow and quality, water analyzers, wastewater flow, hydropower, agriculture, irrigation, soil monitoring for precision agriculture and sports turf, research, hydrometeorological, agrimet, coastal oceanographic, and tide gage. Solutions include: water-monitoring sensors/data collection and process control instruments/satellite and other wireless communication systems/water resources management software/various power supply and other accessories. Products include: The Hydra Probe, the all-in-one soil sensor; and the Stevens Shark, the Bluetooth low-cost wireless solution that enables communications from a data collection device to a serial port.

SRES continues to improve the value of your plots and the efficiency with which they are planted. We will be displaying one of our custom planters, as well as our high-speed seed counter and TopCon GPS system.

REPRESENTATIVES: Jeff Schindler, Brian Winkelman, and Stacy Unruh

Soil Measurement Systems LLC

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

www.soilmeasurement.com

Booth 427

Soil Measurement Systems, LLC will have on display a setup for determining WATER RETENTION CURVES and UNSATURATED HYDRAULIC CONDUCTIVITIES of soil in short columns (cores). Also on display are a TENSION INFILTRATOR with pressure transducer, STAINLESS STEEL LYSIMETERS, a CONE PENETROMETER with integrated GPS, different size SOIL COLUMNS, TENSIOLOGS with/without pressure transducers for use in the field and in the laboratory, and a TENSIOLOG/TENSIOLOG with data storage.

REPRESENTATIVES: Annemarie Wierenga, Marc Wierenga, and Amber Wierenga

Soilmoisture Equipment Corp.

801 South Kellogg Avenue
Goleta, CA 93117
Phone: 805-964-3525
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www.soilmoisture.com

Booth 124

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. Let us add your idea or solution to the growing list of accomplishments that now span over 50 years.

REPRESENTATIVE: Alle Van Calker

Springer

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www.springer.com

Booth 101

Springer is the second largest scientific publishing company in the world, with a portfolio of 4,000 new books per year and more than 1,200 journals. Springer's Agronomy, Crop, and Soil Sciences programs include renowned journals such as *Plant and Soil*, *Potato Research*, and *Biology and Fertility of Soils*, in addition to numerous excellent book publications each year. Visit the Springer booth (#101) to meet our publishers, view our most recent publications, and take advantage of our 20% conference discount!

REPRESENTATIVES: Jacco Flipsen, Jinnie Kim, and Marysye Walsh

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www.easychem.com

Booth 104

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 respects 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.

REPRESENTATIVE: Craig Chinchilla

Swift Machine Ltd.

1881 Chaplin Street West
Swift Current, SK S9H 0H4 Canada
Phone: 877-773-2222
Fax: 306-773-2215

www.swiftmachine.com

Booth 115

Swift Machine manufactures forage plot harvesters (ride-on and walk-behind), plot swathers, and plot seeders. We are able to customize our machines to meet specific requirements. Recently we have become the North American dealer for the German made "Zurn Combine."

REPRESENTATIVES: Evelyn Dyck and Ken Dyck

Timberline Instruments

1880 S. Flatiron Court, Unit I
Boulder, CO 80534
Phone: 303-440-8779
Fax: 303-440-8780

www.timberline.instruments.com

Booth 125

Timberline Instruments, located in Boulder, CO, is an industry leader in the development and manufacture of ammonia and nitrate analyzers. Designed for optimum reality and operational simplicity, our products meet the growing demand for laboratory analysis of soil and plant tissue extracts as well as Kjeldahl digestates (TKN). The analyzer's principle of operation is based on a tubular membrane diffusion system coupled with conductivity measurement. The results are unaffected by turbidity, color, or particulate matter in the sample. Detection down to the 10 ppb of ammonia is easily achievable with a typical analysis of 1-2 minutes.

U.S. Department of Energy Genomics: GTL Program

1060 Commerce Park
Oak Ridge, TN 37830
Phone: 865-574-0597
Fax: 865-574-9888

www.genomics.energy.gov

Booth 107

Genomics:GTL (formerly Genomes to Life) is a systems biology program aimed at achieving a predictive understanding of biological processes in plants, microbes, and microbial communities that can be applied to DOE's missions in energy, climate protection, and environmental remediation. GTL leverages strengths in genomics, computing, technology development, and multi-disciplinary teaming.

Vaisala Inc.

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

www.vaisala.com

Booth 523

Vaisala's 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.

REPRESENTATIVES: Ricky Henderson and Dick Gronholm

Veris Technologies

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

www.veristech.com

Booth 327

Veris Technologies produces on-the-go soil sensing equipment for soil electrical conductivity, near-infrared soil spectroscopy, and soil pH. New for 2007 is the Veris NIR Spectrophotometer probe, designed for rapid collection of visible and near-infrared measurements of soil profiles.

REPRESENTATIVES: Eric Lund and Paul Drummond

Wescor, Inc.

459 South Main
Logan, UT 84321
Phone: 435-752-6011
Fax: 435-753-6756

www.wescor.com

Booth 105

WesternAg Innovations

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

www.westernag.ca

Booth 524

Western Ag Innovations markets the use of Plant Root Simulator (PRS) probes. The PRS 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 PRS probe has been used to study soil nutrient dynamics by more than 200 researchers in over 20 countries. The PRS 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.

Wintersteiger

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Salt Lake City, UT 84116
Phone: 801-924-5702
Fax: 801-355-6541

www.wintersteiger.com

Booth 416/515/517/519

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. We have the Delta combine with full track system for harvesting rice or other crops in muddy soil conditions 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. Smaller equipment like stationary threshers, seed treaters, and seed counters are also on display.

REPRESENTATIVES: Fritz Hoeckner, Ron Flynn, and Frank Seck

ASA-CSSA-SSSA Awards Programs

Scholarships • Awards • Fellows



100 Years of Exceptional Achievement • Distinguished Service
Professional Commitment

From top clockwise: 1961 ASA Awards Banquet, ASA Charter Members 1957, ASA Fellows 1953, Student Essay Winners 1965

2007 ASA Awards Program

Wednesday 7 November

Convention Center, Room R03-R05, Second Floor

- 4:00 pm ASA Reception
- 4:45–5:30 pm ASA Awards Program

All meeting attendees invited

Congressional Science Fellow

Committee Chair: Karl M. Glasener, ASA-CSSA-SSSA, Washington, DC

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.

Marcy E. Gallo

Dr. Marcy E. Gallo is the 2007 ASA-CSSA-SSSA Congressional Science Fellow, serving in the office of Senator Joseph Lieberman (I-CT). As the environmental fellow in Senator Lieberman's office, she is working on a variety of policy topics from climate change legislation and farm bill reauthorization to oversight of the Endangered Species Act and the water quality of Long Island Sound. She is a microbial ecologist who received a Ph.D. from the University of New Mexico (UNM). Gallo's research focused on microbial community structure and function in relation to the photodecomposition of arid plant litter. While at UNM, she was an NSF-IGERT fellow and was a recipient of SSSA's Francis and Evelyn Clark Soil Biology Scholarship.



Frank D. Keim Graduate Fellowship

Committee Chair: James A. McKenna, Virginia Tech

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.

Lauren M. Smith

Lauren M. Smith is an M.S. student in genetics through the Agronomy Department at Kansas State University. She also earned a B.S. in agronomy at Kansas State University. Her thesis research is focused on improvement of wheat through genetic mapping of drought tolerance gene.



J. Fielding Reed Scholarship

Committee Chair: Rajiv Khosla, Colorado State University

The scholarship, funded through the Agronomic Science Foundation, 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.

Tia Nobles

Tia Nobles is a student at Oklahoma State University (OSU) in the Plant and Soil Science Department. She will receive a B.S. in December 2007 with an emphasis



in crop science. At OSU, Nobles has competed on the crops judging team since 2003 and has placed in national competitions. Following graduation, she will be pursuing an M.S. in plant genetics at OSU in January 2008.

Hank Beachell Future Leader Scholarship

Committee Chair: Dana J. Minihan, Kansas State University

The scholarship, funded through the Agronomic Science Foundation, 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 is to expand the agricultural knowledge of undergraduate students participating in activities that enhance their university studies.

Christopher Schaefer

Christopher (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 genomics. 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 of the chapter for a year. He is also the vice president of the Students' Association, an ambassador for the College of Agricultural and Biological Sciences, and a member of the soil judging team. He plans to graduate in May 2008.



United Soybean Board Fellowship

Committee Chair: James J. Heitholt, Texas A&M University

The United Soybean Board Fellowship promotes graduate education in the area of plant sciences, emphasizing the development of improved soybean varieties, understanding soybean genetics, and developing improved ways to grow and use soybeans. The intention of the fellowship is to attract the highest quality students whose careers will continue to advance the science of soybean improvement. Funds for the fellowship are provided by the United Soybean Board.

Thomas M. Seversike

Thomas M. (Tom) Seversike is a Ph.D. student in the Crop Science Department at North Carolina State University. He received an A.S. degree from Brigham Young University–Idaho and B.S. and M.S. from University of Arkansas. His doctoral program will concentrate on soybean drought tolerance. As an undergraduate, Seversike spent a semester in Mozambique as a small-farms instructor for a humanitarian aid group. In the future, he plans to evaluate research approaches for crop improvement under resource-limiting conditions.



Agronomic Achievement Awards

ASA recognizes 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 outstanding contributions to agronomy through education, national and international service, and research. Monsanto presents the Professional Certification Service Award and the Certified Crop Adviser Program presents the ICCA of the Year Award.

through a contribution by the late Dr. Nelson to the Agronomic Science Foundation.

Achim Dobermann

Dr. Achim Dobermann is a program leader at the International Rice Research Institute (IRRI), Philippines for “Sustaining Productivity in Intensive Rice-Based Systems: Rice and the Environment.” He leads the IRRI–CIMMYT alliance project on Intensive Production Systems in Asia. Before re-joining IRRI in September 2007, he was a professor in the Agronomy and Horticulture Department at University of Nebraska–Lincoln. He received an M.S. and Ph.D. from the University of Leipzig. 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.



Agronomic Resident Education Award

Committee Chair: Sherry S. Fulk-Bringman, Purdue

Thomas L. Housley

Dr. Thomas L. Housley is professor of agronomy at Purdue. He received a B.S. in biology from Taylor University, M.A. in science education from University of Connecticut, and Ph.D. in botany from University of Georgia. His program focuses on the control of carbohydrate partitioning between sources and sinks using cereal fructan accumulation and striga parasitism of sorghum as model systems. His knowledge of whole-plant physiology has allowed him an easy transition to teaching at the graduate and undergraduate level. He has been active in collegiate crops judging and with SASES serving as a member or chair of the National Student Awards, Club Achievement Contest, Student Research Symposium, and the Student Manuscript Contest Committees.



Werner L. Nelson Award for Diagnosis of Yield-Limiting Factors

Committee Chair: Jimmy C. Henning, University of Kentucky

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

Sustaining Member Recognition

Organizations holding sustaining membership in the Societies are recognized at specific milestone years. The following individuals will represent their organizations at the ASA Awards Program:

Cornerstone Sustaining Membership (40 years)

Illinois Crop Improvement Association—Dennis R. Thompson

Crystal Sustaining Membership (15 years)

Decagon Devices Inc.—Lauren Bissey
Dynamax Inc.—Michael Van Bavel
Bio Chambers Inc.—Bill Porter

Agronomic Extension Education Award

Committee Chair: Calvin L. Trostle, Texas A&M University

James W. Bauder

Dr. James W. (Jim) Bauder is an extension specialist and professor in the Land Resources and Environmental Sciences Department at Montana State University. He received a B.S.



and M.S. from the University of Massachusetts–Amherst and Ph.D. from Utah State University. His extension education program has focused primarily on irrigated crop production, saline and sodic soil management, and nitrate movement in soil. He has served as associate editor for *Agronomy Journal* and associate and technical editor for *Soil Science Society of America Journal*. He has served as Division S-6 chair and on other ASA–SSSA committees. He is also active in the Soil and Water Conservation Society.

Agronomic Service Award

Committee Chair: Shawn P. Conley, University of Wisconsin

John W. Doran

Dr. John W. Doran is professor emeritus of agronomy at University of Nebraska, former SSSA president, and soil scientist cooperator with USDA-ARS. He received a B.S. from the University of Maryland, M.S. from Virginia Tech, and Ph.D. from Cornell. As editor-in-chief of *Renewable Agriculture and Food Systems*, he creates a forum where scientists, educators, policy makers, farmers, and others of varying viewpoints can work together for sustaining agriculture. He developed sustainability strategies and



ecological tools for assessment of soil quality and sustainability for agricultural systems that integrate performance for economic crop production, soil conservation, and environmental quality. He collaborated with USDA-NRCS in developing soil quality indicators, methods handbooks, and on-farm test kits. He serves on the board for The Sustainability Fund, Ten Thousand Villages, and Community CROPS. He co-founded with his wife Janet the Renewing Earth and Its People Fund.

Carl Sprengel Agronomic Research Award

Committee Chair: George E. Van Scoyoc, Purdue

Mary Beth Kirkham

Dr. Mary Beth Kirkham is a professor in the Department of Agronomy at Kansas State University. She has degrees from Wellesley College and the University of Wisconsin–Madison. Her research activities include the uptake of heavy metals by crops and the physiology of drought resistance. Kirkham is on the editorial board of *Crop Science*, *Journal of Environmental Quality*, and *Soil Science*. She teaches a class in water relations, works with graduate students, and participates in national and international meetings.



ICCA of the Year Award

Committee Chair: Thomas E. Kemp, Carolina Eastern Pamplico Inc., Pamplico, SC

Eugene Flaningam

Eugene Flaningam is a certified crop adviser in southwest Indiana. He has owned and operated his own crop advising service since



1994, providing agronomy services to more than 45 farm clients located within a 50-mile radius of Vincennes, IN. His primary services include soil fertility management and integrated pest management on specialty crops during the summer months. His services also include crop scouting on specialty crops such as cucurbits, potatoes, tomatoes, and sweet corn. He received a B.S. from Purdue in soil and crop management in 1993.

ASA–CSSA–SSSA Early Career Professional Award

Committee Chair: B. Todd Campbell, USDA-ARS, Florence, SC

The award recognizes those who have made an outstanding contribution in agronomy, crop science, and/or soil science within seven years of completing their terminal degree.

Jeffrey T. Edwards

Jeffrey T. (Jeff) Edwards is an assistant professor and small grains extension specialist in the Plant and Soil Sciences Department at Oklahoma State University.



Dr. Edwards received a B.S. from Western Kentucky University and M.S. and Ph.D. from University of Arkansas. His program focuses mainly on grain-only and dual-purpose wheat production in the southern Great Plains with particular emphasis on reduced and no-tillage production systems. Edwards resides in Stillwater with wife Natalie and daughters Allyson and Samantha.

International Service in Agronomy Award

Committee Chair: Tara T. VanToai, Ohio State University

Mannava V.K. Sivakumar

Dr. Mannava V.K. Sivakumar is the chief of the Agricultural Meteorology Division in the World Meteorological Organization (WMO) in Geneva, Switzerland. He also serves as the WMO focal point for the United Nations Convention to Combat Desertification and the Convention on Biological Diversity. Sivakumar received a B.S. in agriculture from the Andhra Pradesh Agricultural University; M.S. in agronomy from the Indian Agricultural Research Institute, New Delhi; and Ph.D. in agroclimatology from Iowa State University. He is responsible for implementing WMO's Agricultural Meteorology Program worldwide. He is a Fellow of ASA, the National Academy of Agricultural Sciences of India, and the Indian Meteorological Society. In addition, he is a member of the Royal Academy of Overseas Sciences of Belgium and a corresponding academician of the Academy of Georgofili of Italy. He serves as associate editor-in-chief of *Sustainability Science* journal and is on the editorial board of *Agricultural and Forest Meteorology Journal*.



Environmental Quality Research Award

Committee Chair: Randall J. Miles, University of Missouri

Patrick G. Hunt

Dr. Patrick G. Hunt is the research leader/director of the USDA-ARS Coastal Plain Soil, Water, and Plant Research Center, Florence, SC. His research has had



worldwide impact on water quality, nitrogen cycling, wetlands, and livestock manure treatment. He has served as an associate editor of the *Journal of Environmental Quality*. He is active in the Water Environment Federation, the Society of Wetland Scientists, the Soil and Water Conservation Society, as well as ASA-CSSA-SSSA.

Agronomic Industry Award

Committee Chair: Noble R. Usherwood, Agr-Tech Services LLC, Madison, GA

Fernando O. García

Fernando O. García is regional director of the International Plant Nutrition Institute (IPNI) Latin America-Southern Cone program based in Buenos Aires, Argentina. Dr. García received a B.S. from University of Buenos Aires and M.S. and Ph.D. from Kansas State University. His work as IPNI regional director focuses on the development of research and educational programs on soil fertility and management, crop nutrition management, and fertilization. García has served as president of the Soil Science Association of Argentina from 2003-2007.



Monsanto Professional Certification Service Award

Committee Chair: Patrick W. McConnell, The McGregor Co., Walla Walla, WA

Matthew P. Montgomery

Matt Montgomery is a crop systems educator with University of Illinois Sangamon-Menard Extension Unit. Montgomery received a B.S. in agricultural science from Western Illinois University and M.S. in crop



science from the University of Illinois. His programming focuses on crop production with an emphasis on integrated pest management. He served on the Illinois Department of Agriculture's Soybean Rust Taskforce where he helped draft Illinois' vigilance, scouting, and sampling plan for Asian soybean rust. He was the 2002 recipient of the Illinois Certified Crop Adviser Award.

ASA Honorary Membership

Committee Chair: Jerry L. Hatfield, USDA-ARS, Ames, IA

Theodore C. Hsiao

Theodore C. Hsiao is professor of water science emeritus and plant physiologist emeritus in the Department of Land, Air, and Water Resources at University of California-Davis. He is a part-time consultant to FAO, United Nations. Dr. Hsiao received a B.S. at Cornell, M.S. at University of Connecticut, and Ph.D. at University of Illinois. His research and teaching focused on plant-water-soil relationships in the context of crop productivity in stressful environments. His recent work extends to micrometeorology aspects of evapotranspiration and carbon dioxide assimilation, as well as water use efficiency and its systematic improvement. Hsiao served as an associate editor of *Irrigation Science* and as an editor of *Planta* and *Physiologia Plantarum*. He served on the editorial board of *Plant Physiology* and on the editorial committee of *Annual Review of Plant Physiology*. Hsiao's review (1973) on plant responses to water stress was identified as a Citation Classic by *Current Contents* and as the most cited paper in *Annual Review of Plant Physiology* and *Plant Molecular Biology* up to 1993. He was awarded an Alexander von Humboldt Prize in 1985 and an honorary doctorate by University of Lerida, Spain in 2005.



ASA Fellows

Committee Chair: David A. Sleper, University of Missouri

Philip J. Bauer

Philip J. (Phil) Bauer is a research agronomist at the USDA-ARS Coastal Plains Soil, Water, and Plant Research Center in Florence, SC. Dr. Bauer received B.S. and M.S. degrees from University of Wisconsin and Ph.D. from Texas A&M University. He conducts crop ecology and management research with an emphasis on cotton production systems. Bauer is currently serving as associate editor for *Agronomy Journal* and has served as associate editor for *Crop Science* and *Soil Science Society of America Journal*. He has been active in the Southern Conservation Tillage Conference for Sustainable Agriculture and the Belt-wide Cotton Conference.



Thomas W. Bruulsema

Tom Bruulsema is director for the northeastern region of the North American Program of the International Plant Nutrition Institute (formerly Potash & Phosphate Institute). He received a B.S. in agriculture and M.S. in crop science at the University of Guelph and Ph.D. in soil science from Cornell University. His research program focuses on the benefits of plant nutrition for the crops of the region, and his educational activities feature responsible, science-based use of fertilizer nutrients. He currently serves as president of the Canadian Society of Agronomy. He served as president of the ASA-SSSA Northeastern Branch from 1999–2002. He has also been active in the Certified Crop Adviser Program, as chair of the International (2001–2004) and Ontario



(1999–2000) boards, and currently represents CCA on the ASA Board of Directors. He also has experience in international agriculture, having served four years with the Mennonite Central Committee as research agronomist in Bangladesh.

Frederick A. Cholick

Fred A. Cholick is the Dean of Agriculture, Director of Research and Extension, and professor of agronomy at Kansas State University. Dr. Cholick received a B.S. at Oregon State University and M.S. and Ph.D. degrees from Colorado State University. His wheat-breeding activities focus on development of cultivars and germplasm for national and international programs, and he has served on the National Wheat Improvement Committee. He is a tireless advocate at the national level for agricultural programs in higher education. He has served on the Policy Board of Directors for the Board of Agriculture Assembly, and the Experiment Station Section Committee on Policy and the Administrative Head Section.



David E. Clay

David E. Clay is a professor and agronomist in the Plant and Soil Science Department at South Dakota State University (SDSU). Dr. Clay received a B.S. from University of Wisconsin–Madison, M.S. from University of Idaho, and Ph.D. from University of Minnesota. His program focuses on development and testing of sustainable agricultural management systems that enhance environmental quality, improve agronomic profitability, and energy self sufficiency. He has served



as associate editor for *Agronomy Journal* and as chair for Division A-8 Agricultural Systems. In addition, he is South Dakota's USDA-CSREES water quality research, teaching, and education coordinator; active in Sigma Xi; and is the SDSU representative on the SD EPA 319 task force.

Vincent A. Haby

Vincent A. Haby is a Regents Fellow, professor, and soil scientist with the Texas Agricultural Experiment Station and a faculty member in the Soil and Crop Sciences Department of Texas A&M University. Dr. Haby received B.S. and M.S. degrees from Texas A&M University and Ph.D. from Montana State University. His research program emphasizes soil chemistry, fertility, and plant nutrition for forage crops. Haby served as associate editor for *Agronomy Journal*, serves as senior editor for *Forage and Grazinglands*, and has been active in ASA, SSSA, and the American Forage and Grassland Council.



Dean L.R. Hesterberg

Dean L.R. Hesterberg is a professor of soil chemistry in the Department of Soil Science at North Carolina State University. He received a B.S. from Southern Illinois University–Carbondale, M.S. from Purdue, and Ph.D. from University of California–Riverside. His program focuses on the molecular chemistry of phosphorus and heavy metals in soils and on mineral-organic particles. Dr. Hesterberg served as associate editor for *Journal of Environmental Quality*. He is also active in SSSA, where he is Chair of Division S-9 Soil Mineralogy.



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 2007 bring the total number to 1,612.



Newell R. Kitchen

Newell R. Kitchen is a soil scientist with the Cropping Systems and Water Quality Research Unit of USDA-ARS at Columbia, MO. Dr. Kitchen received a B.S. from Brigham Young University, M.S. from University of Missouri, and Ph.D. from Colorado State University. His program focuses on applying new technologies for collecting high-resolution soil and crop information, thereby enabling improved management decisions. He has been active in organizing ASA meetings symposia, has served as associate editor for *Agronomy Journal*, and was a previous chair and is current board representative for Division A-8 Integrated Agricultural Systems.



has served as associate editor for *Soil Science Society of America Journal* and *Clays and Clay Minerals* and is active in SSSA and the Clay Minerals Society.

John A. Lamb

John A. Lamb is professor and extension nutrient management specialist in the Department of Soil, Water, and Climate at University of Minnesota. Dr. Lamb received B.S. and Ph.D. degrees from the University of Nebraska and an M.S. from Iowa State University. His research and extension program focuses on nutrient management of crops grown in a sugar beet production system. Lamb teaches undergraduate basic soil science, advises undergraduate students, and is currently the director of graduate studies in soil science. He also has served as associate editor of *Agronomy Journal* and is currently associate editor for the *Journal of Sugar Beet Research*.



David A. Laird

David A. Laird is a soil scientist with the USDA-ARS National Soil Tilth Laboratory in Ames, IA. He is also a professor-USDA collaborator in the Department of Agronomy at Iowa State University. He received a B.S. from University of Kansas, M.S. from Oregon State University, and Ph.D. from Iowa State University. His research program focuses mainly on soil clay mineralogy and environmental chemistry. Dr. Laird



Bao-Luo Ma

Bao-Luo Ma is a research scientist of crop physiology and nutrient management at the Eastern Cereal and Oilseed Research Centre of Agriculture and Agri-Food Canada. He has served as the national study leader for Technologies to Reduce Abiotic Crop Production Risks and as the current principal investigator for the development of optical sensing technologies for genotype improvement and nutrient best management practices. Dr. Ma received a B.S. from Henan Agricultural University and Ph.D. from McGill University. His program focuses mainly on responses of crop plants to environment-induced stresses and nutrient management. Ma served as the eastern director of Canadian Society of Agronomy, is currently serving his second three-year term as associate editor of *Crop Science*, and has been active in ASA-CSSA-SSSA.



David J. Mackill

David J. Mackill is senior scientist and plant breeder at the International Rice Research Institute (IRRI), the Philippines, and is in the Division of Plant Breeding, Genetics, and Biotechnology. He also serves as leader for IRRI's Program 1: Raising Productivity in Rainfed Environments. He received B.S., M.S., and Ph.D. degrees from University of California-Davis. Dr. Mackill developed rice cultivars for rainfed conditions in Asia. His research has focused on tolerance to abiotic stresses such as submergence and the application of molecular markers to the study of complex traits.



David S. Marshall

David S. Marshall is the research leader of the Plant Science Research Unit, USDA-ARS, located in Raleigh, NC. He is also a USDA professor in the Department of Plant Pathology and the Department of Crop Science at North Carolina State University. Dr. Marshall received a B.S. from Towson State College, M.S. from Louisiana State University, and Ph.D. from Purdue University. His program focuses on the breeding of cereal crops (wheat, barley, and oat) and the genetics of disease resistance. He has served as associate editor of *Crop Science*, chair of the Wheat Crop Registration Committee, and member of the Barley Crop Registration Committee. He is also active in the National Improvement Committees of Wheat, Oat, and Barley; the Wheat Crop Germplasm Committee; and the American Phytopathological Society.



Gregory S. McMaster

Gregory S. McMaster is a research agronomist in the Agricultural Systems Research Unit of USDA-ARS at Fort Collins, CO. He received a B.S. from Michigan State University, M.S. from San Diego State University, and Ph.D. from Colorado State University. His program combines the disciplines of agronomy, plant physiology, and ecology and integrates experimentation with digital technology tools (e.g., simulation modeling, decision support systems, computer programs) for a range of users from scientists to farmers. He has served as chair of Division C-2 Crop Physiology and Metabolism, as an original member of the CSSA International Crop Science commit-



tee, several ad hoc ASA-CSSA-SSSA committees, and organized several symposia. Currently he is serving as associate editor for *Crop Science*.

David C. Nielsen

David C. Nielsen is a research agronomist with USDA-ARS Central Great Plains Research Station in Akron, CO. He is also a faculty affiliate with the Department of Soil and Crop Sciences at Colorado State University and an adjunct professor with the Department of Agronomy and Horticulture at University of Nebraska. Dr. Nielsen received B.S. and M.S. degrees from Iowa State University and a Ph.D. from the University of Nebraska. His program focuses on crop water use and water stress effects on crop productivity in dryland and irrigated cropping systems in the Great Plains. Nielsen has served as associate editor for *Agronomy Journal* and *Crop Science* and has been active in ASA, CSSA, and SSSA.



Deanna L. Osmond

Deanna L. Osmond is professor and department extension leader in the Soil Science Department at North Carolina State University. She received a B.S. from Kansas State University, M.S. from North Carolina State University, and Ph.D. from Cornell University. Her program focuses on the interaction between nutrient management and water quality. Dr. Osmond served as chair of Division A-5 Environmental Quality in 1999 and is currently incoming division chair for the division.



William L. Pan

William L. Pan is professor of soil science and chair of the Department of Crop and Soil Sciences at Washington State University. Dr. Pan received a B.S. at University of Wisconsin, M.S. at University of Missouri, and Ph.D. at North Carolina State University. His program focuses on nutrient cycling, nitrogen-use efficiency, and root ecology of cereal-based cropping systems. Pan served as associate and technical editor of *Journal of Production Agriculture*, president of the Western Society of Soil Science, and chair of Division S-4 Soil Fertility and Plant Nutrition.



Karamat R. Sistani

Karamat R. Sistani is a soil scientist with USDA-ARS Animal Waste Management Research Unit in Bowling Green, KY. He also holds adjunct faculty positions at Western Kentucky University and Alabama A&M University. Dr. Sistani received a B.S. in Iran, his M.S. from Texas A&M-Kingsville, and Ph.D. from Oklahoma State University. His research focuses mainly on conducting basic and applied research on practical and economical solutions to develop best management practices in regard to the timing and method of animal waste utilization as a source of plant nutrients for pastures or row crops in order to avoid soil, air, and water contamination. Sistani serves as associate editor of *Agronomy Journal* and *Communications in Soil Science and Plant Analysis*.



Dudley T. Smith

Dudley T. Smith is professor emeritus in the Department of Soil and Crop Sciences at Texas A&M University. He received a B.S. and M.S. from the University of Maryland, Ph.D. from Michigan State University, and an MBA from the University of Houston. Dr. Smith was involved in weed and pesticide research in agronomic crops, served as associate director of the Texas Agricultural Experiment Station for more than 20 years, was recognized as an outstanding classroom teacher, and provided innovative programs in ASA's resident education division. He has produced more than 200 domestic and international publications and presentations on agricultural research, environmental quality, and undergraduate teaching.



relates to plant growth; evaluation of the spatial and temporal distribution of soil properties; estimation of soil moisture using active and passive sensors; and evaluation of the impact of various land use practices on surface and subsurface water quality. Tsegaye has served on several Society committees. He is currently co-chair of the Southern Region Water Quality Coordination Project sponsored by USDA-CSREES. He is a member of ASA, SSSA, Soil and Water Conservation Society, American Water Resource Association, Southern Region Water Quality Group, Southeastern Region Soil Physics Group, IEEE Geosciences and Remote Sensing Society, American Society of Agricultural and Biosystem Engineering (ASABE), Intergraph RRL User Group, Space Science and Technology Alliance, and American Geological Institute.

Teferi Tsegaye

Teferi Tsegaye is chair and professor of soil physics for the Department of Natural Resources and Environmental Sciences at Alabama A&M University. Dr. Tsegaye received B.S. and M.S. degrees from Oklahoma State University and a Ph.D. from University of Maryland. His program focuses on assessment of physical heterogeneity and movement of energy, water, and chemicals in soils; classifying soils in the watersheds for solute transport as affected by soil properties and landscape position; development and evaluation of TMDL processes for the Wheeler Lake Basin of northern Alabama; water quality monitoring and assessment using GIS and GPS technologies; assessment of the impact of tillage management systems as it



Jon M. Wraith

Jon M. Wraith is professor of soil physics and head of the Department of Land Resources and Environmental Sciences at Montana State University. He received a B.S. from Humboldt State University and M.S. and Ph.D. degrees from Utah State University. His program focuses on soil physical properties and processes. Dr. Wraith served as associate editor of *Soil Science Society of America Journal*, as chair of the Soil Science Education Award Committee, Soil Science Research Award Committee, and as chair of Division S-1 Soil Physics. He is active in ASA, SSSA, and the American Geophysical Union.



Robert D. Wych

Robert D. (Bob) Wych is a research coordinator in the parent and seed production research group of Pioneer Hi-Bred, a DuPont business, in Johnston, IA. Dr. Wych received a B.S. from Iowa State University and M.S. and Ph.D. degrees from University of California-Davis. His program focuses on parental attributes of maize inbred germplasm and the unique characteristics of specific, key inbreds that influence the profitability and reliability of seed production. Wych has served on various ASA and CSSA committees and as associate editor for the *Journal of Production Agriculture*.



2007 CSSA Awards Program

Tuesday 6 November

Convention Center, Room R03-R05, Second Floor

- 4:00 pm CSSA Reception
- 4:45–5:30 pm CSSA Awards Program

All meeting attendees invited

CSSA Presidential Awards

Committee Chair: Henry Shands, USDA-ARS, Fort Collins, CO

The Presidential Award is given to persons who have influenced the science or practice of crop production so greatly that the impact of their efforts will be enduring on future science. Their work may have enhanced the yield or quality of crops, improved the potential utility of crop products, provided break-through techniques or unique materials for progress by others, or our understanding of some aspect of crop science, but the fundamental criterion is that their influence be such a lasting and important one in the area of crops and their production that their impact will be long lasting.

Bryan L. Harvey

Bryan L. Harvey is professor emeritus of plant sciences at the University of Saskatchewan. He received a B.S. in horticulture and M.S. in crop science from University of Saskatchewan and Ph.D. in genetics from University of California–Davis. Dr. Harvey's research has focused on malting barley, and he is the breeder/co-breeder of more than 50 varieties including the internationally known Harrington. He has also been a successful administrator serving in several positions, culminating in the office of vice



president of research at University of Saskatchewan. Harvey has served on a number of boards, nationally and internationally. His contributions have been recognized by a number of awards including Fellow of ASA, CSSA, and AIC. He is a member of the Saskatchewan Order of Merit and an officer of the Order of Canada.

Peter H. Raven

Peter H. Raven has served as president of the Missouri Botanical Garden and George Engelmann Professor of Botany at Washington University in St. Louis for more than 36 years. A past president of the American Association for the Advancement of Science and recipient of the National Medal of Science, Dr. Raven received an A.B. degree at University of California–Berkeley and Ph.D. from University of California–Los Angeles. He is a world leader in the conservation of biodiversity, a member of the National Academy of Science since 1977, and has been elected to more than 20 foreign academies of science. His early work concerned the systematics and evolution of the evening primrose family of plants, Onagraceae, and he subsequently worked with folk taxonomy, coevolution, biogeography, and conservation.



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 with a CSSA member-mentor for the coming year.

Patrick Dosier

Patrick Dosier is a senior in the Plant Science Department at Cal Poly–Pomona. He is majoring in agronomy with an emphasis on crop science. Upon graduation in March 2008, his goals are to become a certified crop adviser as well as a pest control adviser. His research centers on the amelioration of calcareous and other high-pH soils. He is a resident in the crop unit and has started a small organic vegetable farm at Cal Poly. Dosier plans to work full time and concurrently attend graduate school in soil science or agricultural economics.



Amy Gail Fannon

Amy Gail Fannon is a student at Virginia Tech in the Crop and Soil Environmental Science Department with a minor in forestry. She plans to graduate in December 2008 and pursue a M.S. in soil science. She would like to pursue a career in disturbed-land reclamation or soil conservation for the Natural Resources Conservation Service. She is the president of the Virginia Tech Agronomy Club, national recording secretary for SASES, member of the Virginia Tech Soil Judging Team, ambassador for the College of Agriculture and Life Science at Virginia Tech, and involved with several other activities in her community and college.



Golden Opportunity Scholars

Committee Chair: Steven L. Fales, Iowa State University

CSSA has named the 2007 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

Branden Furseth

Branden Furseth is a soil and crop science major at the University of Wisconsin-Platteville. He is in his senior year and plans to attend graduate school. On campus, he is on the crops team and the soils team. He is treasurer of the agronomy club and an officer of Alpha Gamma Rho. He received an undergraduate fellowship and is currently researching the relationship between carbon and organic matter in various manure types. He is also an active FFA alumni.



James Johnson

James Johnson is a student in the Plant Science Department at California State University-Fresno. He is majoring in plant science with an emphasis in plant health. He hopes to work in agricultural research. His studies focus primarily on crop management and integrated pest management. He is a member of Alpha Zeta, Phi Kappa Phi, Golden Key, is an agricultural ambassador, and manages the cotton and agronomy FFA competitions. He plans to attend graduate school in plant breeding.



Kristen Kennedy

Kristen Kennedy is a student at Cornell University in the College of Agriculture and Life Sciences majoring in agricultural sciences. She is a sophomore and plans to graduate in May 2010. She aspires to work with a private industry or institution that has international influence in developing nations. Her study focuses on



agricultural education and agribusiness. She is treasurer of the local Agricultural Sciences Club and plans to attend graduate school.

Soo Kim

Soo Kim is a student in the Crop Sciences Department at the University of Illinois at Urbana-Champaign. She is majoring in crop science with a minor in food science. Soo is a senior and plans to graduate in December 2008. Her goal is to improve major field crops such as rice and wheat in the developing countries of Asia. Soo has been a member of Field and Furrow and is a member of the Korean Student Association. She plans to attend graduate school.



Joyce Y. Lok

Joyce Y. Lok is a student in the Crop, Soil, and Environmental Sciences Department at Purdue University. She is double majoring in crop and soil science and international agronomy. She is a senior and plans to graduate in December 2008. Her goal is to become a researcher in an agency or organization focusing on sustainable agriculture issues pertaining to soil and soil-crop relationships in environmentally challenged countries. Her study focuses mainly on soil science and agronomy. Lok is a member of the Purdue University Soils Team and is active in other clubs and hobbies. She plans on attending graduate school in soil science or a related field.



Bryan Parr

Bryan Parr is a student in the School of Agriculture at the University of Wisconsin-Platteville. He is majoring in soil and crop science with a minor in geology. Parr plans on graduating from UW-Platteville in May 2010. His goal is to become a researcher in private industry or at an academic institution. His study focuses mainly on crop management. Parr was raised on a farm and looks forward to helping his fellow farmers after graduation by going to graduate school in plant breeding or crop management.



Michael Popelka

Michael (Mike) Popelka is a student in the College of Agriculture at Kansas State University. He is majoring in plant science option of agronomy with a minor in agriculture economics. He is a senior and plans on graduating in May 2008. His goal is to become a plant breeder in the private industry sector. His study focuses on plant physiology and genetics. He is a member of the Wheat State Agronomy Club, Alpha Gamma Rho, and is part of the crop judging team. He plans on attending graduate school in plant breeding.



Amy Robak

Amy Robak is a student in the Plant and Earth Science Department at University of Wisconsin-River Falls and is majoring in conservation with minors in soil science and agronomy. Her goal is to work with a progres-



-sive team in the field of conservation improving the farming methods of small rural farms. She is an FFA member and represents Minnesota FFA as Region Four president. She is a sophomore and plans to continue her high school research on nutrient management in graduate school studying soil science.

Seth Sherry

Seth Sherry is a student in the Crop and Soil Sciences Department at Oregon State University, majoring in ecosystem analysis and policy with a minor in international and comparative politics. He is a junior and plans on graduating in June 2009. His goal is to work in international development and conflict resolution. His study focuses on the relationship between agriculture and communities through diverse mediums, including socio-economics, ecology, and politics. He plans to attend graduate school.



Samantha Shoaf

Samantha Suelen Shoaf is a student in the Agronomy Department at the University of Florida, where she also serves as Agronomy and Soils Club president and vice president of the College of Agriculture and Life Sciences College Council. She is a laboratory assistant for the forages breeding lab. After graduating in May 2008, she will attend graduate school in the area of integrated pest management or plant breeding. She will apply her knowledge and experience to international agricultural development and eventually enter the private sector as a consultant and producer.



Catherine Swoboda

Catherine Swoboda is a senior in the Agronomy Department at Iowa State University. She will graduate with a degree in agronomy in May 2008. She plans to pursue an M.S. in crop production and physiology. She hopes to remain involved with research and education at an academic institution. She has worked in soybean extension since her freshman year and completed her own project dealing with fungicide use in soybean. She also plays for the Iowa State women's hockey team.



Matthew Vann

Matthew Vann is a junior in the Soil and Water Science Department at the University of Florida. He is majoring in environmental management in agriculture and plans on graduating in December 2008. His goal is to become an agronomist with the Suwannee River Water Management District in north Florida. His study focuses on environmental management and wastewater management. He is a member of his local SASES chapter, where he manages the student ag gardens. He plans on attending graduate school in agronomy.



Margaret Wilson

Margaret Wilson is a student in the Soil and Crop Sciences Department at Colorado State University. She is majoring in crop science with an emphasis in plant biotechnology, genetics, and breeding. She is a senior and will graduate in May 2008. Dur-



ing the school year, she works part time in a plant breeding and genetics lab in the departments. Wilson plans to go to graduate school. She is interested in plant breeding and researching the genetics of agronomic plants.

Congressional Science Fellow

Committee Chair: Karl M. Glasener, ASA-CSSA-SSSA, Washington, DC

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.

Marcy E. Gallo

Dr. Marcy E. Gallo is the 2007 ASA-CSSA-SSSA Congressional Science Fellow, serving in the office of Senator Joseph Lieberman (I-CT). As the environmental fellow in Senator Lieberman's office, she is working on a variety of policy topics from climate change legislation and farm bill reauthorization to oversight of the Endangered Species Act and the water quality of Long Island Sound. She is a microbial ecologist who received a Ph.D. from the University of New Mexico (UNM). Gallo's research focused on microbial community structure and function in relation to the photodecomposition of arid plant litter. While at UNM, she was an NSF-IGERT fellow and was a recipient of SSSA's Francis and Evelyn Clark Soil Biology Scholarship.



Gerald O. Mott Scholarship

Committee Chair: Andrea L. Maas, USDA-ARS, Tifton, GA

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.

Christian J. Peters

Christian J. Peters recently graduated from a Ph.D. program in soil and crop sciences at Cornell University. He is continuing his research on the land resource requirements of



the human diet and the potential for food to be produced through local and regional food systems as a post doctoral associate at Cornell. Dr. Peters is a member of ASA, CSSA, SSSA, and Sigma Xi.

ASA-CSSA-SSSA Early Career Professional Award

Committee Chair: B. Todd Campbell, USDA-ARS, Florence, SC

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.

Jeffrey T. Edwards

Jeffrey T. (Jeff) Edwards is an assistant professor and small grains extension specialist in the Plant and Soil Sciences Department at Oklahoma State University. Dr. Edwards re-



ceived a B.S. from Western Kentucky University and M.S. and Ph.D. from University of Arkansas. His program focuses mainly on grain-only and dual-purpose wheat production in the southern Great Plains with particular emphasis on reduced and no-tillage production systems.

Frank N. Meyer Medal for Plant Genetic Resources

Committee Chair: Gary A. Pederson, USDA-ARS, Griffin, GA

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.

Douglas A. Johnson

Douglas A. Johnson is a plant physiologist at the USDA-ARS Forage and Range Research Lab at Logan, UT. He also is adjunct professor in the Wildland Resources and Crops, Soils, and Biometeorology Departments at Utah State University. Dr. Johnson received a B.A. at Augustana College in Sioux Falls, SD and M.S. and Ph.D. degrees at Utah State University. His research focuses on broadening the genetic base of rangeland and pasture plants and providing improved plant germplasm for upgrading private and public lands in the western U.S. Johnson has served as associate editor for *Crop Science* and *Agronomy Journal* and is an active member in CSSA, ASA, and the Society for Range Management.



NCCPB Genetics and Plant Breeding Award for Industry

Committee Chair: Shawn M. Kaeppler, Univ. of Wisconsin

The Genetics and Plant Breeding Award for Industry is administered by CSSA and is financially supported by the National Council of Commercial Plant Breeders (NCCPB). 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.

Leah A. Brilman

Leah A. Brilman is director of research and technical services of Seed Research of Oregon, a division of The Pickseed Group. She serves as a turfgrass breeder and agronomist for the company. She received a B.S. in biology from California State University-Bakersfield and an M.S. and Ph.D. in agronomy and plant genetics from the University of Arizona. She has been chair of Division C-5 Turfgrass Science, president of the Turfgrass Breeders Association (TBA), and represented TBA on the National Turfgrass Evaluation Program Policy Committee. She is the test preparer and coordinator for the student turf bowl for the Golf Course Superintendents Association of America involving more than 80 student teams from across the United States.



Monsanto Crop Science Distinguished Career Award

Committee Chair Philip J. Bauer, USDA-ARS, Florence, SC

The Monsanto Crop Science Distinguished Career Award 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.

Caroll P. Vance

Carroll P. Vance is a plant physiologist and research leader with USDA-ARS Plant Science Research Unit and professor of agronomy and plant genetics at University of Minnesota. Dr.



Vance received a B.S. from East Tennessee State University and Ph.D. from The Ohio State University. His research program has focused on the physiology, biochemistry, and genomics of symbiotic nitrogen fixation, nitrogen assimilation, and root responses to phosphorus and nitrogen deficiency. Vance has served on the editorial board of several scientific journals including: *Crop Science*, *Plant Physiology*, *Plant and Soil*, and *Physiologia Plantarum*. He has been active in CSSA, the American Society of Plant Biologists, the American Association for the Advancement of Science, and the American Phytopathological Society.

Young Crop Scientist Award

Committee Chair: Wanda W. Collins, USDA-ARS, Beltsville, MD

This award is designed to recognize a 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.

Michael J. Giroux

Michael J. (Mike) Giroux is an associate professor and geneticist in the Plant Sciences and Plant Pathology Department at Montana State University. Dr. Giroux received a B.S. degree from Michigan State University and Ph.D. degree from the University of Florida. His program focuses mainly on the genetics of cereal quality. Giroux served as an associate editor for *Cereal Chemistry* and is active in CSSA and the American Association of Cereal Chemistry International.

Fred V. Grau Turfgrass Science Award

Committee Chair: Terrance P. Riordan, University of Nebraska

The Fred V. Grau Turfgrass Science Award 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.

Peter H. Dernoeden

Peter H. Dernoeden is professor of turfgrass science in the Department of Plant Science and Landscape Architecture at the University of Maryland. He received B.S. and M.S. degrees at Colorado State University and Ph.D. from University of Rhode Island. His appointment includes research and extension components



and he teaches a course in pest management strategies for turfgrasses. Dr. Dernoeden's research and extension programs involve turfgrass pathology, weed science, and turfgrass management. He mentors graduate students and coordinates the turfgrass disease diagnostic laboratory and field days. He served as an associate editor for *Crop Science*, is an ASA Fellow, and is a recipient of the Northeastern Weed Science Society Outstanding Researcher Award.

Seed Science Award

Committee Chair: Daniel J. Cantliffe, University of Florida

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.

Jeffrey J. Steiner

Jeffrey J. Steiner is the national program leader for Agricultural System Competitiveness and Sustainability with USDA-ARS in Beltsville, MD.

Dr. Steiner received B.S. and M.S. degrees from California State University-Fresno and a Ph.D. from Oregon State University. Until 2006, he was a research agronomist at the National Forage Seed Production Research Center in Corvallis, OR where he led a team that conducted research to develop direct-seeded grass seed production systems that did not require straw burning after harvest, and demonstrated the multiple benefits of grass seed farm landscapes so



Crop Science Achievement Awards

CSSA recognizes these individuals with the International Service in Crop Science, Crop Science Extension Education, Crop Science Research, and Crop Science Teaching Awards for their outstanding contributions to crop science through education, national and international service, and research.

farmers can comply with legislation designed to protect natural resources and participate in conservation programs.

International Service in Crop Science Award

Committee Chair: Richard R. Wang, USDA-ARS, Logan, UT

Ravi P. Singh

Ravi P. Singh is a distinguished scientist at the International Maize and Wheat Improvement Center (CIMMYT), Mexico, where he is head of spring bread wheat improvement for intensive agro-ecosystems. He received B.S. and M.S. degrees from Banaras Hindu University, Varanasi, India, and a Ph.D. from University of Sydney, Australia. Dr. Singh's research focuses on genetics and breeding of wheat with emphasis on durable resistance to rust diseases. He has developed, or contributed to the development of, wheat germplasm that has resulted in the release of more than 170 cultivars in numerous developing countries. Singh also is an adjunct professor at Kansas State University.



Crop Science Extension Education Award

Committee Chair: Paul R. Carter, Pioneer Hi-Bred International, Inc., Johnston, IA

Dale Fjell

Dale Fjell is a professor and extension specialist, crop production in agronomy at Kansas State University. He recently was appointed Area Extension Director for K-State Research and Extension. Dr. Fjell received a B.S. from Wayne State College in Nebraska and M.S. and Ph.D. degrees from Kansas State University. He focuses on corn, soybean, and grain sorghum production management through innovative field crops extension programs. Fjell served as an associate editor on the editorial board of *Agronomy Journal* and has been active in the ASA Educational Materials and Poster Awards Programs.



Crop Science Research Award

Committee Chair: Sarah E. Lingle, USDA-ARS, New Orleans, LA

Edwin L. Fiscus

Edwin L. Fiscus is a plant physiologist with the USDA-ARS Plant Science Research Unit in Raleigh, NC and professor of crop science at North Carolina State University. Dr. Fiscus received a B.S. Ed in biology at Slippery Rock State University in Pennsylvania, an M.S. degree



in botany at the University of Arizona, and Ph.D. degree in botany at Duke University. His early research was in plant water transport which continued, combined with irrigation and water stress research, after joining ARS in Colorado. He transferred to North Carolina to work on crop effects of increased ground-level ultraviolet radiation associated with stratospheric ozone depletion and currently studies the impacts of climate change and atmospheric pollutants on crop production.

Crop Science Teaching Award

Committee Chair: Deana M. Namuth, University of Nebraska

Thomas L. Housley

Thomas L. Housley is professor of agronomy at Purdue University. Dr. Housley received a B.S. in biology from Taylor University, M.A. in science education from University of Connecticut, and Ph.D. in botany from the University of Georgia. He applied this basic science education to solving agronomic problems through a postdoctoral study in the Agronomy Department at the University of Wisconsin. His program focuses on the control of carbohydrate partitioning between sources and sinks using cereal fructan accumulation and striga parasitism of sorghum as model systems. His knowledge of whole-plant physiology has allowed him an easy transition to teaching at the graduate and undergraduate level. He has been active in collegiate crops judging and with SASES serving as a member or chair of the National Student Awards, Club Achievement Contest, Student Research Symposium, and the Student Manuscript Contest Committees.



CSSA Fellows

Committee Chair: Steven L. Fales, Iowa State University

James A. Anderson

James A. Anderson is a professor in the Department of Agronomy and Plant Genetics at University of Minnesota. He received a B.S. from University of Minnesota, M.S. degree from 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*, received the CSSA Young Crop Scientist Award in 1998, and was elected ASA Fellow in 2006.



Leah A. Brilman

Leah A. Brilman is director of research and technical services of Seed Research of Oregon, a division of The Pickseed Group. She serves as a turfgrass breeder and agronomist for the company. She received a B.S. in biology from California State University–Bakersfield and a M.S. and Ph.D. in agronomy and plant genetics from the University of Arizona. She has been chair of Division C-5 Turfgrass Science, president of the Turfgrass Breeders Association (TBA), and represented TBA on the National Turfgrass Evaluation Program Policy Committee. She is the test preparer and coordinator for the student turf bowl for the Golf Course Superintendents Association of America involving more than 80 student teams from across the United States.



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 2007.



Silvia R. Cianzio

Silvia R. Cianzio is a professor in the Agronomy Department at Iowa State University. Dr. Cianzio received a B.S. at the University of Uruguay and M.S. and Ph.D. degrees from Iowa State University. Her program focuses on breeding for disease, pest, and abiotic stress resistance in soybean. Cianzio has served as associate editor for *Crop Science* and has been active in CSSA, the International Group on Iron Nutrition and Interaction in Plants, and the Puerto Rico Seed Research Association. She serves as editor of the proceedings published by the Iron Nutrition and Interaction in Plants, and she actively participates in extension activities organized by Iowa State University and the Iowa Soybean Association.



His research and extension programs involve turfgrass pathology, weed science, and turfgrass management. He mentors graduate students and coordinates the turfgrass disease diagnostic laboratory and field days. He served as associate editor for *Crop Science*, is ASA Fellow, and recipient of the Northeastern Weed Science Society Outstanding Researcher Award.

Peggy G. Lemaux

Peggy G. Lemaux is a faculty member in the Department of Plant and Microbial Biology at the University of California–Berkeley and a statewide cooperative extension specialist. She is chair of the Biotechnology Workgroup for the University of California Division of Agriculture and Natural Resources. Dr. Lemaux received a B.A. at Miami University in Ohio and M.S. and Ph.D. in microbiology and immunology from University of Michigan. Her research program focuses on developing and utilizing genetic engineering technologies to improve cereal crops, including her involvement in the nutritional improvement of sorghum for Africa through the Bill and Melinda Gates Foundation. Her public outreach program involves issues relating to agricultural practices, food production, and the impact of new technologies on food and agriculture. These efforts include the website <http://ucbiotech.org>, which received an ASA Certificate of Excellence in 2002.



Peter H. Dernoeden

Peter H. Dernoeden is a professor of turfgrass science in the Department of Plant Science and Landscape Architecture at the University of Maryland. He received B.S. and M.S. degrees at Colorado State University and a Ph.D. from University of Rhode Island. His appointment includes research and extension components, and he teaches a course in pest management strategies for turfgrasses.



Phillip N. Miklas

Phillip N. (Phil) Miklas is a research geneticist with USDA-ARS at the Vegetable and Forage Crops Research Unit in Prosser, WA. He also serves as an adjunct faculty member in the Crop and Soil Sciences Department at Washington State University. Dr. Miklas received a B.S. from Mesa State College, M.S. from Colorado State University, and Ph.D. from North Dakota State University. His program develops enhanced germplasm lines and improved cultivars of dry edible bean. Research efforts focus primarily on genetics of disease resistance. He serves as technical editor for *Crop Science* and is an active member of the Bean Genetics, Phaseolus Crop Germplasm, and Bean Improvement Cooperative Coordinating Committees. Miklas also served as a principal investigator for the USAID Bean/Cowpea Collaborative Research Support Program in eEast and southern Africa, and is an active participant in the ARS sclerotinia initiative.



Ramachandran P.K. Nair

Ramachandran P.K. Nair is a pioneering researcher and educator and a world leader in agroforestry. He is a distinguished professor and director of the Center for Subtropical Agroforestry in the School of Forest Resources and Conservation, and has affiliate faculty status in the departments of Agronomy and Soil and Water Sciences at the University of Florida. He received a Ph.D. in agronomy from Pantnagar Agri. University, India, and Doctor of Science degree from Goettingen University, Germany; he has also received honorary doctor of science degrees from



Kyoto University, Japan; University of Science and Technology, Kumasi, Ghana; and University of Guelph, Ontario, Canada. He is a Fellow of ASA, SSSA, and the American Association for the Advancement of Science, and he has received the International Service Awards of ASA, CSSA, and SSSA. Other recognitions include the Society of American Foresters Barrington Moore Award (2004), International Union of Forest Research Organizations Scientific Achievement Award (2005), Senior Fulbright Award (2005–2010), and the Humboldt Prize (2006). He was editor-in-chief of *Agroforestry Systems* for 11 years and is currently the editor of the book series *Advances in Agroforestry*. He is a past chair of Division A-6 International Agronomy and was the chair of the 1st World Congress of Agroforestry, Orlando, FL in 2004.

James G. Shannon

James G. (Grover) Shannon is professor and David Haggard Endowed Chair of soybean genetics and breeding in the Division of Crop Sciences at the University of Missouri. Dr. Shannon received a B.S. from Mississippi State University and M.S. and Ph.D. from Purdue University. His program primarily focuses on the breeding and genetics of soybeans with resistance to soybean cyst nematode and other diseases. He has been involved in the development of more than 70 cultivars and soybean germplasm lines. Shannon has served on the Soybean Crop Registration Committee, the National Soybean Genetics Committee, and has been active in the American Seed Trade Association.



Bir B. Singh

Bir B. Singh is currently based at G.B. Pant University, India as a visiting professor of genetics and plant breeding. He retired last year from the International Institute of Tropical Agriculture after serving from 1979–2006 as a cowpea breeder. Dr. Singh obtained his B.S. (honors) degree from G.B. Pant University and M.S. and Ph.D. degrees from University of Illinois. His work on genetics and breeding of pigeon pea, soybean, and 60-day cowpeas is well recognized worldwide. Singh has served as a member on the International Crop Science Committee and International Agronomy Award Committee.



Chris van Kessel

Chris van Kessel is the chair of the department of Plant Sciences at the University of California–Davis. Dr. van Kessel received a B.S. degree in agronomy and a second B.S., an M.S., and a Ph.D. degree in biology from the Netherlands. His research program focuses on the management of rice cropping systems and the impact of climate change on crop production and nutrient cycling.



2007 SSSA Awards Program

Monday 5 November

Convention Center, Room R03-R05, Second Floor

- 4:00 pm SSSA Reception
- 4:45 pm SSSA Awards Program
- 5:30 pm "Bangladesh: Problems of Global Warming, Land Inundation, and Arsenic Poisoning" lecture by President of Bangladesh Iajuddin Ahmed

All meeting attendees invited

Congressional Science Fellow

Committee Chair: Karl M. Glasener, ASA-CSSA-SSSA, Washington, DC

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.

Marcy E. Gallo

Dr. Marcy E. Gallo is the 2007 ASA-CSSA-SSSA Congressional Science Fellow, serving in the office of Senator Joseph Lieberman (I-CT). As the environmental fellow in Senator Lieberman's office, she is working on a variety of policy topics from climate change legislation and farm bill reauthorization to oversight of the Endangered Species Act and the water quality of Long Island Sound. She is a microbial ecologist who received a Ph.D. from the University of New Mexico (UNM). Gallo's research focused on microbial community structure and function in relation



to the photodecomposition of arid plant litter. While at UNM, she was an NSF-IGERT fellow and was a recipient of SSSA's Francis and Evelyn Clark Soil Biology Scholarship.

Francis and Evelyn Clark Soil Biology Scholarship

Committee Chair: Edward G. Gregorich, Agriculture and Agri-Food Canada

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.

Brian Darby

Brian Darby is a doctoral candidate at University of Vermont (UVM) Plant and Soil Science Department. He received a B.A. from Northwestern College, IA, and M.S. from UVM.



Along with his advisor, Dr. Deborah Neher, his research examined the nematode and protozoan communities associated with biological soil crusts of southwestern U.S. deserts. Darby's current research focus examines soil microfauna nitrogen cycling.

Lloyd R. Frederick Soil Teaching Travel Study Award

Committee Chair: John Ryan, ICARDA, Aleppo, Syria

The Lloyd R. Frederick Soil Teaching Travel Award is designed to assist top soil science instructors, so they may have a foreign study travel or sabbatical experience. The program will help support the profession of soil science, encourage

international teaching experiences, and benefit countless students of the instructors participating in the program. The awarded is supported by gifts to the Agronomic Science Foundation.

Rajiv Khosla

Dr. Rajiv (Raj) Khosla is an associate professor and extension specialist of precision agriculture at Colorado State University (CSU). He received a B.S. from University of Allahabad, India and a M.S. and Ph.D. from Virginia Tech. Khosla has established a multidisciplinary, multiagency, and extramurally funded research and extension program in precision agriculture. His focus is the management of in-field soil and crop spatial variability using innovative technologies (GPS, GIS, remote-sensing) for variable-rate precision nutrient management. He teaches two undergraduate and one graduate course at CSU. In addition, Khosla directs an undergraduate degree program, Applied Information Technology in Agriculture. He has received numerous national and international awards including the 2005 Syngenta Crop Protection Recognition Award and 2003 SSSA Outstanding Young Scientist Award. He is associate editor of *Soil Science Society of America Journal* and chair of the 9th International Conference on Precision Agriculture, 20-23 July 2008.



America/New Zealand Soil Science Professional Exchange Award

Committee Chair: M.B. Kirkham, Kansas State University

The America/New Zealand Soil Science Professional Exchange encourages bi-directional sabbaticals between scientists in the United

States and New Zealand to foster enhanced cooperative soil science research. Funds for the exchange are provided through the Agronomic Science Foundation. The 2007 exchange will support hands-on research activity of a New Zealand scientist to the United States.

Hailong Wang

Hailong Wang is a senior soil scientist at Ensis, the Forests and Environment Unit. Ensis is the unincorporated joint venture between the New Zealand Crown Research Institute Scion and Australia's CSIRO. He is also an adjunct professor at Hainan University, China. Dr. Wang received B.S. and M.S. degrees from the Zhejiang University, China and a Ph.D. from Massey University, New Zealand. His program focuses mainly on land application of organic residuals and their impacts on ecosystems and nutrient management in relation to surface water eutrophication. Wang serves as a principal subject editor for *Environmental Science and Pollution Research—International* journal and a member of the Technical Committee of the New Zealand Land Treatment Collective. He has been active in New Zealand Society of Soil Science, SSSA, and New Zealand Water and Waste Association.



L.R. Ahuja Ag Systems Modeling Award

Committee Chair: David Nielsen, USDA-ARS, Akron, CO

The L.R. Ahuja Ag Systems Modeling Award is presented to an early career soil scientist, agronomist, or crop scientist in recognition of significant contributions. The award is supported by a gift from Dr. Lajpat (Laj) R. Ahuja to the Agronomic Science Foundation.

Bruno Basso

Bruno Basso is associate professor in the Crop Systems, Forestry, and Environmental Sciences Department at the University of Basilicata, Italy. He is adjunct professor at Queensland University of Technology, Australia. Dr. Basso received a B.S. and M.S. from the University of Naples and Ph.D. from Michigan State University. His field of research is the development and application of soil-plant-atmosphere simulation models to identify causes of yield variability and to identify the soil management strategies that increase crop productivity and water use efficiency with spatially variable soils and landscape. Basso is a recognized leader in extending point-based crop models to a spatial scale of fields.



Emil Truog Soil Science Award

Committee Chair: Alain F. Plante, University of Pennsylvania

The Emil Truog Award is supported by funds and a bequest from Dr. Truog's estate. Dr. Truog served as chair of the Soil Science Department at the University of Wisconsin from 1939–1953 and was one of the founding members of SSSA. The 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 a Ph.D. degree during the preceding calendar year.

Paul M. White

Paul M. White is a research assistant at Kansas State University in the Department of Agronomy. Dr. White received a B.S. and M.S. from University of



Arkansas and a Ph.D. from Kansas State University. His research focused on environmental issues in soil science, including carbon sequestration and phytoremediation. Currently he is studying ecosystem carbon and nitrogen flux in tallgrass prairie and agricultural systems. He served as the Division S-3 Soil Biology & Biochemistry Graduate Student Representative from 2005–2007.

Don & Betty Kirkham Soil Physics Award

Committee Chair: Michael H. Young, Desert Research Institute, Las Vegas, NV

The Don and Betty Kirkham Soil Physics Award recognizes mid-career soil scientists who have made outstanding contributions in the area of soil physics. The award is supported by the Lena and Maria Van der Ploeg Fund and the Don and Betty Kirkham Fund, both of the Agronomic Science Foundation.

Yakov A. Pachepsky

Yakov A. Pachepsky is a soil scientist with USDA-ARS, Beltsville, MD. He received advanced degrees in applied mathematics and in soil science from Moscow State University, Russia. Dr. Pachepsky is nationally and internationally known for his basic and applied research on better understanding and modeling subsurface flow and transport processes and devising methods for monitoring, evaluating, and controlling nonpoint source pollution. The recent emphasis of his research is on the fate and transport of manure-borne pathogenic microorganisms in soils and landscapes. Dr. Pachepsky serves as an associate editor for *Soil Science Society of America Journal*, *Vadose Zone Journal*, and as a member of editorial boards of several other journals. He has been active in ASA and SSSA.



ASA-CSSA-SSSA Early Career Professional Award

Committee Chair: B. Todd Campbell, USDA-ARS, Florence, SC

The award recognizes those who have made an outstanding contribution in agronomy, crop science, and/or soil science within seven years of completing their terminal degree.

Jeffrey T. Edwards

Jeffrey T. (Jeff) Edwards is an assistant professor and small grains extension specialist in the Plant and Soil Sciences Department at Oklahoma State University.



Dr. Edwards received a B.S. from Western Kentucky University and M.S. and Ph.D. from University of Arkansas. His program focuses mainly on grain-only and dual-purpose wheat production in the southern Great Plains with particular emphasis on reduced and no-tillage production systems.

Irrrometer Professional Certification Service Award

Committee Chair: Stephen R. Colbert, Froehling & Robertson Inc., Raleigh, NC

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. The award is supported by the Irrrometer Company through the Agronomic Science Foundation.

Kevin C. Harvey

Kevin C. Harvey is the founder, president, and chief scientist of KC Harvey Inc., an environmental consulting firm based in Bozeman, MT. He is a certified professional soil



scientist with 26 years of experience offering environmental consulting services throughout the U.S., Canada, Mexico, Asia, and Europe. He is recognized as an expert in managing the produced water and land reclamation associated with coal-bed natural gas (CBNG) and conventional oil and gas operations throughout the Rocky Mountain Region. He received a B.S. in resource conservation with an emphasis in soil science from University of Montana School of Forestry. He received an M.S. in land rehabilitation with an emphasis in soil science from Montana State University

Marion L. & Chrystie M. Jackson Soil Science Award

Committee Chair: April L. Ulery, New Mexico State University

The Marion L. and Chrystie M. Jackson Soil Science Award recognizes mid-career 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 supported through a contribution by Dr. and Mrs. Marion L. Jackson to the Agronomic Science Foundation.

Brenda J. Buck

Brenda J. Buck is associate professor in the Department of Geoscience at University of Nevada Las Vegas and also serves as an adjunct professor in the Department of Environmental Sciences at the University of Montana-Western. She received a B.S. from the University of Notre Dame in geology and a M.S. and Ph.D. from New Mexico State University in geology and agronomy, respectively. She specializes in soils formed



in arid and semi-arid regions of the world. Her research emphasis is on understanding and quantifying the processes involved with the genesis of arid soils and paleosols and applying this knowledge to the fields of soil geomorphology, landscape evolution, micromorphology, tectonics, paleoclimate, geoarchaeology, and heavy metal and radionuclide contamination.

Soil Science Distinguished Service Award

Committee Chair: Mary E. Collins, University of Florida

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 2007.

D. Keith Cassel

D. Keith Cassel is emeritus professor and soil scientist in the Department of Soil Science at North Carolina State University. He retired in early 2006 after serving 32 years in



the Department. Dr. Cassel received a B.S. in agricultural science at the University of Illinois-Urbana and M.S. and Ph.D. degrees from University of California-Davis. His research program dealt with soil water management, deep tillage, and irrigation scheduling. Throughout his career, he taught graduate and undergraduate courses in soil physics. Dr. Cassel is active in SSSA and ASA and served terms as associate editor, technical editor, and editor of *Soil Science Society of America Journal*. He was president of SSSA in 1997. He is a Fellow of SSSA and ASA.

John Ryan

John Ryan from Ireland is recently retired as a soil scientist at the International Center for Agricultural Research in the Dry areas (ICARDA) in Aleppo, Syria. He has worked in Lebanon as professor of soil science at the American University of Beirut and in Morocco as soil fertility specialist with the University of Nebraska. He has B.S., Ph.D., and doctor of science degrees from University College–Dublin in soil science and M.S. in agricultural education from University of Arizona. His research interests are nutrient dynamics in dryland cropping and international agricultural development. He serves on editorial boards including *European Journal of Agronomy*, *Nutrient Cycling in Agroecosystems*, and *Renewable Agriculture and Food Systems*. He is chair of the Commission on Soil Fertility and Plant Nutrition in the International Union of Soil Sciences, and was chair of Division A-6 International Agronomy. He serves on the Scientific Advisory Committee of the World Phosphate Institute. He has received numerous international awards and is ASA and SSSA Fellow.



Soil Science Research Award

Committee Chair: Michael J. Kasperbauer, Retired, Lexington, KY

The award is presented to the team of Peter J. Bottomley and David D. Myrold.

Peter J. Bottomley

Peter J. Bottomley is professor in the Department of Crop and Soil Science and in the Department of Microbiology at Oregon State University. He received



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 through education, research, and national and international service.

a B.S. from University of Liverpool, England and a Ph.D. from University of Dundee, Scotland. His research program is directed at environmental soil microbiology. He has served on the editorial board of *Applied and Environmental Microbiology* and has reviewed for many journals and grant funding agencies. He has authored and co-authored chapters in two popular textbooks of *Soil Microbiology*.

David D. Myrold

David D. Myrold is a professor and soil scientist in the Department of Crop and Soil Science at Oregon State University. He also serves as associate department head and as director of an NSF-IGERT program on the subsurface biosphere. Dr. Myrold received a B.S. from Michigan Technological University, M.S. from Washington State University, and Ph.D. from Michigan State University. His program focuses on soil microbial ecology. He is a technical editor for *Soil Science Society of America Journal*, on the editorial boards of *Applied and Environmental Microbiology*, *Soil Biology & Biochemistry*, and *FEMS Microbiology Ecology*, and served as chair of Division S-3 Soil Biology & Biochemistry.



Soil Science Education Award

Committee Chair: Elizabeth W. Sulzman (deceased), Oregon State University

James W. Bauder

Dr. James W. (Jim) Bauder is an extension specialist and professor in the Land Resources and Environmental Sciences Department at Montana State University. He received a B.S. and M.S. from the University of Massachusetts–Amherst and a Ph.D. from Utah State University. His extension education program has focused primarily on irrigated crop production, saline and sodic soil management, and nitrate movement in soil. He has served as associate editor for *Agronomy Journal* and associate and technical editor for *Soil Science Society of America Journal*. He has served as Division S-6 chair and on other ASA–SSSA committees. He is also active in the Soil and Water Conservation Society.



Soil Science Industry Award

Committee Chair: David E. Kissel, University of Georgia

John B. Dickey

John B. Dickey is principal soil scientist and agronomist at NewFields Agricultural and Environmental Resources in Sacramento, CA. He received a B.S. and M.S. from University of California–Davis and a Ph.D.



from Purdue University. His projects with irrigation districts and with industrial, municipal, state, and federal clients have varied widely, including stabilization of over 40 square miles of Owens Dry Lake with water and vegetation, irrigation return flow quality management and monitoring, and nutrient management. Dr. Dickey spent approximately five years working with West African national programs in applied soil and crop management research and development, including extensive on-farm work in Burkina Faso.

Soil Science Applied Research Award

Committee Chair: Richard J. Roseberg, Oregon State University

Antonio P. Mallarino

Antonio P. Mallarino began his professional career at the University of Uruguay and then joined Iowa State University in 1993, where he is professor of agronomy. His work involves research, extension education, and graduate student training. Research and extension programs focus mainly on improving the agronomic and environmental efficiency of phosphorus, potassium, and manure management by developing or implementing better soil and plant-tissue testing methods, fertilizer and manure placement methods, applications of precision agriculture technologies, and environmental phosphorus assessment tools and management practices to improve water quality. He has published extensively and serves or has served as associate editor of *Agronomy Journal* and *Soil Science Society of America Journal*, chair of the CSREES North-Central Regional Committee for Soil Testing and Plant Analysis, and SSSA representative to the North American Proficiency Testing Program. He is an ASA Fellow and has received



the W. L. Nelson Award for Diagnosis of Yield-Limiting Factors, Fluid Fertilizer Foundation W. L. Nelson Award, Iowa State University R. Baker Award, USDA-ARS Secretary Group Award, and USDA-ARS Secretary Technology Transfer Group Award.

Soil Science Professional Service Award

Committee Chair: Warren D. Devine, USDA Forest Service, Lacey, WA

Raymond C. Ward

Dr. Raymond C. (Ray) Ward is president and founder of Ward Laboratories Inc., a large multi-line agricultural testing laboratory in Kearney, NE founded in 1983. Ward received B.S. and M.S. degrees from the University of Nebraska-Lincoln and a Ph.D. in soil fertility from South Dakota State University.



International Soil Science Award

Committee Chair: Anke Herrman, Univ. of Western Australia

Roland J. Buresh

Roland J. Buresh is a senior soil scientist in the Crop and Environmental Sciences Division at the International Rice Research Institute (IRRI) in the Philippines. He has worked for 15 years in Asia and eight years in Africa. His research focuses on sustainable nutrient, soil, and residue management in rice-based cropping systems. He has served as associate editor for *Agronomy Journal*. He is a Fellow of SSSA and ASA and a member of the ASA Board of Directors.



SSSA Fellows

Committee Chair: Mary E. Collins, University of Florida

James C. Bell

James C. (Jay) Bell is associate dean of Academic Programs and Faculty Affairs for the College of Food, Agricultural, and Natural Resource Sciences at the University of Minnesota. He previously served as a professor in the Department of Soil, Water, and Climate. Dr. Bell received B.S. and M.S. degrees from Virginia Tech and Ph.D. from Penn State. His research program focuses mainly on wetland soils, spatial analysis of soils, and soil genesis. Bell served as associate editor for *Soil Science Society of America Journal* and joint editor-in-chief for *Geoderma*. He is the recipient of several teaching awards including the H.T. Morse Distinguished Teaching Award for Excellence in Undergraduate Education.



Robert S. Bowman

Robert S. Bowman is professor of hydrology and chair of the Department of Earth and Environmental Science at the New Mexico Institute of Mining and Technology. Dr. Bowman received a B.S. in chemistry from University of California-Berkeley and a Ph.D. in soil chemistry from New Mexico State University. His research focuses on the interactions of dissolved chemicals with minerals in soil and groundwater. He served as associate editor of *Journal of Environmental Quality* and is active in SSSA and American Geophysical Union. He served as the organizing committee chair for Zeolite'06, the quadrennial conference of the International Natural Zeolite Association.



Edward G. Gregorich

Edward G. (Ed) Gregorich is a research scientist with Agriculture and Agri-Food Canada at the Central Experimental Farm in Ottawa, Canada. He received a B.S. and M.S. from University of Saskatchewan and Ph.D. from University of Guelph. His research focuses on soil biochemistry, particularly carbon and nitrogen cycling in soil and the production and emission of biogenic gases by soils. He is a fellow and past president of the Canadian Society of Soil Science, was a 2007 Erskine Fellow at the University of Canterbury in Christchurch, New Zealand, and served as chair of Division S-3 Soil Biology and Biochemistry. He edited three books and served as associate editor for *Canadian Journal of Soil Science*; *European Journal of Soil Science*; *Agriculture, Ecosystems & Environment*; and the *Journal of Environmental Quality*.



Terry A. Howell

Terry A. Howell is research leader of the Soil and Water Management Research Unit at USDA-ARS Conservation and Production Research Laboratory, Bushland, TX. He also serves as adjunct professor at the University of Nebraska and Texas A&M University. Dr. Howell received B.S., M.S., and Ph.D. degrees from Texas A&M University. His program focuses on sustaining irrigated agriculture and improving the effectiveness of dryland agriculture in semiarid environments through improved knowledge of crop water use. Howell serves as associate editor for *Soil Science Society of America Journal* and has been active in ASA,



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 2007.



American Society of Agricultural and Biological Engineers, Environmental Water Resources Institute, American Academy of Water Resource Engineers, American Society of Civil Engineers, and the Irrigation Association.

R. César Izaurralde

Dr. R. César Izaurralde is a laboratory fellow in the Joint Global Change Research Institute, a collaboration of the Pacific Northwest National Laboratory and the University of Maryland. He is also an adjunct professor in the Department of Geography at the University of Maryland. Izaurralde received his Agronomist Engineer degree from the University of Córdoba, Argentina and M.S. and Ph.D. from Kansas State University. His research focuses on three areas: sustainable agriculture, climate change impacts and adaptation in relation to agriculture and water resources, and climate change mitigation through soil carbon sequestration and reductions in soil emissions of nitrous oxide. Izaurralde is a active member of ASA, SSSA, American Association for the Advancement of Science, and American Geophysical Union. He is also an ASA Fellow.



Henry Janzen

Henry Janzen is a research scientist with Agriculture and Agri-Food Canada in Lethbridge, Alberta. He has a B.S. in crop science and Ph.D. in soil science, both from the University of Saskatchewan. Janzen's research focuses on carbon and nitrogen cycling in agricultural ecosystems, seeking ways to build soil carbon and reduce greenhouse gas emissions. He has been associate editor of *Journal of Environmental Quality* and the *Canadian Journal of Soil Science* and has participated in various national and international climate change initiatives, including reports of the Intergovernmental Panel on Climate Change.



William C. Lindemann

Dr. William C. Lindemann is professor of soil microbiology and environmental science in the Plant and Environmental Sciences Department at New Mexico State University. He received a B.S. at Southern Illinois University and M.S. and Ph.D. from the University of Minnesota. His teaching efforts are in several classes in soil and environmental science. His research focuses on practical application of soil microbiology as



related to plant growth in mine spoil reclamation, pecans, chile, and other crops as well as microbial manipulation of environmental contaminants. Lindemann has been awarded both the Distinguished Teaching and Distinguished Research Awards in the College of Agriculture and the department Service Award.

Sally D. Logsdon

Sally D. Logsdon is a research soil scientist with the USDA-ARS at the National Soil Tilth Laboratory in Ames, IA. She is also a 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 served as associate editor and technical editor for *Soil Science Society of America Journal*, served on award committees for ASA and SSSA, and currently serves as SSSA editor-in-chief.



plant-tissue testing methods, fertilizer and manure placement methods, applications of precision agriculture technologies, and environmental phosphorus assessment tools and management practices to improve water quality. He has published extensively and serves or has served as associate editor of *Agronomy Journal* and *Soil Science Society of America Journal*, chair of the CSREES North-Central Regional Committee for Soil Testing and Plant Analysis, and SSSA representative to the North American Proficiency Testing Program. He is an ASA Fellow and has received the W.L. Nelson Award for Diagnosis of Yield-Limiting Factors, Fluid Fertilizer Foundation W. L. Nelson Award, Iowa State University R. Baker Award, USDA-ARS Secretary Group Award, and USDA-ARS Secretary Technology Transfer Group Award.

Robert L. Mikkelsen

Dr. Robert Mikkelsen is the western director of the International Plant Nutrition Institute, located in Merced, CA. He received a B.S. from Brigham Young University and Ph.D. from University of California–Riverside. Mikkelsen worked as a Research Scientist with the National Fertilizer Development Center of the Tennessee Valley Authority. He was responsible for nutrient management issues involving fertilizers and irrigation and received a patent for new fertilizer innovations. He joined the Soil Science Department faculty at North Carolina State University (NCSU), where he was active in graduate education and received the College Excellence in Teaching Award. His research at NCSU focused on managing fertilizers and manures in cropping systems to maximize nutrient efficiency and productivity. He now works with IPNI throughout the Western U.S. and Canada to pro-



mote science-based education and research in the agricultural community and to train practitioners on appropriate nutrient use. He provides active leadership in many national professional societies. He has served on editorial boards of numerous international journals as well as associate editor for *Agronomy Journal* and the *Journal of Environmental Quality*. He is associate editor of the *Soil Science Society of America Journal*.

Keith H. Paustian

Keith H. Paustian is a professor in the department of Soil and Crop Sciences and a Senior Research Scientist at the Natural Resources Ecology Laboratory at Colorado State University. Dr. Paustian earned his B.S. and M.S. degrees from Colorado State University and his Ph.D. degree from the Swedish University of Agricultural Sciences. His research focuses mainly on soil carbon dynamics and agriculture and greenhouse gases. He has served as a lead author on several taskforces of the Intergovernmental Panel on Climate Change dealing with agriculture and greenhouse gases and serves on the US Carbon Cycle Science Steering Group.



Antonio P. Mallarino

Antonio P. Mallarino began his professional career at the University of Uruguay and then joined Iowa State University in 1993, where he is professor of agronomy. His work involves research, extension education, and graduate student training. Research and extension programs focus mainly on improving the agronomic and environmental efficiency of phosphorus, potassium, and manure management by developing or implementing better soil and



Kenneth S. Sajwan

Kenneth S. Sajwan is a professor and director of the Environmental Science Program in the Department of Natural Sciences and Mathematics at Savannah State University. Dr. Sajwan received a B.S. degree in Agriculture and Animal Husbandry from G.B. Pant University of Agricultural and Technology, M.S. degree in agronomy from Jawaharlal Nehru



Agricultural University in India, and Ph.D. degree in agronomy from Colorado State University. His teaching and research programs focus on the phytoremediation of toxic elements from contaminated soils; sediments and waste streams; and co-disposal of coal combustion byproducts with biosolids such as sewage sludge and animal manure as soil amendments. Sajwan serves as associate editor for the *Journal of Environmental Quality* and the *Journal of Environmental Monitoring and Restoration*. He has actively served the Societies as a member of the SSSA Advocacy/Outreach Task Force and the Membership and Society Identity Committee.

Daniel W. Sweeney

Daniel W. (Dan) Sweeney is a professor at the Kansas State University Southeast Agricultural Research Center. He received a B.S. degree from Kentucky Wesleyan College, M.S. degree from Purdue University, and Ph.D. degree from the University of Florida. His research addresses soil fertility and management for row and forage crops grown on claypan soils. Dr. Sweeney has served on several SSSA committees, the *Journal of Production Agriculture* and *Agronomy Journal* editorial boards, and is currently the Division S-4 Soil Fertility and Plant Nutrition representative to the SSSA Board of Directors.



Glenn V. Wilson

Glenn V. Wilson is a physical hydrologist with USDA-ARS National Sedimentation Laboratory in the Watershed Physical Processes Research Unit. Dr. Wilson received B.S. and M.S. degrees from Louisiana State University and Ph.D. from 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. He served as associate editor for *Water Resources Research* and the *Soil Science Society of America Journal* and is currently the Technical Editor for *Soil Science Society of America Journal*. He has also served as board representative of Division S-1 Soil Physics on the ASA and SSSA boards.



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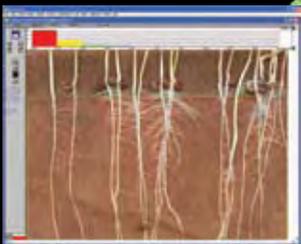
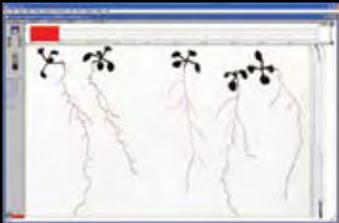
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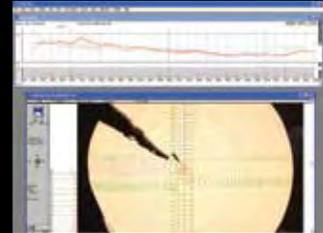
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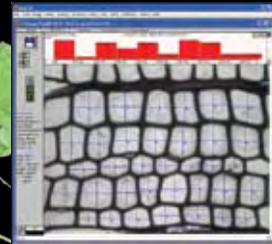
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