# SS News

**North Central Weed Science Society** 

Volume 15, Number 1, Spring 1998

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### From Your 1998 President—Doug Buhler

It is with great pleasure that I serve as President of the North Central Weed Science Society in 1998. We are all part of a thriving organization with the potential to continue to grow and prosper. Our finances and membership numbers continue to be strong. But let us not rest on our successes. Times are changing, and it is our challenge to meet and benefit from these changes.

One of our greatest strengths as an organization is the willingness of members to contribute time and talent to the society. One of the most gratifying experiences I have had as a member of NCWSS was working with the people who organized and conducted our annual meeting. The support I received as Program Chair from the Local Arrangements Committee, Section Chairs, Committee Chairs, Symposia Chairs, and others was outstanding. I trust that you will give Phil Orwick the same support as he develops the program for the 1998 meeting.

In my estimation, our 52<sup>nd</sup> annual meeting was a success. Total attendance was down slightly from 1996, but that was expected given our meeting site. There was a total of 196 oral presentations and 54 posters. Both near all-time highs. The graduate student contests continued to be a highlight of the program with 56 papers and 22 posters entered in the contests. I extend my congratulations to all the graduate students who participated in the contests. Keep up the good work!



Doug Buhler, 1998 NCWSS President

There are several individuals worthy of

special thanks for their recent service to NCWSS. First, I'd like to thank Charles Slack and the Louisville Local Arrangements Committee for doing an outstanding job from start to finish. The graduate student contests were again a success due in large part to Mark Dahmer, Chair of the Resident Education Committee; Curtis Thompson, Chair of the Paper Contest; Randy Lloyd, Chair of the Poster Contest; and Paul Clayton and Greg Alley, Weed Science Contest Local Arrangements. Thanks also go to officers who completed service in 1997. This includes Alan Dexter who completed the cycle from Vice President through Past President, Jim Kells who stepped down after several years of service as Secretary/Treasurer, and Jerry Doll and Dallas Peterson who completed terms as CAST and WSSA representatives, respectively. Finally, I'd like to thank all the past committee and section chairs for their efforts. Of special note is Loyd Wax, who has stepped aside after several years as the co-chair of the Future Site Selection Committee. New officers elected at the 1997 meeting were Jim

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## Program Taking Shape for 1998 Annual Meeting in St. Paul, MN

Plans are well underway for the 1998 NCWSS Annual Meeting in St. Paul, MN. Our theme this year will be "Focus on the Future" with special emphasis on the importance of graduate students on the success of our Society. Our keynote speaker for the general session will be Dr. Harold Coble of North Carolina State University. Dr. Coble is currently on assignment in Washington, DC as the IPM Coordinator for the USDA. We also will continue the membership feedback portion of the general session that was begun last year. Our symposia lineup also is taking shape for the meeting.

Currently the topics include 1) Weed Resistance Management; 2) Forensic Weed Science: Diagnosing Symptoms; and 3) Professional Opportunities in Weed Science. The Program Committee looks forward to your participation in the meeting with a volunteered paper or poster. See you in St. Paul!

Phil Orwick 1998 Program Chair

### From the Editor

The deadlines for submitting items for the next two NCWSS Newsletters are May 15 and September 1. Preferred methods of news item submission are via e-mail (mjhorak@ksu.edu), or in WordPerfect format. Otherwise, send by FAX or mail to:
Michael J. Horak
Department of Agronomy
Kansas State University
3701 Throckmorton Hall
Manhattan, KS 66506-5501

Phone: (785) 532-7240 Fax: (785) 532-6094

NCWSS Business Office Address and Phone: NCWSS 1508 West University Avenue Champaign, IL 61821-3133

Phone: (217) 352-4212 Fax: (217) 352-4241

### From Your 1998 President

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Kells, Vice President; Chris Boerboom, Secretary/Treasurer; Gordon Harvey, WSSA Representative; and Tom Peters, CAST Representative. They are to be thanked for their willingness to serve.

This issue of the newsletter contains the 1998 NCWSS committee assignments. Please review it carefully. If you have been assigned a task that you will not be able to complete, please contact me. All committee chairs will be receiving a letter from me outlining committee responsibilities and tasks for the year. If you would like to be added to a committee, let me know, it's never too late to add a willing volunteer to any committee.

As I mentioned earlier in this message, times are changing and the NCWSS is changing as well. Many other scientific societies also are involved in examining their missions and services. The NCWSS and the other weed science societies are among more than 25 scientific societies that have participated in the CAST Conversations on Change program. The primary goal of Conversations on Change is to look at our activities as professional societies in the face of changing times and membership. Conversations on Change held it's third meeting at Tuskegee University in Alabama in late February, I will provide a more complete report in the next newsletter.

The trend of change also continues in the Weed Science Society of America. The Presidents of the Regional Weed Science Societies met with the WSSA Board of Directors during their meeting in Chicago. The major topic of discussion was representation of the weed science profession in Washington, D.C. To make a long story short, the WSSA has decided to drop from the Congressional Science Fellow Program and increase the Washington Liaison position from one-half to full time (currently the AESOP representative). What this likely means to NCWSS is elimination of our financial contribution to the Congressional Fellow Program and an increased contribution to the Washington Liaison. The bottom line should be a lower total financial commitment to Washington-based activities. More on this situation as it develops.

Closer to home. I feel we made some positive changes in the NCWSS over the past year. These include a restructuring of our Manual of Operating Procedures, email title submission, and format changes for our annual meeting. Some of our challenges and goals in the coming year include establishing a site on the internet and increasing electronic communication, developing a new logo, establishing a new contract for business services, establishing a distinguished achievement award for technical workers, resolving the membership of the Canadian Provinces as members of our Board of Directors, and increasing membership of weed science practitioners.

In closing, I'd like to remind us that we members are the society. We can change the rules or make new ones. If you have an idea, don't hesitate to express it to any officer or director. Open and honest debate of our programs and policies can only strengthen our society.

### **Resolutions of the NCWSS**

**RESOLUTION ON:** Local Arrangement Committee for the 52nd Annual Meeting

WHEREAS the North Central Weed Science Society relies upon the effort and diligence of the Local Arrangements Committee for arranging suitable facilities for the annual meeting; and

WHEREAS a well-organized Local Arrangements Committee is crucial to the conduct of a successful annual meeting; and

WHEREAS Chairman Charles Slack and the other members of the Local Arrangements Committee have fulfilled all their responsibilities in an exemplary manner;

THEREFORE BE IT RESOLVED that the North Central Weed Science Society in session at Louisville, KY, December 8 - 11, 1997 for the 52nd Annual Meeting commends Charles Slack and the Local Arrangements Committee for their outstanding efforts in providing the Society with excellent meeting facilities and arrangements.

**RESOLUTION ON:** Graduate Student Paper and Poster Contest Judges for the 52nd Annual Meeting

WHEREAS the North Central Weed Science Society relies on the voluntary contribution of time, effort and expertise of its members selected to judge the Graduate Student Paper and Poster Contests; and

WHEREAS the judges selected for the Graduate Student Paper and Poster Contests for the 52nd Annual Meeting fulfilled their obligations and responsibilities with dedication and commitment;

THEREFORE BE IT RESOLVED that the North Central Weed Science Society in session at Louisville, KY, December 8 - 11, 1997 for the 52nd Annual Meeting commends the judges of the Graduate Student Paper and Poster Contests for their inputs of time, effort, and cooperation in providing the Society with well run, successful contests at this Annual Meeting.

**RESOLUTION ON:** Hotel Meeting Facilities for the 52nd Annual Meeting of the North Central Weed Science Society.

WHEREAS the North Central Weed Science Society requires adequate meeting facilities and lodging in order to conduct the business and program of the Society at the annual meeting; and

WHEREAS the meeting rooms and facilities of the Galt House Hotel of Louisville, KY provided an excellent, spacious meeting environment; and

WHEREAS the staff and management of the Galt House Hotel of Louisville, KY were helpful and cooperative in fulfilling the needs of the Society for a successful annual meeting;

THEREFORE BE IT RESOLVED that the North Central Weed Science Society in session at Louisville, KY, December 8 - 11, 1997 for the 52nd Annual Meeting commends the Galt House Hotel, its staff and management for their outstanding efforts in providing the Society with excellent meeting facilities and arrangements.

#### **RESOLUTION ON:** The North Central Collegiate Weed Science Contest

WHEREAS the North Central Collegiate Weed Science Contest requires adequate facilities in order to conduct the contest in an orderly and educational manner; and

WHEREAS the facilities at the Cenex/Land O'Lakes Research Farm in Webster City, IA provided an excellent contest environment; and

WHEREAS the Summer Contest Host and staff of the Cenex/Land O'Lakes Research Farm in Webster City, IA met the needs of the Society and had the dedication for a successful North Central Collegiate Weed Science Contest;

THEREFORE BE IT RESOLVED that the North Central Weed Science Society in session at Louisville, KY, December 8 - 11, 1997 for the 52nd Annual Meeting commends Paul Clayton and the staff of the Cenex/Land O'Lakes Research Farm for their outstanding efforts and hard work in providing the Society with an excellent facility and a well run, educational Weed Science Contest.

### **NCWSS Elects 1998 Officers**



The NCWSS selected new officers for 1998 at the annual meeting held in Louisville, Kentucky. Pictured (left to right) are Robert Schmidt - Executive Secretary; Chris Boerboom - Secretary-Treasurer; R. Gordon Harvey - WSSA Representative; James Kells - Vice President; Philip Orwick - President Elect; William Miller - Past President; Douglas Buhler - President; Merrill Ross - Proceedings Editor; Michael Barrett - Research Report Editor; Thomas Peters - CAST Representative; Michael Horak - Newsletter Editor; Carole Lembi - Proceedings Editor (not pictured).

# James J. Kells Elected as Vice President

James J. Kells is a native of Michigan and received his B.S. degree from Michigan State University. He received his M.S. degree from the University of Kentucky and his Ph.D. from Michigan State University.

He is currently Professor and Extension Weed Specialist in the Department of Crop and Soil Sciences, Michigan State University. His major responsibilities are in extension and applied research related to weed control in corn, small grains, and forages. He also teaches weed science to undergraduate students in the Department of Crop and Soil Sciences as well as students in the Institute of Agricultural Technology.

As an extension specialist, he has developed numerous extension references and publications. He has placed a major emphasis on weed control practices for reduced-tillage farming systems with a focus on control of perennial weeds. His research is closely integrated with his extension effort.

# **NCWSS Presents 1997 Distinguished Service Awards**

#### Service—Richard Zollinger

Richard Zollinger, a native of Utah, obtained his B.S. and M.S. degrees from Utah State University, and received his Ph.D. from Michigan State University. Dr. Zollinger was Weed Science Training and Development Specialist for Agri-Growth Research for two years and has been Extension Weed Specialist with North Dakota State University since 1990.

Over the past seven years, Dr. Zollinger has had a broad extension program averaging more than 17,000 direct contacts each year. Dr. Zollinger is the most requested Extension Specialist in North Dakota.

In addition, Dr. Zollinger has provided the weed control section for the NDSU Crop and Pest Report and the North Dakota Pesticide Quarterly. He produces the annual North Dakota Weed Control Guide and works closely with the North Dakota Department of Agriculture on development and submission of Section 18 and 24(c) label applications for herbicides.

Dr. Zollinger has developed Weed-Pro and the Herbicide Selection Guide computer software as aids to selecting herbicides in North Dakota. He established and maintains an e-mail list server for the North Central region. In addition to activities in North Dakota, Dr. Zollinger has presented educational programs in seven states and Canada as an invited speaker.

Dr. Zollinger maintains an active field research program and he has been involved in 40 cooperative research projects in 10 states in the past seven years. The research is primarily designed to answer questions of North Dakota crop producers. He has been major advisor for three graduate students and served as a committee member for eight graduate students.

Dr. Zollinger has been active in the North Central Weed Science Society. He has served on several committees, on the Board of Directors, as a judge for the

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Graduate Student Paper Contest, and as Chair of the Extension and Cereal and Oil Seed Sections.

Dr. Zollinger received the NDSU College of Agriculture Excellence in Extension Award and shared the NDSU Extension Communication, Large Team Award for the Agricultural Pesticide Recertification Program conducted through satellite communication.

#### **Education—Roger Becker**

Roger Becker is a native of Iowa and obtained his B.S., M.S. and Ph.D. degrees from Iowa State University. Dr. Becker has been an Extension Associate with Iowa State University and a Production Development Associate with Monsanto Company.

Since 1987, he has been an Extension Weed Specialist with the University of Minnesota working in water quality and in forage, pasture and noncropland weed management. Dr. Becker developed the Extension program on water quality at the University of Minnesota and has reached a diverse array of clientele. He worked with the USDA-NRCS and USDA-ARS to develop pesticide selection criteria by specific soil type to address surface and groundwater concerns. His educational materials have been used nationally to address pesticide selection for reduced environmental effects. More than 10,000 copies of the publication "Pesticides: Surface Runoff, Leaching and Exposure" were distributed to a national, diverse audience.

Dr. Becker is effective with traditional Extension clientele. He has developed educational materials on forage production that have been used locally and on nationally televised satellite video conferences. He has presented invited papers at the National Alfalfa Symposium and coauthored the weed management portion of the Alfalfa Management Guide distributed by the American Society of America. Dr. Becker is the regional expert

on control of purple loosestrife and was instrumental in importing two biological control agents into the United States. Dr. Becker has been active in National IPM Workshops, the Leafy Spurge Task Force and as an invited participant in the first Institute for Science and Society Regional Food Safety Round Table Working Group.

Dr. Becker has been very active in the NCWSS. He has served on several committees, on the Board of Directors, Chair of the Placement Committee and Chair of the Extension section.

Dr. Becker has been a participant in 18 research grants and 14 extension grants at the University of Minnesota. He has produced a total of 150 publications of various types.

Dr. Becker received a Monsanto Achievement Award for technical sales support, a Monsanto Distinguished Development Award for Product Development, the American Society of Agronomy Certificate of Excellence for the Alfalfa Management Guide and a Programming Excellence Award from the Minnesota Association of Extension Agents.

#### Young Scientist— David E. Stoltenberg

David Stoltenberg is a native of Minnesota and obtained his B.S., M.S. and Ph.D. degrees from the University of Minnesota-St. Paul. He was an Extension Water Quality Specialist at Iowa State University for two years and has been at the University of Wisconsin-Madison since 1990 with a 75% Research - 25% Teaching appointment.

Dr. Stoltenberg's research program has focused on weed resistance to herbicides, weed seed bank population dynamics, and degradation and movement of herbicides in soil. Dr. Stoltenberg's long-term research (more than 4 years) on reducing herbicide use through integrated weed management strategies suggests that proper implementation of such strategies can reduce the seed bank density of annual weeds. Dr. Stoltenberg has determined the influence of tillage, irrigation scheduling and herbicide rate on atrazine movement to groundwater in sandy soil.

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Recipients of the 1997 NCWSS Distinguished Service Awards:—Richard Zollinger, Service; Roger Becker, Education; David E. Stoltenberg, Young Scientist, Charles H. Slack, Research; Joseph G. Vollmer, Industry (not pictured).

Dr. Stoltenberg's research has resulted in 16 refereed journal articles, 2 edited symposium proceedings, 12 nonedited conference papers and numerous abstracts, research reports and Extension publications.

Dr. Stoltenberg teaches Agronomy 300 Cropping Systems, with emphasis on agroecosystems and the characterization, evaluation and improvement of cropping systems. Dr. Stoltenberg has been major advisor to two M.S. and two Ph.D. students and has served on advisory committees for 11 additional graduate students.

Dr. Stoltenberg has served on the NCWSS Board of Directors and has twice been Chair of the Herbicide Resistance Committee. He organized a symposium on management of herbicide- resistant weeds and coordinated surveys of herbicide-resistant weeds in the North Central Region.

#### Research—Charles H. Slack

Charles Slack is a native of Kentucky and obtained his B.S. and M.S. degrees from the University of Kentucky. He has been employed in the Department of Agronomy at the University of Kentucky since 1965.

Charles has developed an outstanding herbicide evaluation program. He emphasizes field weed management studies and is considered an authority on weed management systems for no-tillage crop production. His advice on positioning of new herbicide chemistry has been widely sought by the agrichemical industry.

Charles has authored or coauthored 60 papers at weed science meetings. Charles received the prestigious Chancellor's Outstanding Staff Award from the University of Kentucky for his contributions to weed management in no-tillage

crop production. He has been invited to assist in the development of no-till weed control systems in Argentina and the Dominican Republic.

Charles has been very active in the North Central Weed Science Society and the Weed Science Society of America. He has been on numerous Society committees and has been elected twice to the NCWSS Board of Directors. He was Chair of Local Arrangements for WSSA in 1991 and is the Chair of Local Arrangements for the 1997 NCWSS meeting.

#### Industry—Joseph G. Vollmer

Joseph Vollmer is a native of Illinois, obtained his B.S. and M.S. degrees from Southern Illinois University and received his Ph.D. from Virginia Polytechnic Institute and State University.

Dr. Vollmer was Associate Extension Specialist in the Agronomy Department of Ohio State University for one year and has been with American Cyanamid Company since 1990 in the Specialty Products Division.

Dr. Vollmer has led the development of imazapic (Plateau) for weed control in noncrop areas. Dr. Vollmer expanded research on imazapic to weed control for bare ground. He noticed that native warm season grasses were not controlled by imazapic. Dr. Vollmer knew that native warm season grasses were important for pasture and hay, that several species are important in wildlife management, and no herbicide was labeled to assist in establishing these native prairie grasses. Also, many native forbs and legumes are tolerant to imazapic which maintains a diversity of plant species that is beneficial to wildlife. Imazapic controls tall fescue which allows the conversion of tall fescue stands into native warm season grasses.

Dr. Vollmer involved groups not typically associated with herbicide research such as the Departments of Natural Resources of Minnesota, Iowa, Missouri and Ohio, the USDA-Natural Resource Conservation Service, the United States Fish and Wildlife Service, Buckmasters, Pheasants Forever, Quail Unlimited and the Audubon Society. Many of these groups have a negative attitude towards pesticides but the results of research with imazapic demonstrated the benefit of herbicides for wildlife management. This has brought wildlife managers, biologists and environmentalists together with Weed Scientists in a positive relationship to improve and restore wildlife habitat, CRP, native prairies and pasture/rangeland.

Other research supported and coordinated by Dr. Vollmer has established that imazapic provides leafy spurge control in rangeland and that imazapic will control weeds in wildflower plantings. Previously, mowing or hand weeding were the only weed control methods available to wildflower growers and plantings often were lost due to unmanageable weed infestations. Eventually, Dr. Vollmer developed enough unique uses for imazapic to justify a label. Presently imazapic (Plateau) is labeled for leafy spurge control, wildflower establishment, fescue renovation, native warm season grass establishment, and noncrop weed control. Plateau probably would not be labeled for any of these uses without the efforts of Dr. Vollmer.

Dr. Vollmer has been Chair of the NCWSS Forest, Rights-of-Way and Industry Interest Group. He has received the Sixth Man Award and a Market Discovery Award from American Cyanamid Company.

# A Good Deal on an Excellent Book!

The North Central Weed Science Society is selling the Illustrated Taxonomy Manual of Weed Seeds by Richard Delorit for only \$20 per copy.

This book is one of the best available for weed seed identification. It contains species in 40 plant families common throughout the Midwest United States. The illustrations are excellent color photographs of seeds magnified two to six times and are accompanied by a detailed and easy to use taxonomic key.

To order, send US \$20 per copy (includes postage) with a complete mailing address to North Central Weed Science Society, 1508 W. University Ave., Champaign, IL 61821-3133. Please indicate that you are ordering the Illustrated Taxonomy Manual of Weed Seeds.

Telephone orders using Visa or Master Card can be made by calling 217 352-4212.

# **Burnside Retires after Distinguished Career**

Dr. Orvin C. Burnside, Professor of weed science in the Department of Agronomy and Plant Genetics at the University of Minnesota, retired in January. Dr. Burnside was raised on a crop and dairy farm near Hawley, MN. He earned his B.S. degree from North Dakota State University in 1954, spent two years as an army officer in military intelligence (CIC), and subsequently earned his M.S. and Ph.D. degrees from the University of Minnesota in 1958 and 1959, respectively.

Dr. Burnside was involved with teaching and research at the University of Nebraska from 1959 until 1985. He then joined the University of Minnesota. He has had a distinguished career and is well recognized on the university, state, regional, national and international levels. Dr. Burnside and his late wife, Delores, are the parents of two children and grandparents to three. He remarried in 1991, and Clarice (three children and eight grandchildren) and he reside at 1545 McClung Dr., Arden Hills, MN 55112-1908.



# Compendium of Herbicide Adjuvants, 4th Edition Available

Compendium of Herbicide Adjuvants, 4th Edition. Lists and describes over 400 adjuvants from over 30 manufacturers/distributors. The adjuvants are organized by type, such as nonionic surfactants, petroleum oil concentrates, methylated seed oils, premixes, etc. To obtain a copy (\$3.00 each) contact:

Dr. George Kapusta
Department of Plant, Soil and General
Agriculture
Southern Illinois University
Carbondale, IL 62901-4415
Phone: 618-453-1782
Fax: 618-453-7457

e-mail: gkapusta@siu.edu

# Highlights of the 1997 NCWSS General Session and Meeting

The 52nd meeting of the North Central Weed Science Society was held in Louisville, Kentucky at the Galt House Hotel on December 8-11, 1997. The theme of the program was 'The Changing Nature of Weeds'. More than 600 weed scientists from the North Central Region and other areas of the world attended the meeting.

Dr. Scott Smith, Chair, Department of Agronomy, University of Kentucky welcomed the attendee's to Louisville. Keeping with the theme of the conference he highlighted changes that are occurring with agriculture in Kentucky. He emphasized the importance of changing agriculture technologies and the role of weed science in the future.

The keynote speaker was Dr. Jodie Holt, Professor, Botany and Plant Sciences Department, University of California at Riverside.

The main focus of her comments were how and why weeds change and what we can do about it. She pointed out that we can see shifts in weeds in relative short time periods as weeds change in response to their environment. Selection is the primary force of change and she presented evidence for changes in weed populations. She concluded by stating that in the future we should never rely on a single weed management tool, but should alter selection pressure by using a variety of weed control strategies.

In the presidential address Dr. Bill Miller, DowElanco, summarized the Society activities for its members and graciously thanked the various committees and others for their hard work and devotion to duty during the past year. He specifically noted the discussion within the NCWSS and among other related professional societies on what are we doing and how can we function better in the future. The general session concluded with a forum for members to ask questions and discuss issues with the Society officers and committee chairs.







Photos from left clockwise: Galt House Hotel; Members register at the onset of the meeting; Dr. Scott Smith, Chair Department of Agronomy, University of Kentucky welcomes the NCWSS; President Bill Miller addresses the members; Dr. Jodie Holt, Keynote Speaker, addresses the General Session; and members at the General Session.









Members at the General Session



Poster session attendees



Members interact during a break.



Members gather for Wednesday night banquet.



Tom Mueller is Master of Ceremony of the banquet



Past President, Bill Miller and Incoming President Doug Buhler, after the passing of the rocking chair.

# The 1997 NCWSS Graduate Student Paper and Poster Contests

The paper and poster contests provide important learning opportunities at every North Central Meeting. The student presentations consistently set high standards for innovation and clarity that can serve as examples for all of us as we communicate the results of our research efforts. We congratulate all of the student participants in both the paper and poster contests for their excellent presentations. We also recognize more than 40 contest judges for their time, effort and insight in making the difficult choices in ranking these presentations.

There were 56 papers in this year's NCWSS Graduate Paper contest divided into five sections of 8 to 10 papers. A first and second place award is given for each section. There were 22 participants in the Graduate Poster contest divided in three sections with first and second place awards presented in each section. The awards consisted of a certificate and a check, \$50 for second place and \$100 for first place.

# The winners of the 1997 NCWSS Graduate Paper Contest

#### Group I. Corn and Sorghum

**1st place:** Christy L. Sprague, James J. Kells, and Donald Penner, Michigan State University, East Lansing.

Weed control and corn tolerance as affected by the timing of isoxaflutole application.

**2nd place:** Brent E. Tharp and James J. Kells, Michigan State University East Lansing. Weed management strategies in glufosinate resistant and glyphosate resistant corn.

#### **Group II. Weed Ecology and Biology**

1st place: Jed B. Colquhoun, Larry K. Binning, Timothy R. Connell, David E. Stoltenberg, and

Chris M. Boerboom. University of Wisconsin, Madison.

Phenology of Chenopodium album in soybean, field corn, and snap bean.

**2nd place:** Anthony B. Cortilet, Michael D.K. Owen, and John J. Obrychi, Iowa State University, Ames.

Impact of Galerucella calmariensis larval density on purple loosestrife growth.

# Group III Soybean and Annual Legumes (two 2nd places)

**1st place:** Kelly A. Nelson and Karen A. Renner, Michigan State University, East Lansing. *Tank mixtures with imazomox and imazethapyr in soybeans.* 

**2nd place:** Jimmy D. Wait, and William G. Johnson, University of Missouri, Columbia. Weed control with reduced rates of glyphosate in no-till glyphosate-tolerant soybean.



1997 NCWSS Paper Winners—First Place Winners, front row (left to right) Chad Lee, Bryan Young, Kelly Nelson, Jed Colquhoun, Christy Sprague; Second Place Winners, back row (left to right) Brad Ramsdale, Jason R. Maschoff, Rebecca Franey, Jim Wait, Anthony Cortilet, Brent Tharp.

**2nd place:** Rebecca J. Franey, Stephen E. Hart, and F. William Simmons, University Of Illinois, Urbana.

Weed management systems with cloransulam-methyl in soybean.

# Group IV. Soil and Environmental Aspects, Herbicide Physiology, Weed Ecology and Biology.

**1st place:** Bryan G. Young and Stephen E. Hart, University of Illinois, Urbana. *Optimizing foliar activity of isoxaflutole on giant foxtail.* 

**2nd place:** Jason R. Maschhoff, Stephen E. Hart, and John L. Baldwin. University of Illinois, Urbana: AgrEvo USA. Seymour, IL.

Utilization of ammonium sulfate with glufosinate to enhance efficacy on various weed species.

# Group V. Changing Nature of Weeds, Equipment and Application Methods, Sugarbeet, Horticulture and Ornamental

**1st place:** Chad Lee, Alex Martin, and Fred W. Roeth. University of Nebraska, Lincoln. *Shattercane whole plant and enzymatic response to ALS herbicides.* 

**2nd place:** Brad K. Ramsdale and Calvin G. Messersmith. North Dakota State University, Fargo. *Drift-reducing nozzles effects on herbicide efficacy.* 

# The Winners of the 1997 NCWSS Graduate Poster Contest

#### Group I. Soybean and Corn

**1st place**: Chris Mayo and Alan Dexter. North Dakota State University, Fargo. *Methodology of herbicide plus frost on sugarbeet.* 

**2nd place:** Emilie Bergeson, Calvin Messersmith and Frank Manthey. North Dakota State

University, Fargo.

Herbicide-resistant kochia interference in corn.

#### **Group II. Weed Ecology**

**1st place:** David Fischer and Gordon Harvey. University of Wisconsin, Madison.

NC202 regional common lambsquarters/field corn competition study.

**2nd place:** Rafael Massinga, Randall Currie and Michael J. Horak. Kansas State University, Manhattan.

Palmer amaranth growth in corn and in monoculture.

#### **Group III. Herbicide Physiology**

**1st place:** Darren Unland, Kassim Al-Khatib, and Dallas Peterson. Kansas State University, Manhattan.

Interactions of diphenylether herbicides with imazamox.

**2nd place:** Michelle Obermeier, S. Aviushko and Michael Barret. University of Kentucky, Lexington. *Comparative sequences of the carbosybiotin binding site of acetyl CoA carboxylase genes isolate from ACCase inhibitor resistant and susceptible johnsongrass biotypes.* 



1997 NCWSS Poster Winners—Left to right, Rafael A. Massinga - 2nd, Michelle R. Obermeier - 2nd, David Fischer - 1st, Emile R. Bergeson - 2nd, Darren Unland - 1st, Chris Mayo - 1st (not pictured).

### 1997 NCWSS Fellows

#### Stephen D. Miller

Stephen D. Miller was born March 17, 1946 in Platteville, Colorado. He received his B.S. in Agronomy in 1968 from Colorado State University; M.S. in Weed Science in 1970; and Ph.D. in Weed Science in 1973 from North Dakota State University.

Steve's professional positions have been with North Dakota State University as Assistant Professor from 1975 to 1980; Associate Professor from 1980 to 1984; and with the University of Wyoming as Associate Professor from 1984 to 1987, and from 1987 to present date as Professor. He present position is 70% research, 20% teaching, and 10% service.

Dr. Miller has demonstrated excellence in research and teaching, and has provided exemplary service to production agriculture, two land-grant universities, and several scientific organizations, especially the NCWSS, WSWS, and WSSA. He has authored or coauthored nine book chapters, 60 refereed journal articles, and many abstracts, research reports and extension publications. His publications reflect broad interests, demonstrate commitment to interdisciplinary and regional research, and represent good balance between basic and applied research directed toward finding practical solutions to grower problems, yet contributing to a better understanding of weeds and their control. He probably is best known for his research on the biology and control of wild oats in spring wheat, weed management systems in sugarbeets and winter wheat, and on the biology and control of weeds in reduced and no-till cropping systems.

Dr. Miller is an enthusiastic and dedicated teacher, an excellent graduate student advisor, and a frequently-invited speaker at grower meetings, field tours, and industry seminars. His practical research and candid style and comment are much appreciated by the farming community, agrochemical industry, county and area extension specialists, and private crop consultants. Steve teaches a large number of undergraduate and graduate classes far exceeding expectations of a 20% teaching appointment. He has been the major professor 15 M.S. and 10 Ph.D. candidates.

In recognition of academic excellence and exemplary service, Dr. Miller was awarded the University of Wyoming's George Duke Humphrey Distinguished Faculty Award in 1993.

Dr. Miller has been an active and dedicated member of the NCWSS since 1970. He has attended all but one NCWSS annual meeting in the past 27 years, and presented 80 papers including the invited keynote address in 1984. He served as Editorial Assistant for the Research Reports from 1976-83, served on the board of directors, and chaired several sections, and served on many committees. In 1991, he successfully petitioned for inclusion of Wyoming into the NCWSS. Steve is equally active in the Western Society of Weed Science, having served in several capacities including President in 1992, and was named Outstanding Public Weed Scientist and Fellow of the WSWS in 1991 and 1995, respectively. He also has served on several committees of the WSSA and American Society of Sugarbeet Technologists, including Associate Editor of the Journal of Sugarbeet Research (1991-present) and is a frequent reviewer for "Weed Technology."

#### Micheal D. K. Owen

Micheal D.K. Owen was born May 14, 1951 in Des Moines, Iowa. He received his B.S. in Botany/Physiology in 1974; M.S. in Botany/Weed Physiology in 1975 from Iowa State University; and Ph.D. in Weed Science in 1982 from the University of Illinois.

Mike's professional positions have been with American Cyanamid from 1975 to 1977 as a Research and Development representative; with the University of Illinois from 1977 to 1982 as Extension Agronomist; with the University of Florida in 1982 as Assistant Professor; and with Iowa State University from 1982 to 1985 as Assistant Professor, 1985 to 1991 as Associate Professor, and from 1991 to present as Professor. Dr. Owen's current appointment is 100% extension.

Although he does not have a formal research appointment, Mike has a very active research program addressing a broad range of areas. Dr. Owen has statewide responsibilities for weed management recommendations, agricultural professional training in weed science, and grower education programs. His research addresses weed biology, herbicide resistance, weed stress physiology, and conservation tillage systems. Dr. Owen has been a prolific writer and received the WSSA



Recipients of the 1998 NCWSS Fellows award—Stephen D. Miller; Micheal D. K. Owen; and Fred W. Roeth.

Award for the Outstanding Paper in Weed Technology in 1995. This research has resulted in a better understanding of weed biology and physiology, thus improving overall weed management efficiency. Owen established a comprehensive research program investigating not just the herbicidal management of woolly cupgrass, a weed he identified as problematic approximately 15 years ago, but also the biological, ecological, and physiological characteristics of this weed in crop production systems. This research has served as the basis for management strategies promoted to growers and by the agrochemical industry.

Owen's extension program emphasizes weed management in corn and soybeans. He developed a number of specific in-depth programs, notably a 40 hour credit course in weed management, and initiated the Integrated Crop Management (ICM) workshops in "Herbicide Physiology and Mechanisms of Action" and "Weed Ecology and Biology." He also leads the weed science section of the Field Extension Education Laboratory conducted each summer. Owen is also a tireless participant in grower and dealer meetings. He has been a leader in distance education for Agronomy Extension efforts utilizing the Iowa Communications Network, a fiber optic system that allows two-way communication.

Dr. Owen has been active in graduate student training and has had over 38 students while at Iowa State University. He has taught graduate courses in Herbicide Physiology and Biochemistry, Weed Ecology, Biology, and Pesticides in the Environment. He also lectures in a number of undergraduate courses. He is an adjunct Professor at Escuela Agricola Panameric, El Zamorano, Honduras and lectures in the Ph.D. program in Sustainable Tropical Agriculture at the University of Costa Rica.

Dr. Owen has played a major role in the NCWSS. Mike and his students have been major contributors of presented papers and posters. He has worked tirelessly on behalf of the NCWSS serving in a multitude of roles and strongly contributing to the overall well being

of the organization. The NCWSS recognized Dr. Owen's contributions in 1995 with the Distinguished Achievement Award for Service. Mike also is active in the WSSA.

Dr. Owen's contributions are widely acknowledged. He received the National Corn Growers Association Research Recognition Award in 1990, the Raymond and Mary Baker Outstanding Agronomy Faculty Award in 1991, the Ciba-Geigy Agricultural Recognition Award in 1992, and the Iowa State University College of Agriculture Excellence in Research and Extension Award in 1993. Dr. Owen was recognized by the WSSA in 1992 as the Outstanding Extension Worker. He was recognized by the NCWSS in 1995 with the Distinguished Achievement in Weed Science Service Award, and by the WSSA as a coauthor of the Outstanding Paper in "Weed Technology."

#### Fred W. Roeth

Fred W. Roeth was born August 21, 1941 in Houston, Ohio. He received his B.S. in Agronomy from Ohio State University; M.S. in Weed Science in 1967, and Ph.D. in Weed Science in 1969 from the University of Nebraska.

Fred's professional positions have been with Purdue University from 1969 to 1975; and with the University of Nebraska since 1975 where he currently holds the rank of Professor. His current position is 50% research and 50% extension. Dr. Roeth's responsibilities are weed management in row crops and herbicide management to reduce ground and surface water contamination.

Fred has a highly productive research and extension program in integrated weed management. His research has explored the biology and control of several weedy species including musk thistle, shattercane, and velvetleaf. He has examined the soil degradation of carbamothioates and triazines, and the resultant impact on herbicide efficacy. Dr. Roeth leads a cutting-edge program in herbicide resistance recently focused on shattercane. This research has resulted in the development of management practices readily adopted by producers.

Fred's extension program is highly regarded and his counsel widely sought in Nebraska and by colleagues throughout the Midwest. He is a mainstay of weed management extension education in Nebraska and is a key player in many educational programs. Fred has authored many fine extension bulletins and articles. He has been a leader of multi-state water quality projects and is a key member of the team that developed the WeedSOFT economic threshold based decision support system. He has been a leader in development of distance education courses in "Herbicide Mode of Action" and "Weed Population Biology". Fred has been a strong contributor to team projects in his commitment to focussing on the project and following through. This commitment has been a key to the success of many team projects.

Dr. Roeth has made excellent contributions to graduate education despite being located some distance from the main university campus. He has willingly invested the extra effort and travel required to work with graduate students. Fred brings to graduate education the real world perspective of production agriculture. Students benefit greatly from this integration of basic and applied perspectives. He has an excellent publication record both in referred journals and extension publications. His publications address topics ranging from weed management strategies to weed biology and fate of herbicides in soil and water. The publications have a common theme of addressing issues that are directly useful in production agriculture.

Fred has been an active member of several academic and professional societies. His contributions to the NCWSS have been numerous and sustained. He has attended and presented papers at every NCWSS meeting since 1970 except once during a faculty development leave. Dr. Roeth has coauthored many papers and posters with students and colleagues. He has chaired and served on numerous NCWSS committees. Dr. Roeth also has been actively involved in the WSSA, serving in various capacities including Associate Editor of Weed Technology.

# **North Central Weed Science Society 1998** Committee **Appointments**

#### A. Standing Committees

#### 1. Board of Directors

Douglas D. Buhler, President (515 294-5502) Philip L. Orwick, President Elect (317 848-2818)

James J. Kells, Vice President (517 355-2173) Chris Boerboom, Secretary-Treasurer (608 262-1392)

Merrill A. Ross and Carole A. Lembi, Editors, Proceedings (317 494-4621)

Michael J. Horak, Editor, Newsletter (785 532-7240)

Michael Barrett, Editor, Research Report (606 257-5843)

R. Gordon Harvey, WSSA Representative (608 262-7975)

Thomas J. Peters, CAST Representative (314 694-2647)

Bill Miller, Past President (816 373-0012) Robert A. Schmidt, Executive Secretary

(217 352-4212)

#### **Directors**

Alberta - Linda Hall (403 427-7098) (1999)

Colorado - Jeffery Coultas (2000)

Illinois - Ron Krausz (618 566-4761) (1999)

Indiana - Troy Bauer (317 482-7059) (2000)

Iowa - James E. Retzinger (515 226-0152) (1999)

Kansas - Phillip Stahlman (913 625-3425) (1998)

Kentucky - James Martin (502 365--7541) (2000)

Manitoba - Richard Gibson (204 948-3940) (1998)

Michigan - John Jensen (616 665-4913) (1998)

Minnesota - Carlyle Holen (218 281-8691) (1999)

Missouri - Gerald Gogan (816 459-6018) (2000)

Nebraska - Ken Carlson (402 489-9131) (1998)

North Dakota - Terry Gregoire (701 662-7080) (1999)

Ohio - Jennifer Vollmer (614 998-6671) (1998)

Oklahoma - Aithel McMahon (405 223-3505) (2000)

Ontario - Michael Reidy (519 271-1847) (1999)

Saskatchewan - Open

South Dakota - David Vos (2000)

Wisconsin - Jon Baldock (608 845-7993) (1998)

Wyoming - Stephen Miller (307 766-3112) (1999)

#### **Directors at Large**

Extension - Bill Johnson Graduate Students - Brad Ramsdale Industry - Vince Ulstad Regulatory and Crop Consultants - Steve Wagner Research and Publications - Anthony Dobbels Resident Education - Curtis Thompson

#### 2. Constitution and Operating **Procedures Committee**

William Lueschen, Chair (612 625-6719) John M. Fenderson, Vice Chair (1999) Blake Brown (1999)

Gary Kilgore (1999)

Robert Schmidt, Ex Officio

Chris Boerboom, Ex Officio

#### 3. Finance, Steering, and Policy Committee

Chris Boerboom, Chair (608 262-1392)

Phillip Westra (1998)

Lovd Wax (1998)

LeRoy Cobia (1999)

Lakhdar Boukerrou (1998)

Jim Kells (2000)

Robert Schmidt, Ex Officio

#### 4. NCWSS Fellow Committee

Ken Carlson, Chair (402 489-9131)

Brent Peterson, Vice Chair

Alex Martin, Past Chair (402 472-1527)

Ted Warfield (2000)

Robert Wilson (1998)

Emile Regnier (1999)

Alan Dexter (2000)

Tom Bauman (2000)

Gary Fellows (2000)

#### 5. Legislative Information Committee

LeRoy Cobia, Chair (402 895-1928)

Philip Westra, Past Chair (970 491-5219) CO

Bill McGregor (1999) ALB

James Retzinger (1999) IA

George Czapar (1999) IL

IN Mark Fanning (1998)

KS Gary Cramer (1998)

KY Bill Witt (1999)

Richard Gibson (1998) MAN

ΜI Benard Zanstra (2000)

Don Null (1999) MO

Greg Dahl (1998) ND Duane Ebke (1999) NE

Jim Strikzke (1998) OK

Chris Hall (1999) ONT

SAS Open

Paul Johnson (1998) SD

WI Thomas Bybee (1998)

Stephen Miller (2000) WY

Ad Hoc: Congressional Science Fellows, AESOP Representative

#### 6. Local Arrangements Committee

1998 - St. Paul, MN

St. Paul Radisson

Zach Fore, Co-chair (612 451-4630)

Duane Rathmann, Co-chair (507 835-2580)

**Ieff Gunsolus** 

Dallas Rasmussen

Steve Crosbie

Bryce Nelson

Gary Halvorson

Tom Hoverstad

Dave Simpson

Dave Hanson

Jim Klauzer

George Simpkins

Shane Taylor

Don Pullins

Dave Johnson

Kip Sander

Walt Wilms

Phil Orwick, Ex Officio

#### 7. Career Placement Placement Committee

Robert Masters, Chair (402 472-1546)

Robert Hartzler, Vice Chair

Mark Peterson, Past Chair (309 944-5184)

J.D. Green (1999)

Tom Threewitt (1998)

Richard Proost (2000)

Mark Dahmer (2000)

Steve Valenti (2000)

#### 8. Membership Committee

Sharon Clay, Chair (605 688-4757)

Gary Fellows, Vice Chair

Stephen Hart, Past Chair

Adrian Moses (1998)

Lester Stafford (1998)

Bryce Nelson (2000)

#### 9. Nominating Committee

Roger Becker, Chair (612 625-8700)

Edward Stoller, Vice Chair

Paul Mayland, Past Chair (913 532-5776)

Gordon Harvey (1998)

Dan Easton (1998)

Steve Busse (2000)

David Johnson (2000)

Jerry Doll (2000)

Loyd Wax (2000)

#### 10. North Central Regional **Publications Committee**

Karen Renner, Chair (517 353-9429)

Richard Zollinger, Vice Chair

Dallas Peterson, Past Chair (913 532-5776)

Micheal Owen, Iowa State Liaison

Diane Kintner (1999)

Jeff Gunsolus (1999)

Michael Hickman (1999)

Bill Johnson (1998)

#### 11. Program Committee

Philip Orwick, President-Elect and Chair (317 848-2818)

Duane Rathmann and Zach Fore, Local Arrangements

Jim Kells, Vice President

Chris Boerboom, Secretary/Treasurer

Bill Johnson, Extension

Brad Ramsdale, Graduate Students

Vince Ulstad, Industry

Steve Wagner, Regulatory and Crop Consultants Anthony Dobbels, Research and Publications Curtis Thompson, Resident Education Doug Buhler, Ex Officio.

# 12. Publicity and Public Relations Committee

Jim Kells, Vice President, Co-Chair (517 355-2173)

Kip Sander, Local Arrangements, Co-Chair (612 469-1031)

Bill Witt, Past Chair

#### 13. Resolutions and Necrology Committee

Kevin Thorsness, Chair (701 293-0653) Gail Wicks, Vice Chair Vince Ulstad, Past Chair (701 232-5651) Bill Witt (1998) Richard Proost (2000)

#### 14. Distinguished Achievement Award Committee

Bill Miller, Chair (816 373-0012)

Doug Buhler, Vice Chair

Alan Dexter, Past Chair (701 231-8131)

Don Penner

Tom Jordan

LeRoy Cobia

Dave Mortensen

Paul Sprankle

Phil Stahlman

Jeff Gunsolus

Micheal Owen

#### **B. NCWSS Special Interest Groups**

#### 1. Extension

William Johnson, Chair (573 882-0619) Aaron Hager, Vice Chair Micheal Owen, Past Chair

#### 2. Industry

Vince Ulstad, Chair (701 232-5651) Brent Peterson, Vice Chair Larry Hageman, Past Chair

#### 3. Regulatory and Crop Consultants

Steve Wagner, Chair (517 349-5871) Jon Baldock, Vice Chair Lakhdar Boukerrou, Past Chair

#### 4. Research and Publications

Anthony Dobbels, Chair (614 292-1393) Michelle Obermeier, Vice Chair Chris Boerboom, Past Chair

#### 5. Resident Education

Curtis Thompson, Chair (316 275-9164) Randy Lloyd, First Vice Chair Reid Smeda, Second Vice Chair Mark Dahmer, Past Chair

#### 6. Graduate Students

Brad Ramsdale, Chair (701 231-8164) Kevin Adam, Vice Chair Daniel Anderson, Past Chair

#### C. Sectional Program Chairs

#### 1. General Program

Philip Orwick, Chair (317 848-2818, FAX 317 844-0500)

#### 2. Poster Session

J. Rene Scoresby, Chair (614 397-2247) Rick Bottoms, Vice Chair Joseph Matthews, Past Chair

#### 3. Corn and Sorghum

Rex Wichert, Chair (402 420-2082) Duane Rathmann, Vice Chair

#### 4. Cereals and Oilseeds

Carlyle Holen, Chair (218 281-8691) Jeremy Frie, Vice Chair

#### 5. Forage and Range

Ken Carlson, Chair (402 489-9131) Walter Fick, Vice Chair

#### 6. Industrial, Forestry, Turf, and Aquatics

Louanne Brooks, Chair (612 345-4665) Jerry Doll, Vice Chair

#### 7. Equipment and Application Methods

Robert Wolf, Chair (217 333-9418) John Fenderson, Vice Chair

#### 8. Soybeans and Annual Legumes

Troy Bauer, Chair (317 482-7059) Joseph Bruce, Vice Chair

#### 9. Herbicide Physiology

Joseph Masabni, Chair (517 353-9807) Tracy Klingaman, Vice Chair

#### 10. Weed Ecology and Biology

Jack Dekker, Chair (515 294-8229) John Lindquist, Vice Chair

#### 11. Soil and Environmental Aspects

Angela Harrison, Chair (515 382-5498) Jennifer Crawford, Vice Chair

#### 12. Alternate Communication Systems

Alan Haack, Chair (515 267-8161)

# 13. Sugarbeets, Horticulture, and Ornamentals

J. Rene Scoresby, Chair (614 397-2247) Bob Wison, Vice Chair

#### **D. Special Committees**

# 1. Collegiate Weed Science Contest Local Arrangements

Ronnie Jones, Chair (217 687-7100) Paul Clayton, Past Chair (515 543-4852)

#### 2. Computer Committee

Brent Pringnitz, Chair (515 294-9487) Wayne Olson, Past Chair Jack Dekker Michael DeFelice Frank Forcella Michael Horak

# 3. Long Range Planning and Organizational Affairs

Bill Miller, Chair (816 373-0012) Doug Buhler Dallas Peterson Mark Dahmer Nelson Balke

#### 4. Herbicide Resistance Committee

Jamie Retzinger, Chair (515 226-0152) Mark Peterson, Vice Chair-Industry Richard Zollinger, Vice Chair-Academic Monte Anderson Steve Valenti Gary Aagesen Nelson Balke James Bloomberg Reid Smeda

#### 5. Future Site Selection

Don McCall

Charles Slack, Co-Chair (606 257-3168) Bill Miller, Co-Chair (816 373-0012) Loyd Wax, Past Chair (217 333-9653) James Bloomberg Edward Stoller Tom Peters Jerry Doll

### Call for Nominations NCWSS Fellows

Selection as a Fellow is the highest honor the society bestows on its members and is limited to 0.5% of the membership annually.

The Fellow Committee is responsible for identifying those individuals most deserving of this recognition. To assist with this task, members of the Society are encouraged to submit nominations for NCWSS Fellows or to suggest possible nominees for this award to the Chairman of the Fellow Committee, Ken Carlson.

The deadline for submitting nominations and supporting letters for this year is September 25, 1998. Directions for submission of nominations can be found in Proceedings of the NCWSS. Eight copies of the nomination should be submitted to: Ken Carlson, American Cyanamid, 8040 Cooper Ave., Lincoln, NE 68506. Phone (402)-489-9131.

### **Summer Contest**

# Register or Volunteer Now!

Valent USA will host the 1998 North Central Collegiate Weed Science Contest. The contest will be held near Champaign, Illinois at the Mid-West Agricultural Research Center (MWARC) on JULY 23, 1998. If you have not received the registration materials or if you wish to volunteer to help, please contact:

Ronnie Jones Valent USA-MWARC, 1035 Co. Rd. 300 E., Seymour, IL 61875 or email: rjone@valent.com or fax your request to:s (217) 687-7104.

# Call for Nominations NCWSS Distinguished Achievement Awards

Distinguished Achievement, Research Award
Distinguished Achievement, Education Award
Distinguished Achievement, Service Award
Distinguished Achievement, Young Scientist Award
Distinguished Achievement, Industry Award

The above awards are available for presentation by the North Central Weed Science Society (NCWSS) to recognize persons who have made outstanding contributions to Weed Science in the North Central Region. Up to five awards can be given among these categories per year - awards will be given according to merit. We strongly encourage nominations from Industry.

#### **Eligibility of Nominees**

Nominees must be NCWSS members for at least five years at the time of nomination. A member may be eligible in more than one category, but can receive only one award within a three-year period. Candidates for the young scientist award must not have attained 40 years of age prior to September 7 of the year the award is given. Members of the NCWSS Executive Board and DAAC are ineligible to be nominated. In the situation where it is desired to nominate a DAAC member, the member may resign from the committee to be eligible for nomination.

#### **Eligibility of Nominators**

Nominations will be received from active members of NCWSS. Members of the Distinguished Achievement Awards Committee (DAAC) are ineligible to make nominations but are exhorted to actively encourage other Society members to submit nominations.

To assure that a nominee can be adequately evaluated for an award, the nomination document must be accurately prepared in the proper format. Nomination forms and instructions are available from the committee chairperson, Bill Miller, Dow AgroSciences, 624 N.E. Persimmon Ln., Lee's Summit, MO 64064. Phone (816) 373-0012, Fax (816) 373-0051 E-Mail wmiller@dowagro.com. When requesting, please include your address, phone number and FAX number if available. Instructions also can be found in NCWSS Proceedings.

Submission Deadline: All materials must be received by the Chairperson by September 7, 1998.