

National Symposium

Renaissance of Hill Agriculture Through Advanced Genetics and Crop Breeding Interventions for Attaining Food and Nutrition Security under climate change scenario

September 10-12, 2022

Jointly Organized by



Sher-e-Kashmir University of
Agricultural Sciences & Technology of
Kashmir, Srinagar, J&K



Indian Society of Genetics & Plant
Breeding, NAAS Complex,
New Delhi



About Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir (SKUAST-K)

SKUAST-K is located in the UT of J&K, India. The University was founded in 1982 by an Act passed by the State Legislature of J&K. The University is envisaged in the mission to impart education in different disciplines like Agriculture, Horticulture, Veterinary and Animal Sciences, Forestry, Fisheries, Agricultural Engineering, Home Science, Environmental Science, Sericulture and other allied sciences. The University leads in undertaking strategic and applied research on temperate and cold arid agriculture in Hill and Mountain ecosystem. The University has jurisdiction over Kashmir Valley and Ladakh comprising two agro-ecological zones: 1) valley basin mid-high altitude temperate zone of Kashmir Valley covering multiple districts where the annual precipitation ranges between 660 to 1400 mm with an average temperature around 13 °C and the altitude ranging between 1500–2500 m; 2) cold-arid region of Ladakh comprising the districts of Leh and Kargil which thrive with precipitation around 120 mm and temperatures fluctuating between -40 to +30°C with an altitudinal range of 2500–5300 m. The macro-climatic relief features have shaped varied and distinct genetic diversity in food and horticultural crops. Over the decades, the Institution has played a pivotal role in increasing the production and productivity of cereals, forages, pulses, vegetables and fruit crops within the region. The discipline of Genetics and Plant Breeding, SKUAST-K has enormous deliverables to its record particularly in the genetic enhancement of the crops like temperate rice (both japonica and indica), maize, common bean, oats, rapeseed, saffron, Kala Zeera, etc.

About The Indian Society of Genetics and Plant Breeding, New Delhi, India

The Indian Society of Genetics and Plant Breeding, the oldest and most prestigious registered society of practicing Geneticists and Plant Breeders from public and private institutions, has vital role to play in fostering the progress of Science of Genetics and Plant Breeding in the country. The Society was founded 80 years ago, in January, 1941 at the Indian Congress Session at BHU, Varanasi by a group of Indian geneticists and plant breeders of that time led by Late Dr. B.P. Pal, the First Secretary and also the First Editor of the Society's official publication, The Indian Journal of Genetics & Plant Breeding. Sir T.S. Venkataraman, was the First President of the Society. The Society was registered in 1951 under the Societies Act 1860. The Founder of the Society Late Dr. B.P. Pal graced the Presidentship of the Society four times during 1947, 1948, 1957 and 1977. The Father of Green Revolution in India, Dr. M.S. Swaminathan, was President of the Society for three terms - 1964, 1975 and 1983. Since the humble founding of the Society in pre-independent India, the Society has continually expanded and has now on its roll, more than 2097 members from India and abroad which include more than 1186 Life Members. The Honorary Fellows of the society includes some of the most renowned Geneticists and Plant Breeders of the twentieth century like Prof. H.J. Muller, Prof. Gustafsson, Prof. H. Kihara, Nobel Laureates Dr. Norman E. Borlaug, Dr. Hargovind Khorana, Prof. J. Lederberg and Dr. B. Mc Clintock. World Food Prize winners Dr. M. S. Swaminathan, Dr. Gurdev Singh Khush and Dr. S.K. Vasal are also closely associated with the Society. The major aims and objectives of the Society are to advance the cause of research in the field of genetics and plant breeding and its allied disciplines in India, to disseminate the knowledge of Genetics and Plant Breeding and to provide facilities for association and conferences for students of heredity. True to the letter and spirit of its objectives, the Society has been keeping itself abreast with the latest research in the area of Genetics and Plant Breeding by encouraging active integration among its members through topical seminar/symposia to bring about an awareness among its members and the public at large.

Hill Agriculture

Hill and mountain agri-ecosystem largely comprises of *Agri-horti-silvi-pastoral* type land use pattern. Around 34 million people inhabit the great Himalayan region where 76 per cent of the gross cropped area is under staple food grain crops. The low yield of food and cash crops, fodder, fuel and other minor forest produce and stagnant growth are the critical pull factors of agrarian economy and in particular the household food security. The scattered and marginal land holdings are among the inherent constraints of hill farming. Furthermore, prioritizing the land allocation to cereals for food security and to horticultural and cash crops for income support is critical. Conservation and sustainable utilization of the enormous agro-biodiversity in the hills and mountains are the other important issue of hill agriculture. Research on developing novel and appropriate technologies, refinement of the existing technologies will create a sustainable impact. In Jammu & Kashmir (J&K) rice and maize have percolated deep in the farmers' cultural practices and have marked a huge impact on the agrarian economy of the region. The J&K has a rich horticultural base which supports huge chunk of the population.

With the burgeoning population on one hand and constraints posed by depleting land resources on the other, the onus lies on plant geneticists and breeders to develop high yielding crops with resilience to harsh climates. The pathogen and pest dynamics under changing climatic variables poses new challenges. However, the success in the development of high yielding, nutrition rich and drought and submergence tolerant crop varieties has shown a great promise. Advances in genomics and genetics has broadened the vision to delve deep into our natural populations and genetic wealth. With persistent and concerted research efforts breeding and genomics would support and ensure rejuvenation and regrowth of hill agriculture in the country.

Objective of the Conference

The primary objective of the National Symposium on *“Renaissance of Hill Agriculture through Advanced Genetics and Crop Breeding Interventions for Attaining Food and Nutrition Security”* is to provide a common platform for the researches, scientists, technocrats and students from all over the country to share and discuss their latest research findings, development activities in the area of genetics, genomics and crop breeding and benefit from each other's knowledge and experience in the concerned area. Further, it will provide an opportunity to listen to the experts and renowned personalities in the field of genetics, genomics, and breeding from all over the country. It will also be a platform to strengthen the collaboration among the Scientists, Academia and the Institutions. *The invaluable inputs and suggestions gathered during the conference will be pursued as the guidelines for adopting new frontiers in improvement of hill agricultural research at SKUAST-Kashmir in particular and the whole region in general.*

Conference Themes

1. Mining plant genetic resources for new alleles/genes targeting enhancement of productivity in food, forage, fruit and forest crops	4. Improvement in economic value of underutilized / niche crops in hill and mountain agro-ecosystem
2. Genetic, genomic and breeding approaches for mitigating the ill effects of climate change on agri-horticultural crops.	5. Tree genetics and Genomics-assisted breeding for enhancement of productivity and quality
3. Genomics, Genetics and Breeding for quality improvement and nutrition security	6. Genetics and plant breeding education in post-genomics era

Highlights of Conference Sessions

OFF-LINE MODE
Plenary / Expert Lectures from Invited Speakers
Technical Session for Lead, Oral and Poster Presentations
Awards & Commendations: Poster and paper presentation awards

Conference Events

Plenary Lectures: Eminent scientists and experts will deliver special lectures on the topics related to genetics, genomics and advances in crop improvement.

Invited Lead Lectures: The selected speakers would be provided an opportunity to deliberate on advances in the field of crop improvement aiming at their suggestive role in policy, decision making and future strategies for uplifting the agrarian economy of the region.

Concurrent sessions: Theme based paper / poster presentations shall be made with thorough deliberations on the subject in presence of Expert committee.

Congress Tour: Organizing committee shall be pleased to cater to your interest in touring around some picturesque destinations of Kashmir which are pinned on the world tourism map.

KEY DATES	
Registration Start Date / Submission of Abstracts	01-07-2022
Last Date for Abstract submission	05-08-2022
Confirmation of Abstracts Acceptance	15-08-2022
Submission of Full length papers (Selected papers only)*	20-08-2022
Conference Date	10-12 Sep, 2022

Venue: Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir, Shalimar Campus, Srinagar, J&K, 190 025

Conference organization

<u>Chief Patron</u> •Prof. Trilochan Mohapatra Director General Indian Council of Agricultural Research, New Delhi	<u>Co-Patrons</u> •Prof. Sarfaraz Ahmed Wani Director Research, SKUAST Kashmir, J&K •Dr. Raihana H. Kanth Dean, Faculty of Agriculture SKUAST Kashmir, J&K
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<p><u>Organizing Chairman</u></p> <p>Prof. G.P. Singh President, Indian Society of Genetics and Plant Breeding, New Delhi</p> <p><u>National Organizing Committee</u></p> <p>Dr. S.K. Singh Vice-President, Indian Society of Genetics and Plant Breeding, New Delhi</p> <p>Dr. S.K. Pradhan Vice-President, Indian Society of Genetics and Plant Breeding, New Delhi</p> <p>Dr. R.K. Sharma Secretary, Indian Society of Genetics and Plant Breeding, New Delhi</p> <p>Dr. Rajbir Yadav Head, Division of Genetics, ICAR-IARI, New Delhi</p> <p>Dr. Akshay Talukdar Editor, Indian Society of Genetics and Plant Breeding, New Delhi</p> <p>Dr. K.K. Vinod Associate Editor, Indian Society of Genetics and Plant Breeding, New Delhi</p>	<p><u>Organising Secretary</u></p> <p>Dr. Asif. B. Shikari Head, Division of Genetics and Plant Breeding, Faculty of Agriculture, SKUAST Kashmir, J&K</p> <p><u>Secretary</u></p> <p>Dr. R. R. Mir Associate Professot, Division of Genetics and Plant Breeding, Faculty of Agriculture, SKUAST Kashmir, J&K</p> <p>Dr. Shabir H. Wani Assistant Professor, Genetics and Plant Breeding, MRCFC, Khudwani, SKUAST Kashmir, J&K</p>
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Conference Registration Fee

REGISTRATION FEE			
Participants Category	Inland participants	Inland participants (Spot Registration)	Overseas Participant US\$
Delegates/Scientists/ Academicians/ Professionals	₹5000/-	₹7000/-	\$100
Research Scholars / Students	₹2000/-	₹3000/-	\$50

Logistics

While the lunch and Dinner shall be served on conference days, the expenses on account of accommodation has to be borne by the delegates. The organizing committee shall arrange discounted accommodation wherever possible in University Guest houses on first come first serve basis. Others have to opt for hotels for which choice shall be circulated separately.

Advertisement

In the Souvenir and Proceeding of the Conference, containing the messages from VIPs and articles from renowned scientists, policy makers and administrator, there is a provision of advertisement for the companies and commercial units. Souvenir and Proceedings is a very important publication of the Conference and is kept by the delegates for a long period and used as a reference book. Interested companies may approach the organizers for subscribing for advertisements. The rates for the advertisement are as follows.

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Registration Link:

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