FROM SEED TO PASTA IV
INTERNATIONAL CONFERENCE
A SUSTAINABLE DURUM WHEAT CHAIN
FOR FOOD SECURITY AND HEALTHY LIVES

BOLOGNA - ITALY
26-29 OCTOBER 2022
Conference Center, Emilia-Romagna Region
Tower 3 - Viale della Fiera, 8 - Bologna

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## ORGANIZING COMMITTEE

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| Name            | Affiliation                              |
|-----------------|------------------------------------------|
| Karim Ammar     | University of Bologna, Italy             |
| Roberto Tuberosa| University of Bologna - Italy            |

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- University of Bologna, Italy

### Aldo Ceriotti
- CNR, Italy

### Tzion Fahima
- University of Haifa, Israel

### Silvia Giuliani
- Assosementi, Italy

### Peter Langridge
- Wheat Initiative, Germany

### Enrico Pè
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### Nicola Pecchioni
- CREA, Italy

### Stefano Ravaglia
- SIS, Italy

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- Hebrew University, Israel

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### Marco Silvestri
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  - University of Tuscia, Italy

- **Luigi Rossi**
  - ENEA, Italy
International Conference
FROM SEED TO PASTA IV
Bologna - Italy, 26-29 October 2022

SCIENTIFIC COMMITTEE

Chairs

Luigi Cattivelli
CREA - Italy

Curtis Pozniak
University of Saskatchewan - Canada

Jason Able
University of Adelaide
Australia

Filippo Bassi
ICARDA
Morocco

Sarrah Ben M’Barek
Research Center of Beja
Tunisia

Brian Beres
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Marina Carcea
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Anna Maria Mastrangelo
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Elisabetta Mazzucotelli
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Spain

Marcel Thierry
INRAE
France

Cristobal Uauy
John Innes Centre
United Kingdom

Steven Xu
USDA
USA
Wednesday, 26th October 2022

08:15 - 09:00 Registration of participants

09:00 - 09:40 Opening session and welcome addresses
Chairs: Karim Ammar, Roberto Tuberosa

- Paolo de Castro - EU Committee on Agriculture and Rural Development
- Rosalba Lanciotti - Delegate of the Rector of the University of Bologna and Director of DISTAL
- Alessio Mammì - Dept. Agriculture Emilia-Romagna Region
- Representative of MIPAAF
- Stefano Vaccari - General Manager of CREA
- Aldo Ceriotti - Director of IBBA, CNR
- Silvio Salvi - Vice President SIGA and delegate of AISSA

09:40 - 10:10 Opening keynote lecture
Importance of science and collaboration in addressing food security: Role of the Wheat Initiative
Peter Langridge - Wheat Initiative, Germany

10:10 - 12:35 Session 1. Genomics of durum wheat
Chairs: Luigi Cattivelli, Agata Gadaleta

Invited presentations

10:10 - 10:40 Leveraging modern genomic resources to identify adaptive variants and optimize breeding strategies in wheat
Eduard Akhunov - Kansas State University, USA

10:40 - 11:00 Svevo v2: A Platinum quality assembly of the durum wheat reference genome
Luigi Cattivelli (CREA, Italy) and Curtis Pozniak (University of Saskatchewan, Canada)

Presentations selected from abstracts

11:00 - 11:15 Carlotta award special mention
Speed genomic selection scheme for better adapted durum wheat to CWANA and West Africa regions
Hafssa Kabbaj - ICARDA, Rabat, Morocco

11:15 - 11:30 Recreating adaptive traits in exotic wheat germplasm
Dhouha Kthiri - National Research Council, Canada
Use of optimized hexaploidy wheat SNP arrays for durum genotyping
Martin Ganal - SGS Institut Fresenius GmbH, TraitGenetics, Germany

Illuminating the genomic landscapes of wheat evolution and domestication
Yael Lev-Mirom - University of Haifa, Israel

Application of molecular and cytogenetic markers to improve Hessian fly resistance and grain quality in durum wheat (Triticum turgidum) in Morocco
Moha Ferrahi - INRA, Morocco

Defining the genetics of spike colour and variation underlying awn and glume pigmentation in tetraploid wheat
Teketel Haile - University of Saskatchewan, Canada

Lunch

Session 2. Leveraging tetraploid wheat genetic resources for a concerted improvement of durum and bread wheat
Chairs: Haile Jemanesh, Marco Maccaferri

Invited presentations

Using the tetraploid Triticum timopheevii to increase the genetic variation of wheat
July King - University of Nottingham, UK

Genomics collaborative tools developed by the durum wheat community
Marco Maccaferri - University of Bologna, Italy

The Global Durum wheat Panel (GDP): An open access collection for durum wheat breeding
Elisabetta Mazzucotelli - CREA, Italy

Illuminating the history of domesticated tetraploid wheat along space and time
Sariel Hübner - Tel Hai Academic College, Israel

Metabolomics contribution in the evaluation of tetraploid wheats diversity. Leveraging tetraploid wheat genetic resources for a concerted improvement of durum and bread wheat
Romina Beleggia - CREA, Italy
**Wednesday, 26th October 2022**

| Time     | Presentation                                                                 |
|----------|------------------------------------------------------------------------------|
| 16:05 - 16:20 | **The role of polyphenol oxidase genes during the domestication and breeding of**
|           | *T. turgidum* ssp. *Francesca Taranto - CNR, Italy*                            |
| 16:20 - 16:35 | **A nested association mapping (NAM) panel of Durum Wheat to identify wild loci**
|           | **contributing to drought adaptation** *Jabbour Yaman - Aleppo University, Syria* |
| 16:35 - 16:50 | **Development of wild emmer wheat diversity panel for GWAS and population**
|           | **genetics** *Sela Hanan - University of Haifa, Israel*                        |
| 16:50 - 17:05 | **Hidden hunger and the role of ZIP family in tetraploid wheat**
|           | *Muhammad Waqas Ali - John Innes Centre, UK*                                   |
| 17:05 - 19:15 | **Session on InnoVar project**
|           | **Chairs: Fiona Doohan, Roberto Tuberosa**                                    |
| 17:05 - 17:15 | **Introduction to InnoVar**
|           | *Lisa Black - Afb, Ireland*                                                   |
| 17:15 - 17:35 | **GWAS for DUS examination**
|           | *Julio Sanchez (UPM, Spain) and Matteo Bozzoli (University of Bologna, Italy)* |
| 17:35 - 17:55 | **Multi-environmental field trials for next generation variety testing**
|           | *Elena Prats - CSIC, Spain*                                                   |
| 17:55 - 18:15 | **Machine Learning and the InnoVar database**
|           | *Danilo Sarti - NUIM, Ireland*                                                |
| 18:15 - 18:35 | **InnoVar Communications and outreach**
|           | *Dina Lopes - CONSULAI, Portugal*                                             |
| 18:35 - 18:55 | **External talk**
|           | **Uncovering the regulatory landscape of the wheat genome and its role in yield**
|           | **components variation**
|           | *Eduard Akhunov - Kansas State University, USA*                               |
| 18:55 - 19:15 | **External talk**
|           | **The vision of seed companies on the future of official listing tools**
|           | *Silvia Giuliani - Assosementi, Italy*                                        |
| 19:15 - 19:20 | **Final remarks**
|           | *Hazel Brown - AFB, Ireland*                                                  |

Close of the day
Thursday, 27th October 2022

08:45 - 10:25  **Session 3. Towards disease- and pest-resistant durum wheat**  
*Chairs: Elisabetta Mazzucotelli, Tzion Fahima*

Invited presentations

08:45 - 09:10  
Identification of rust resistance genes in wild emmer (*Triticum turgidum* ssp. *dicoccoides*)  
Pablo Oliveira Firpo - *University of Minnesota St. Paul, USA*

09:10 - 09:35  
*Carlotta Award winner*
Cloning of a novel stripe rust resistance gene Yr84 using BSA-Seq and low-coverage PacBio assembly  
Valentyna Klymiuk - *University of Saskatchewan, Canada*

09:35 - 10:00  
Fusarium head blight resistance in durum wheat: Identification of key genes for breeding innovations  
Agata Gadaleta - *University of Bari, Italy*

10:00 - 10:25  
The challenges of gene cloning in complex genomes: The winding road leading to the cloning of Pm69 from tetraploid emmer wheat  
Tzion Fahima - *University of Haifa, Israel*

Presentations selected from abstracts

10:25 - 10:40  
Fine mapping of a leaf rust resistance gene derived from emmer wheat (*Triticum turgidum* ssp. *dicoccum*)  
Francesca Desiderio - *CREA, Italy*

10:40 - 10:55  
Loci harboring genes with significant role in FHB resistance in durum wheat revealed by multiple GWAS models  
Jemanesh K. Haile - *University of Saskatchewan, Canada*

10:55 - 11:10  
Metabolic profiling of rachis and grain tissues of durum wheat- *Thinopyrum* germplasm harboring *Fhb7E*, a major Fusarium Head Blight resistance locus from *Thinopyrum elongatum*  
Kuzmanović Ljiljana - *University of Tuscia, Italy*

11:10 - 11:25  
Characterization of *sbm2*, a locus for soil-borne cereal mosaic virus (SBCMV) resistance in durum and bread wheat  
Matteo Bozzoli - *University of Bologna, Italy*
Thursday, 27th October 2022

11:25 - 12:45  **Carlotta Awards**  
*Chairs: Margherita Venturi, Patrizia Galeffi*

11:30 - 11:45  **Winners:** Caixia Lan, Ilaria Marcotuli, Valentyne Klymiuk, Jyoti S. Sharma

11:45 - 12:00  **Special mentions:** Hafssa Kabbaj, Paula Silva, Divya Ambati, Meryem Zaim

11:45 - 12:00  **1st classified thematic area A**  
Rapid cloning and functional gene analysis for a leaf rust resistance locus in durum wheat  
Caixia Lan - *Huazhong Agricultural University, Henan, China*

12:00 - 12:15  **1st classified thematic area B**  
Beta-glucan in durum wheat: The road towards new genotypes for a healthier wheat-pasta production  
Ilaria Marcotuli - *University of Bari, Italy*

12:15 - 12:30  **2nd classified thematic area B**  
Identification and characterization of stem rust resistance genes in tetraploid wheat  
Jyoti Saini Sharma - *University of Minnesota, USA*

12:30 - 12:45  **Special mention**  
Untapping the blast resistance from the D-sub genome progenitor of wheat  
Paula Silva - *INIA, Uruguay*

12:45 - 14:00  **Lunch**

14:00 - 14:50  **Session 4. Enhancing yield potential and yield stability of durum wheat**  
*Chairs: Eduard Akhunov, Anna Maria Mastrangelo*

14:00 - 14:25  **Invited presentations**  
*Breeding for yield potential and stability, the CIMMYT approach*  
Karim Ammar - *CIMMYT, Mexico*

14:25 - 14:50  **Genetic analysis of stable yield component QTL in tetraploid wheat**  
Amanda R. Peters Haugrud - *North Dakota State University, USA*
Thursday, 27th October 2022

Presentations selected from abstracts

14:50 - 15:05 Enhancing yield potential and yield stability in durum wheat using crop wild relative crosses, and participatory assessment of Moroccan farmers preferences
Noureddine El Haddad - ICARDA, Morocco

15:05 - 15:20 Uncovering the basis of wheat adaptation to the canopy environment
Guy Golan - IPK, Germany

15:20 - 15:35 Multivariate conditional QTL analysis of complex traits in durum wheat
Andrii Fatiukha - University of Saskatchewan, Canada

15:35 - 15:50 Unravelling the genetics of grain yield potential in wheat
Ragavendran Abba - IPK, Germany

15:50 - 16:05 Fine mapping and characterization of Grain Number Increase-2 locus (GNI-A2) in durum wheat
Francesco de Sario - University of Bologna, Italy

16:05 - 16:20 Q&A - Discussion

16:20 - 16:50 Short presentations selected from Posters

16:20 - 16:23 Eco-geographic and genomic imprints on Emmer wheat phenotypic performance under Mediterranean climate
Aviya Fadida - Myers - ARO, Israel

16:23 - 16:26 Towards the identification of Purple Pericarp 1 (Pp1) in Triticum durum
Esposito Salvatore - CREA, Italy

16:26 - 16:29 Is heritage wheat bread tastier?
Roi Ben-David - Institute of Plant Sciences, Agricultural Research Organization, Volcani Institute, Israel

16:29 - 16:32 QTL mapping of seedling and field resistance to stem rust in DAKIYE/Reichenbachii durum wheat population
Shitaye Megerssa - Ethiopian Institute of Agricultural Research, Ethiopia

16:32 - 16:35 Evaluation of durum (Triticum durum Desf.) global panels, gdp v 1.0-2018/2019 and gdp v 2.0-2019/2020 for earliness and yield in north western and north central, Nigeria
Mala Kachalla - Lake Chad Research Institute, Nigeria
Thursday, 27th October 2022

16:35 - 16:38 Durum wheat (Triticum turgidum ssp. durum Desf.) breeding program in Tunisia: Current status and future prospects
Ayed Sourour - National Institute of Agronomic Research of Tunisia

16:38 - 16:41 Durum wheat quality assessment: Influence of genotype and environment
Mounira Azouz - INRAA, Algeria

16:41 - 16:44 Durum wheat adaption to heat along the Senegal river valley
Amadou Tidiane Sall - Institut Sénégalais de Recherches Agricoles, Senegal

16:44 - 16:47 Digital phenotyping applications for high-throughput evaluation of durum wheat breeding field trials
Adam Carter - University of Saskatchewan, Canada

16:47 - 16:50 Q&A - Discussion

16:50 - 19:00 Session 5. Durum around the world
Chairs: Filippo Bassi, Amanda Peters

Presentations selected from abstracts

16:50 - 17:00 From the land to the table, pasta is from Emilia-Romagna
Cristina Pacifico - Emilia-Romagna Region, Italy

17:00 - 17:10 Queule-Inia, spring durum wheat variety for Chile
Iván Matus-Tejos - Instituto de Investigaciones Agropecuarias, Chile

17:10 - 17:20 Durum wheat global changes in cultivated area and breeding activities from 1800 to the present: A historical review
Fernando Martinez-Moreno - University of Seville, Spain

17:20 - 17:30 A status update on fusarium head blight and ergot on canadian durum
Sean Walkowiak - Canadian Grain Commission, Grain Research Laboratory, Canada

17:30 - 17:40 Evaluation of yield, biomass and grain quality of Moroccan multilocation trials of durum wheat lines from different origins
Amamou Ali - INRA, Rabat, Morocco

17:40 - 17:50 Revisiting the Tunisian durum wheat: From landraces to modern varieties "Towards global assessment for full picture"
Ines Yacoubi - Plant Biotechnology and Improvement laboratory, Tunisia
Thursday, 27th October 2022

17:50 - 18:00   Ancient and novel Ethiopian durum cultivars: What future for their cultivation?  
Wasihun Legesse - Ethiopian Institute of Agricultural Research, Ethiopia

18:00 - 18:10   Durum wheat in Syria: Current status of research despite all  
Jabbour Yaman - Aleppo University, Syria

18:10 - 18:20   On-farm multi-locations trials and promotion of traditional and modern durum wheat genotypes in Lebanon  
Rola El Amil - LARI, Lebanon

18:20 - 18:30   Diversity analysis of Aegilops species of different origin using SSR markers  
Merahj Abbasov - Genetic Resources Institute, Germplasm bank, Azerbaijan

18:30   Discussion and closing remarks by Filippo Bassi

19:00   Close of the day
## Session 6. The durum wheat-pasta value chain: Healthier durum wheat for healthier lives

**Session dedicated to the memory of Craig Morris**  
**Chairs:** Stefania Masci, Peter Shewry

| Time          | Presentation                                                                 | Speaker                              | Affiliation/Institution                                |
|---------------|------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------|
| 08:30 - 08:55 | Improving the health benefits of wheat                                        | Peter Shewry                          | Rothamsted Research, UK                                |
| 08:55 - 09:20 | Improving the nutritional value in durum wheat: New genotypes biofortified in resistant starch, provitamin A and minerals | Francesco Sestili                    | University of Tuscia, Italy                            |
| 09:20 - 09:45 | Pasta optimization for the production of pasta enriched with functional ingredients | Alessandra Marti (University of Milano, Italy) and Mike Sisson (Tamworth Agricultural Institute, Australia) |
| 09:45 - 10:10 | A DNA-based toolbox to meet the traceability needs of the pasta supply chain | Valeria Terzi                         | CREA, Italy                                           |

### Round Table

**Designing the future for a healthier durum wheat chain**
**Jointly organized by the Italian Pasta makers Association and the PLAN’EAT project**

**Chairs:** Roberto Ranieri, Maria Caboni, Patrizia Brigidi

| Time          | Presentation                                                                 | Speaker                              | Affiliation/Institution                                |
|---------------|------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------|
| 10:10 - 10:25 | The PLAN’EAT project as related to the From Seed To Pasta chain               | Maria Caboni                         | DISTAL, University of Bologna, Italy                  |
| 10:25 - 10:50 | Status of the art of the worldwide pasta business                             | Cristiano Laurenza                  | Secretary of Italian Pasta makers Association (AIDEPI), Italy |
| 10:50 - 11:05 | The benefit of whole grain pasta for a healthier diet                         | Yan De Vries                         | Board member and communication manager of the Health Grain Forum, the Netherlands |
| 11:05 - 11:20 | Innovative approaches in the New Product (Pasta) Development                 | Francesco Pantò                      | Vice President of the Pasta and Sauces R&D (Barilla G.e R. F.lli) |
| 11:20 - 11:35 | High Amylose Pasta, more than prototype                                        | Michael Gusko                        | Innovation Director (Goodmills group), USA             |
| Time          | Session                                                                 |
|--------------|--------------------------------------------------------------------------|
| 11:35 - 11:50| Durum wheat milling co-products valorization | Marcello Greco Miani - R&D (Molino Casillo), Italy |
| 11:50 - 12:25| Q&A and discussion on the future for a healthier durum wheat chain | Coordinated by the Chairs |
| 12:20 - 12:30| Closing remarks by Roberto Ranieri                                     |
| 12:30 - 14:00| Lunch                                                                   |
| 14:00 - 14:30| Technical session: Meet the pasta technology companies | Chair: Roberto Ranieri |
|              | Smart sensors meet spaghetti | Andrea Palmieri - Paola Rametta - RAM ELETTRONICA, Italy |
|              | Automated multi-plex mycotoxin control for safe raw material intake | Claus Holm - FOSS, Denmark |
|              | Q&A - Discussion                                                         |
| 14:30 - 15:45| Session 6. (continued). The durum wheat-pasta value chain: Healthier durum for healthier lives |
|              | Session dedicated to the memory of Craig Morris | Chairs: Valeria Terzi, Francesco Sestili |
|              | Presentations selected from abstract                                      |
| 14:30 - 14:45| WHEATUCO: Breeding for durum wheat quality | Carlos Guzman - University of Córdoba, Spain |
| 14:45 - 15:00| Nutritional and industrial quality assessment in Spanish durum wheat commercial cultivars | Virginia Garcia-Calabres - University of Córdoba, Spain |
| 15:00 - 15:15| Renewing traditional Mediterranean durum wheat based products | Barbara Laddomada - ISPA, CNR, Italy |
| 15:15 - 15:30| North African traditional durum dishes: From end-use traits to their genomic control | Houda Bousselham - ICARDA, Morocco |
| 15:30 - 15:45| Selection of high-yellow color durum wheat lines by using effective molecular markers | Maria Itria Ibba - Global Wheat Program, CIMMYT, Mexico |
| Time     | Session                                                                 |
|----------|-------------------------------------------------------------------------|
| 15:45 - 18:00 | **Session 7. Breeding durum wheat to face the climate crisis**  <br> *Chairs: Nicola Pecchioni, Dolors Villegas* |
| 15:45 - 16:05 | **Invited presentations**  <br> Genotype vs. environment: The ICARDA durum wheat breeding program for dryland cultivation  <br> Filippo Bassi - ICARDA, Morocco |
| 16:05 - 16:25 | Towards improving durum wheat breeding programs to face climate changes  <br> Pasquale De Vita - CREA, Foggia, Italy |
| 16:25 - 16:45 | Increasing durum wheat yield and yield stability in the Mediterranean region  <br> Dolors Villegas - IRTA, Sustainable Field Crops Program Lleida, Spain |
| 16:45 - 17:00 | **Carlotta award special mention**  <br> Loci controlling moisture conversion of durum wheat productivity  <br> Meryem Zaïm - ICARDA, Morocco |
| 17:00 - 17:15 | **Carlotta award special mention**  <br> Assessment of Indian wheat genotypes for drought tolerance under two water regimes  <br> Divya Ambati - ICAR, India |
| 17:15 - 17:30 | **DRF1 gene expression profiles of durum wheat grown in field under full- and reduced-irrigation**  <br> Arianna Latini - ENEA, Casaccia Research Center, Italy |
| 17:30 - 17:45 | Exploring the molecular bases of root growth angle and its regulation in durum wheat  <br> Cristian Forestan - University of Bologna, Italy |
| 17:45 - 18:00 | Q&A - Discussion |
| 18:00 | End of the day |
| 20:00 | Social Dinner  <br> *Sydney Hotel, Bologna* |
### Saturday, 29th October 2022

| Time       | Event                                                                 | Chair(s)                                                                 |
|------------|-----------------------------------------------------------------------|--------------------------------------------------------------------------|
| 09:00 - 11:00 | **Session 8. Managing a sustainable durum production for food security** | Curtis Pozniak, Allison Bentley                                           |
|            | **Invited presentations**                                              |                                                                          |
| 09:00 - 09:25 | Unlocking the potential of Genotype x Environment x Management (GxExM) synergies to enhance durum wheat production systems | Brian Beres - Agriculture and Agri-Food Canada                           |
| 09:25 - 09:50 | Decision Support Systems to increase farm sustainability and resilience | Pierluigi Meriggi - HORTA, Italy                                        |
| 09:50 - 10:15 | Smart farming tools for sustainable production chain: The Barilla durum wheat case study | Marco Silvestri - Barilla G.e R. F.lli, Italy                           |
|            | **Presentations selected from abstracts**                             |                                                                          |
| 10:15 - 10:30 | Prediction of durum wheat diseases using reflectance spectroscopy      | Dalma Castillo - INIA, Quillamapu, Chile                                 |
| 10:30 - 12:30 | **Closing session**                                                  | Peter Langridge, Roberto Tuberosa                                        |
|            | **Invited presentations**                                              |                                                                          |
| 10:30 - 11:00 | Acquired inheritance in weeds and wheat and its plant breeding potential | Bikram Gill - Kansas State University, USA                               |
| 11:00 - 11:30 | Wheat breeding as a DNA-assembly problem                              | Cristobal Uauy - John Innes Centre, UK                                  |
| 11:30 - 12:00 | **Closing keynote lecture**                                           | What’s next for global wheat?                                           | Alison Bentley - CYMMIT, Mexico                                      |
| 12:00 - 12:30 | **Closing remarks**                                                  | Karim Ammar, Luigi Cattivelli, Curtis Pozniak, Roberto Tuberosa          |
|            | **Lunch (on your own)**                                               |                                                                          |
| 14:00 - 16:00 | **Workshop Expert in Durum Wheat & Genomics and Breeding**            | Luigi Cattivelli                                                        |
Session 1. Genomics of durum wheat

P1 Transcriptional reprogramming activated by Wheat Tandem Kinase 1 in response to stripe rust infection
Liubov Govta - University of Haifa, Israel

P2 Transcriptome analysis of the response to nitrogen stress at the seedling stage, in wheat introgression of GPC-QTL from wild emmer wheat
Nikolai Govta - University of Haifa, Israel

P3 Study of gliadin-coding loci of the hybrid generation of durum wheat varieties of Azerbaijan
Gulshen Polado - Institute of Genetic Resources of ANAS, Azerbaijan

P4 The ratio of yield and content of nucleic acids in heterotic hybrids of wheat (T. durum Desf.)
Afet Mammadov - Genetic Resources Institute, Azerbaijan

P5 Development and validation of molecular markers for high molecular weight glutenins (HMW-GS) in durum wheat
Laura Pascual - Politécnica de Madrid, Spain

P6 Influence in yellowness of allelic variation in PSY-1A gene in a durum wheat recombinant population
Naima Bouabdellah - Universidad Politécnica de Madrid, Spain

P7 Effect of major genes (Rht-B1, Ppd-A1, Vrn-A1) and loci identified by association mapping on yield and morfo-phenological traits in durum wheat
Pablo Federico Roncallo - CERZOS and UNS-CONICET, Bahía Blanca, Argentina

P8 Association study and multivariate genomic prediction for simultaneous improvement of grain yield and grain protein content in durum wheat
Paolo Vitale - CREA, Italy

Session 2. Leveraging tetraploid wheat genetic resources for a concerted improvement of durum and bread wheat

P9 Generation of an EMS mutant collection for isolation and characterization of genes of agronomic interest in durum wheat
Patricia Giraldo - Universidad Politécnica de Madrid, Spain
POSTERS’ LIST

P10 Identification of diverse set of genotypes for grain quality-related traits in wheat
Maria Anna Russo - CREA, Italy

P11 Evaluation of genetic diversity of Sicilian autochthonous tetraploid wheat varieties by gluten protein analysis
Marco Bonarrigo - University of Tuscia, Italy

P12 Exploiting the potential of Global Durum Panel for plant and human health
Elena Baldoni - CNR/IBBA, Italy

P13 Exploring the genetic diversity of wheat landraces of Campania region using SNP and SSR markers
Giuseppina Angione - CREA, Italy

P14 Genetic loci involved in resistance to six races of stem rust in a wild emmer wheat panel assessed at seedling stage
Elisabetta Mazzucotelli - CREA, Italy

P15 The effect of different wheat genotypes and species on rhizospheric and endospheric bacterial communities
Armin Shahpari - University of Bologna, Italy

P16 A Tetraploid Core Collection (TCC) from the global durum genomic resource assessed for resilience traits including root system architecture, stem anatomy and developmental traits
Xinying Zeng - University of Bologna, Italy

Session 3. Towards disease- and pest-resistant durum wheat

P17 Improvement of tritordeum, the durum wheat × wild barley amphiploid
Sergio Atienza - IAS-CSIC, Spain

P18 Pyramiding of powdery mildew and yellow rust resistance genes introgressed from wild emmer wheat into cultivated wheat
Li Yinghui - University of Haifa, Israel

P19 Genome-wide association mapping of Septoria Tritici blotch resistance in a collection of Mediterranean durum wheat landraces via high-density marker arrays
Meriam Nefzaoui - University of Bologna, Italy
POSTERS’ LIST

P20 Production of durum wheat lines with improved durable resistance to multiple fungal diseases
Daniela Marone - CREA, Italy

P21 Identification of a set of wide untapped diversity for reaction to tan spot in durum wheat
Anna Maria Mastrangelo - CREA, Italy

P22 Effect of Fusarium culmorum on grain and pasta quality of Tunisian durum wheat varieties
Dorra Sfayhi Terras - INRAT, Tunisia

P23 QTL mapping of stem rust resistance in bi and multi-parental populations of durum wheat
Elisabetta Mazzucotelli - CREA, Italy

P24 Evaluation of the global durum genomic resource for resistance to yellow rust in a multi-environment phenotypic evaluation and GWAS
Jad B Novi - University of Bologna, Italy

P25 Multi-environmental genome-wide association study for response to fusarium head blight in durum wheat panels
Ambra Viviani - University of Bologna, Italy

P26 Molecular approaches for identifying sources of resistance to Fusarium wilt as the main pathogen causing wheat quality degradation
Labhilli Mustapha - Regional Center for Agronomic Research of Rabat, INRA, Morocco

Session 4. Enhancing yield potential and yield stability of durum wheat

P27 Selecting desirable durum wheat elite lines for diversification of genetic base and release of varieties in Pakistan
Waqar Sundas - National Agriculture Research Centre, Pakistan

P28 Identification and mapping of quantitative trait loci for kernel-related traits in a durum wheat x T. dicoccum segregating population
Francesca Desiderio - CREA, Italy

P29 Specific adaptation: The key to overcoming the effects of terminal drought on durum wheat in Chile
Christian Alfaro - INIA Rayentué, Chile
POSTERS’ LIST

P30 Comprehensive assessment of tetraploid germplasm for plant developmental traits related to grain yield including spike fertility and grain size and shape  
Matteo Campana - University of Bologna, Italy

Session 5. Durum around the world  
(no posters)

Session 6. The durum wheat-pasta value chain: Healthier durum wheat for healthier lives

P31 Carotenoid biofortification of durum wheat through inter-specific breeding  
María Dolores Requena Ramírez - Instituto de Agricultura Sostenible (CSIC), Spain

P32 Filigrano: Innovation in the cereal supply chain, from high quality sustainable production to differentiated storage  
Laura Gazza - CREA, Italy

P33 Innovative processing plants: Technological and nutritional quality of unrefined durum wheat air-classified fractions  
Alessandro Cammerata - CREA, Italy

P34 Development of new wheat-derived foods of the Mediterranean diet with improved nutritional and health value: MEDWHEALTH project  
Samuela Palombieri - University of Tuscia, Italy

P35 Biofortification in microelements by modulating the accumulation of phytic acid in durum wheat grain  
Arianna Frittelli - University of Tuscia, Italy

P36 Variability of lipid composition in a Triticum turgidum collection  
Giovanni Maria Poggi - University of Bologna, Italy

P37 Toxic and potentially toxic element uptake and translocation in durum wheat (Triticum turgidum L. subsp. durum) cultivars under real field conditions  
Emilia Pucci - ENEA, Casaccia Research Center, Italy

Session 7. Breeding durum wheat to face the climate crisis

P38 Abscisic acid-stress-ripening (ASR) gene modulates response to high salinity and water deficit in durum and common wheat  
Angelica Giancaspro - University of Bari, Italy
POSTERS’ LIST

P39 An attempt to convert multi-trait into quality index for describing quality in durum wheat breeding program
Mouna Taghouti - INRA, Morocco

P40 Identification of the quantitative trait loci controlling spike-related traits in durum wheat
Francesca Desiderio - CREA, Italy

P41 Yield and technological value of spring T. durum cultivars grown in Poland
Elżbieta Suchowilska - University of Warmia and Mazury, Poland

P42 Next generation variety testing for improved durum wheat
Gracia Montilla - Bascon - Institute for Sustainable Agriculture, Cordoba, Spain

P43 Allelic variation at Vrn-1 and Ppd-1 loci and their effects on agronomic traits on Italian durum wheat germplasm
Sanaz Afshari-Behbahanizadeh - CREA-CI, University of Foggia, Italy

P44 The modulation of cell cycle progression and of histone H3 acetylation in response to salt stress in durum wheat Thinopyrum spp. recombinant lines analysed by a flow cytometric approach
Debora Giorgi - ENEA, Italy

P45 Performance of locally adapted durum wheat germplasm in the Mediterranean basin and recombinant lines with Thinopyrum spp. introgressions across Algerian and Italian environments with different water availability
Carla Ceoloni - University of Tuscia, Italy

P46 Assessing yield and quality traits of durum wheat varieties, landraces and recombinant lines with alien introgressions in Turkish and Italian environments under rainfed and irrigated conditions
Roberto Ruggeri - University of Tuscia, Italy

P47 The response to salt stress application of durum wheat Thinopyrum spp. recombinant lines based on morpho-physiological and biochemical parameters
Sana Tounsi - Centre of Biotechnology of Sfax, Tunisia

P48 Exploitation of the Thinopyrum genus to enhance durum wheat heat tolerance: Chromosomally engineered recombinant lines perform remarkably under stress application at flowering time
Gloria Giovenali - University of Tuscia, Italy
POSTERS’ LIST

P49 Root system analysis of durum wheat under drought stress using high-throughput phenotyping method
Ieva Urbanavičiūtė - University of Tuscia, Italy

P50 Genome wide association study uncovers the QTLome for osmotic adjustment and related drought adaptive traits in durum wheat
Marco Maccaferri - University of Bologna, Italy

P51 RGB-derived vegetation indices as a tool to estimate soil coverage ability in durum wheat
Fabio Fania - University of Foggia, Italy

Session 8. Managing a sustainable durum production for food security

P52 Marker-trait associations of agronomic traits from the Cerealmed durum wheat panel as assessed in multi-environment trials under conservative agriculture
Elisabetta Mazzucotelli - CREA, Italy
GENERAL INFORMATION

CONFERENCE VENUE
Conference Center • Emilia-Romagna Region
Viale della Fiera 8 - Bologna
Bus Nr. 35 (stop Aldo Moro)
Timetable available on: www.fromseedtopasta.com - section “general information / Venue”

WI-FI
In the Conference venue free Wi-Fi is available.
Network: EmiliaRomagnaWiFi

COVID RULES
During the Conference it is mandatory to wear the FFP2 face mask in the Conference room and in the other common areas

POSTERS’ VIEW
The Posters are available on the website www.fromseedtopasta.com - Section Program / Posters

COFFEE STATION
With automatic machine for water, coffee, hot drinks and snacks

26th - 27th - 28th October
Available from 9:00 to 18:00

29th October
Available from 9:00 to 13:00

LUNCH VENUE
(reserved to the participants that have booked the service)

Wednesday 26th October - Hotel Savoia Regency
12:30 - Bus departure from Conference venue

Thursday 27th October - Hotel Sydney
12:45 - Bus departure from Conference venue

Friday 28th October - Hotel Sydney
12:30 - Bus departure from Conference venue

SOCIAL DINNER VENUE
Hotel Sydney
Via Michelino 73 - Bologna
SHUTTLE SERVICE

Wednesday 26th October

From Hotels to Conference venue
08:00   Holiday Inn Express Hotel (same pick up venue for Cosmopolitan Guests)
08:10   Sydney Hotel (same pick up venue for Michelino Hotel Guests)

From Conference venue to Hotels
19:30   Destinations: Sydney Hotel, Michelino Hotel, Holiday Inn Express and Cosmopolitan

Thursday 27th October

From Hotels to Conference venue
08:20   Holiday Inn Express Hotel (same pick up venue for Cosmopolitan Guests)
08:30   Sydney Hotel (same pick up venue for Michelino Hotel Guests)

From Conference venue to Hotels
19:00   Destinations: Sydney Hotel, Michelino Hotel, Holiday Inn Express and Cosmopolitan

Friday 28th October

From Hotels to Conference venue
08:10   Holiday Inn Express Hotel (same pick up venue for Cosmopolitan Guests)
08:20   Sydney Hotel (same pick up venue for Michelino Hotel Guests)

From Conference venue to Hotels
18:00   Destinations: Sydney Hotel, Michelino Hotel, Holiday Inn Express and Cosmopolitan

Social Dinner (only for participants that have booked the ticket)
19:45   Pick up from Holiday Inn Express and Cosmopolitan to Sydney Hotel
22:30   Pick up from Sydney Hotel (Social Dinner venue) to Hotel Cosmopolitan

Saturday 29th October

From Hotels to Conference venue
08:40   Holiday Inn Express Hotel (same pick up venue for Cosmopolitan Guests)
08:50   Sydney Hotel (same pick up venue for Michelino Hotel Guests)

From Conference venue to Hotels
12:30   Destinations: Sydney Hotel, Michelino Hotel, Holiday Inn Express and Cosmopolitan

USEFUL NUMBERS

Organizing Secretariat onsite: + 39 348 2487176
Taxi service: + 39 051 4590 / + 39 051 372727
Private cars: + 39 051 519090 (Cosepuri)
+ 39 051 553415 (Cab)
Bologna Airport: + 39 051 6479615
Trainline (Trenitalia): + 39 892021
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Bologna - Italy, 26-29 October 2022

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