



# TECHNICAL PROGRAM

**National Conference**

**on**

**Maize for Resource Sustainability, Industrial  
Growth and Farmers' Prosperity**

**February 23-25, 2022**

*Organised*

*by*

**Maize Technologists Association of India, New Delhi  
Indian Council of Agricultural Research, New Delhi  
ICAR-Indian Institute of Maize Research, Ludhiana  
Maharana Pratap University of Agriculture and Technology, Udaipur  
International Maize and Wheat Improvement Center (CIMMYT)**

**National Conference  
on  
Maize for Resource Sustainability, Industrial Growth and  
Farmers' Prosperity  
Technical Program  
Day 1: 23 Feb 2022 (Wednesday)**

Venue: New Auditorium, Rajasthan College of Agriculture-RCA

**Registration**

February 22, 2022

Time: 2:00 PM TO 6:00 PM

February 23, 2022

Time: 8:00 AM TO 11:00 AM

<b>Day 1: February 23, 2022</b>	
<b>9:30–11:30</b>	<b>Inaugural Function</b>
<b>11:30-12:00</b>	<b>High tea</b>
<b>12:00-12:30</b>	<b>Plenary lecture</b> Co-chairs: Dr S.K. Vasal and Dr N.S. Rathore Maize in India by 2030: prospects and strategies: Dr Sujay Rakshit
<b>12:30-14:15</b>	Lunch
<b>14:30-17:00</b>	<b>Theme 1: Genetic innovations in maize</b> Co-chairs: Dr S.K. Vasal and Dr Sujay Rakshit Conveners: Dr Ravikeshvan R and Dr Bhupender Kumar Rapporteurs: Drs Pardeep Kumar and Mamta Gupta
<b>14:30-15:00</b>	<b>Keynote lecture:</b> Innovative tools in maize breeding: Dr B.M. Prasanna
<b>15:00-16:15</b>	<b>Lead lecture (12-15 minutes each):</b> <ul style="list-style-type: none"> <li>• Improving nutritional quality of maize: progress and prospect: Dr Firoz Hossain</li> <li>• Double haploid technology in maize for fastening breeding cycle: Dr Venkatesh</li> <li>• Prospects of specialty corn breeding in India: Dr Chikkappa G.K.</li> <li>• Prospect of genetically engineered maize in India: Dr Krishan Kumar</li> </ul>
<b>16:15-17:00</b>	<b>Oral presentation (8-10 minutes each):</b> <ul style="list-style-type: none"> <li>• A novel technique high throughput phenotyping for maize: Prashant Kaushik</li> <li>• Assessing reciprocal cross effect on combining ability and heterosis in heterotic hybrids by crossing diverse endosperm types of corn: K. Kavya</li> <li>• Inheritance and validation of molecular markers for kernel row number in tropical maize: Sahana P. Patil</li> <li>• Amino acid substitution causes variation in kernel row number determined by fea4 gene in tropical maize: Ganapati Mukri</li> <li>• Analyzing the genetic variability in maize inbreds across locations for morphological and biochemical traits: Lydia Pramitha J.</li> <li>• Evaluation of Late Maturity Maize Hybrids for Identification of Stable Lines Using Various Univariate Methods: N. Sunil</li> <li>• Screening maize genotypes for phosphorus efficiency in calcareous soils- P. M.Brindhavani P. M. Brindhavani</li> </ul>
<b>Day 2: February 24, 2022 (Thursday)</b>	
9:00-11:00	<b>Theme 2: Maize for sustainable and resilient cropping systems</b> Co-chair: Dr Dilip Singh and Dr S.R. Bhakar Conveners: Dr A.K. Singh and Dr D. Sreelatha

	Rapporteurs: Drs Mahesh Kumar and Sujatha V.
9:00-9:30	<b>Keynote lecture:</b> <ul style="list-style-type: none"> <li>• Conservation Agriculture in Smallholder Maize Systems and Sustainable Development Goals: Dr M.L. Jat</li> </ul>
9:30-10:30	<b>Lead lecture (12-15 minutes each):</b> <ul style="list-style-type: none"> <li>• Conservation agriculture in maize-based systems under changing climatic scenarios: Drs A.K. Singh and C.M. Parihar</li> <li>• Mechanization for sustainability of maize-based cropping systems: Dr H.S. Sidhu</li> <li>• Tillage and residue management impact on soil organic carbon and physical properties: Dr Debashis Chakraborty</li> <li>• Efficient weed management in maize systems: Dr Raj Kumar</li> <li>• Precision nutrient and water management in maize systems for environmental stewardship: Dr H.S. Jat</li> <li>• Intercropping in maize for enhancing income of small holders: Dr Narender Singh</li> </ul>
10:00-11:00	<b>Oral presentation (8-10 minutes each):</b> <ul style="list-style-type: none"> <li>• Performance of single cross maize hybrid (<i>Zea mays</i> L.) under varying zinc management practices: Dr. Dilip Singh</li> <li>• Conservation agriculture-based ICMs in cereal-based rotations: Dr. Vijay Pooniya</li> <li>• Evaluation of sensor guided in season nitrogen management strategies for maize: Dr. V. Sujatha</li> <li>• Effect of nitrification inhibitors on productivity and nitrogen use efficiency of maize (<i>Zea mays</i> L.): Kamlesh Kumar</li> <li>• Sensor guided and placement-based nitrogen management in maize under conservation agriculture: Chunendra Prakash</li> <li>• Estimation of Photo synthetically Active Radiation Distribution and Absorption in Corn Based Intercropping System: M.R. Umesh,</li> <li>• Effect of foliar application of zinc based nanofertilizer and varying fertility levels on growth attributes, yield attributes, yield and economics of maize: Piyus Choudhary</li> </ul>
11:00-11:15	Tea break
11:15-13:15	<b>Theme 3: Maize value chain for industrial growth and farmers' prosperity</b>
	Co-chair: Dr Sain Dass and Dr. N.K. Jain
	Convener: Dr Zahoor Ahmad Dar and Dr Bhupender Kumar
	Rapporteurs: Drs Suby SB and Krishan Kumar
11:15-11:45	<b>Keynote lecture:</b> <ul style="list-style-type: none"> <li>• Millet based value-added products for industrial prosperity and nutritional security: Dr B. Dayakar Rao</li> </ul>
11:45-12:30	<b>Lead lecture (12-15 minutes each):</b> <ul style="list-style-type: none"> <li>• Prospects of maize-based silage for sustainability of dairy industries in India: Dr D.P. Chaudhary</li> <li>• Maize for sustainable growth of poultry: Dr B. Prakash</li> <li>• Prospects of maize-based ethanol in India in the present scenario: Dr Alla Singh</li> <li>• Maize starch prospects in India: Rocquet's Industry representative</li> </ul>
12:30-13:00	<b>Oral presentation (8-10 minutes each):</b> <ul style="list-style-type: none"> <li>• Exploring the role of maize in ensuring food and nutritional security: A Bibliometric Perspective: Priyajoy Kar</li> </ul>

	<ul style="list-style-type: none"> <li>Maize production in northeast India: trend and decomposition analysis: Nivetina Laitonjam</li> </ul>
13:00-13:30	Lunch
14:00-16:00	<b>Theme 4: Biotic and abiotic stresses in maize under changing climatic scenario</b> Co-chair: Dr Surender Sandhu and Dr P.H. Zaidi Convener: Dr Ishwar Singh and Dr S.S. Sharma Rapporteurs: Drs Jethi Konsam and S.K. Agarwal
14:00-14:30	<b>Keynote lecture:</b> <ul style="list-style-type: none"> <li>Challenges in biotic stresses management in maize: Drs J.C. Sekhar and P.L. Soujanya</li> </ul>
14:30-15:30	<b>Lead lecture (12-15 minutes each):</b> <ul style="list-style-type: none"> <li>Plant biosecurity perspectives in India: Dr K.S. Hooda</li> <li>Seed magnetopriming- An empirical enhancement technique to improve productivity in maize: Dr Anjali Anand Host plant resistance in maize: Dr Harleen Kaur</li> <li>Fall armyworm biological control: Dr Suby S.B.</li> </ul>
15:30-16:00	<b>Oral presentation (8-10 minutes each):</b> <ul style="list-style-type: none"> <li>Synthesis and validation of IPM strategy in maize for fall army worm management in farmer participatory mode: Dr. M.K. Khokhar</li> <li>Artificial Intelligence based identification of important pests of maize crop and their management: Dr. Niranjan Singh</li> <li>Total phenol and tannins contain in selected maize genotypes and resistance to <i>Sesamia inferens</i>: Dr. Ashok Kumar Sau</li> <li>Screening of maize (<i>Zea mays</i> L.) germplasms against turcicum leaf blight disease: Dr. A.Vijaya Bhaskar</li> <li>Confirmation of stable resistance sources to Northern Corn Leaf Blight [<i>Exserohilum turcicum</i> (pass.) Leonard and Suggs in Maize: Mallikarjuna et al.</li> </ul>
<b>16:00-17:30</b>	<b>Theme 5: Last mile delivery of maize technologies</b> Co-chairs: Dr. R.A. Kaushik and Dr Rajbir Singh Convener: Dr. D. Sreelatha and Dr. N.K. Singh Rapporteurs: Drs Sonali Biswas and Priyajoy Kar
16:00-16:30	<b>Keynote lecture:</b> <ul style="list-style-type: none"> <li>Challenges and perspective in out scaling maize innovations: Dr K. Srinivas</li> </ul>
16:30-17:00	<b>Lead lecture (12-15 minutes each):</b> <ul style="list-style-type: none"> <li>Hybrid maize seed production: challenges and prospects: Dr Bijender Pal</li> <li>Technology targeting for up scaling in maize system: Dr Atul Kulkarni</li> <li>Maize technologies targeting in NEH region: Dr M.A. Ansari</li> </ul>
17:00-17:30	<b>Oral presentation (8-10 minutes each):</b> <ul style="list-style-type: none"> <li>Success story of farmers' participatory seed production of maize hybrid–Karimnagar Makka-1 in the state of Telangana: D. Sravani</li> </ul>
<b>Day 3: February 25, 2022 (Friday)</b>	
<b>9:00-10:30</b>	<b>Theme 6: Social inclusion and policy in maize research and development</b> Co-chair: Drs (Mrs.) Meenu Srivastava and Virendra Nepalia Convener: Drs Ramesh Kumar and Ganpati Mukri Rapporteurs: Drs Bharat Bhushan and Manish Dagla
9:00-9:30	<b>Keynote lecture:</b> Maize based cropping system diversification for sustainability: Dr Sain Dass

9:30-10:00	<b>Lead lecture (12-15 minutes each):</b> <ul style="list-style-type: none"> <li>Policy perspective of maize diversification: Dr Prem Chand</li> <li>Social dimension for maize technologies: Dr Vijesh Krishna</li> </ul>
10:00-10:30	<b>Oral presentation (8-10 minutes each):</b> <ul style="list-style-type: none"> <li>Access to Maize Genetic Resources-the policy perspective: Sherry Rachel Jacob</li> <li>Socially inclusive maize technologies: Dr Pramod Kumar</li> <li>Optimization of resource use in cereal-based cropping system using big data: A deductive approach using econometric tool: H.S. Nayak et al.</li> <li>Need for assessing soil potassium supply capacity in conservation agriculture-based maize-wheat system: Moumita Ash</li> </ul>
10:30-11:00	<b>Tea break</b>
11:00-13:00	Panel discussion on “ <i>Road map on maize for sustainable &amp; resilient Production and inclusive value chain systems in India</i> ”
	<b>Moderator:</b> Dr V Nepalia/Dr Suby SB
	<b>Panelists:</b> Dr S.K. Vasal, Dr Sain Dass, Dr Sujay Rakshit, Dr B.S. Vivak, Dr Raju Barwale, Mr B.K. Tripathi, Dr Bijender Pal, Dr Sadawud (CP Seed), Dr Rajvir Rathi, Dr Tomar (Dhanuka), Dr Surya Rao (Syngenta), Corteva Representative (Dr Anand Pandravada and Ashish Srivastava)
13:00-14:00	Lunch
<b>14:00-15:30</b>	<b>Valedictory Function</b>

## **POSTER SESSION PROGRAM**

National Conference

on

**Maize for Resource Sustainability, Industrial Growth and Farmers’ Prosperity**

**February 23-25, 2022**

### **POSTER SESSION –1**

**Day 1: 23 Feb 2022 (Wednesday)**

**Display Timing: 12:00 – 17:00**

Theme: 1 **Genetic innovations in maize**

Abstract/ Poster number	Title	Authors
1	Combining ability, gene action and heterosis in medium maturing maize inbreds under temperate conditions	Amin et al.
2	Genetic variation of Maize ( <i>Zea mays</i> L.) genotypes for morphological and yield related traits at different growth stages	Rashid et al.- Munezeh
3	Heterotic grouping using combining ability effects among maize ( <i>Zea mays</i> L.) germplasm lines	Kachapur et al.
4	Relationship between heterosis, potence ratio and genetic distance for morphological and yield contributing traits in maize	Sumalini et al.
5	Influence of mating systems on genetic variability in F4 populations of maize ( <i>Zea mays</i> L.)	Bindu Priya et al.
6	A novel technique high throughput phenotyping for maize	Anand Kumar and Prashant Kaushik

Abstract/ Poster number	Title	Authors
7	Application of molecular markers analysis for genetic diversity in Maize	Anand Kumar and Prashant Kaushik
8	Evaluation of maize genotypes for baby corn characteristics during kharif season	Jangid et al.
9	Genetic analysis of maize inbreds for yield and its contributing traits over the locations	Sharma et al.-Gaurav
10	Study of Combining Ability in newly developed inbred lines of Maize ( <i>Zea mays</i> L.)	Sharma et al. - Prashant
11	Stability Analysis of Medium Maturity Maize ( <i>Zea mays</i> L.) Hybrids for Yield Traits Under Temperate Ecology of Kashmir	Aieman et al.
12	Stability Analysis of Medium Maturity Maize ( <i>Zea mays</i> L.) Hybrids for Morphological Traits Under Temperate Ecology of Kashmir	Aieman et al.
13	Stability of experimental maize hybrids tested across the diverse climatic conditions of Himachal Pradesh	Chandel et al.
14	Genotype x management interaction in maize in conservation agriculture in Indo-Gangetic plains of North-West India	Singh et al.-Love kumar
15	Evaluation of maize inbred lines for nitrogen use efficiency (NUE) based on physiological traits	Singh et al.- Prabha
16	Combining ability and heterosis analysis of quality protein maize (QPM) inbreds for grain yield and agronomic traits	Swain et al.
17	Standard heterosis for green cob yield and quality traits in sweet corn hybrids	Nivethitha et al.
18	Combining ability analysis for grain yield and its contributing characters in maize ( <i>Zea mays</i> L.)	Kumar et al.- Praveen G.
19	Genetic Diversity Analysis - a key in Maize Breeding	Sinana et al.
20	Heterotic grouping of new inbred lines through quantitative genetic methods in maize	Bhat et al. - Jayant
21	Broadening genetic diversity of maize using crop wild relatives	Jaishreepriyanka et al.
22	Present Use of Haploids in maize Plant Breeding	Kapil Kumar Nagar and S. L. Yadav
23	Micronutrient delivery systems through seed for enhancing seed yield and quality of maize	Jayanth et al.
24	Combining ability and heterosis studies for yield and yield contributing characters in maize ( <i>Zea mays</i> L.)	Dhonde et al.
25	Assessment of genetic variability, character association and path coefficient analysis for yield and its components in maize	Reddy et al.
26	Heterotic grouping of Indian baby corn lines based on combining ability	Kumar et al. - Pardeep
27	HOPE and RIPE: Tools to break genetic ceiling in crop improvement	Dharmendr and Uttej Karla
28	Plumule colouration as a criterion to improve the efficiency of R1-nj marker based doubled haploid breeding in maize	Singh et al. - Prabhat
29	Generation of transgene-free semidwarf maize by gene editing of gibberellin-oxidase 20-3 using CRISPR	Kumhar et al.
30	Genetic studies in early maturing maize ( <i>Zea mays</i> l.) inbred lines	Viqar un nisa et al.



Abstract/ Poster number	Title	Authors
31	Exploration and evaluation of landraces to strengthen maize quality breeding programme at PAU	Bajwa et al.
32	Investigation of molecular diversity among parental lines and identification of elite heterotic combinations in sweet corn	M.S. Niji and R. Ravikesavan
33	Genotype x Environment interaction and stability analysis in maize across the southern Aravalli hilly ranges of Rajasthan	Kumawat et al. - Ravi
34	Integration of random mating and double haploid tool for rapid development of homozygous lines from maize-teosinte cross	Varalakshmi et al.
35	Assessment of combining ability in yellow seeded Maize ( <i>Zea mays</i> L.)	Bhagchand Ola and Manmohan Puniya
36	Phenotypic evaluation of inbred lines for grain yield and their utilization for developing high yielding maize ( <i>Zea mays</i> L.) hybrids	Kushwah et al.
37	Genome wide association studies in maize: A review	Anand Kumar
38	Elucidating molecular diversity and grouping of Indian maize inbred lines using SNP markers	Madankar et al.
39	Genetic diversity analysis of inbred lines in maize ( <i>Zea mays</i> L.)	Kamesh Anand and S.K. Sinha
40	Characterization of entire set of maize germplasm conserved at National Genebank (NGB) of India	Kumar et al.
41	Morphological and molecular characterization of low phytic acid ( <i>lpa1</i> - and <i>lpa2</i> -based) genotypes in maize	Ragi et al.
42	Introgression of <i>waxy1</i> gene into multi-nutrient rich maize inbreds through genomics-assisted breeding	Mishra et al.
43	Genetic characterization of a core set of maize germplasm for trait specific variability	Yousuf et al. - Nida

## POSTER SESSION – 2

**Day 2: 24 Feb 2022 (Thursday)**

**Display Timing: 09:00 – 11:30**

**Theme: 2: Maize for sustainable and resilient cropping systems**

Abstract/ poster number	Title	Authors
1	Assessing the Effect of Seedling Age and Sources of Nutrients on Performance of Sweet Corn under Temperate Climatic Conditions	Jan et al.
2	Crop-weather relationship of maize hybrids sown under different dates at varied row spacings	Wani et al.
3	Performance of Maize ( <i>Zea mays</i> L.) Genotypes for Fodder and Quality Attributes as Influenced by Sowing Dates under Kashmir Conditions	Rashid et al. - U.
4	Performance of sweet corn hybrids ( <i>Zea mays saccharata</i> ) as influenced by soil and foliar application of zinc	Hussain et al.
5	Economic analysis of sweet corn hybrids ( <i>Zea mays saccharata</i> ) in response to soil and foliar application of zinc	Hussain et al.
6	Maize production technology for future, challenges and opportunities: A review	Gull et al.
7	Conservation agriculture for higher resource use efficiency in maize-based production system	Rifat-un-Nisa et al.

Abstract/ poster number	Title	Authors
8	Planting Density and Nutrient Management Effects on Yield of Maize Hybrids in Temperate Ecology of Kashmir	Azad et al.
9	Growth of baby corn as influenced by sowing dates and fertility levels under temperate conditions	Ahangar et al.
10	Effect of different integrated nutrient management on productivity of maize ( <i>Zea mays</i> L.) in maize-mustard cropping system	Gaurav Mahajan and V. K. Paradkar
11	Effect of organic weed and nutrient management practices on yield attributes and yields of maize in western Rajasthan	Lokesh Kumar Jain and P L Maliwal
12	Influence of site-specific nitrogen management on yield and nitrogen use efficiency of fodder maize	Rashid et al.- Zahida
13	Response of varied levels of phosphorus on growth and yield performance of sweet corn, <i>Zea mays</i> L.	Ameer, M. and Somashekhar, K. S
14	Effect of Organic manure, Bio NPK Consortium and Chemical Fertilizer on yield of hybrid maize ( <i>Zea mays</i> , L) in Kharif season	Patel et al.- K.H.
15	On-farm crop response to plant nutrients in maize-toria cropping system	Sahoo et al.
16	Performance of AGROTAIN incorporated urea for yield and nitrogen use efficiency in winter maize	Bijarniya et al.
17	Effect of Phospho Enriched Compost and Fertility Levels on Productivity of Maize ( <i>Zea mays</i> L.) in Typic Haplusteps	Doodhawal et al.
18	Comparison of yield and economics in normal maize and sweet corn in kharif season under conditions of Haryana	Kamboj et al.
19	Influence of black gram genotypes and nitrogen levels on performance of maize equivalent yield and available status of soil under maize + black gram intercropping system	Shilpa et al.
20	Studies on Optimization of Row Ratios for Maize-Bean Intercropping in Kashmir	Rasool et al.
21	Weed Management in Maize with New Generation Herbicides	Tetarwal et al.
22	Soil biology and climate smart agriculture (CSA) practices under major agri-food systems of IGP	Choudhary et al.- Madhu
23	Study on Nutrient management of hybrid maize ( <i>Zea mays</i> . L) through decision support tools	Jyothsna et al.
24	Trends in area, production and productivity of maize crop in Hyderabad-Karnataka region: An economic analysis	Basavaraj et al.
25	Effect of suitable weed management practices to enhance the yield of rainfed maize in Odisha	Naik et al.
26	Productivity and monetary return of sweet corn ( <i>Zea mays</i> L. var. saccharata) under different planting geometry and nutrient levels	Bhatnagar et al.
27	Weed dynamics of Baby Corn ( <i>Zea mays</i> L.) as influenced by different weed management practices under organic farming	Choudhary et al.- Roshan
28	Effect of dose, application time and herbicide combination on weed growth and maize ( <i>Zea mays</i> L.) in North Western India	Rajan Shukla and Amit Bhatnagar
29	Growth and yield parameters of maize under integrated nutrient management	Bamboriya et al.- Jitendra
30	Effect of nitrogen levels and weed management practices on weed dry matter accumulation, yield and economics of hybrid maize ( <i>Zea mays</i> L.)	Nayak et al.- Anshuman



Abstract/ poster number	Title	Authors
31	Maize – a crop of opportunities and challenges to grow	Abhinav et al.
32	Effect of organic and inorganic sources of nitrogen on yield attributes and yield of maize in maize-mustard cropping system under sandy loam soil conditions in Northren Telangana Zone of Telangana State	Rao et al.
33	Effects of different crop established methods with different herbicide in Maize	Sunil Kumar
34	Maize, a remunerative crop CA- based sustainable intensification of rice-wheat system in Indo-Gangetic plains	Gora et al.
35	Integrated nutrient management in maize ( <i>Zea mays</i> L)-wheat ( <i>Triticum aestivum</i> L.) cropping system	Hargilas
36	Maize for diversification and sustainable intensification option for rice-wheat system	Radheshyam et al.
37	Raised bed planting in maize: an effective agronomic intervention for sustainable maize production under changing climatic condition	Jha et al.
38	Ecological intensification: A step towards climate resiliency in maize-based cropping systems	Singh et al. - Narendra
39	Exploring the efficiency of calcium and potassium thiosulphate on yield, nutrient uptake and quality of winter maize	Dharminder et al.
40	Organic Weed management in maize	Monika Choudhary
41	Evaluation of effect of fortified Jeevamrit on growth & yield of maize under organic production system	Sharma et al.- S.K.
42	Mechanized maize production	Jitendra Kumar Yadav
43	Soil health in agricultural systems	Shankar Lal Bijarnia et al.
44	Crop diversification options for income and nutritional security	Harish Kumar Bijarnia et al.
45	Performance of Sweet corn under varying fertilizer levels	Chouhan et al.
46	Influence of stages and heights of detopping on productivity of kharif maize ( <i>Zea Mays</i> L.)	Sujatha et al.
47	Effect of integrated weed management on weeds, growth and yield attributes of maize ( <i>Zea mays</i> L.)	R.S. Sidar and A.K. Lakra
48	System productivity of diversified baby corn-based cropping system under various nutrient managements	Meena et al.
49	Integrated nutrient management - maize based cropping systems	Jakkula et al.
50	Correlation analysis of yield and its component traits in maize	Narayanan et al.
51	Maize production under organic farming in Indian context	Sandeep Gawdiya and Sanjay Kumar
52	Re-designing nitrogen management protocol in maize through precision agronomic innovations: A paradigm shift towards agricultural sustainability in Indo Gangetic Plains of India	Patra et al.
53	Impact of precision nutrient management on productivity, economics, and water and energy use efficiency of long-term conservation agriculture-based maize-wheat system	Meena et al.- Bharat Raj
54	Grain cum fodder production in maize based intercropping system under irrigated condition	Selvakumar et al.

Abstract/ poster number	Title	Authors
55	Effect of foliar application of zinc based nanofertilizer and different fertility levels on growth attributes and yield of maize in Southern Rajasthan	Choudhary et al. - Piyush
56	Yield performance of maize ( <i>Zea mays</i> L.) genotypes under different nutrient levels	Kumar et al.- Mahesh
57	Low input sustainable agriculture with ecological management practices	Mahipal Singh Choudhary
58	Conservation agriculture and its impact on hydrothermal properties of soil-plant continuum	Manju Choudhary
59	Winter maize-based cropping system: strategies to improve productivity and profitability of farming community of Bihar	Vijay S. Meena et al.

### POSTER SESSION – 3

**Day 2: 24 Feb 2022 (Thursday)**

**Display Timing: 11:30 – 13:30**

**Theme: 3 Maize value chain for industrial growth and farmers' prosperity**

Abstract /poster number	Title	Authors
1	Maize based Complementary food (Weaning Food): A review	Yaseen et al.
2	Enhancement of Attributes of Maize by Germination and Fermentation	Jabeen et al.
3	Pulse-Maize Mix: A viable livelihood venture in Himalayan foothills of Kashmir	Lone at al.
4	An insight on nutritionally superior sweet corn	Santhiya et al.
5	Comparative evaluation of diverse and contrasting color maize germplasm for their functional food applicability	Bhushan et al.
6	Analysis of nutritional quality attributes and their inter-relationship in maize inbred lines for sustainable livelihood	Langyan et al.
7	Electrostatic field seed treatment in Maize - A promising tool for seed quality enhancement	Dhruva N. Bhagwatkar and V.K. Deshpande
8	Molecular breeding to improve nutritional quality of maize	Sheetal Gupta and Preeti Basser
9	Development of a single row self-propelled maize cob picker cum stalk cutting machine	Mamilla Shrivani and Abhay Kumar Mehta
10	Meta QTLs analysis in maize ( <i>Zea mays</i> L.) associated with popping traits	Kumar et al.- Amit
11	Biochemical and molecular characterization of locally adapted maize inbreds for kernel carotenoids and tocopherols	Thakur et al.
12	Protein and NPK content of maize grain as influenced by soil and foliar application of active silica	Prajapat et al.
13	Studies on yield traits and $\beta$ -Carotene content in single cross hybrids of Maize	Swarnalatha Devi.I and Nusrath
14	QPM-A man made maize	Choudhary et al.
15	Maize biology	Bijarania et al.

**POSTER SESSION – 4****Day 2: 24 Feb 2022 (Thursday)****Display Timing: 14:00 – 16:00****Theme: 4: Biotic and abiotic stresses in maize under changing climatic scenario**

Abstract/ poster number	Title	Authors
1.	Monitoring of target site mutations in acetylcholinesterase (ace) and voltage-gated sodium channel (VGSC) genes in <i>Spodoptera frugiperda</i> (J.E.Smith) in Indian context	Kumar et al. - Sandeep
2.	Studies on Common Rust of Maize ( <i>Puccinia sorghi</i> Schw.) under Temperate Agro-ecologies of Kashmir	Ahangar et al.
3.	Identification of drought tolerance maize hybrids using selection indices under managed field conditions	Singh et al. - S.B.
4.	Solo and Integrated Approaches for Management of Banded Leaf and Sheath Blight (BLSB) of Maize	Chauhan et al.
5.	Detection of biotic stresses in maize crop under changing climatic scenario using hyperspectral remote sensing	Kanojia et al.
6.	Profiling of core set of Maize ( <i>Zea Mays</i> L.) Germplasm for Root Traits in Hydroponic system	Wajhat-Un-Nisa et al.
7.	Evaluation and identification of sources of resistance against <i>Turcicum</i> Leaf Blight of maize under temperate areas of Kashmir valley	Sabina et al.
8.	Impact of straw mulching on leaf physiological response and yield of winter maize ( <i>Zea mays</i> L.) irrigated under available soil moisture depletion conditions in Mollisols	Maneesh Bhatt and Veer Singh
9.	Evaluation of indigenous materials against Fall Armyworm, <i>Spodoptera frugiperda</i> (J.E. Smith) in Maize	Varma et al.
10.	Effects of seasonal variation on the ovipositional behaviour of fall armyworm, <i>Spodoptera frugiperda</i> (J. E. Smith) in maize	Soujanya et al.
11.	Physiological changes upon hydropriming in maize hybrids	Yaseen et al.
12.	Comparative study of three different isolates of <i>Rhizoctonia solani</i> collected from banded leaf and sheath blight disease of maize	Biswas et al.
13.	Genome-wide association mapping for <i>turcicum</i> leaf blight resistance in tropical maize	Lahkar et al.
14.	Character association and path analysis of grain yield and its attributes in maize under heat stress	Dash et al.
15.	Field efficacy of fungicides against <i>Drechslera maydis</i> causing <i>maydis</i> leaf blight of maize ( <i>Zea mays</i> L.)	Kaur et al. - Harleen
16.	Elucidating the initial vigor under drought in Maize genotypes with Polyethylene glycol (PEG, 6000)	Ravikesavan R and Lydia Pramitha J
17.	Investigations on the incidence of bacterial stalk rot ( <i>Erwinia chrysanthemi</i> pv <i>zeae</i> ) of maize in Telangana state during kharif - 2020	Mallaiah et al.
18.	Compatibility of new generation insecticides and fungicides against major pests and diseases of Maize	Sandhya et al.
19.	Confirmation of stable resistance sources to Northern Corn Leaf Blight [ <i>Exserohilum turcicum</i> (pass.) Leonard and Suggs] in Maize	Mallikarjuna et al.

Abstract/ poster number	Title	Authors
20	Evaluation of maize hybrids for yield and yield attributes under rainfed conditions	Usharani G and Sravani D
21	Agro - ecological options for fall armyworm management	E.Rajanikanth and G.Manjulatha
22	Efficacy of biological agents and botanicals against <i>Exseorhilum turcicum</i> causing Turcicum leaf blight in Maize	Shinde et al.
23	Habitat management for control of Maize Fall Army Worm in Telangana State	Sreelatha et al.
24	Discriminating maize inbreds for drought tolerance using physiological parameters	Mohanapriya et al.
25	Cob borer on Maize ( <i>Helicoverpa armigera</i> )	Sharma et al.- Pooja
26	Performance of Maize ( <i>Zea mays</i> L.) hybrids to adapt to rainfall changes and climatic aberrations	G.Manjulatha and K.Sumalini
27	Effect of Different Temperature and Time Intervals on Germination of Uredospores of <i>Puccinia Polysora</i> Underw.	Pati et al.
28	Bio-efficacy of combined and sequential application of herbicide in kharif maize	Chhatoi et al.
29	Current Scenario of Rajasthan Downy Mildew of Maize Incited by <i>Pernosclerospora heteropogoni</i> in Southern Rajasthan	Fagodia et al.
30	Cowpea+baby corn intensification and stress mitigation for higher productivity during summer season	Bijarnia et al.
31	Management of stem borer ( <i>Chilo partellus</i> Swinhoe) in maize using conventional pesticides	Bishana Ram
32	Molecular identification and scanning electron microscopy (SEM) study of <i>Aspergillus flavus</i> isolated from maize and colony morphology study of <i>Aspergillus flavus</i> on different media	Tania Biswas and Srabani Debnath
33	An Overview of Pollution, Climate Change, and Maize Production Strategies	Pooja et al
34	Influence of flooding on chlorophyll pigment, enzyme activity and carbohydrate content of maize	Ranjan et al.
35	Change in Biochemical and Physio-morphological characteristics due to heat and drought stress in maize	Reddy et al.
36	Climate change's impact on the changing patterns of maize diseases in the India: A review	Pavani et al.
37	In-vitro Management of Banded Leaf and Sheath Blight of Maize by using fungicides	Pavani et al.
38	Influence of sowing method, nitrogen and growth regulator on maize yield under excess soil moisture stress	Singh et al. - Pavan
39	Screening of maize genotypes against turcicum leaf blight of maize disease under artificial epiphytotic conditions in field	Iliger et al.
40	Transcriptional profiling for Turcicum leaf blight disease resistance in Indian maize germplasm	Kumar et al. - Bhupender
41	Effect of different temperature levels and incubation time on germination of urediniospores of <i>Puccinia polysora</i> Underw.	Sanjog Chhetri and Srabani Debnath
42	Screening for maydis leaf blight under artificial epiphytotic conditions in maize ( <i>Zea mays</i> l.)	Thakur et al..

Abstract/ poster number	Title	Authors
43	Subsurface drip irrigation in cereal systems for addressing water and crop productivity in north-west India	Poonia et al.
44	Field efficacy of insecticides for management of invasive fall armyworm, <i>Spodoptera Frugiperda</i> (J.E. Smith) on maize in India	Samota et al.
45	Occurrence of natural enemies of maize stem borer <i>Chilo partellus</i> (Swinhoe) in Kharif maize ecosystem	Behera et al.
46	Detection and monitoring of cob borer, <i>Helicovera armigera</i> (Hubner) using pheromone traps in maize	Chaudhary et al.
47	Screening of maize germplasm for resistance against maize stem borer, <i>Chilo partellus</i> (Swinhoe) under artificial infestation	Jaglan et al
48	Maize hybrids tolerant to excessive soil moisture stress based on morphological and biochemical attributes	Dash et al.
49	Management of stem borer ( <i>Chilo partellus</i> Swinhoe) in maize using conventional pesticides	Shivani Choudhary
50	Fall armyworm management strategies through integrated approach in maize"	Reddy et al.
51	Adjustment in sowing date to prevent heat stress in spring maize	Bamboriya et al. - Shanti
52	Meta-QTL analysis for mining of candidate genes and constitutive gene network modulating fungal disease resistance in maize ( <i>Zea mays</i> L.)	Gupta et al. - Mamta
53	Development and screening of maize hybrids under water log conditions using selection indices	Ranjan et al. - Rumesh
54	The efficacy of fungicides against post flowering stalk rot (PFSR) of specialty corn caused by <i>Fusarium Verticillioides</i> (sheldon)	Jat et al. - Anita
55	Evaluation of insecticides as spray based on incidence for the management of fall armyworm <i>Spodoptera frugiperda</i> (J.E. Smith)	Kumar et al. - Ashok
56	Inhabitant's fluctuation of fall armyworm, <i>Spodoptera Frugiperda</i> (J.E. Smith), infesting in maize ( <i>Zea Mays</i> L.)	Singh et al. - Beerendra
57	Evaluation of organic management practices for control of fall army worm ( <i>Spodoptera frugiperda</i> ) and yield in sweet corn	Sharma et al. - S. K.
58	Abiotic stress management in maize under changing climatic condition	Yogita Khandelwal and R. Chaudhary
59	Unravelling genetic variability and inheritance for Fall army worm tolerance in PAU maize germplasm stock	Sandhu et al.
60	Abiotic stress resistance in maize ( <i>Zea mays</i> )	Roshan Kumawat and Anju Bijarnia
61	Spatial distribution of invasive fall armyworm, <i>Spodoptera frugiperda</i> in maize at Udaipur	Ahir et al.
62	Drought stress response in maize ( <i>Zea mays</i> l.): impacts, resistance strategies and management for sustainable food production	Kaur et al. - Simardeep
63	Involvement of maize chitinases in disease resistance against maydis leaf blight	Vasmatkar et al.
64	Status of fall armyworm ( <i>Spodoptera frugiperda</i> smith) in Bihar	Giri et al.
65	Effects of waterlogging on the growth parameters of maize hybrids under field water logging condition	Gayatri Kumawat and Jai Prakash Shahi

Abstract/ poster number	Title	Authors
66	Recent advances in effective biorationals management of serious biotic threat of maize	Kumar et al.- Pravesh

### POSTER SESSION – 5

**Day 2: 24 Feb 2022 (Thursday)**

**Display Timing: 16:00 – 17:30**

**Theme: 5: Last mile delivery of maize technologies**

Abstract /poster number	Title	Authors
1	Impact assessment of Quality Protein Maize Hybrid (SQPMH-1) in frontier District Kupwara of Kashmir	Bhat et al.
2	A preliminary study of the evaluation of maize hybrids for grain yield under Temperate areas of Kashmir for inclusion in the farmers fields	Sabina et al.
3	IHPC-1203, Popcorn hybrid for cultivation in NWPZ, NEPZ and PZ in Kharif season	Patel et al.- M.B.
4	GAYMH-1, high yielding baby corn hybrid for cultivation in PZ and CWZ in Kharif season	Parmar et al.
5	Popularization of maize in tribal belt of Pali through frontline demonstrations	D Singh and M K Chaudhary
6	Redundancy Assessment for Management of Genebank Collections- A Case Study in Maize	Mallikarjun et al.
7	Performance of different maize varieties under Front Line Demonstrations in District Kupwara	Bhat et al.-Raies
8	Yield performance of maize through front line demonstration in Malwa region of Madhya Pradesh	Kantwa et al.
9	Assessment of hybrid maize cultivation using participatory approaches in Mayurbhanj district of Odisha	Mohanty et al.
10	Evaluation of front-line demonstration on QPM at farmer's field	Kumar et al.- Ajay
11	Sustainability of maize-based production practices among small-scale maize farmers	Jasveer Singh and Rohtash Kumar
12	The role of agricultural extension in the corn intensification program	Rohtash Kumar and Jasveer Singh

### POSTER SESSION – 6

**Day 3: 25 Feb 2022 (Friday)**

**Display Timing: 16:00 – 17:30**

**Theme: 6: Social inclusion and policy in maize research and development**

Abstract /poster number	Title	Authors
1	Sensor-based nitrogen management in maize-wheat cropping system under conservation agriculture in North-West Indo-Gangetic plains	Mahala et al.



2	Estimation of yield gap and decomposition to efficiency and resource yield gap methodology	Nayak et al. -H.S.
3	Social and government gaze on maize	Himansuman and Piyush Choudhary
13-00-14:00	Lunch	
<b>14:00-15:30</b>	<b>Valedictory Function</b>	

## Organizing Committees

### Technical Session Programme Committee

Chair: Dr M.L. Jat	Co-chairs: Dr Robin Gogoi Dr Firoz Hossain	Convener: Dr S.L. Jat
Members		
Dr D.P. Chaudhary	Dr J.C. Sekhar	Dr Ravikesavan R
Dr Digbijaya Swain	Dr J.S. Chawla	Dr S.S. Sharma
Dr Dilip Singh	Dr Jwala Jindal	Dr Suby S. B.
Dr Dogga Sreelatha	Dr Mehar Chand Kamboj	Dr Vignesh Muthuswamy
Dr Ganapati Mukri	Dr Narender Singh	Dr Y.S. Saharawat
Dr Harleen Kaur	Dr Pranjal Yadava	Dr Y.S. Shivay
Dr Ishwar Singh	Dr Rajkumar Zunjare	Dr S.K. Guleria

### Registration Committee

Chair: Dr S.S. Sharma	Co-chair: Dr N.L. Meena	Convener: Dr Chikkappa G.K.
Members		
Dr Alla Singh	Ms Chayanika Lahkar	Dr Pashupat Vasmatkar
Dr Anand Kumar	Dr K.M. Choudhary	Dr Pardeep Kumar
Mr Anup Saini	Dr Naveen Doulat	Dr Shaddha Nigam
Dr B.S. Jat	Mr Omkar Kumar	Dr Sumit Aggarwal

### Publication Committee

Chair: Dr Y.S. Shivay	Co-chairs: Dr K.S. Hooda Dr Zahoor Ahamed Dar	Convener: Dr C.M. Parihar
Members		
Dr Alla Singh	Dr Jwala Jindal	Dr Suby S. B.
Dr Bhupender Kumar	Dr Krishan Kumar	Dr Vignesh Muthuswamy
Dr Deep Mohan Mahala	Dr Mukesh Choudhary	Dr Vijay Pooniya
Dr Ganapati Mukri	Dr Pranjal Yadav	Dr Yathish KR
Mr H.S. Nayak	Mr Kiranmoy Patra	Dr Bharat Raj Meena

### Transport Committee

Chair: Dr R. B. Dubey	Co-chair: Dr K. D. Ameta	Convener: Dr P. B. Singh
-----------------------	--------------------------	--------------------------

### Finance Committee

Chair: Dr J.C. Sekhar	Co-chair: Dr M.L. Jat Dr S.K. Guleria	Convener: Dr Chikkappa G.K.
Members		
Dr Abhijeet Das	Dr C.M. Parihar	Dr R.K. Jat
Dr A. K. Singh	Dr Dilip Singh	Dr Ramesh Kumar
Dr Ashok Kumar	Dr D.P. Choudhary	Dr Sarbani Debnath
Dr Bhadru Dharavath	Dr. N. Sunil	Dr Y.S. Saharawat

### *Accommodation Committee*

Chair: Dr J. Choudhary	Co-chairs: Dr G. L. Meena	Convener: Dr. R. N. Bumkar
------------------------	---------------------------	----------------------------

#### Members

Dr Bharat Bhushan	Dr M.C. Dagla	Dr D. Sravani
-------------------	---------------	---------------

### *Stage and hall management Committee*

Chair: Dr S. S. Lakhawat	Co-chairs: Dr Lekha Dr Shalini Paliana	Convener: Dr D.M. Mahala
--------------------------	---	--------------------------

#### Members

Dr Mamta Gupta	Dr Seema Sepat	Dr Madhu Choudhary
----------------	----------------	--------------------

Dr Shanti Bamboriya	Ms Chayanika Lahkar	Dr P.L. Soujanaya
---------------------	---------------------	-------------------

### *Poster session Committee*

Chair: Dr M. K. Kaushik	Co-chairs: Dr A.K. Singh Dr K.S. Hooda	Conveners: Dr Bhupender Kumar Dr Krishan Kumar
-------------------------	---	---

#### Members

Dr Bhupender Kumar	Dr Mukesh Choudhary	Dr Vignesh Muthuswamy
--------------------	---------------------	-----------------------

Dr S Naseer	Dr Pranjal Yadav	Dr Vijay Pooniya
-------------	------------------	------------------

Dr Ganapati Mukri	Dr S.S. Sharma	Dr Yathish KR
-------------------	----------------	---------------

Dr Krishan Kumar	Dr Suby S.B.	Dr Mahesh Kumar
------------------	--------------	-----------------

Dr Pravin Bagaria	Dr Surinder Sandhu	Dr Faisal Rasool
-------------------	--------------------	------------------

### *Food & hospitality Committee*

Chair: Dr Dilip Singh	Co-chairs: Dr R. H. Meena	Convener: Dr B. L. Baheti
-----------------------	---------------------------	---------------------------

#### Members

Mr Divyaditya Awasthi	Mr Abhishek Jha	Mr Chhavinath
-----------------------	-----------------	---------------

Mr Kamlesh Kumar	Mr Praveen V Kadam	Mr Radheshyam
------------------	--------------------	---------------

## *National Steering cum Advisory Committee*

<b>Chairman:</b> Dr Trilochan Mohapatra	<b>Chief Patrons:</b> Dr R S Paroda; Dr S K Vasal
<b>Co-Chairman:</b> Dr N S Rathore, Dr. T R Sharma, Dr Sujay Rakshit	<b>Patrons:</b> Dr B S Dhillon Dr B K Mukherjee
<p>Dr Ashok Kumar Singh, DDG (AgriL. Extn) ICAR, India</p> <p>Dr Suresh Kumar Chaudhari, DDG (NRM), ICAR, India</p> <p>Dr Ashok Kumar Singh, Director, ICAR-IARI, ND</p> <p>Dr. D K Yadav, ADG (Seed), ICAR, India</p> <p>Dr. R K Singh, ADG (CC), ICAR, India</p> <p>Dr O P Yadav, Director, ICAR-CAZRI, Jodhpur</p> <p>Dr Parbodh Chander Sharma, Director, CSSRI, Karnal</p> <p>Dr Sain Dass, Ex-Director maize, ICAR, New Delhi</p> <p>Dr Rajbir Singh, Director, ATARI, Ludhiana, Punjab</p> <p>Dr Ashok Kumar, Director, NBPGR, New Delhi</p> <p>Dr M S Chauhan, Director, NDRI, India</p> <p>Dr B M Prasanna, Director, CIMMYT Maize Program</p> <p>Dr M L Jat, CIMMYT, Kathmandu, Nepal</p> <p>Dr Arun Kumar Joshi, Managing Director, BISA, India</p> <p>Dr B C Deka, VC, AAU, Jorhat, Assam, India</p> <p>Dr Onkar Nath Singh, VC, BAU, Ranchi, India</p> <p>Dr R C Srivastava, VC, RP CAU, Samastipur, India</p> <p>Dr S K Patil, VC, IGKV, Raipur, India</p> <p>Dr VP Chovatia, VC, JAU, Junagadh, India</p> <p>Dr Z P Patet, VC, NAU, Navsari, India</p> <p>Dr H K Chaudhary, VC, CSK HPKVV Palampur</p> <p>Dr B R Kamboj VC, CCSHAU, Hisar, Haryana, India</p> <p>Dr R P Singh, VC SKRAUI, Bikaner, India</p> <p>Dr B R Choudhary, VC, AU, Jodhpur, India</p> <p>Dr N Kumar, VC, TNAU, Coimbatore, India</p> <p>Dr Parvinder Kaushal, VC, Dr. YSPUH&amp;F, Solan, India</p> <p>Dr Chindi Vasudevappa, VC, NIFTE&amp;M, Sonipat, India</p> <p>Dr K B Kathiria, VC, AAU, Anand, India</p> <p>Dr Jaideep Srivastava, CGM, NABARD, Jaipur</p> <p>Dr S. Sandhu, PAU Ludhiana</p>	<p>Dr J P Sharma, VC, SKUAST, Jammu, India</p> <p>Dr S Rajendra Prasad, VC, UAS, Bengaluru, India</p> <p>Dr M B Chetti, VC, UAS, Dharwad, India</p> <p>Dr M K Naik, VC, UAHS, Shivamogga, KA, India</p> <p>Dr. Nazir Ahmad Ganai, VC, SKUAST, Srinagar, India</p> <p>Dr A S Dhawan, VC, VNMKV, Parbhani, India</p> <p>Dr P K Agrawal, VC, OUAT, Bhubaneswar, India</p> <p>Dr Dinesh Chandra Joshi, VC AU, Kota, India</p> <p>Dr A V Reddy, VC, ANGRAU, Guntur, India</p> <p>Dr B S Mahapatra, VC, BCKV, Nadia, India</p> <p>Dr Jeet Singh Sandhu, VC, SKNAU, Jobner, India</p> <p>Dr A K Singh, Director &amp; VC, IARI, New Delhi, India</p> <p>Dr Vilas Madhukar Bhale, VC, Dr PDKV, Akola, India</p> <p>Dr Tej Partap, VC, GBPUA&amp;T, Pantnagar, India</p> <p>Dr A R Sharma, DoR, RLBCAU, Uttar Pradesh, India</p> <p>Dr. Ramesh Raliya, IFFCO, New Delhi, India</p> <p>Dr J K Ladha, Davies, USA</p> <p>Dr R S Rathi, Director-Public Affairs, Bayer Crop Science</p> <p>Dr Anand Pandravada, Corteva, Agriscience, Hyderabad</p> <p>Shri Raju Barwale, MD, MAHYCO, Jalna, India</p> <p>Shri Shashank Chaturvedi, Senior CGM, HIL</p> <p>Dr Surya Rao, Syngenta Ltd</p> <p>Shri R G Aggarwal, Chairman, Dhanuka Groups</p> <p>Dr Pares Verma, Bio Seed Ltd,</p> <p>Dr Mahesh, Ganga Kaveri,</p> <p>DR Jivan Thakur, Kanchan Ganga Seed Company</p> <p>Dr Sadawud, C P Seeds</p> <p>Dr Uday Shetty, Advanta/UPL Ltd</p> <p>Dr Suresh Babu R, VP, (Sales and Marketing) Rasi Seeds</p>