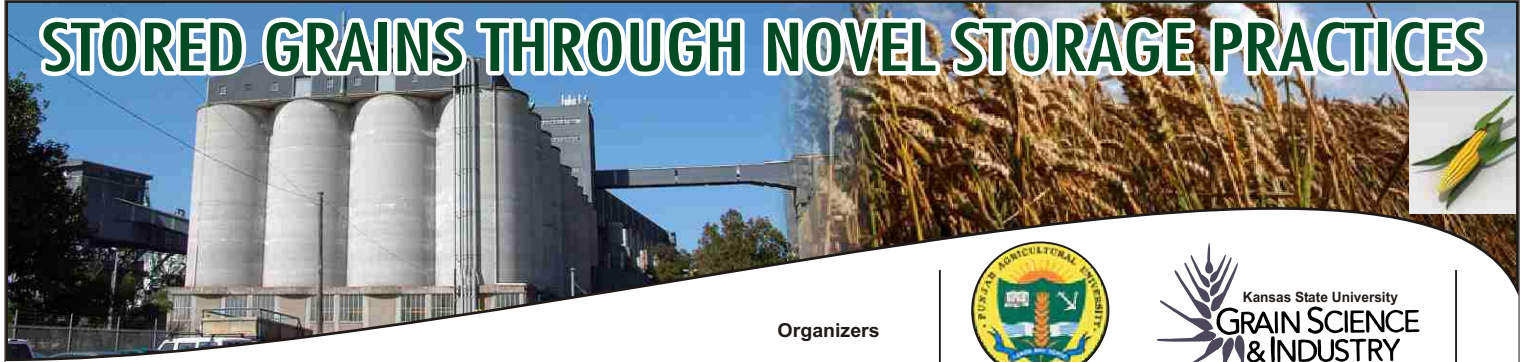


# ACCOMPLISHING FOOD SECURITY OF STORED GRAINS THROUGH NOVEL STORAGE PRACTICES



Organizers



**May 27, 2010, Punjab Agriculture University, Ludhiana, Punjab, India**

**A**bout : Food security in its simplest form means accessibility to quality food to everyone in the world. India has achieved food security through the first green revolution and is on its path to a second green revolution brought on by new government schemes and new markets created by public-private partnerships. Recently, government of India has allocated resources to improve the infrastructure for storage of our grains. India is a world leader in the production of food grains and protection of grain in storage in bags or bulk is important to assure food security. Losses of stored grain worldwide are in the range of 5-10% with insects and molds, and can exceed to more than 50% if we include losses due to rodents and birds. Maintaining quality and integrity of food grains in storage is essential. Despite advances in science, protection losses do occur to this day. This workshop provides a comprehensive view of storage situation in India and focuses on technologies for management of losses in storage. This workshop features grain storage experts from India and the United States and shares knowledge that can empower anyone interested in preventing losses of stored commodities.

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## AGENDA

**08:30 - 09:00 Registration**

**09:00 - 09:30 Welcome** - Dr Manjit Singh Kang, Vice Chancellor, Punjab Agricultural University (*Requested*)

**Introduction** - Dr. Dirk Maier, Department Head & Director, International Grains Program, Kansas State University

**09:30 - 11:00 Keynote presentations**

- Food security and storage issues in India  
Mr. Siraj Hussain, Chairman and Managing Director, Food Corporation of India (*Requested*)
- Handling of wheat and what we are to do for price discovery  
Dr. S. Nagarajan, Chairperson, Protection of Plant Varieties and Farmer's Rights Authority, Department of Agriculture and Co-operation, Ministry of Agriculture, Government of India
- Grain protection techniques in India  
Mr. B.B. Pattanaik, Managing Director, Central Warehousing Corporation (*Requested*)

**11:00 - 11:30 Networking Tea Break**

- Storage issues in India  
Mr. Puneet Mahdiratta, Dy. General Manager, Adani Agri Logistics Limited, Grain handling and storage facilities
- Maintaining and monitoring quality of stored grain  
Dr. Dirk Maier

**13:00 - 14:00 Lunch**

- Stored-grain insects: A major threat to food security  
Dr. Bh. Subramanyam, Professor, Grain Science Department, Kansas State University
- Chemical and nonchemical methods for management of stored-grain insects  
Dr. Dirk Maier and Dr. Bh. Subramanyam

**15:30 - 16:00 Networking Tea Break**

**16:00 - 17:00 Open House Discussion**



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## KEY SPEAKERS

**Dirk E. Maier** is Professor and Head of the Department of Grain Science and Industry at Kansas State University where he is responsible for leading the department's teaching, research and outreach programs. He also serves as the Director of the department's International Grains Program (<http://grains.ksu.edu/igp/DesktopDefault.aspx>).

Dr. Maier is a registered professional engineer, and a member and officer of several academic, professional and scholarly societies. He has served on two EPA FIFRA Scientific Advisory Panels related to the assessment of genetically modified grains. He has traveled extensively throughout the world as a speaker and participant in many national and international industry meetings and scientific conferences. Dr. Maier's research and extension education programs focus on post-harvest engineering, stored product protection, structural fumigation, value-added processing, and quality assurance of agricultural crops and biological products. Previous to joining Kansas State University, he was Professor, Associate Head and Extension Agricultural Engineer at Purdue University (1991-2008), where he now is an Adjunct Professor. He was the co-founder of the Purdue Grain Quality Team, key initiator and director of the Purdue Post-Harvest Education and Research Center, and director of the Purdue Grain Quality Laboratory.

**Dr. Bhadriraju Subramanyam (Subi)** is currently a Professor in the Department of Grain Science and Industry at Kansas State University, Manhattan, Kansas, USA. He received a BS degree in Agriculture from the Andhra Pradesh Agricultural University, Rajendranagar, India, in 1981. He received his MS and PhD degrees in stored-product entomology in 1984 and 1988, respectively, from the University of Minnesota, St. Paul, Minnesota, USA. Between 1988 and 1989 he worked in the Department of Entomology at Kansas State University as a postdoctoral Research Associate. In August of 1989 he joined the Department of Entomology, University of Minnesota, as an Assistant Professor and Extension Educator. In 1996 he was promoted to an Associate Professor/Extension Educator. In May 1999 he moved to the Department of Grain Science and Industry, Kansas State University and became a full Professor in 2003. Dr. Subramanyam has a wealth of experience in the management of insect pests associated with stored raw grain, food/feed processing facilities, warehouses, and retail environments. His research interests are diverse and include the following: management of stored-product insects using alternatives to traditionally used pesticides, sampling and trapping stored-product insects, evaluation of pesticide resistance in insects and mechanisms conferring insecticide resistance, modeling environmental effects on insects, and development of pest management programs for the grain and food industry. For the last 10 years he has been working on alternatives to methyl bromide. In 2004 he received the US Environmental Protection Agency's Stratospheric Ozone Protection Award for his research and educational programs on the use of elevated temperatures for management of insects in food-processing facilities. He teaches a course on Food and Feed Product Protection and was nominated by the students to receive the 2002 College of Agriculture's Outstanding Faculty Award. He also has vast consulting experiences with several companies in the United States and outside the United States on issues related to sanitation, GMPs/HACCP, and insect and pesticide contamination in food and feed products. He has published over 180 research papers and extension/popular articles on stored-product insects and has delivered over 200 presentations within and outside the United States. He co-edited two books on stored product pest management (Integrated management of insects in stored products, 1996 and Alternatives to pesticides in stored-product IPM, 2000) and co-wrote a text book on "Fundamentals of stored-product entomology" (2006), and a fourth text book titled, "Stored- Product Insect Resource" was published in early 2009.

## REGISTRATION DETAILS

- Early Bird Registration : Rs. 3370/- (Before April 30, 2010)
- Registration after April 30, 2010 : Rs. 3,935/-
- Registration for International Participant : US\$ 150

10% discount on registration fee applicable for minimum 2 to 4 participants in the same organization

Registration fee should be sent through demand draft in favor of "ASSOCOM-INDIA PVT. LTD." payable at New Delhi, India.

**Tuition must be paid before start of seminar**

(Fee is inclusive of Service Tax 12.36%)

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## REGISTRATION FORM

**Yes, I would like to enroll in the following: Accomplishing Food Security of Stored Grains Through Novel Storage Practices on May 27, 2010, at Ludhiana, Punjab**

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