



GENETIC BLUEPRINTS FOR NEXT GENERATION CROPS

FIRST ANNOUNCEMENT

The Board of the Italian Society of Agricultural Genetics (SIGA) announces that the LXIX Annual SIGA Congress will take place in Rome, Italy, from September 8 to 11, 2026. The venue will be the headquarters of the National Research Council (CNR), Piazzale Aldo Moro 7. The venue is fully accessible.

The official language of the Congress will be English. The Congress will include seven oral sessions and two round tables, as detailed in the attached programme. Each session will include talks provided by invited international experts, as well as oral and poster presentations. The "Next Generation SIGA" group will organize Session 6, entitled "Integrative genomics and regulatory networks for next-generation crop improvement", scheduled in the afternoon of September 10; contributions by first authors 35-year-old or younger will be selected for this session.

The round table "*Il contributo della genetica alle filiere agroalimentari italiane*" is scheduled for the morning of September 9 while the round table "*Proteggere le innovazioni: brevetti, IPR e privative vegetali a confronto*" is scheduled for the afternoon of September 10. Two poster discussion sessions will be held.

A welcome cocktail will be held on Tuesday, September 8 at 19:00 in the Museum of Classical Art (Gypsoteca), Sapienza University of Rome, Piazzale Aldo Moro 5, within walking distance from the venue.

The annual SIGA assembly, reserved to the Society Members, will take place at the Congress venue on Wednesday, September 9, from 17:45 to 19:30. Information on the Assembly programme will be communicated to Members in due time.

The social event will be held on Thursday, September 10 at 20:30 in the Cloister of San Giuseppe de Merode, Via San Sebastianello 3, Roma. On this occasion, the SIGA 2026 Congress Awards will be assigned to the best posters, selected by the SIGA Board. Details on how to reach the site of the social event will be provided in due time.

SCIENTIFIC CONTRIBUTIONS AND SUBMISSION RULES

The SIGA Board, as the Congress Scientific Committee, invites **both members and non-members** to submit scientific contributions (either oral or poster presentations) for the following sessions:

- Session 1 - From wild species to crops: *de novo* domestication and breeding of underutilized crops
- Session 2 - Regulation of plant development, architecture and *in vitro* regeneration

- Session 3 - Emerging strategies and future directions in plant breeding
- Session 4 - Harnessing plant potential for food and health
- Session 5 - Exploiting plant biodiversity to drive innovative plant breeding
- Session 6 - Integrative genomics and regulatory networks for next-generation crop improvement
- Session 7 - Improving the utilization efficiency of key resources, water and macronutrients for crop productivity
- Session 8 - Miscellaneous (posters only).

The description of the contents of each session is given below. Oral presentations will be selected by the Scientific Committee among the submitted contributions. Submissions not accepted for oral presentation will be accepted for poster presentations. Authors will be notified about presentation form by the end of July. The abstracts of oral and poster contributions should be in English and submitted through the Congress website (<http://www.sigaannualcongress.it>). The Abstract submission deadline is June 20. At abstract submission, the corresponding Author must indicate: (a) the session identification number (1 - 8); (b) the preferred form of presentation (oral or poster).

Each contribution, either oral or poster, will be linked to a single corresponding Author who must be registered to the Congress. The corresponding Author may or may not be the first Author. The corresponding Author can be a co-author of other contributions, but not with the qualification of corresponding Author.

Only the abstracts of accepted and presented contributions (oral or poster), will be published in the proceedings, which will be made available on the SIGA website under an ISBN identifier.

The slides for oral presentations and the posters should be in English. Poster format should be 70 cm wide x 100 cm high. The posters will be displayed in the dedicated areas. Due to space limitations, there will be two poster sessions organized in two separate, consecutive groups. Therefore, the posters of each session will be displayed for a limited time as detailed in the provisional programme below. Authors will be asked to be present nearby their posters during the discussion time.

The Scientific Committee reserves the right to make any changes to the program that may be necessary for scientific and/or organisational reasons.

REGISTRATION AND FEES

Registrations will be accepted until August 25, exclusively online through the Congress website: <http://www.sigaannualcongress.it>. Discounted early bird registrations will be accepted until June 20. Congress fees can be paid by bank transfer or on site at the Congress venue (full fee, see below).

Participants' status	Early bird fee	Full fee
	(before June 20)	(from June 21 to August 25)
Tenured – SIGA Member	€ 380	€ 430
Tenured – not SIGA Member	€ 430	€ 480
Non tenured – SIGA Member	€ 200	€ 250
Non tenured – not SIGA Member	€ 250	€ 300

To encourage participation of young, non-tenured researchers, a reduced registration fee is applied. The non-tenured status applies only to students, including PhD students, post-docs and scholarship holders. The certification of the non-tenured status should be issued in writing by the PI of the applicant or by the director of the department or research institution, and submitted online at registration.

The registration fee will include access to the congress venue, the congress kit, the welcome cocktail, coffee breaks, lunches, and the social event.

To benefit from Member fees, the participant must be up-to-date with the payment of the membership fee. For any questions concerning your membership, please contact the SIGA Secretariat: segretario@geneticagraria.it

CANCELLATION OF REGISTRATION

In the event of registration cancellation, the refund of the fee must be requested within 10 days from the closing of the Congress. The refund, minus any applicable bank charges, will be made within a month following the closing of the Congress.

SIGA AWARDS 2026 FOR THE BEST PUBLICATION IN AN INTERNATIONAL SCIENTIFIC JOURNAL

The three papers previously selected by the SIGA Board as winners of the SIGA 2026 Award for the best publication in international scientific journals on agricultural genetics, breeding and biotechnology by young scientists will be presented by the Authors on Friday, September 11 at 09:30.

SIGA CONGRESS AWARDS 2026

Poster communications by non-tenured participants as first Author will be eligible for the SIGA Congress Awards 2026. Candidates should apply by checking the appropriate box when submitting the abstract. The posters will be evaluated by the SIGA Board, and the prizes (200 Euro each) will be awarded during the social event and exclusively to the first Author, if present at the event. Candidates to the SIGA Congress Awards 2026 must be registered by 31 July 2026.

HOTEL BOOKING

Nearby the congress venue, hotels, bed & breakfasts, residences, and restaurant services are available. The list of facilities with special rates will be published on the Congress website (<http://www.sigaannualcongress.it>). Congress participants will directly reserve their accommodations. To take advantage of the special rates, it will be necessary to mention the participation in the SIGA Congress during the booking process. The Local Organising Committee recommends booking your accommodation as soon as possible. The list of hotels offering discounts to Congress participants may be updated as we approach the Congress, therefore we recommend checking the Congress website just before making your reservation.

We look forward to your participation in the LXIX Annual SIGA Congress.

The Secretary

Daniele Rosellini

The President

Stefania Masci

The President of the
Organizing Committee

Raffaella Maria Balestrini

IMPORTANT DEADLINES
20 JUNE 2026 a) last date for early bird registration fee b) last date for abstract submission 31 JULY 2026 Last date for registration (at full fee) for candidates to the “SIGA Congress awards 2026” (non-tenured participants) 25 AUGUST 2026 Last date for registration (at full fee)

LXIX ANNUAL CONGRESS OF THE ITALIAN SOCIETY OF AGRICULTURAL GENETICS

GENETIC BLUEPRINTS FOR NEXT GENERATION CROPS

ROMA, SEPTEMBER 8-11, 2026

CALL FOR ABSTRACTS

Session 1 - From wild species to crops: *de novo* domestication and breeding of underutilized crop

This session explores the analysis of domestication traits and how plant genetics and genomics are driving progress in *de novo* domestication and the improvement of underutilized crops. Expected contributions will cover foundational genetic resources, including genomic and transcriptomic data, and the use of pangenomes to uncover structural variation linked to key traits.

The session welcomes insights into precision genome engineering for accelerated domestication of wild species, as well as multi-omics or AI-driven approaches for prioritizing quality and yield-related traits.

Session 2 - Regulation of plant development, architecture and *in vitro* regeneration

Genetic control of plant development and architecture is central to plant adaptation and breeding and provides new opportunities for the application of New Genomic Techniques (NGTs). This session welcomes contributions on genetic, molecular and hormonal mechanisms regulating plant development and architecture, as well as advances in *in vitro* culture and regeneration. Topics include developmental and architectural regulators, also in relation to response to environmental conditions, and improved regeneration systems supporting efficient genome editing and crop innovation.

Session 3 - Emerging strategies and future directions in plant breeding

Plant breeding is quickly advancing through the use of genomic tools, data science, and artificial intelligence. This session will focus on innovative strategies that accelerate variety development, enhance selection efficiency, and promote sustainable crop improvement. We welcome contributions that showcase AI-based methods, digital breeding techniques, and new applications aimed at enhancing crop performance, quality, and resilience in a changing agricultural landscape. The session will also cover traditional breeding approaches that integrate molecular techniques, speed breeding, and genomic selection.

Session 4 - Harnessing plant potential for food and health

This session highlights cutting-edge advances in plant genetics aimed at enhancing nutritional quality and health-promoting traits. Presentations will cover genomic tools, molecular breeding, and the identification of key genes and pathways underlying valuable plant-based product characteristics. Strategies for accelerating crop improvement to meet food and health challenges can be proposed for this session, fostering the dialogue among geneticists, breeders, and researchers working on plant-based systems for biomolecules.

Session 5 - Exploiting plant biodiversity to drive innovative plant breeding

This session highlights the development, analysis, conservation and exploitation of collections of plant genetic materials (including crop wild relatives, ecotypes, varieties, landraces, natural and induced mutants, and mapping populations) as a boundless reservoir of genetic diversity for crop improvement. We welcome contributions describing innovative approaches in high-throughput

phenotyping and genotyping aimed at generating new insights into simple or complex traits to accelerate the improvement of the crops for the future.

Session 6 - Integrative genomics and regulatory networks for next-generation crop improvement

Understanding complex agronomic traits requires moving beyond single reference genomes toward integrative frameworks that capture multiple layers of genome regulation and variation. This session focuses on recent advances in the reconstruction and analysis of plant regulatory networks using next-generation sequencing data, combining transcriptomic, epigenomic and genome-wide information with bioinformatics and data-driven approaches. Particular emphasis will be placed on “beyond-the-reference” genomics, including pangenomes development and investigation, epigenomic diversity, and their integration with multi-omics and phenomics data. Contributions will explore how these approaches enhance the interpretation of gene regulation, metabolic pathways and genotype–phenotype relationships, providing new insights and tools for next-generation crop improvement.

Session 7 - Improving the utilization efficiency of key resources, water and macronutrients for crop productivity

Macronutrients (Nitrogen – N, Phosphorous – P) and water are decisive resources for plant growth and development. Their utilization efficiency is a key determinant of sustainable crop productivity under changing environmental conditions. This session invites contributions providing new insights into the identification of heritable traits enabling improved Water Use Efficiency (WUE), N and P Use Efficiency (NUE and PUE), as well as plant adaptation to low input conditions.

Session 8 - Miscellaneous (posters only)

This session will host all the contributions that cannot be included in the thematic sessions listed above. This will be a poster session.

LXIX ANNUAL CONGRESS OF THE ITALIAN SOCIETY OF AGRICULTURAL GENETICS

GENETIC BLUEPRINTS FOR NEXT GENERATION CROPS

ROMA, SEPTEMBER 8-11, 2026

PRELIMINARY PROGRAMME

TUESDAY, SEPTEMBER 8

12:00 – 14:00	Registration and poster setup GROUP I	
14:00 – 14:30	Opening ceremony <i>Chairpersons: Stefania Masci, Raffaella Maria Balestrini</i> Welcome address by institutional and local Authorities	
14:30 – 16:30	Session 1 - From wild species to crops: <i>de novo</i> domestication and breeding of underutilized crop <i>Chairpersons: Stefania Masci, Marco Maccaferri</i>	
	14:30 – 15:00	Invited Lecture <i>Hakan Özkan</i> - University of Çukurova, Turkey From wild genomes to future crops: rethinking wheat domestication
	15:00 – 16:15	Oral communications
	16:15 – 16:30	General discussion
16:30 – 17:00	Coffee break and poster viewing	
17:00 – 18:45	Session 2 - Regulation of plant development, architecture, and <i>in vitro</i> regeneration <i>Chairpersons: Laura Rossini, Raffaella Maria Battaglia</i>	
	17:00 – 17:30	Invited Lecture <i>Maria Von Korff</i> - Max Planck Institute for Plant Breeding Research, Germany Adaptation to thermal stress: decoding barley's shoot meristem response
	17:30 – 18:30	Oral communications
	18:30 – 18:45	General discussion
19:00 – 21:00	Welcome cocktail - Museum of Classical Art (Gypsoteca), Sapienza University of Rome, Piazzale Aldo Moro 5, Roma	

WEDNESDAY, SEPTEMBER 9

09:00 – 11:00	Session 3 – Emerging strategies and future directions in plant breeding <i>Chairpersons: Silvia Giuliani, Emidio Albertini</i>	
	09:00 – 09:30	Invited Lecture <i>Manuel Jamilena</i> - University of Almería, Spain Developing and using TILLING resources for functional genomics and plant breeding in zucchini
	09:30 – 10:45	Oral communications
	10:45 – 11:00	General discussion
11:00 – 11:30	Coffee break and poster viewing	
11:30 – 13:00	Round Table - (LOC) "Il contributo della genetica alle filiere agroalimentari italiane" <i>Discussant: Francesca Taranto</i>	
	<i>Participants:</i> Giorgio Gambino (CNR-IPSP), Pasquale De Vita (CREA-CI), Concetta Licciardello (CREA-OFA), Tania Gioia (Università degli studi della Basilicata), Salvatore Parlato (Bonifiche Ferraresi), Mario Marino (FAO), Silvia Giuliani (Assosementi)	
13:00 – 14:30	Lunch break	
14:30 – 16:15	Session 4 – Harnessing plant potential for food and health <i>Chairpersons: Roberta Paris, Vincenzo D'Amelia</i>	
	14:30 – 15:00	Invited Lecture <i>Dominique van der Straeten</i> - Ghent University, Belgium Agriculture under global climate change: tackling challenges of stress resilience and nutritional losses
	15:00 – 16:00	Oral communications
	16:00 – 16:15	General discussion
16:15 – 17:45	Poster Discussion GROUP I	
	Coffee break	
17:45 – 18:30	Poster dismount GROUP I	
17:45 – 19:30	SIGA General Assembly	

THURSDAY, SEPTEMBER 10

08:30 – 09:00	Poster setup GROUP II	
09:00 – 11:00	Session 5 - Exploiting plant biodiversity to drive innovative plant breeding <i>Chairpersons: Eleonora Cominelli, Francesco Cellini</i>	
	09:00 – 09:30	Invited Lecture <i>Mats Hansson</i> - Lund University, Sweden Exploiting historic barley mutants to drive next-generation crop improvement
	09:30 – 10:45	Oral communications
	10:45 – 11:00	General discussion
11:00 – 11:30	Coffee break and poster viewing	
11:30 – 13:15	Session 6 - Integrative genomics and regulatory networks for next-generation crop improvement <i>Organized by Next Generation SIGA Group</i> <i>Chairpersons: Anna Bertoncini, Matteo Martina</i>	
	11:30 – 12:00	Invited Lecture <i>Agnieszka Golicz</i> - Wageningen University & Research, The Netherlands Title to be defined
	12:00 – 13:00	Oral communications
	13:00 – 13:15	General discussion
13:15 – 14:45	Lunch break	
14:45 – 16:15	Poster Discussion GROUP II	
	Coffee break	
16:15 – 17:45	Round Table - Proteggere le innovazioni: brevetti, IPR e privative vegetali a confronto <i>Discussant: Massimiliano Beretta</i> - Panora Seeds	
	<i>Participants:</i> Emidio Albertini (SIGA), Silvia Giuliani (Assosementi), Corrado Lamoglie (CREA), Daniele Manzella (FAO), Francesco Mattina (CPVO), Valentina Predazzi (SIB)	
20:30	Social Event - Cloister of San Giuseppe de Merode, Via San Sebastianello 3, Roma	

FRIDAY, SEPTEMBER 11

09:30 – 10:15	SIGA Award 2026 <i>Dedicated to Carlo Jucci</i> <i>Chairpersons: Stefania Masci, Daniele Rosellini</i> <i>Award ceremony</i>	
10:15 – 12:30	Session 7 – Improving the utilization efficiency of key resources, water and macronutrients for crop productivity <i>Chairpersons: Francesco Sunseri, Laura Toppino</i>	
	10:15 – 10:45	Invited Lecture <i>Gabriel Krouk</i> - National Center for Scientific Research, Montpellier, France Title to be defined
	10:45 – 12:15	Oral communications
	12:15 – 12:30	General discussion
12:30 – 12:45	Closing ceremony <i>Chairpersons: Stefania Masci</i>	