

# Revised Program for 17 March Morning



## Borlaug Global Rust Initiative

Cd. Obregón, Sonora, Mexico, March 17-20, 2009

7:30 AM Registration open at the Fiesta Inn

### Welcome and Opening Ceremony

**Chairperson:** **Ronnie Coffman, Vice Chair, Borlaug Global Rust Initiative**

8:15 – 8:30 AM **Welcome addresses**

Thomas A. Lumpkin, Director General of the International Maize and Wheat Improvement Center

Ing Eduardo Bours Castelo, Gobernador Constitucional del estado de Sonora  
Dr. Pedro Brajcich Gallegos, director del Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias

8:30 – 8:45 AM **Special Presentation**

Theodore Crosbie, Monsanto

8:45 - 9:30 AM **Plenary Talk: History and Status of the Wheat Rusts**

Robert A. McIntosh, Honorary Associate, University of Sydney

### Session 1:

**Chairperson:** **Mangala Rai, Indian Council for Agricultural Research (ICAR)**

9:30 – 9:55 AM **Using race survey outputs to protect wheat from rust**

Robert Park, Thomas Fetch, Yue Jin, Mohinder Prashar, Zak Pretorius

9:55 – 10:20 AM **Using trap plot outputs to protect wheat from rust**

Kumarse Nazari\*, Amor Yahyaoui, Ravi Singh, Tom Fetch, Dave Hodson, Robert Park

10:20 - 10:50 AM **Break**

### Special Session

**Chairperson:** **Ronnie Coffman, Vice Chair, Borlaug Global Rust Initiative**

10:50 – 11:20 AM **Keynote address**

Norman E. Borlaug, Chair, Borlaug Global Rust Initiative

11:20 – 11:50 AM **Special Address**

Ing. Alberto Cárdenas Jiménez, Secretaría de Agricultura, Ganadería, Desarrollo Rural, Pesca y Alimentación (SAGARPA)

### Session 1 (cont.):

**Chairperson:** **Mangala Rai, Indian Council for Agricultural Research (ICAR)**

11:50 AM – 12:15 PM **The Global Cereal Rust Monitoring System**

Dave Hodson\*, Keith Cressman, Kumarse Nazari, Robert F. Park, and Amor Yahyaoui

12:15 – 12:40 PM **Sequencing Ug99 and other stem rust races: progress and results**

Les Szabo\* and Christina Cuomo

12:40 – 1:05 PM **Advances in host-pathogen molecular interactions: rust effectors as targets for recognition**

Peter Dodds\*, Greg Lawrence, Rohit Mago, Michael Ayliffe, Narayana Upadhyaya, Les Szabo, Robert Park and Jeff Ellis

1:05 – 2:00 PM **Lunch**

\* Speaker

**Session 1 (continued):**  
**Chairperson:**  
 2:00 – 2:30 PM  
 2:30 – 3:00 PM  
 3:00 – 3:30 PM  
 3:30 – 4:00 PM

**Rust Race Analysis, Surveillance, and Epidemiology**  
**E. A. Mukisira, Kenya Agricultural Research Institute (KARI)**  
**Global stem rust surveillance in practice**  
 Zak Pretorius\* and Kumarse Nazari  
**Race nomenclature systems: can we all speak the same language?**  
 Tom Fetch, Yue Jin, Robert Park, and Zak Pretorius  
**Are rust pathogens under control in the Southern Cone of South America?**  
 Marcia Chaves, Pablo Campos, Lidia Viedma, Ricardo Madariaga, and Silvia German\*  
**Break**

**Session 1 (continued):**  
**Chairperson:**  
 4:00 – 4:25 PM  
 4:25 – 4:50 PM  
 4:50 – 5:10 PM

**Rust Race Analysis, Surveillance, and Epidemiology**  
**Solomon Assefa, Ethiopian Institute of Agricultural Research (EIAR)**  
**Recent experiences with global surveillance of wheat stripe rust**  
 Mogens S. Hovmøller\*, Amor H. Yahyaoui and Annemarie F. Justesen  
**Development and use of isolines in rust monitoring**  
 Colin R. Wellings\*, Ravi Singh, Amor Yahyaoui, Kumarse Nazari and R.A McIntosh  
**Discussion**

## Wednesday, March 18

**Session 2:**  
**Chairperson:**  
 8:30 – 8:55 AM  
 8:55 – 9:20 AM  
 9:20 – 9:45 AM  
 9:45 – 10:10 AM  
 10:10 – 10:30 AM  
 10:30 – 11:00 AM

**New Sources of Rust Resistance for Wheat**  
**Thomas Lumpkin, CIMMYT**  
**Progress and prospects in discovery and use of novel sources of rust resistance**  
 Yue Jin\*, Matthew Rouse, Pablo Olivera, and Brian Steffenson  
**Cytogenetic manipulation to enhance the utility of alien resistance genes**  
 Michael Pumphrey\*, Ian Dundas, S.S. Xu, Yue Jin, Justin Faris, X. Cai, W.X. Liu, L.L. Qi, B. Friebe, and Bikram S. Gill  
**Cloned rust resistance genes and gene based molecular markers in wheat: Current status and future prospects**  
 Evans Lagudah  
**Molecular-genetic dissection of rice nonhost resistance to wheat stem rust**  
 Michael Ayliffe, Yue Jin, Brian Steffenson, Zhensheng Kang, Shiping Wang, Hei Leung\*  
**Discussion**  
**Break**

**Session 3:**  
**Chairperson:**  
 11:00 – 11:30 AM  
 11:30 AM – 12:00 PM  
 12:00 – 12:30 PM  
 12:30 – 1:00 PM  
 1:00 – 2:00 PM

**Breeding Rust Resistant Wheat**  
**Mahmoud Solh, ICARDA**  
**Screening for stem rust resistance in East Africa**  
 Davinder Singh\*, Bedada Girma, Peter Njau, Ruth Wanyera, Ayele Badebo, Sridhar Bhavani, Ravi P. Singh, Julio Huerta-Espino, Getaneh Woldeab and Richard Ward  
**Status and application of molecular markers for selection of stem rust resistance genes**  
 Long-Xi Yu, Zewdie Abate, James A. Anderson, U.K. Bansal, H.S. Bariana, Sridhar Bhavani, Jorge Dubcovsky, P.K. Sambasivam, Evans S. Lagudah, Sixin Liu, Ravi P. Singh and Mark E. Sorrells\*  
**Breeding for minor gene-based resistance to stem rust of wheat**  
 Ravi P. Singh\*, Julio Huerta-Espino, Sridhar Bhavani, Davinder Singh, P.K. Singh, Sybil A. Herrera-Foessel, Peter Njau, Ruth Wanyera and Yue Jin  
**Strategies for using major genes: combinations, mixtures, multi-lines etc.**  
 David Marshall\*, Francis C. Ogonnaya, Christina Cowger, Osman Abdalla, and Peter Balint-Kurti  
**Lunch**

#### **Session 4:**

##### **Chairperson:**

8:50– 9:20 AM

9:20 – 9:40 AM

9:40-10:00 AM

10:00–10:20 AM

10:20 – 10:30 AM

10:30 – 11:00 AM

#### **Session 5:**

##### **Chairperson:**

11:00 – 11:30 AM

11:30 – 12:00 PM

12:00 – 12:10 PM

12:10 – 1:00 PM

1:00 – 2:00 PM

#### **Session 6:**

##### **Chairperson:**

2:00 – 2:20 PM

2:20 – 2:40 PM

2:40 – 3:05 PM

3:05 – 3:30 PM

3:30 – 4:00 PM

4:00 – 4:30 PM

#### **Closing Remarks**

##### **Chairperson:**

4:30 – 5:00 PM

#### **Variety Release and Seed Delivery**

##### **Xiomara Sinisterra-Hunter, USAID**

**Principles for rapid variety release, seed multiplication, and distribution in developing countries**

Thomas Osborn\* and Zewdie Bishaw

**Ethiopia's experience with rapid seed multiplication and cultivar replacement**

Bedada Girma\*, Balcha Yai, Sintayehu Debebe, Tezera Walabu, Lijalem Korbu and Sherif Aliye

**Experience with rapid seed multiplication and cultivar replacement in the Eastern Indo-Gangetic plains**

Arun Joshi,\* R. Chand, B. Arun, V.K. Mishra, G. Ortiz Ferrara, Hans J. Braun, and Ravi P. Singh

**Mexico's experience with rapid seed multiplication and cultivar replacement**

Antonio Gandara

**Discussion**

**Break**

#### **Chemical and Other Strategies to Control Rust**

##### **Julio Huerta-Espino, INIFAP**

**Field efficacy of fungicides used against stem rust in Kenya**

Ruth Wanyera\*, J.K. Macharia and S. M. Kilonzo

**Responding to the Transboundary Threat of Wheat Black Stem Rust (Ug99)**

Pierre Lagoda

**Discussion**

**Free**

**Lunch**

#### **International Cooperation**

##### **Katherine Kahn, Bill & Melinda Gates Foundation**

**The UN-FAO Wheat Rust Disease Global Programme**

Wafa Khoury

**Global Reference Center - Wheat Yellow Rust**

Mogens S. Hovmøller\*, Amor H. Yahyaoui and Ravi Singh

**The Borlaug Global Rust Initiative as a platform for coordination and global advocacy**

Rick Ward

**Contributions of socio-economics to assuring impact of global rust research investments**

Kamel Shideed

**Break**

**Update on the role of the International Centers in enhancing international cooperation in wheat improvement**

Hans J. Braun and Richard Brettell

##### **Ronnie Coffman, Cornell University**

**Closing ceremony**

\* Speaker

**Session 3: (continued)**

**Chairperson:**

2:00 – 2:30 PM

2:30 – 3:00 PM

3:00 – 3:15 PM

3:15 – 3:30 PM

3:30 – 4:00 PM

**Session 3: (continued)**

**Chairperson:**

4:00 – 4:15 PM

4:15 – 4:30 PM

4:30 – 4:45 PM

4:45 – 5:00 PM

**Poster Session**

5:15 – 6:15 PM

6:15 – 7:15 PM

**Breeding Rust Resistant Wheat**

**Shivaji Pandey, UN-FAO**

**Overview of Durum Wheat Research in Ethiopia: Challenges and Prospects**

Ayele Badebo\* and Solomon Gelalcha

**Strategies to combat Ug99 and control other wheat rusts in India**

Mohinder Prashar\*, Ravish Chatrath, S.C. Bhardwaj, S. K. Jain, Y.P. Sharma, and Jag Shoran

**Country report of strategies and progress towards development/release of rust resistant varieties – China**

Zhonghu He\* and Xianchun Xia

**Country report of strategies and progress towards development/release of rust resistant varieties –Iran**

Mohsen Esmaeilzadeh Moghaddam

**Break**

**Breeding Rust Resistant Wheat**

**Ronnie Coffman, Cornell University**

**Country report of strategies and progress towards development/release of rust resistant varieties – Pakistan**

Makhdoom Hussain\* and Muhammad Yaqub Mujahid

**Country report of strategies and progress towards development/release of rust resistant varieties – Egypt**

Moustafa Moustafa\*, M.A. Abu-Shreif, M.M. Abd-Aleem , H.S. El-Borhamy, M.A. El-Maghraby , A.A. Ageez , and S.O. Shereif

**Country report of strategies and progress towards development/release of rust resistant varieties – Kenya**

Peter Njau\*, Ruth Wanyera, Macharia Gethi, G. Kamau, Ravi P. Singh, Davinder Singh and Yue Jin

**Impact of Wheat Breeding at ICARDA and the Status of UG99 Resistance**

Osman Abdalla\*, Francis Ogbonnaya, A. Yaljarouka, Amor Yahyaoui, Kumarse Nazari, Ayele Badebo, M. Gerfu, Girma Bedada, Solomon Gelalcha, B. Yaie, Ruth Wanyera, Peter Njau and Davinder Singh

**Even-numbered posters session**

(presenters, please stand at your poster at this time to answer questions)

**Odd-numbered posters session**

(presenters, please stand at your poster at this time to answer questions)

## Thursday, March 19

7:45 AM

8:30 AM – 2:30 PM

3:30 PM – 5:30 PM

**Buses arrive at the hotels for transport to the field**

**Field visit to CIMMYT's research station in Obregon located in Patronato's facilities**

**Traditional carne asada at CIMMYT's research station**

## Friday, March 20

**Session 3: (continued)**

**Chairperson:**

8:30-8:50 am

**Breeding Rust Resistant Wheat**

**Ronnie Coffman, Cornell University**

**Sources of resistance to Ug99 and variants in Canadian germplasm**

Ron DePauw\*, Tom Fetch, JB Thomas, RE Knox, CJ Poznaniak, AK Singh, H Randhawa, DG Humphreys, SL Fox, PD Brown, FR Clarke and A Comeau

\* Speaker