



National Seminar on Plant Biodiversity for Food, Nutrition and Health Security in North-West Himalayas (PBFSNWH)

Nov 27 & 28 2023

Venue

Auditorium, Shoolini University, Solan, Himachal Pradesh

TECHNICAL PROGRAM

Day 1: November 27, 2023 (Monday)

08:30-09:30

Registration

INAUGURAL SESSION (9.30-11.15 a.m.)

Chief Guest

Shri Mukesh Agnihotri

Hon'ble Deputy Chief Minister, Government of Himachal Pradesh, Shimla

Chair

Dr R.S. Paroda

President, ISPGR & Chairman, TAAS, New Delhi

Co-Chair

Prof. P.K. Khosla

Chancellor, Shoolini University, Solan

Guests of Honour

Dr P.L. Gautam

Former Chairperson NBA & PPV&FRA, Palampur

Dr Sanjay Kumar

Chairman, ASRB, New Delhi

Convenor

Prof. Atul Khosla

Vice Chancellor, Shoolini University, Solan

09.30-09.40

Arrival of Dignitaries and Lighting of Lamp

09.40-09.50

Welcome & Setting the Context

Prof. Atul. Khosla, VC, Shoolini University, Solan

09.50-10.10

Special Remarks

Dr Sanjay Kumar, Chairman, ASRB, New Delhi

Dr P.L. Gautam, Former Chairperson NBA & PPV&FRA, Palampur

Dr P.K. Khosla, Chancellor, Shoolini University, Solan

10.10-10.20

Address by President, ISPGR

Dr R.S. Paroda, President, ISPGR & Chairman, TAAS, New Delhi

10.20-10.40

Address by Chief Guest

Shri Mukesh Agnihotri, Hon'ble Deputy Chief Minister, Government of Himachal Pradesh, Shimla

10.40-10.50

Vote of Thanks

Dr Anuradha Agrawal, General Secretary, ISPGR & Organizing Secretary, PBFSNWH, New Delhi

TECHNICAL SESSION I

Status and Management of Plant Biodiversity of North-West Himalayas (NWH) (11.20 a.m. -2.45 p.m.)

(Concurrent Poster Session)

Co-Chair

P.L. Gautam, Former Chairperson NBA & PPV&FRA, Palampur

P.K. Khosla, Chancellor, Shoolini University, Solan

Convenor

R.K. Gautam, ICAR-NBPGR, New Delhi

B.D. Sharma, Eternal University Baru Sahib, Rajgarh, Sirmour

Rapporteurs

Kuldeep Tripathi, ICAR-NBPGR, New Delhi

Vinay Kumar Rachappanavar, Shoolini University, Solan

11.20-11.25

Welcome

Convenor

11.25-11.50

Plenary Lecture

Generating bioeconomy using biore-sources of North-West Himalayas

Sanjay Kumar, ASRB, New Delhi

11.50-12.05

Invited Lectures

Plant diversity in Cold Desert Himalayas: Challenges and opportunities

O.P. Chaurasia, DIHAR, Leh, Ladakh

12.05-12.20

Genetic enhancement in local food sys-tems

Lakshmi Kant, ICAR-VPKAS, Almora

12.20-12.35	<i>Current status and potential of temperate horticulture</i>	M.K. Verma , ICAR-CITH, Srinagar
12.35-12.50	<i>Status and role of Agroforestry in the Himalayan Agriculture Production system</i>	Jagdish Singh , ICFRE-HRFI, Shimla
12.50-13.35	Rapid Oral Presentations (4; 6 min. each) <i>TSI-OP1: Expedition of PGR diversity in North Western Himalaya of India</i> <i>TSI-OP2: Ampelographic characterization of grape genotypes from Himachal Pradesh</i> <i>TSI-OP3: Interventions for conservation, productivity enhancement and nutrient assessment of medicinal and edible forest species</i> <i>TSI-OP4: Reaching the unreached farming community through recent extension methods</i>	R.K. Pamarthi , ICAR-NBPGR, New Delhi Co-authors - D.P. Semwal, Soyimchetan & P.K. Singh Sharmistha Naik , ICAR-National Research Centre for Grapes, Pune Co-authors - D.P. Sharma, Jagesh Tiwari, Rasna Zinta, Gopal Singh & Arun Kumar Vipan Guleria , Forestry Regional Horticultural RS Jachh (Kangra), Dr Y.S. Parmar University of Horticulture and Forestry Co-authors - Amol Vashisth, Renu Kapoor, Rajesh Kaler & Dharmender Kumar D.D. Sharma , Shoolini University, Solan Co-author - Shareya
13.35-13.45	Discussion and Co-Chairs' Remarks	
13.45-14.45	Lunch Break	
TECHNICAL SESSION II Traits Discovery and Genomics in Plants of NWH (2.45 p.m.–5.40 p.m.) <i>(Concurrent Poster Session)</i>		
Co-Chair	B.S. Dhillon , Former VC, PAU, Ludhiana Atul Khosla , VC, Shoolini University, Solan	
Convenor	M.C. Yadav , ICAR-NBPGR, New Delhi D.P. Walia , ICAR-IARI, Regional Station, Shimla	
Rapporteurs	Monika Singh , ICAR-NBPGR, New Delhi Salej Sood , ICAR-CPRI, Shimla	
14.45-14.50	Welcome Keynote Lecture	Convenor
14.50-15.10	<i>Genomics for germplasm improvement and utilization</i> Invited Lectures	S.K. Yadav , CSIR-IHBT, Palampur
15.10-15.25	<i>Genomics for conserving Himalayan food crops</i>	R.K. Chahota , CSKHPKV, Palampur
15.25-15.40	<i>Genomics of medicinal plants: status and prospects</i>	R.K. Sharma , CSIR-IHBT, Palampur
15.40-15.55	<i>Harnessing synergies in PGR utilization through public-private partnership</i>	Aashish Barwale , Seven Star Fruits Pvt Ltd., Mumbai
15.55-16.15	Tea/Coffee Break	
16.15-17.15	Rapid Oral Presentations (7-6 min. each) <i>TSII-OP1: Characterization and core set development of Amaranth using high density 64K SNP Array</i>	Akshay Singh , ICAR-NBPGR, New Delhi

TS-II-OP2: Search of novel donor germplasm for powdery mildew resistance in wheat minicore

TSII-OP3: Identification and development of yellow rust resistant sources in wheat using conventional, molecular and doubled haploidy breeding

*TSII-OP4: Morphological characterization of magic population reveals extensive genetic variation for morpho-physiological and yield-related traits in bread wheat (*Triticum aestivum* L.)*

TSII-OP5: Genome-wide association mapping of grain quality traits in rice using single-locus and multi-locus models

*TS-II-OP6: Mapping and mining of major genomic regions conferring resistance to Bruchid (*Callosobruchus maculatus*) in blackgram (*Vigna mungo* (L.) Hepper)*

TS-II-OP7: Molecular and tepal morphology in delineating vegetable Amaranthus species complex conserved in Indian National Gene Bank

Co-authors - Avantika Maurya, Rajat Gupta, Dimpri Das, Gautam Vats, Ajay Kumar Mahato, S. Rajkumar, A.K. Singh, Rakesh Bhardwaj, S.K. Kaushik, Sandeep Kumar, Veena Gupta, Kuldeep Singh & Rakesh Singh

Jyoti Kumari, ICAR-NBPGR, New Delhi
Co-authors--Shivani Sharma, Sherry Rachel Jacob, Arun Gupta, Ashwani Baisandrai, Sivasamy M., Vikas V.K., Lakshmi Kant, K K Mishra, Preeti Jakhar, Gaurav Kumar, Vasudha Jadon, Sundeep Kumar, Ashok Kumar, R.K. Gautam & G.P. Singh

Madhu Patial, ICAR-IARI, RS Shimla

Sharmila M, ICAR-NBPGR, New Delhi
Co-authors- Shailesh Tiwari & Mahesh C. Yadav

Avantika Maurya, ICAR-NBPGR, New Delhi
Co-authors - Rakesh Singh, Supriya Sachdeva, Vikas K. Singh, Uma M. Singh, Arvind Kumar & G.P. Singh

Ragul S. TNAU, Coimbatore
Co-author - Manivannan N

Pooja Pathania, ICAR-NBPGR, New Delhi
Co-authors - Venugopal Gowda R. & S. Rajkumar

17.15-17.30

Discussion & Co-Chairs Remarks

17.30-17.40

Comfort Break

Evening Lecture and Cultural Program

Co-Chair

R.C. Agrawal, DDG (Agric. Education), ICAR, New Delhi

R.K. Tyagi, Vice President, ISPGR, New Delhi

Convenor

Sanjeev Kumar Chauhan, YSPUHF, Solan

J.K. Sharma, Baddi University, Baddi, Solan

Rapporteurs

Lokender Kumar, Shoolini University, Solan

Anil Kumar, ICAR-DMR, Solan

17.40-17.45

Introduction of Speaker

Convenor

17.45-18.30

Global Concerns for PGR Management

R.S. Paroda, TAAS, New Delhi

18.30-18.35

Chairperson Remarks

18.35-18.40

Vote of Thanks

Yashwant Singh Negi, Shoolini University, Solan

18.40-18.50

Break

18.50-19.45

Cultural Program

19.45 onwards

Welcome Dinner (Hosted by Chancellor, Shoolini University, Shoolini)

Day 2: November 28, 2023 (Tuesday)

TECHNICAL SESSION III

In situ/on-farm, ex situ Conservation and Access & Benefit Sharing

(9.30 a.m. – 11.55 a.m.)

(Concurrent Poster Session)

Co-Chair	K.R. Dhiman , Former VC, YSPUHF, Solan J.C. Rana , Vice President, ISPGR, New Delhi
Convenor	Anju Mahendru Singh , ICAR-NBPGR, New Delhi S.K. Gupta , Shoolini University, Solan
Rapporteurs	Jyoti Kumari , ICAR-NBPGR, New Delhi Narender Negi , ICAR-NBPGR, RS Shimla

9.30-9.35	Welcome	Convenor
9.35-10.00	Plenary Lecture <i>Protection of plant varieties and farmer's rights in context of N-W Himalayas</i>	Dipal Roy Chaudhury , PPV&FRA, New Delhi
10.00-10.15	Invited Lectures <i>Use of genetic resources in crop improvement</i>	Mohar Singh , ICAR-NBPGR, RS, Shimla
10.15-10.30	<i>Conservation of native arboreal flora of N-W Himalayas: status, challenges and prospects</i>	Vaneet Jishtu , ICFRE-HFRI Shimla
10.30-10.45	<i>Biological Diversity Act and its relevance in conservation of unique Himalayan flora</i>	Murari Lal Thakur , HIMCOSTE, Shimla
10.45-11.15	Tea/Coffee Break	
11.15-11.35	Rapid Oral Presentations (4-6min. each) <i>TSIII-OP1: Ex situ conservation of wild Allium genetic resources at NBPGR Bhowali field genebank</i> <i>TSIII-OP2: Conservation of wheat and barley genetic resources of North-Western Himalayas in the National Genebank</i> <i>TSIII-OP3: Conservation and Characterisation of Protected Farmer's Varieties of Apricot of Cold Arid Region for future breeding programmes in Kargil (UT-Ladakh)</i> <i>TSIII-OP4: Advanced methods of conservation of plant biodiversity</i> <i>TSIII-OP4: Advanced methods of conservation of plant biodiversity</i>	K.M. Rai , ICAR-NBPGR, RS Bhowali Co-authors - Pavan Malav, Pankaj Kumar Kannaujia, Narendra Negi & Mamta Arya Sherry Rachel Jacob , ICAR-NBPGR, New Delhi Co-authors - Shashank H.G., Sampa Saha, Aradhana Mishra, Aravind J., Padmavati Gore & Anju Mahendru Singh Faizan Ahmad , Mountain Agriculture Research and Extension Station, Kargil SKUAST-Jammu and Kashmir Neha Rani , Dr Y.S. Parmar, College of Horticulture and Forestry Co-authors - B.S. Ditta & Bhavna Rajkumari

11.35-11.55 Discussion & Co-Chairs Remarks

TECHNICAL SESSION IV

Plant Biodiversity in Local Food System

(11.55 a.m.–3.00p.m.)

(Concurrent Poster Session)

Co-Chair	R.S. Chandel , YSPUHF, Solan Brajesh Singh , Director, ICAR-CPRI, Shimla
Convenors	Manjusha Verma , ICAR-NBPGR, New Delhi Somesh Sharma , Shoolini University, Solan

Rapporteurs	Rakesh Sharma , YSPUHF, Solan Ravi K. Pamarthi , ICAR-NBPGR, New Delhi	
	Keynote Lecture	
12.00-12.20	<i>Mainstreaming agrobiodiversity for enhancing climate resilience, nutrition, livelihoods and ecosystems service</i>	J.C. Rana , Alliance for BI and CIAT, New Delhi
	Invited Lecture	
12.20-12.35	<i>Status and nutritional value of mushroom</i>	V.P. Sharma , ICAR-DMR, Solan
12.35-12.50	<i>Underutilized temperate fruit species in the Western Himalayas - scope for enhancing rural livelihoods and improving food security</i>	K.K. Jindal , Former ADG (Horticulture), ICAR, New Delhi
12.50-13.05	<i>Medicinal value of local plant diversity of N-W Himalayas</i>	Bhupinder Dutt , Professor YSPUHF, Solan
13.05-13.20	<i>Traditional food of Himachal Pradesh</i>	Nand Lal Sharma , Himachal Pradesh Tourism Development Corporation
13.20-14.20	Lunch break	
14.20-14.45	Rapid Oral Presentations (4-6 min. each)	
	<i>TSIV-OP1: Evaluation of potato germplasm in early crop season</i>	Babita Chaudhary , ICAR-CPRI, Modipuram, Meerut Co-authors – S.K. Luthra , Anuj Bhatnagar, V.K. Gupta, Dalamu & Vinod Kumar
	<i>TSIV-02: Reviving grasspea (Lathyrus sativus L.) - a potential green leafy vegetable source for the Himalayan regions</i>	Ramya KR , ICAR-NBPGR, New Delhi Co-authors - Kuldeep Tripathi, Ravi K. Pamarthi, Padmavati G. Gore, Rinky Reshma Panda, Rakesh Bharadwaj & K.C. Bhatt
	<i>TSIV-OP3: Understanding genetic variability for morphological and nutritional traits in the linseed germplasm collection at National Genebank of India</i>	Vikender Kaur , ICAR-NBPGR, New Delhi Co-authors - Sunil S. Gomashe, Shashank K. Yadav, Devender Singh, Vinay Kumar, Sheela, Shubhendra Singh Chauhan, Balram Jat, Munisha Kheralia, Sapna Langyan, Nutan Kaushik, Mamta Singh, D.P. Wankhede, J Aravind, Ashok Kumar & G.P. Singh
	<i>TSIV-OP4: Agricultural biodiversity: participatory knowledge and autonomous learning for rural food systems</i>	Bhavna Rajkumari , Dr Y.S. Parmar, College of Horticulture and Forestry Co-authors - B.S. Dilta, Chinglembi Laishram & Neha Rana
14.45-15.00	Discussion & Co-Chairs Remarks	
TECHNICAL SESSION V Entrepreneurship and value chains – Role of youths and women (3.00p.m. –5.15p.m.) <i>(Concurrent Poster Session)</i>		
Co-Chair	Parvinder Kaushal , VC, UUHF, Pauri Garhwal Anuradha Agrawal , National Coordinator, NAHEP, ICAR, New Delhi	
Convenors	Pankaj Sood , KVK, Mandi Ramesh Bhardwaj , YSPUHF, Solan	
Rapporteurs	Vikender Kaur , ICAR-NBPGR, New Delhi Anil Kumar , ICAR-DMR, Solan	

15.00-15.05	Welcome	Convenor
	Keynote Lecture	
15.05-15.25	<i>Role of potato in entrepreneurship development</i>	Brajesh Singh , ICAR-CPRI, Shimla
	Invited Lectures	
15.25-15.40	<i>High density apple plantation (HDAP)</i>	D.P. Sharma , YSPUHF, Solan
15.40-15.55	<i>Unlocking native mountain crops for livelihood and enterprise development</i>	Lal Singh , HRC, Shimla
15.55-16.20	Tea/Coffee Break	
16.20-16.30	<i>Developing recipes/products of traditional crops of N-W Himalayas</i>	Rahul Saxena , Back to Basics Naturally LLP, Palampur
16.30-16.40	<i>Developing recipes/products of Himalayan plant diversity</i>	Joginder Walia , Society for Technology and Development, Mandi
16.40-16.50	<i>Value addition of millets</i>	Sneha , Women Self Help Group, Gohar, Mandi
16.50-17.00	<i>Promotion of local plant diversity of N-W Himalayas for developing products and value chain in Uttarakhand</i>	Nav Bharat , Mount Valley Development Association, Doni, Tehri Garhwal
17.00-17.15	Discussion & Co-Chairs Remarks	
Concluding Session (5.15 p.m. –6.45 p.m.)		
Co-Chair	R.S. Paroda , President, ISPGR, New Delhi	
	P.K. Khosla , Chancellor, Shoolini University, Solan	
Convenors	R.K. Tyagi , ISPGR, New Delhi	
	Yashwant Singh Negi , Shoolini University, Solan	
Rapporteurs	Sherry R. Jacob , ICAR-NBPGR, New Delhi	
	Pankaj Chauhan , Shoolini University, Solan	
17.15-17.30	Summary of Major Recommendations	R.K. Tyagi , Vice-President, ISPGR
17.30-18.05	Felicitations and Award Distribution	
18.05-18.35	Remarks by Co-Chairs	
18.35-18.45	Vote of Thanks	Saurabh Kulshreshta , Organizing Secretary, Shoolini University, Solan
18.45 onwards	Dinner (Hosted by Mahyco Pvt. Ltd.)	

