

FROM SEED TO PASTA 5

A SUSTAINABLE DURUM WHEAT CHAIN FOR FOOD SECURITY AND HEALTHY LIVES

BARI - ITALY, 24-27 SEPTEMBER 2025



Chairs

AGATA GDALETA
University of Bari, Italy

ROBERTO TUBEROSA
University of Bologna, Italy

PROGRAM

www.fromseedtopasta.com



SCAN ME

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SECRETARIAT**

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International Conference
FROM SEED TO PASTA 5
Bari - Italy, 24-27 September 2025

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PROGRAM

WEDNESDAY, 24 SEPTEMBER 2025

ROOM 1

08:00-08:30 Registration of participants

08:30-09:10 WELCOME ADDRESSES

Chairs: Agata Gadaleta - *University of Bari, Italy*;
Roberto Tuberosa - *University of Bologna, Italy*

- Paolo De Castro - *Economist, expert of European policies*
- Rector of University of Bari
- Maria De Angelis - *Director DISSPA, University of Bari*
- CREA Representative
- CNR Representative
- Stefania Masci - *University of Tuscia, President of SIGA*

09:10-13:00 Session 1

SETTING THE FSTP5 SCENE FOR WHEAT BREEDING 5.0

09:10-09:20 *Title to be announced*

Maurizio Martina - *FAO Deputy Director General*

09:20-09:40 **Durum wheat role in the Global Drylands Strategy for ICARDA**

Augusto Becerra - *ICARDA Deputy Director General Research, Rabat, Morocco*

09:40-09:50 **Advancing Mediterranean Agriculture: PRIMA's vision, projects, and opportunities**

Ali Rhouma - *PRIMA Foundation, Tunisia Agriculture Ministry*

09:50-10:10 **The tetraploid wheat genetic resources for better bridging durum and bread wheat genomics and breeding**

Marco Maccaferri - *University of Bologna, Italy*

10:10-10:30 **Svevo reference genome 2.0: a comprehensive tool for durum wheat genomics and breeding**

Luigi Cattivelli - *CREA, Genomic and Bioinformatics, Italy*

10:30-10:50 **Multi-omic strategies for durum wheat improvement**

Curtis Pozniak - *University of Saskatchewan, Canada*

10:50-11:20 *Coffee break*



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WEDNESDAY, 24 SEPTEMBER 2025

11:20-11:40	Artificial intelligence and machine learning method: enhance prediction accuracy of durum wheat traits José Crossa - <i>CIMMYT, Mexico</i>
11:40-12:00	<i>Title and speaker to be announced</i>
12:00-13:00	Q&A and discussion with the speakers
13:00-14:00	<i>Lunch</i>
14:00-17:00	Session 2 AGRONOMY, PHYSIOLOGY AND MODELING OF YIELD POTENTIAL TO ENHANCE THE SUSTAINABILITY OF DURUM WHEAT Chairs: Zina Flagella - <i>University of Foggia, Italy</i> ; Nicola Pecchioni - <i>CREA Foggia, Italy</i>
	<i>Invited presentations</i>
14:00-14:20	The transition of durum wheat cultivation from conventional to conservation tillage in Mediterranean conditions Michele Pisante - <i>University of Teramo, Italy</i>
14:20-14:40	Durum wheat spike traits for improving yield potential Nicola Pecchioni - <i>CREA, Cereal and Industrial Crops, Italy</i>
14:40-15:00	Yield potential and adaptation to stress are not mutually exclusive José Luis Araus - <i>University of Barcelona, Spain</i>
15:00-15:20	Lessons from global Genotype x Environment x Management (GxE x M) systems research to enhance the durum wheat value chain Brian Beres - <i>Agrifood, Alberta, Canada</i>
15:20-16:00	Q&A and discussion with the speakers
16:00-16:30	<i>Coffee break</i>
16:30-17:00	Short presentations selected from Abstracts
17:00-19:00	INNOVAR & WHEAT SECURITY Chairs: Fiona Doohan - <i>University of Dublin, Ireland</i> ; Filippo Bassi - <i>ICARDA, Morocco</i>



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THURSDAY, 25 SEPTEMBER 2025

ROOM 1

08:30-11:00

Session 3

GENETIC RESOURCES IN TETRAPLOID WHEAT TO BETTER BRIDGE DURUM AND BREAD WHEAT

Chairs: Marco Maccaferri, *University of Bologna, Italy*

Invited presentations

08:30-08:50

Transfer and characterization of wild relative introgressions into durum wheat
Julie King - *BBSRC Wheat Research Centre, Nottingham, United Kingdom*

08:50-09:20

Wheat history revealed: insights from ancient grains of southern Israel
Assaf Distelfeld - *Institute of Evolution, Haifa, Israel*

09:20-09:35

Gene bank genomics of *Aegilops* supports introgression breeding of wheat
István Molnár - *Hungarian Academy of Sciences, Budapest, Hungary*

09:35-09:50

Unleashing the potential of tetraploid relatives: from core collections to QTL for introgression breeding
Elisabetta Mazzucotelli - *CREA, Genomics and Bioinformatics, Italy*

09:50-10:05

Resistance to rust diseases in tetraploid wheats
Pablo Olivera - *USDA-ARS, St. Paul, USA*

10:05-10:20

Genetic architecture of winter survival in the Global Durum Panel
Ahmad Sallam - *USDA-ARS, St. Paul, USA*

10:20-11:00

Coffee break

Invited presentations

11:00-11:15

Priority actions for Fusarium head blight resistance in durum wheat: insights from the Wheat Initiative
Ambra Viviani - *DISTAL, University of Bologna, Italy*

11:15-11:30

Genomic breeding for dryland durum at ICARDA
Filippo Bassi - *ICARDA, Rabat, Morocco*

11:30-11:45

New soft spring durum variety release USDA 'Morris' brings novel milling and baking traits from farm to table
Jeffrey Boehm - *USDA, Lincoln, USA*



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11:45-12:00	Holistic approach to develop drought-tolerance of durum wheat Andrés Schwember - <i>Pontificia Universidad Catolica, Santiago, Chile</i>
12:00-12:30	Short presentations selected from Posters
12:30-13:00	Q&A and discussion with the speakers
13:00-14:00	<i>Lunch</i>
14:00-17:30	Session 4 QTLOME, CANDIDATE GENES AND EDITING OF THE DURUM WHEAT GENOME Chairs: Roberto Tuberosa - <i>University of Bologna, Italy</i> ; Anna Maria Mastrangelo - <i>CREA, Cereal and Industrial Crops, Italy</i>
14:00-14:15	The durum wheat germplasm panels and genome as resources to unveil the genetic bases of agronomic traits under conservative agriculture Anna Maria Mastrangelo - <i>CREA, Foggia, Italy</i>
14:15-14:30	Three candidate genes in 60 Kb: which one is responsible for leaf rust resistance in <i>T. dicoccum</i>? Francesca Desiderio - <i>CREA, Fiorenzuola D'Arda, Italy</i>
14:30-14:45	Characterization of the <i>Sbm2</i> QTL, a major QTL for resistance to soil borne cereal mosaic virus (SBCMV) in durum wheat Matteo Bozzoli - <i>DISTAL, University of Bologna, Italy</i>
14:45-15:00	Enhancing durum wheat seed quality and safety through CRISPR gene editing Francesco Camerlengo - <i>DISTAL, University of Bologna, Italy</i>
15:00-15:40	Q&A and discussion with the speakers
15:40-16:00	Short presentations selected from Abstracts
16:00-16:30	<i>Coffee break</i>
16:30-16:50	Presentation by FAO representative <i>Title and speaker to be announced</i>
16:50-19:00	CARLOTTA AWARD Chairs: Patrizia Galeffi; Giuseppina del Signore - <i>ENEA, Rome, Italy</i>



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FRIDAY, 26 SEPTEMBER 2025

ROOM 1

08:30-10:20

Session 5

BREEDING DURUM WHEAT UNDER CLIMATE CHANGE: PROGRESS AND CHALLENGES

Session dedicated to the memory of Gian Tommaso Scarascia Mugnozza

Chairs: Antonio Blanco - *University of Bari, Italy*;

Stefania Masci - *University of Tuscia, Viterbo, Italy*

08:30-08:50

Commemoration of Gian Tommaso Scarascia Mugnozza and his research activities

Antonio Blanco - *University of Bari, Italy*

08:50-09:10

Feeding the World through Science: The life and work of Gian Tommaso Scarascia Mugnozza

Antonio Bonatesta - *University of Bari, Italy*

09:10-09:20

Durum Wheat Research at the University of Tuscia: From Creso to Climate Resilience

Stefania Masci - *University of Tuscia, Viterbo, Italy*

09:20-09:30

Gian Tommaso Scarascia Mugnozza and the Green Revolution

Roberto Tuberosa - *University of Bologna, Italy*

09:30-09:50

Mediterranean durum wheat in a warming climate: optimizing alleles, phenology, and sowing windows

Pasquale De Vita - *CREA, Sezione Cerealicoltura, Foggia, Italy*

09:50-10:05

Improving durum wheat resilience to climate change: balancing between accelerating genetic gains and relevance to main production environments

Karim Ammar - *CIMMYT, Mexico*

10:05-10:20

Genomic breeding for heat tolerance at ICARDA

Hafssa Kabbaj - *ICARDA, Rabat, Morocco*

10:20-10:30

Conclusions

Enrico Porceddu - *University of Tuscia, Viterbo, Italy*

AWARD IN MEMORY OF GIAN TOMMASO SCARASCIA MUGNOZZA

10:30-11:00

Coffee break & Posters vision

11:00-13:00

Session 6

BREEDING FOR DISEASE RESISTANCE/TOLERANCE IN DURUM WHEAT

Chairs: Valentyna Klymiuk - *University of Saskatchewan, Canada*;

Fiona Doohan - *University of Dublin, Ireland*

11:00-11:20

Pre-breeding for disease resistance in durum

Valentyna Klymiuk - *University of Saskatchewan, Canada*



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11:20-11:40	The long road to Fusarium Head Blight resistance in durum wheat Barbara Steiner - <i>BOKU University, Vienna, Austria</i>
11:40-12:00	Utilizing resistance alleles from wheat relatives to build stripe rust resistance in Canadian hard red spring wheat Canada Gurcharn Singh Brar - <i>University of Alberta, Canada</i>
12:00-12:20	The evolutionary battle between <i>Stb</i> resistance genes and <i>Septoria tritici</i> blotch across bread and durum wheats Marcel Thierry - <i>INRAE, Palaiseau, France</i>
12:20-12:40	Genetic dissection of resistance to major diseases and insects in cultivated emmer wheat Steven Xu - <i>USDA, Albany, USA</i>
12:40-13:00	Short presentations selected from Abstracts

ROOM 2 – PARALLEL SESSION

10.30 – 12.45	INNOVATIVE APPROACHES FROM THE INDUSTRY*  (*Italian language) <i>Moderator: Roberto Ranieri - Open Fields, Parma, Italy</i>
10:30-10:50	Worldwide pasta business overview Margherita Mastromauro - <i>President of the Italia Pasta Makers, Italy</i>
10:50-11:10	AltoGrano: a breakthrough in the milling industry Marcello Miani and Graziano Stasi - <i>Molino Casillo, Bari, Italy</i>
11:10-11:30	Stra Pasta: durum wheat pasta with 19% of protein and 12% of fiber Emidio Mansi - <i>Pastificio Lucio Garofalo, Gragnano, Italy</i>
11:30-11:50	Innovative approaches to make pasta and filled pasta with durum wheat and other raw materials Renato Dall'Agata and Alessio Marchesani - <i>Fava-Storci, Cento, Italy</i>
11:50-12:10	End products from the new perennial grain Kernza developed from intermediate wheatgrass, and looking ahead to a perennial durum-wheatgrass hybrid Timothy Crews - <i>The Land Institute, Salina, Kansas USA</i>
12:10-12:20	Colkim - <i>Title and speaker to be announced</i>
12:20-12:30	Anton Paar - <i>Title and speaker to be announced</i>



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FRIDAY, 26 SEPTEMBER 2025

12:30-12:45	Open Discussion
13:00-14:00	<i>Lunch</i>
14:00-15:30	Round Table - See the program in ROOM 1

ROOM 1

14:00-15:30 **ROUND TABLE WITH DURUM WHEAT AND PASTA STAKEHOLDERS**

Moderators: *Silvia Giuliani - Assosementi, Bologna, Italy;*
Roberto Ranieri - Open Fields, Parma, Italy

- Maria Caboni - *University of Bologna, Italy*
- Stefano Ravaglia - *Società Italiana Sementi, Italy*
- Andrea Massi - *Produttori Sementi Bologna, Italy*
- Oriana Porfiri - *CGS Sementi, Italy*
- Pierre Devaux - *Florimond Desprez, France*
- Casillo Company, Italy (*TBD*)
- Divella Pasta Company, Italy (*TBD*)
- USA, Canada Pasta producer Representative (*TBD*)

15:30-17:00 **Session 7**
QUALITY AND FUNCTIONAL FOODS TRACEABILITY IN THE DURUM WHEAT CHAIN

Chairs: *Agata Gadaleta - University of Bari, Italy;*
Stefania Masci - University of Tuscia, Viterbo, Italy

Invited presentations

15:30-15:45	Development of new wheat-derived foods of the Mediterranean diet with improved nutritional and health value <i>Francesco Sestili - University of Tuscia, Viterbo, Italy</i>
15:45-16:00	The expression of the <i>CsIF6</i> gene in wheat: a beta-glucan biosynthesis prospective <i>Ilaria Marcotuli - University of Bari, Italy</i>
16:00-16:15	Genetic variation in semolina yellow colour-associated genes within the Global Durum Panel <i>Carlos Guzman - University of Cordoba, Spain</i>



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FRIDAY, 26 SEPTEMBER 2025

16:15-16:30	Short presentations selected from Abstracts of Sessions 6 & 7
16:30-17:00	<i>Coffee break & Posters vision</i>
17:00-19:45	Session 8 DECODING AND LEVERAGING THE DURUM WHEAT PANGENOME Chairs: Marco Maccaferri, <i>University of Bologna, Italy</i> ; Curtis Pozniak - <i>University of Saskatchewan, Canada</i>
17:00-17:20	Landscape of structural variation in the wheat genome: functional and phenotypic consequences Eduard Akhunov - <i>Department of Agronomy, Kansas State University, USA</i>
17:20-17:40	Uncovering hidden diversity in wheat genomes through k-mer-based analyses Simon Krattinger - <i>KAUST, Thuwal, Saudi Arabia</i>
17:40-18:00	Inflorescence architecture and its relevance for sink capacity Thorsten Schnurbush - <i>IPK, Gatersleben, Germany</i>
18:00-18:20	Exploiting the Tetraploid Wheat pangenome: a functional resource for the whole wheat community Cristian Forestan - <i>University of Bologna, Italy</i>
18:20-18:50	Improving wheat productivity: stories from the source and the sink sides Jorge Dubcovsky - <i>University of California, Davis, USA</i>
18:50-19:10	Closing remarks Agata Gadaleta - <i>University of Bari, Italy</i> ; Roberto Tuberosa - <i>University of Bologna, Italy</i>
20.00-23:00	Social Dinner

SATURDAY, 27 SEPTEMBER 2025

ROOM 1

09:00-11:30	EWG durum wheat
11:30-12:00	<i>Coffee break and Posters vision</i>

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