

Grain Quality Newsletter

News and Highlights from NC-213: Management of Grain Quality and Security in World Markets.

Volume 24:1

Visit the NC-213 web site at: <http://www.oardc.ohio-state.edu/nc213>



Calendar items of interest ...

Upcoming Events and Issues

- The International Quality Grains Conference: A Global Symposium on Quality-Assured Grains and Oilseeds for the 21st Century will be held July 19-22, 2004, at the University Place Conference Center and Hotel in Indianapolis, Indiana. For more information, turn to the program on page 2.
- The upcoming NC-213 Annual Meeting for 2005 will be held in Kansas City, Missouri, at the Embassy Suites KCI on February 23 and 24. We will be meeting in conjunction with the Wheat Quality Council and will be enjoying a joint banquet on February 23.

The Grain Quality Newsletter is published and distributed at no charge to NC-213 (formerly NC-151) participants and supporters of research on "Management of Grain Quality and Security in World Markets."

Send your contributions, comments, suggestions, and subscription requests to:

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2004 Annual Meeting NC-213 Annual Meeting/Winter Technical Session Held in Minneapolis

The NC-213 Annual Meeting/Winter Technical Session was held February 24-25, 2004, at the Hilton Minneapolis and Towers. The Annual Meeting started off with NC-213 Chair, Dirk Maier, Purdue University, leading the Business Meeting. The Technical Session included presentations given by recipients of The Andersons Research Grant Program 2000 and 2001 and by recipients of The Andersons Research Grant Program Team Competition 2002. Other presentations covered the four research objectives. The Executive Committee for the coming year is as follows:

Chair – Marvin Paulsen, University of Illinois-Urbana

Vice Chair – David Jackson, University of Nebraska-Lincoln

Secretary – Michael Montross, University of Kentucky

Past Chair – Dirk Maier, Purdue University

Approximately 35 NC-213 participants and individuals from industry attended the Annual Meeting.

This year, NC-213 members had the opportunity to attend all or part of the 75th Annual International Technical Conference & Exposition of the Grain Elevator and Processing Society (GEAPS), which was held at the Minneapolis Convention Center and Hilton Minneapolis February 21-24. In addition, NC-213 participants attended GEAPS' President's Banquet and enjoyed Club GEAPS afterwards.

The highlight, for NC-213 members, was the presentation of The Andersons Research Award. This year's recipient was Florence V. Dunkel, Entomology Research, Montana State University-Bozeman. In reviewing potential recipients for this prestigious award, the committee took into consideration Florence's contributions to research:

- Numerous multidisciplinary collaborative research efforts to improve and ensure stored grain quality with colleagues within the framework of NC-213 and NC-151 and beyond the scope of these projects.
- Conducted extensive research in the area of integrated pest management of post-harvest stored grains and oilseeds to prevent losses due to insect and fungal damage and mycotoxin contamination.
- Received more than \$1.2 million in grants to support research and educational activities on stored grain quality and safety.
- Advised and mentored numerous undergraduate and graduate students, post-doctoral scientists, and visiting scientists in the area of integrated pest management and control of insects in stored grains and oilseeds.
- Taught numerous courses dealing with insect biology, ecology and integrated pest management and control of insect damage in stored grains.
- Long and committed involvement and service to NC-213 and the previous NC-151 Regional/Multistate Research projects.

All of these form a career of more than 30 years that has been dedicated to improving the quality and safety of stored grains and oilseeds which has ultimately been of benefit to the grain industry and consumers of grain based foods.

NC-213 Participating Station Receives Grant from NRI Global Tracing and Recall System for U.S. Grains: Proof-of-Concept

Kansas State University received a \$500,000 competitive grant from the National Research Initiative integrated program for biosecurity. The proposed proof-of-concept research is directed toward developing a global tracing and recall system for U.S. grains.

The proposed technology does not prevent contamination of grain during production and handling. However, when a bio-terror or other major threat to food safety occurs, grain trace back from any point in the marketing chain to the individual field(s) is an essential step in identifying the source of contamination. Trace back capability enables companies and government agencies to implement risk management strategies including product recall.

The research and technology development contained in the proposal will augment all future bio-security research involving cereals and oilseeds and comprises a necessary step in furthering food homeland security. Developing a grain tracing system concomitantly addresses some of the emerging traceability regulations, such as the European Union's regulation EC No 178/2002.

The multidisciplinary team involves faculty in Agriculture Economics, Biological and Agricultural Engineering, and Grain Science and Industry, and individuals from the USDA Farm Service Agency and several private firms.

GMPRC Progress Report for 2003 Issued

The Progress Report for 2003 from the Grain Marketing and Production Research Center (GMPRC) in Manhattan, Kansas, is available.

The annual report is designed to provide specific information about each of the research projects at GMPRC. In the annual report, you will find all of the results from major research projects and collaborative work with other groups such as universities, other federal agencies, or private companies.

For each project described, a statement is provided of the problem that is being solved, the goals and objectives for the particular research activity, the results, and future goals for the research activity for the next three years.

The report also contains a list of publications, along with a contact person if additional information is desired. For more information on the annual report, or to request a copy, please contact Dr. Donald E. Koeltzow, Director, USDA-ARS-GMPRC.

U.S. EPA's 2004 Stratospheric Ozone Protection Awards

EPA Protection Award Goes to NC-213 Participant

Dr. Bhadriraju Subramanyam of Kansas State University and an NC-213 participant will receive a 2004 Stratospheric Ozone Protection Award for his individual efforts to protect the environment. The award will be presented in April at the 2004 Earth Technologies Forum in Washington, D.C.

Dr. Subramanyam has been an enthusiastic leader in demonstrating alternatives to methyl bromide for the food processing industry through his scientific research, presentations on alternatives, and organization of workshops, conferences, and symposia.

Since 1999, Dr. Subramanyam has organized four heat treatment workshops at the flour mill and feed mill used for teaching at Kansas State. More than 250 professionals from Austria, Australia, Canada, Germany, Japan, New Zealand, Portugal, Peru, Sweden, and the United States have attended these workshops. In addition to presentations on several methyl bromide alternatives, these workshops provided the companies that produce heating equipment an opportunity to demonstrate their equipment and gave food processing industry professionals and other users hands-on experience with heat treatment.

Dr. Subramanyam's work has provided better information on managing stored-product insects with heat. He leads a research team that has produced models to calculate the amount of heat required to control pest species and conducted basic and applied research on managing stored-product insect pests with sulfuryl fluoride, ultrasound, diatomaceous earth, and spinosad.

More news on this important award... U.S. EPA's 2004 Stratospheric Ozone Protection Awards

With its annual Stratospheric Ozone Protection Awards, the United States Environmental Protection Agency (U.S. EPA) honors the extraordinary accomplishments of individuals, companies, and organizations that have made significant contributions to protecting the environment. Winners of the 2004 *Stratospheric Ozone Protection Awards* will be recognized in conjunction with the 2004 Earth Technologies Forum in Washington, D.C., April 13-15, 2004. Awards will be presented at a special EPA Awards Ceremony and Dinner on Tuesday evening April 13. The EPA Climate Protection Awards will also be presented at this dinner.

What Are the Stratospheric Ozone Protection Awards?

In 1990, EPA established the *Stratospheric Ozone Protection Awards* to recognize exceptional leadership, personal dedication, and technical achievements in protecting the Earth's stratospheric ozone layer.

From 1990 to 2003, the Stratospheric Ozone Protection Award has been presented to 460 individuals and organizations from 39 countries — Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, China, Costa Rica, Dominican Republic, Egypt, France, Germany, Hungary, India, Indonesia, Ireland, Japan, Kenya, Malaysia, Malta, Mexico, Netherlands, Norway, Philippines, Poland, Russia, Singapore, Spain, Sweden, Switzerland, Taiwan, Thailand, Uganda, United Kingdom, United States, Uruguay, Venezuela, and Vietnam.

Who Are This Year's Award Winners?

Companies/Government

- Environment Canada and Health Canada
- General Electric Company
- JACO Environmental, Inc.
- NASA Shuttle Environmental Assurance Initiative
- NASA White Sands Test Facility
- North Carolina Foam Industries
- Southern California Edison Company and the Appliance Recycling Centers of America, Inc.

Organizations/Teams

- Netherlands-U.S. Military & Environmental Halon Leadership Team
- Refrigerants Recycling Promotion and Technology Center

Individuals

- Marten Barel BV, Consultant
- Ma Mingqing, IRICO Colour Picture Tube Company
- Marta Pizano, Hortitechnia Ltda.
- Joseph A. Senecal, Ph.D., PE, Kidde-Fenwal, Inc.
- Dr. Aman Deep Singh, Customs, Government of India
- Dean Stanbrige, Steritech Group
- **Dr. Bhadriraju Subramanyam, Kansas State University**
- Alan Woodhouse, National Refrigeration and Air Conditioning Council

2004 International Quality Grains Conference Program

A Global Symposium on Quality-Assured Grains and Oilseeds for the 21st Century

The most recent program agenda for the 2004 International Quality Grains Conference is featured in this issue of the Grain Quality Newsletter. Please share this information with your colleagues. The November issue featured conference objectives, purpose, background, and timeline.

The conference will be held July 19-22, 2004, at the University Place Conference Center and Hotel in Indianapolis, Ind. For more information, visit: www.GrainQuality.org.

Monday, July 19, 2004 — Day 1

Management Approaches to Meet Customer Needs

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| 1 p.m. | Welcome by Indiana's Governor and Purdue University's Ag School Dean
Keynote Address by USDA Undersecretary of Agriculture |
| 2-5 p.m. | Keynote presentations on Management Approaches to Meet Customer Needs |
| 6:30 p.m. | Banquet and Keynote Speaker on Traceability and Labeling of Grain-Based Foods |

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| Noon | Lunch on your own |
| 1-3 p.m. | Keynote presentations on Meeting Customer Needs Through Grades and Standards |
| 3 p.m. | Break and Viewing of Posters |
| 3:30 p.m. | Panel discussion with grain handling and processing industry experts on Management Approaches to Meet Customer Needs |
| 5 p.m. | Feedback Reporting and Summary Session |
| 5:30 p.m. | Dinner on your own |
| 8:15 – 9:30 p.m. | Optional Hot Topic Discussion Forum |

Tuesday, July 20, 2004 — Day 2

Measurement Technologies to Quantify Agronomic, Quality, and End-Use Traits

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| 8-10 a.m. | Keynote presentations on Measurement Technologies to Quantify Agronomic, Quality, and End-Use Traits |
| 10 a.m. | Break and Viewing of Posters |
| 11 a.m. | Concurrent Sessions |

Wednesday, July 21, 2004 — Day 3

Best management practices to assure the identity/ purity and integrity/ quality of grains and oilseeds during the production, harvest, handling, and post-harvest operations.

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| 8 a.m. | Keynote presentations on Best Management Practices to Assure Identity/Purity and Integrity/ Quality of Grains and Oilseeds |
| 10 a.m. | Break and Viewing of Posters |

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| 11 a.m. | Concurrent Sessions on Best Management Practices and Measurement Technologies |
| Noon | Lunch on your own |
| 1 p.m. | Concurrent Sessions |
| 2:30 p.m. | Break and Viewing of Posters |
| 3:00 | Panel Discussion with grain handling and processing industry experts on Best Management Practices to Assure Identity/Purity and Integrity/ Quality of Grains and Oilseeds |
| 4:45 p.m. | Feedback Reporting and Summary Session |
| 5:30 p.m. | Dinner on your own |
| 8:15 – 9:30 p.m. | Optional Hot Topic Discussion Forum |

Thursday, July 22, 2004

Best Management Practices, Measurement Technologies, and Management Approaches

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| 8 a.m. | Concurrent Sessions |
| 9:30 a.m. | Break and Viewing of Posters |
| 11 a.m. | Conference Feedback Reporting, Summary, and Action Steps |
| Noon | Conference ends |

- Thursday Afternoon and Friday Morning, July 22-23, 2004
Optional overnight Indiana/Illinois Post-Harvest Tour of farm and commercial facilities specializing in food corn production, handling, and processing.

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