



4th ICC Latin American Cereals Conference

PROGRAM

11-14 March 2018

**Hilton Mexico City Reforma
Mexico**



INTERNATIONAL ASSOCIATION FOR
CEREAL SCIENCE AND TECHNOLOGY



CIMMYT^{MR}

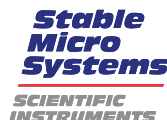
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Welcome to the 4th Latin American Cereals Conference in Mexico, 2018!

Dear colleagues and friends,

It's a great pleasure to welcome you to Mexico on behalf of the International Association for Cereal Science and Technology (ICC) and the International Maize and Wheat Improvement Center (CIMMYT).

For the first time, ICC and CIMMYT are collaborating for the LACC4 - 4th ICC Latin American Cereals Conference in combination with the IGW - 13th International Gluten Workshop so that cereal science and technology in Latin America will be in the spotlight.

LACC is an event series of international conferences that promotes scientific and technological knowledge related to the production of grains, cereals and food. The multidisciplinary audience is characteristic for LACC. We welcome professionals connected to the value chains of grains and cereals from agricultural production to the food industry and consumers.

At LACC4 experts from around the world will present on themes spanning from recent developments in breeding and agronomy to cereal processing technologies, quality assessment, and nutrition and health and food safety and security.

As participants you will find a program of the highest scientific quality with keynote lectures, presentations, and poster sessions on recent developments selected from large numbers of submitted abstracts, while industry will showcase its products and services.

We would like to thank all the global experts who will share their research and insights as well as the endorsing organisations that advertised the LACC4 all over the world. Our special thanks also go to our sponsors and exhibitors who will contribute significantly to the success of this conference.

Today, many branches of science require even greater international collaboration than before, and ICC actively pursues the development of links with cereal and food associations at country, regional and international level. Enabling a unique platform for collaboration on a global level where participants from around the world can interact and exchange knowledge and experience is a main goal of ICC.

We look forward to interacting with you during the LACC4 and wish you a fruitful conference and enjoyable stay in Mexico City!

Yours sincerely,



Hamit Köksel
Chair of LACC4 and ICC President
Hacettepe, Turkey



Carlos Guzmán
Chair of IGW,
CIMMYT, Mexico

LACC Scientific Committee

Hamit Köksel (Chair), ICC President/Hacettepe, Turkey

Carlos Guzmán, CIMMYT, Mexico

Joel Abecassis, INRA, France

Ismail Cakmak, Sabanci University, Turkey

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Jan Willem van der Kamp, TNO, The Netherlands

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Sun Hui, ASAG, China

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Sabine Gratzler, ICC, Austria

Marcella Gross-Varga, ICC, Austria

Carlos Guzmán, CIMMYT, Mexico

Hamit Köksel, ICC President/Hacettepe University

SUNDAY - 11 MARCH		Speaker
14:00-16:00	Registration and welcome coffee	
16:00-18:15	Opening & welcome session (Don Alberto 1)	
16:00-16:30	ICC opening speech	Hamit Köksel, ICC, TR
16:30-17:00	Global food security and role of CIMMYT.	Martin Kropff, CIMMYT, MX
17:00-17:30	The power of pulses: Capturing new opportunities for pulse proteins through innovations along the value chain.	James D. House, U. Manitoba, CA
17:30-18:00	Restructuring and functionalization of cereal food materials for food and non-food applications using food processing and nanotechnology.	Jozef L. Kokini, Purdue University, US
18:00-18:15	Organizational announcements & overview of the upcoming days.	Jennifer Nelson, CIMMYT, MX; Michaela Picher, ICC, AT
18:15-19:00	EXHIBITION & POSTER VIEWING (DON ALBERTO 3-4)	
19:00-22:30	LACC4 WELCOME RECEPTION (HILTON TERRACE)	

MONDAY - 12 March		Speaker
08:30-10:30	Session 1: Food security: Dedicated to Norman Borlaug (Don Alberto 1)	
	Chairs: James D. House, University of Manitoba, CA; Hamit Köksel, ICC, TR	
08:30-09:00	Wheat – A cornerstone for global food security.	Hans-Joachim Braun, CIMMYT, MX
09:00-09:30	Maize-based food and nutritional security in the developing world.	Maruthi Prasanna Boddupalli, CIMMYT, KE
09:30-09:50	HarvestPlus Alliance: Research, development and delivery of micronutrient dense crops.	Wolfgang Pfeiffer, Harvest Plus, US
09:50-10:10	Masagro's participative research network across Mexico: Adapting conservation agriculture to local conditions.	Simon Fonteyne, CIMMYT, MX
10:10-10:30	Milling quality: The Achilles heel of cereal foresight studies?	Gideon Kruseman, CIMMYT, MX
10:30-11:00	COFFEE BREAK WITH EXHIBITION AND POSTER VIEWING (DON ALBERTO 3-4)	

MONDAY - 12 March		Speaker
11:00-13:00	Parallel session 2.1 – Biofortification (Don Alberto 1) <i>Chairs: Natalia Palacios, CIMMYT, MX; İsmail Çakmak, Sabanci University, TR</i>	
11:00-11:30	Agronomic biofortification of cereals with micronutrients.	<i>İsmail Çakmak, Sabanci University, TR</i>
11:30-12:00	Biofortified maize: Progress and perspectives.	<i>Natalia Palacios, CIMMYT, MX</i>
12:00-12:20	Biofortification in Brazil: Iron and zinc concentration in grains on wheat cultivars grown in different environments.	<i>Pedro Luiz Scheeren, Embrapa Trigo, BR</i>
12:20-12:40	Quality and control analysis of wheat fractions by using laser induced breakdown spectroscopy.	<i>İsmail Hakki Boyacı, Nanosens Inc., TR</i>
12:40-13:00	Adaptation pattern of exotic Provitamin A biofortified maize hybrids in Pakistan.	<i>Muhammad Amir Maqbool, CIMMYT, PK</i>
11:00-13:00	Parallel session 2.2 – Enzymes (Don Alberto 2) <i>Chairs: Dilek Austin, Novozymes North America Inc., US; Larisa Cato, AEGIC, AU</i>	
11:00-11:20	Introduction to baking enzymes.	<i>Luis Alberto Ramírez Barajas, Novozymes, MX</i>
11:20-11:40	Sponge & dough baking with Australian wheat.	<i>Larisa Cato, AEGIC, AU</i>
11:40-12:00	Hagberg falling number measurement: New machine versus conventional machine.	<i>Arnaud Dubat, CHOPIN, FR</i>
12:00-12:20	Occurrence of amylase-trypsin-inhibitors in Austrian wheats and their trypsin inhibition.	<i>Stefano D'Amico, BOKU, AT</i>
12:20-12:40	Standarization of low protein wheat flour.	<i>Lutz Popper, Stern Ingredients, DE</i>
12:40-13:00	Fermented and malted millet products in Africa: Expedition from traditional/ethnic foods to industrial value added products.	<i>Eugénie Kayitesi, University of Johannesburg, ZA</i>
13:00-14:00	LUNCH BREAK WITH EXHIBITION AND POSTER VIEWING (DON ALBERTO 3-4)	
14:00-16:00	Parallel session 3.1 – Cereal processing (Don Alberto 1) <i>Chairs: Regine Schoenlechner, BOKU, AT; Juan De Dios Figueroa, Cinvestav Unidad Querétaro, MX</i>	
14:00-14:20	Evolution of nixtamalization process: Advantages and disadvantages.	<i>Juan de Dios Figueroa, Cinvestav Unidad Querétaro, MX</i>
14:20-14:40	Viscoelastic behavior of masa from corn flours obtained by nixtamalization with different calcium sources.	<i>David Santiago-Ramos, UAQ, MX</i>

MONDAY - 12 March		Speaker
14:40-15:00	The effect of milling degree on rice quality.	Xiaoliang Duan, ASAG, CN
15:00-15:20	Isolation and identification of lactic acid bacteria and yeasts in Type I sourdoughs with focus on traditional Austrian sourdoughs.	Vera Fraberger, VFG, AT
15:20-15:40	Potential of isolated arabinoxylans to improve the functional properties of gluten-free bread.	Denisse Bender, BOKU, AT
15:40-16:00	Application of Fick's second law to study the mechanism of oil uptake and water loss during deep-fat frying of tortilla chips.	Alfonso Topete Betancourt, Cinvestav, MX
14:00-16:00	Parallel session 3.2 – Breeding & agronomy (Don Alberto 2) Chairs: Carlos Guzmán, CIMMYT, MX; Wolfgang Pfeiffer, HarvestPlus, US	
14:00-14:30	Relationships between grain yield and protein quantity and quality in commercial wheat.	Maryke Labuschagne, UFS, ZA
14:30-14:50	The influence of nitrogen and phosphorous deficiency on protein quality and quantity in two bread wheat cultivars in South Africa.	Brigitta Tóth, UFS, ZA
14:50-15:15	Genetic improvement of agronomic performance of hexaploid wheat in China reflected by changes in genomic DNA composition.	Chunlai Zhang, Shanxi Agricultural University, CN
15:15-15:30	Development and characterization of wheat with low-viscosity grain extracts using novel alleles of IRX9 orthologue TAGT43_2.	Till K. Pellny, Rothamsted Research, UK
15:30-15:45	Development of wheat genotypes with high biscuit-making quality and evaluation of biscuit-making quality of landraces.	Yaşar Karaduman, TZARI, TR
15:45-16:00	Optimization of mucilage extraction of chan seeds (<i>Hyptis suaveolens</i> (L.) Poit) by mechanical agitation using a box-Behnken design.	Melissa Esther Morales Tovar, Cinvestav-IPN, MX
16:00-16:30	COFFEE BREAK WITH EXHIBITION AND POSTER VIEWING (DON ALBERTO 3-4)	

MONDAY - 12 March		Speaker
16:30-18:30	Parallel session 4.1 – Innovations in cereal ingredients and processing for novel and healthful foods (Don Alberto 1) <i>Chairs: Sajid Alavi, KSU, US; Hulya Dogan, KSU, US</i>	
16:30-16:35	Introductory remarks	
16:35-16:55	Unique properties and applications of waxy wheat flour and starch.	<i>Yong-Cheng Shi, KSU, US</i>
16:55-17:15	Indirect continuous heat treatment of wheat grain and whole wheat flour.	<i>Hulya Dogan, KSU, US</i>
17:15-17:35	Utilization of sorghum and millets in extruded products.	<i>Sajid Alavi, KSU, US</i>
17:35-17:55	Recent innovations in extrusion systems for whole grain expanded snacks.	<i>Jorge Morales, PepsiCo, US</i>
17:55-18:15	Usage and benefits of deactivated yeast as an alternative reducing agent in industrial baking.	<i>Sherill Cropper, Lesaffre Yeast Corp., US</i>
18:15-18:30	Panel discussion	
16:30-18:40	Parallel session 4.2 – Quality assessment: Dedicated to Dr. Walter Bushuk (Don Alberto 2) <i>Chairs: Harry Sapirstein and Filiz Köksel, U. Manitoba, CA</i>	
16:30-16:50	A screening protocol for wheat flour water absorption, dough mixing requirement and viscoelasticity.	<i>Bin Xiao Fu, CGC, CA</i>
16:50-17:10	Quality characteristics of U.S. soft white and club wheat.	<i>Craig Morris, USDA-ARS/WWQL, US</i>
17:10-17:30	New solutions to automate and optimize quality control and lab analytics.	<i>Markus Löns, Brabender GmbH & Co KG, DE</i>
17:30-17:50	Prediction of quality control parameters of wheat and wheat flour.	<i>Zeki Demirtasoglu, BASTAK, TR</i>
17:50-18:10	Cereal chemistry research in a small country: Strategies to move on.	<i>Daniel Vázquez, INIA, UY</i>
18:10-18:25	Variation of gluten quality- and quantity-induced changes via the gluten structure in relation to viscoelastic properties.	<i>Pavalee Chompoorat, OSU, US</i>
18:25-18:40	Understanding the functional properties of starch from the “malanga” grown in Cuba: Comparison of starch from corms and cornels.	<i>Jehannara Calle, FRI, CU</i>
18:40-19:00	EXHIBITION & POSTER VIEWING (DON ALBERTO 3-4)	

TUESDAY - 13 March		Speaker
08:30-10:30	Parallel session 5.1 – Nutrition & health 1 (Don Alberto 1) <i>Chairs: Luis Bello-Pérez, IPN, MX; Cristina M. Rosell, IATA-CSIC, ES</i>	
08:30-09:00	Making healthier cereal foods by applying physical treatments.	<i>Cristina M. Rosell, IATA-CSIC, ES</i>
09:00-09:25	High amylose wheat: A route to healthier foods.	<i>Ahmed Regina, CSIRO, AU</i>
09:25-09:50	Retrospective study of starch digestibility in corn tortilla.	<i>Luis Bello-Pérez, IPN, MX</i>
09:50-10:10	Purple wheat products: Potential anti-oxidative stress and anti-inflammatory functional foods.	<i>Tamer Gamel, University of Guelph, CA</i>
10:10-10:30	Processing effects on resistant starch formation and shelf life of tortillas.	<i>Rosa María Mariscal Moreno, Cinvestav, MX</i>
08:30-10:30	Parallel session 5.2 – Durum wheat & pasta (Don Alberto 2) <i>Chairs: Bin Xiao Fu, CGC, CA; Martha Cuniberti, INTA, AR</i>	
08:30-09:00	Industrial quality attributes of globally distributed CIMMYT durum wheat germplasm: Historical evolution, recent genetic improvement strategy and current status.	<i>Karim Ammar, CIMMYT, MX</i>
09:00-09:30	Glutopex: A breeding tool for screening dough properties of durum wheat.	<i>Mike Sissons, NSW Dept Primary Industries, AU</i>
09:30-09:50	Canadian durum wheat quality objectives and measurements.	<i>Bin Xiao Fu, CGC, CA.</i>
09:50-10:10	Evaluation of important quality parameters for pasta industry on some durum wheat landrace genotypes in Turkey.	<i>Turgay Sanal, CRIFC, TR</i>
10:10-10:30	An integrated approach to investigate the functioning of wheat quality components and their interaction with environment.	<i>Olfa Daaloul INAT, TN</i>
10:30-11:00	COFFEE BREAK WITH EXHIBITION AND POSTER VIEWING (DON ALBERTO 3-4)	
11:00-13:00	Parallel session 6.1 – Whole grains (Don Alberto 1) <i>Chairs: Jan Willem van der Kamp, Health Grain Forum, NL; Michaela Pichler, ICC, AT</i>	
11:00-11:30	Grains and whole grains: Just for the health of it.	<i>Julie Miller Jones, St. Catherine's University, US</i>

TUESDAY - 13 March

Speaker

11:30-12:00	Definitions for whole grain and whole grain foods – Perspectives for global harmonization.	<i>Jan Willem van der Kamp, Health Grain Forum, NL</i>
12:00-12:20	A global movement to increase whole grain intake – Plans and actions.	<i>Michaela Pichler, ICC, AT</i>
12:20-12:40	Making whole grains the new norm: Changing consumer attitudes & perceptions in Latin America and around the world.	<i>Caroline Sluyter, WGC, US</i>
12:40-13:00	Attitudes to whole grain foods, their benefits and liking: Insights from consumers in Mexico, Colombia and a global perspective.	<i>Daniel Guerrero, Cereal Partners Worldwide, MX</i>

11:00-13:00 Parallel session 6.2 – Food legumes (Don Alberto 2)

Chairs: Martha Z. de Miranda, Embrapa Trigo, BR; Roberto Javier Peña, CIMMYT, MX

11:00-11:30	The use of nitrogen gas as a physical blowing agent to produce puffed snacks made from yellow pea flour.	<i>Filiz Koxsel, U. Manitoba, CA</i>
11:30-12:00	Nixtamalization as an alternative for bean processing.	<i>David Santiago-Ramos, UAQ, MX</i>
12:00-12:30	Discovery of unique low resistant starch dry bean genotypes.	<i>Rie Sadohara, MSU, US</i>
12:30-13:00	The impact of thermal processing methods on the protein quality of pulses, as determined by in vivo and in vitro methodologies.	<i>James D. House, U. Manitoba, CA</i>

13:00-14:00 LUNCH BREAK WITH EXHIBITION AND POSTER VIEWING (DON ALBERTO 3-4)

14:00-16:00 Parallel session 7.1 – Food safety (Don Alberto 1)

Chairs: Senay Simsek, North Dakota State University, US; Daniel Vázquez, INIA, UY

14:00-14:30	Mycotoxins and health.	<i>Senay Simsek, NDSU, US</i>
14:30-14:50	Fate of deoxynivalenol and deoxynivalenol-3-β-d-glucopyranoside during wheat processing.	<i>Kristin Whitney, NDSU, US</i>
14:50-15:05	Fate of deoxynivalenol during wet milling process.	<i>Ana Magallanes López, NDSU, US</i>
15:05-15:25	MyToolBox - Safe food and feed through an integrated ToolBox for mycotoxin management.	<i>Michaela Pichler, ICC, AT</i>
15:25-15:45	Aflatoxin management for the Caribbean region: Prospects for biological control.	<i>Peter Cotty, USDA-ARS, US</i>

TUESDAY - 13 March		Speaker
15:45-16:00	Analysis of deoxynivalenol and deoxynivalenol-3-glucoside in hard red spring wheat inoculated with <i>Fusarium graminearum</i> .	Maribel Ovando-Martinez, Universidad de Sonora, MX
14:00-16:00	Parallel session 7.2 – Nutrition & health 2: Dedicated to Prof. Radomir Lászlity (Don Alberto 2) Chairs: Sándor Tömösközi, Budapest University of T&E, HU; Craig Morris, USDA-ARS/WWQLs, US	
14:00-14:30	Novel phenotyping tools to assess the glycaemic potential of rice germplasm.	Nese Sreenivasulu, IRRI, PH
14:30-15:00	Wheat bran modified by autoclaving has remarkable properties that suggest significantly enhanced health benefits.	Harry Sapirstein, U. Manitoba, CA
15:00-15:20	Towards the development of a new gluten reference material.	Sándor Tömösközi, Budapest University of T&E, HU
15:20-15:40	Designing attractive healthy high fibre products by using material science and rheology based guidelines.	Jan Willem van der Kamp, TNO, NL
15:40-16:00	Interaction of thaumatin-like proteins with β -glucan in barley.	Jaswinder Singh, McGill University, CA
16:00-16:30	COFFEE BREAK WITH EXHIBITION AND POSTER VIEWING (DON ALBERTO 3-4)	
16:30-18:00	Session 8 – Using processing as a touchstone for choosing grain-based foods – Fabulous or flawed? (Don Alberto 1) Chairs: Julie Miller Jones, St. Catherine's University, US; Susana Socolovsky, AATA, AR	
16:30-17:00	A food science perspective for the classification of processed foods.	Susana Socolovsky, AATA, AR
17:00-17:30	The role of food processing in food safety and food security	Rebeca López García, Logre Int. FSC, MX
17:30-18:00	Processed grain-based foods – A nutritional boon or ban?	Julie Miller Jones, St. Catherine's University, US
18:00-18:30	AWARD CEREMONY	
20:00-23:00	GALA DINNER (SEPARATE REGISTRATION NECESSARY) (DON ALBERTO 3-4)	

WEDNESDAY - 14 March

07:15-13:00 CIMMYT headquarters visit (organized by CIMMYT)

07:15 Buses leave at Hotel Hilton

08:30-09:00 Arrival at CIMMYT and welcome coffee

Intro to CIMMYT: Overview of CIMMYT's mission, history, research and impacts.

*Marianne Bänziger,
Deputy Director General,
Research and Partnerships*

09:00-12:00

Wheat quality and nutrition

Carlos Guzmán

Maize quality and nutrition

Natalia Palacios

Genebank

Denise Costich & Thom Payne

Sustainable intensification and machinery

Bram Govaerts

Wheat breeding

Karim Ammar

Maize breeding

Martha Willcox

CIMMYT Museum

José Juan Caballero

12:00-13:45 LUNCH

13:45 DEPARTURE FOR MEXICO CITY

15:30 END OF THE 4TH ICC LATIN AMERICA CEREALS CONFERENCE

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Carbohydrates, Grains and Wheat in Nutrition & Health



Cereal grains and Carbohydrates have been central components of human diets since the beginning of agriculture due to several factors:

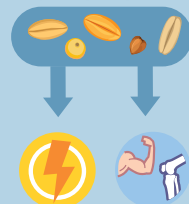
They are reliable, storable, sustainable, and readily available sources of energy and nutrients

1.



2.

As a ready source of energy grains and other staples spare proteins



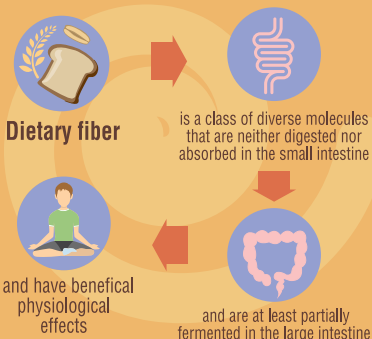
3.



Grains are embedded in a variety of cultural, religious and linguistic traditions around the globe

Cereal grains and other sources of carbohydrates form the nutritional base that sustains life and are associated with other dietary components that allow an optimal health and well-being of the human population.

Dietary Fiber Functions



- Reduced blood total and/or LDL cholesterol levels
- Attenuation of postprandial glycemia/insulinemia
- Reduced blood pressure
- Increased fecal/bulk laxation
- Decreased transit time
- Increased colonic fermentation/short-chain fatty acid (SCFA) production
- Positive modulation of colonic microflora
- Weight loss/reduction in adiposity
- Increased satiety



13th International Gluten Workshop

PROGRAM

14-17 March 2018

**Hilton Mexico City Reforma
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Welcome to the 13th International Gluten Workshop in Mexico!

Dear colleagues and friends,

On behalf of the International Maize and Wheat Improvement Center (CIMMYT), I am very pleased to welcome you to Mexico for the 13th International Gluten Workshop during 14-17 March 2018.

Hosting the International Gluten Workshop in Mexico is of special significance: Mexico was where Dr. Norman Borlaug conducted his pioneering research to create the wheat varieties that would spark the Green Revolution. For this reason, we have invited all of you to visit CIMMYT headquarters near Mexico City and our major wheat experiment station in Ciudad Obregón in northwestern Mexico, which is the site of Dr. Borlaug's first efforts to develop rust-resistant, short-stalked and high-yielding wheat. Dr. Borlaug recognized the importance of processing quality in wheat, and when CIMMYT was established in 1966, he pushed for the creation of the Wheat Chemistry and Quality Laboratory to ensure that we would combine high grain yield with high quality for the benefit of the farmer, the processor, and the consumer.


As you well know, wheat is incredibly important in people's diets around the world. Wheat accounts for one-fifth of the world's food and is second only to rice as a source of calories for developing country consumers. Demand for wheat in the developing world is projected to increase 60% by 2050. At the same time, climate change-induced temperature increases are likely to reduce wheat production in developing countries by 20–30%. Increasing demand for low-cost, nutritious, and convenient food means that we must redouble our efforts to enhance grain quality at all levels.

Meanwhile, misinformation about gluten and wheat are distressingly common in the media in many developed countries, affecting consumers' perceptions of products made with wheat. What effect could this have on consumption in developing countries, and on wheat research?

Events like this workshop represent an invaluable opportunity to share experiences, establish linkages, and explore collaboration on the issues facing the world wheat crop. As an organization, CIMMYT focuses on applied science and technology, as well as networking and sharing knowledge. But we can achieve nothing without your collaboration and support. On behalf of CIMMYT, I would like to express my sincere gratitude to you for partnering with us. We are also interested in expanding those relationships, and I encourage you to contact Carlos Guzmán or write to me directly with ideas or suggestions. I would also like to extend special thanks to the sponsors who will contribute significantly to the success of this conference.

Above all, I wish you a successful workshop and a nice stay in Mexico City.

Sincerely yours,



Martin Kropff
Director General
The International Maize and Wheat Improvement Center

IGW Scientific Committee

Carlos Guzmán (Chair), *CIMMYT, Mexico.*

Frank Bekes, *CSIRO, Australia.*

Jose M. Carrillo, *Universidad Politécnica de Madrid, Spain.*

Roberto J. Peña, *CIMMYT, Mexico.*

Senay Simsek, *North Dakota State University, USA.*

Craig Morris, *USDA-ARS, USA.*

Zhonghu He, *CIMMYT-CAAS, China.*

Tatsuya Ikeda, *NARO, Japan.*

Maryke Labuschagne, *Free State University, South Africa.*

Wujun Ma, *Murdoch University, Australia.*

Turgay Sanal, *Ministry of Food Agriculture and Livestock, Turkey.*

IGW Organizing Committee

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Jennifer Nelson, *CIMMYT, Mexico.*

Catherine Casas Saavedra, *CIMMYT, Mexico.*

Karen Castro, *CIMMYT, Mexico.*

Daniela Flores, *CIMMYT, Mexico.*

WEDNESDAY - 14 March		Speaker
MORNING	VISIT TO CIMMYT HQ AND REGISTRATION IN CONFERENCE VENUE	
15:00-17:00	REGISTRATION	
17:00-17:15	Opening ceremony	<i>Hans Braun and Carlos Guzmán, CIMMYT, MX</i>
17:15-17:40	International collaboration on wheat quality and safety.	<i>Tatsuya Ikeda, NARO, JP</i>
17:40-19:00	Session 1: A new revolution in durum wheat* <i>Chairs: Hans Braun and Carlos Guzmán, CIMMYT, MX.</i>	
17:40-18:05	Enhanced gluten properties in soft kernel durum wheat.	<i>Craig Morris, USDA-ARS, US</i>
18:05-18:25	Can manipulation of the glutenin composition of durum wheat improve bread loaf volume and still maintain pasta quality?	<i>Mike Sissons, NSW, AU</i>
18:25-18:45	Effect of novel high molecular weight glutenin subunit combinations on gluten strength, dough rheological properties and baking quality of durum wheat.	<i>Karim Ammar, CIMMYT, MX</i>
18:45-19:00	Grain quality traits of commercial durum wheat varieties and their relationships with drought stress and glutenins composition.	<i>Ana Magallanes, NDSU, US</i>
19:00	WELCOME RECEPTION (HILTON TERRACE)	
THURSDAY - 15 March		Speaker
9:15-10:40	Session 2: Omics sciences for wheat quality improvement <i>Chairs: Tatsuya Ikeda, NARO, JP, and Zhonghu He, CAAS/CIMMYT, CN.</i>	
9:15-9:40	Proteomics in wheat gluten research: Where are we standing and where are we going?	<i>Maryke Labuschagne, UFS, ZA.</i>
9:40-10:00	Wheat proteomics to assess the quality of the Portuguese bread wheat.	<i>Gilberto Igrejas, UTAD, PT</i>
10:00-10:20	Improvement of mineral content in wheat grains: A comparative transcriptomics approach.	<i>Chunlai Zhang, SAU, CN</i>
10:20-10:40	Characterization of cysteine-rich avenin-like proteins in common wheat.	<i>Wujun Ma, MU, AU</i>
10:40-11:20	COFFEE BREAK AND POSTER VIEWING (DON ALBERTO 3-4)	

*All sessions will take place in Don Alberto 2

THURSDAY - 15 March		Speaker
11:20-13:00	Session 3: Genes and molecular markers for wheat quality improvement <i>Chairs: Susanne Dreisigacker, CIMMYT, MX, and Susan Altenbach, USDA-ARS, US.</i>	
11:20-11:45	Molecular marker development and application for improving quality in bread wheat.	<i>Zhonghu He, CAAS/CIMMYT, CN</i>
11:45-12:05	Identification of the major gene associated with grain protein content in chromosome 2B in hard red winter wheat.	<i>Yohei Terasawa, NARO, JP</i>
12:05-12:25	Molecular improvement of processing quality in wheat 1B/1R translocation lines.	<i>Jianfang Chai, HAAFS, CN</i>
12:25-12:45	Functional analysis and breeding application of complex gluten protein gene loci in commercial wheat.	<i>Daoweng Wang, CAAS, CN</i>
12:45-13:00	An overview on wheat bug damage and characterization of wheat bug enzymes.	<i>Hamit Koksel, HU, TR</i>
13:00-14:30	LUNCH AND POSTERS	
14:30-16:00	Session 4: Solutions to adverse reactions from gluten <i>Chairs: Craig Morris, USDA-ARS, US, and Senay Simsek, NDSU, US.</i>	
14:30-15:00	Gluten: Facts, factoids, and fallacies.	<i>Julie Miller Jones, HGI, CA</i>
15:00-15:20	Biotechnology and breeding strategies for the development of wheat with reduced allergenic potential.	<i>Susan Altenbach, USDA-ARS</i>
15:20-15:40	Reduced gluten and increased lysine levels by single gene disruption in wheat.	<i>Jos Van Boxtel, RKDA, US</i>
15:40-16:00	Decreasing the risk of coeliac disease in humans by modifying gliadin proteins in bread wheat, using the CRISPR-Cas9 technique.	<i>Aurélie Jouanin, WUR, NL</i>
16:00-16:40	COFFEE BREAK AND POSTER VIEWING (DON ALBERTO 3-4)	
16:40-18:10	Session 5: Genomic selection for wheat quality improvement <i>Chairs: José Crossa and Karim Ammar, CIMMYT, MX.</i>	
16:40-16:55	Brief introduction to genomic selection and its applications.	<i>José Crossa, CIMMYT, MX</i>
16:55-17:15	Genomic selection models for predicting end-use quality traits in CIMMYT spring bread wheat.	<i>Diego Jarquin, UN, US</i>

THURSDAY - 15 March		Speaker
17:15-17:35	Genome-wide association and prediction of grain and semolina quality traits in durum wheat breeding populations.	Xuehui Li, NDSU, US
17:35-17:55	Improving genomic-enabled prediction accuracy by modeling the genotype-by-environment interaction for quality traits in Kansas wheat.	Reka Howard, UN, US
17:55-18:10	Accelerating wheat breeding for end-use quality with multi-trait genomic predictions incorporating near infrared and nuclear magnetic resonance-derived phenotypes.	Ben Hayes, AgriBio, AU
18:10-18:50	Session 6: Deploying genetic resources for wheat quality improvement Chairs: Thomas Payne, CIMMYT, MX.	
18:10-18:30	Winter wheat genetic resources for end-use quality: Modern germplasm, landraces and primary synthetics.	Alexey Morgunov, CIMMYT, MX
18:30-18:50	Rapid development and characterization of chromosome specific translocation line of thinopyrum elongatum with improved dough strength.	Monika Garg, NABI, IN
FRIDAY - 16 March		Speaker
9:00-10:20	Session 7: Gluten properties and applications Chairs: Maryke Labuschagne, UFS, ZA, and Harry Sapirstein, U. Manitoba, CA.	
9:00-9:20	Gluten proteins and their structure-function relationships.	Eva Johansson, SLU, SE
9:20-9:40	Modern applications of vital gluten in bakery products and higher demands for its quality.	Markus Brunnbauer, Backaldrin GmbH, AT
9:40-10:00	Viscoelastic properties of wheat kernel, dough, gluten, proteins and non-gluten constituents on end-product quality.	Juan de Dios Figueroa, CINVESTAV, MX
10:00-10:20	Wheat gluten protein structures in processed foods and non-foods.	Ramune Kuktaite, SLU, SE
10:20-11:00	COFFEE BREAK AND POSTERS	
11:00-13:00	Session 8: Methodologies and innovations to analyze wheat quality Chairs: Mike Sissons, NSW, AU, and Gilberto Igrejas, UTAD, PT.	
11:00-11:25	Development of a method to evaluate the quality of vital wheat gluten for bread baking using a high shear technique.	Jayne Bock, Brabender, US

FRIDAY - 16 March		Speaker
11:25-11:45	Is there an optimal analytical strategy for routine assessment of gluten strength in bread wheat based on protein composition?	Harry Sapirstein, U. Manitoba, CA
11:45-12:05	Use of a dual speed mixing protocol as a rapid wheat screening tool for Alveograph W value estimation.	Arnaud Dubat, Chopin, FR
12:05-12:25	Rapid assay for functional protein fractions in wheat flour or wholemeal.	Bin Xiao Fu, CGC, CA
12:25-12:45	Development of semi-automated macro- and micro-scale baking test.	Sándor Tömösközi, BME, HU
12:45-13:00	C-hordein as reference material in R5 ELISA gluten quantification.	Xin Huang, HKBU, CN
13:00-13:15	Benefits and importance of NIR technology in wheat quality analysis.	Diana Gomez, Foss, MX
13:15-14:30	LUNCH AND POSTERS	
14:30-16:00	Session 9: Developing healthier wheat Chairs: Velu Govindan, CIMMYT, MX, and Sewa Ram, ICAR-Indian, IN.	
14:30-14:55	Immunomodulatory activities of wheat arabinoxylan hydrolyzates.	Senay Simsek, NDSU, US
14:55-15:20	Exploiting natural and induced variation to improve the content and composition of dietary fibre in wheat grain.	Alison Lovegrove, RRes, GB
15:20-15:40	<i>Aegilops</i> as a source of dietary fiber and drought stress tolerance.	Marianna Rakszegi, MTA-ATK, HU
15:40-16:00	Phenolic acid profiles of CIMMYT durum wheat cultivars and Mexican landraces.	Barbara Laddomada, ISPA, IT
16:00-16:40	COFFEE BREAK AND POSTERS	
16:40-19:10	Session 10: Wheat quality and enviromental effects Chairs: Eva Johansson, SLU, SE, and Roberto Javier Peña, CIMMYT, MX.	
16:40-17:00	Developing new types of wheat with good processing quality at low grain protein content.	Till Pellny, RRes, GB
17:00-17:20	Influence of genotype and environment on wheat protein fractions and their relationship with dough rheological properties.	Daniel Vázquez, INIA, UY
17:20-17:35	Matching opposites – Defining the association between grain yield and protein content in South African wheat.	Robbie Lindeque, ARC-Small Grain, ZA

FRIDAY - 16 March		Speaker
17:35-17:50	Evaluating pre-harvest sprouting tolerance and thousand kernel weight in doubled haploid wheat populations.	Thobeka Khumalo, ARC-Small Grain, ZA
17:50-18:10	Effect of wheat bug (<i>eurygaster integriceps</i>) damaged on quality of bread and durum wheat varieties grown in Turkey.	Turgay Sanal, CRIFC, TR
18:10-18:25	Increasing sun pest damage threshold level by using strong gluten genotypes.	Mesut Keser, ICARDA, TR
18:25-18:40	The effect of low nitrogen and low phosphorous and a combination of the two on the quantity of HMW-GS in two South-african bread wheat cultivars.	Brigitta Toth, UFS, ZA
18:40-18:55	Recent advances of the influence of foliar diseases and their control by fungicides on breadmaking quality in argentinian wheat cultivars.	Maria Fleitas, UNLP, AR
18:55-19:10	The impact of α -amylase of normal mature wheat grain on the quality of chinese dry white noodle.	Zhifen Pan, CAAS, CN

SATURDAY - 17 March		Speaker
10:00-11:00	Session 11: Developing more nutritious wheat	
	Chairs: Alison Lovegrove, RRes, GB, and Turgay Sanal, CRIFC, TR.	
10:00-10:25	Farmers and consumers' choice of biofortified wheat in South Asia.	Velu Govindan, CIMMYT, MX
10:20-10:45	Assessment of genetic variability and development of high phytase and low phytic acid genotypes in wheat.	Sewa Ram, ICAR-Indianm, IN
10:45-11:00	Variability in iron, zinc and phytic acid content in a worldwide collection of commercial durum wheat.	Nayeli Hernández, CIMMYT, MX
11:00-12:00	ELECTION OF THE NEXT VENUE AND CLOSING OF THE CONFERENCE	
12:00-13:00	LUNCH	