

International Conference

FROM SEED TO PASTA III

A SUSTAINABLE DURUM WHEAT CHAIN
FOR FOOD SECURITY AND HEALTHY LIVES



FSTP3

Bologna - Italy, 19-21 September 2018

Conference Center Emilia Romagna Region

Via della Fiera, 8 - Bologna



www.fromseedtopasta.com

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A SUSTAINABLE DURUM WHEAT CHAIN FOR FOOD SECURITY AND HEALTHY LIVES

BOLOGNA – ITALY, 19-21 SEPTEMBER 2018

CONFERENCE CENTER REGIONE EMILIA ROMAGNA

PRELIMINARY PROGRAM

WEDNESDAY 19 SEPTEMBER 2018

08.30 – 09.00 *Registration of participants*

09.00 Opening session and welcome addresses

Paolo De Castro

(Vice-President of Agricultural Commission & Rural Development European Parliament)

Simona Caselli

(Agriculture Councilor of Emilia Romagna Region)

Roberto Tuberosa

(Conference Chair – University of Bologna, Italy)

09.30 **One century of durum wheat breeding: An Italian legacy**

Antonio Blanco (University of Bari, Italy)

10.00 **An industrial perspective for a more sustainable and safer pasta production**

Luca Ruini (Barilla, Italy)

10.30 Opening keynote

Durum wheat genomics: From sequencing to breeding

Curtis Pozniak (University of Saskatchewan, Canada)

11.00 *Coffee break*

11.30 - 13.00 Session 1.

Leveraging the tetraploid wheat genomes

11.30 **The wild emmer wheat genome**

Assaf Distelfeld (University of Tel Aviv, Israel)

11.50 **The durum wheat genome**

Annamaria Mastrangelo (CREA, Italy)

12.10 **Editing the wheat genome**

Eduard Akhunov (Kansas State University, USA)

12.30 ***Rht18* Semi-dwarfism reveals a new height-reducing mechanism in wheat**

Wolfgang Spielmeier (CSIRO, Australia)

12.50 Discussion

- 13.00 *Lunch*
- 14.10 - 15.30 Session 2.**
Tetraploid wheat genetic resources for the improvement of durum and bread wheat
- 14.10 **Signature of selection sweeps in the tetraploid wheat germplasm**
Marco Maccaferri (University of Bologna, Italy)
- 14.30 ***Yr15* gene (WTK1) encodes two kinase-like protein domains and confers broad-spectrum resistance to stripe rust**
Tzion Fahima (University of Haifa, Israel)
- 14.50 **Harnessing wild wheat alleles to enhance yield stability and productivity of modern wheat**
Yehoshua Saranga (University of Jerusalem, Israel)
- 15.10 **Characterization of Ethiopian genetic resources for durum wheat**
Enrico Pè (Scuola Superiore Sant'Anna, Italy)
- 15.30 *Coffee break and Poster vision*
- 16.30 - 18.30 Oral presentations selected from abstracts**

THURSDAY 20 SEPTEMBER 2018

08.30 - 11.00 Session 3.

Enhancing yield potential and yield stability of durum wheat

- 08.30 **Protecting yield loss through multi-pathogen resistance genes: Benefits to durum wheat?**
Evans Lagudah (CSIRO, Australia)
- 09.20 **Stem rust resistance in durum, particularly on sources of resistance to *Ug99***
Yue Jin (USDA-ARS, USA)
- 09.40 **Decades of breeding scab resistant durum wheat in North Dakota: Challenges and successes**
Elias Elias (North Dakota State University, USA)
- 10.00 **Map-based cloning of FHB resistance QTL in durum wheat**
Agata Gadaleta (University of Bari, Italy)
- 10.20 **Genomic selection in durum wheat**
Jose Crossa (CIMMYT, Mexico)
- 10.40 **High-throughput phenotyping to enhance wheat yield potential**
Scott Chapman (CSIRO, Australia)
- 11.00 *Coffee break and Poster vision*
- 11.30 - 12.30 Session 4.**
- Managing a sustainable durum production for food security**
- 11.30 **Exploring G x E x M synergies to enhance durum wheat production**
Brian Beres (Agriculture Agri-Food, Canada)
- 11.50 **Durum wheat nitrogen management: From monitoring to application and more**
José Luis Araus (University of Barcelona, Spain)
- 12.10 **A decision support system for durum wheat management**
Pierluigi Meriggi (Horta, Italy)
- 12.30 - 13.00 Oral presentations from abstracts**
- 13.00 *Lunch*

14.15 - 16.15 Session 5.

Durum wheat breeding to face climate change

Round table moderated by Filippo Bassi and Karim Ammar

Participants:

- Karim Ammar (CIMMYT, Mexico)
- Filippo Bassi (ICARDA, Morocco)
- Pasquale De Vita (CREA, Italy)
- Ron Knox (Agriculture Agri-Food, Canada)
- Conxita Royo (IRTA, Spain)
- Daria Scarano (ISEA, Italy)

16.15 *Coffee break and Poster vision*

17.00 - 18.30 Oral presentations from abstracts

FRIDAY 21 SEPTEMBER 2018

08.30 - 10.30 **Session 6.**

Enhancing durum quality and healthiness

- 8.30 **Durum wheat quality improvement at CIMMYT**
Carlos Guzman Garcia (CIMMYT, Mexico)
- 8.50 **RE-evolution of durum wheat by resorting the *Hardness* locus**
Craig Morris (USDA-ARS, USA)
- 09.10 **Celiac disease, non-celiac wheat sensitivity**
Luud Gilissen (University of Wageningen, The Netherland)
- 09.30 **Conventional and biotechnological approaches to improve durum healthiness**
Stefania Masci (University of Tuscia, Italy)
- 09.50 **Bioactive compounds in durum wheat**
Marina Carcea (CREA, Italy)
- 10.10 **Durum wheat products with improved quality and nutritional value**
Marco Gobetti (University of Bolzano, Italy)
- 10.30 *Coffee break and Poster vision*

11.30 - 13.00 **Oral presentations selected from abstracts**

13.00 *Lunch*

14.00 - 15.30 **Session 7.**

Innovation in the durum wheat-pasta chain

Round table moderated by Roberto Ranieri

- **Short summary on the innovations of pasta supply chain in the last 100 years.**
Roberto Ranieri (Open Fields srl, Italy)
- **Pasta ready meal and pasta with legumes**
Francesco Pantò (Barilla G. e R. F.lli spa, Italy)
- **Nutritional and healthy pasta claims**
Marina Mastromauro (Pastificio Attilio Mastromauro, Italy)
- **Effect of the patent “Gluten Friendly” on pasta**
Carmen Lamacchia (New Gluten World, Italy)
- **Traceability of the pasta supply chain**
Valeria Terzi (CREA, Italy)

**15.30 - 17.30 Session 8.
Opportunities and perspectives in wheat research**

Congress keynote lecture

International collaboration on wheat improvement

Hans Braun (CIMMYT, Mexico)

Global vision of durum and bread wheat research perspectives

Peter Langridge (Wheat Initiative)

**The PRIMA project: What role and opportunities
for the durum value chain in the Mediterranean Basin?**

Round table. Moderator and participants to be announced

**17.30 Closing keynote.
A glimpse into the future of durum breeding**

Cristobal Uauy (John Innes Centre, UK)

18.00 Concluding remarks and closing of the conference