



TECHNICAL PROGRAMME

Fifth International Agronomy Congress (IAC)
Agri-Innovations to Combat Food and Nutrition Challenges

23-27 November 2021

Venue: PJTSAU, Hyderabad, Telangana, India

Registration:	Venue: PJTSAU, Hyderabad
November 22, 2021	Time: 14:00-18:00 hrs
November 23, 2021	Time: 8:00-9:00 and 11:00-17:00 hrs
November 24-26, 2021	Time: 9:00-13:00 hrs
Day 1: November 23, 2021	
08:00-09:00	Welcome Tea
09:00-11:40	Inaugural Session (Hall-1)
11:40-12:00	High Tea
12:00-13:00	Presidential Address
Chair:	Dr. Panjab Singh , Chancellor, RLBCAU, Uttar Pradesh & Former Secretary, DARE and DG, ICAR, New Delhi, India
Rapporteur:	Dr. H.S. Shivaramu , UHS, Bagalkot, Karnataka, India
Speaker:	Dr. V. Praveen Rao , President ISA & Vice Chancellor, PJTSAU, Hyderabad, Telangana, India
13:00-14:00	Lunch break
CONCURRENT SYMPOSIA (I & II)	
14:00-18:00	Symposium I: Climate Resilient Agriculture and Ecosystem Services (Hall-1) *
Chair:	Dr. S.K. Chaudhari , ICAR, New Delhi, India
Co-Chair:	Dr. Ch. Srinivasa Rao , ICAR-NAARM, Hyderabad, Telangana, India
Conveners:	Dr. T.K. Das , ICAR-IARI, New Delhi, India Dr. J.V.N.S. Prasad , ICAR-CRIDA, Hyderabad, Telangana, India
Rapporteurs:	Dr. T. Bharat , KVK, Nalgonda, PJTSAU, Hyderabad, Telangana, India Dr. Mona Nagargade , ICAR-IISR, Lucknow, Uttar Pradesh, India
Keynote Speaker: (30 Minutes)	Dr. Anthony Whitbread , ISD - Tanzania, ICRISAT, Hyderabad, Telangana, India <i>Designing Climate Resilient Agricultural Systems with some Examples from India</i>
Lead Speakers: (20 Minutes)	Dr. N.H. Ravindranath , CST - IISc, Bengaluru, Karnataka, India <i>Climate Change, Nutrition and Food Security</i> Dr. Pramod Aggarwal , BISA, New Delhi, India <i>Climate Change Smart Agriculture</i> Dr. P.K.R. Nair , University of Florida, Florida, USA <i>Agroforestry and Climate-Resilient Agriculture: A Global Perspective</i>

Oral Presentations: (10 Minutes)	<p>Dr. Sunil Kumar, ICAR-IGFRI, Jhansi, Uttar Pradesh, India <i>Climate resilient farming for enhanced system productivity and fodder security in semi-arid regions of India</i></p> <p>Dr. Rajbir Singh, ICAR-ATARI, Ludhiana, Punjab, India <i>Experience learning from climate smart model villages: from pilots to scales</i></p> <p>Dr. G. Ravindra Chary, ICAR-CRIDA, Hyderabad, Telangana, India <i>Real time contingency planning to cope with climate variability in rainfed areas of India</i></p> <p>Dr. U.P. Singh, BHU, Varanasi, Uttar Pradesh, India <i>Climate resilient agricultural practices for rainfed stress-prone rice ecosystem in eastern India</i></p>
Rapid Fire: (05 Minutes)	<p>Dr. Bipin Kumar, WTC, ICAR-IARI, New Delhi, India <i>Impact of irrigation schedules and tillage practices on productivity of maize-wheat cropping system</i></p> <p>Dr. S. S. Balloli, ICAR-CRIDA, Hyderabad, Telangana, India <i>Development of resilient fodder-based cropping system to improve livelihood security in rainfed areas</i></p> <p>Dr. B. Sahadeva Reddy, AICRPDA Centre, ANGRAU, Ananthapuramu, Andhra Pradesh, India <i>Effect of extreme weather events on productivity of groundnut in Ananthapuramu district of Andhra Pradesh</i></p> <p>Dr. Satish Kumar, CCSHAU, Hisar, Haryana, India <i>Response of mungbean (<i>vigna radiata</i> L.) genotypes to irrigation scheduling</i></p> <p>Dr. Sudhir Kumar Rajpoot, BHU, Varanasi, Uttar Pradesh, India <i>Transplanted cotton based cropping systems to improve ecosystem services in semi-arid agro-ecology of South Asia</i></p>
14:00-18:00	Symposium II: Integrated Farming Systems for Sustainable Peasant Economy (Hall-2) *
Chair:	Dr. N.P. Singh , Formerly with ICAR-NIASM, Baramati, Maharashtra, India
Co-Chair:	Dr. A.S. Panwar , ICAR-IIFSR, Modipuram, Uttar Pradesh, India
Conveners:	<p>Dr. U.K. Behera, CAU, Umiam, Meghalaya, India</p> <p>Dr. N. Ravisankar, ICAR-IIFSR, Modipuram, Uttar Pradesh, India</p>
Rapporteurs:	<p>Dr. R.P. Mishra, ICAR-IIFSR, Modipuram, Uttar Pradesh, India</p> <p>Dr. Sreedhar Chauhan, PJTSAU, Hyderabad, Telangana, India</p>
Keynote Speaker: (30 Minutes)	<p>Dr. Nhamo Nhamo, ICBA, Dubai, UAE <i>Regenerative Agriculture, Food Systems and Machine Learning for Resilient Smallholder Farms</i></p>
Lead Speakers: (20 Minutes)	<p>Dr. J.S. Bohra, BHU, Varanasi, Uttar Pradesh, India <i>Sustainable Intensification through IFS under Irrigated Agro-Ecosystems</i></p> <p>Dr. V.K. Mishra, ICAR-RC for NEH, Umiam, Meghalaya, India <i>Integrated Farming System Approaches for Eastern Himalayan Hill and Mountain Agro-ecosystem</i></p> <p>Dr. Parveen Kumar, ICAR-CCARI, Ela, Goa, India <i>Sustainable Integrated Farming System for Coastal India</i></p>

Oral Presentations: (10 Minutes)	<p>Dr. U.K. Behera, CAU, Meghalaya, India <i>Natural farming systems model for livelihood security of farmers in North-Eastern hill region</i></p> <p>Dr. S.S. Rathore, ICAR-IARI, New Delhi, India <i>Diversification for Sustained Livelihood and Restoration of Ecosystems in Maize Based Cropping System</i></p> <p>Dr. Raj Singh, ICAR-IARI, New Delhi, India <i>Integrated Farming System Model to Sustain Livelihood of Small and Marginal Farmers of Indo-Gangetic-Plains (IGP) Under Semi-Arid Conditions</i></p> <p>Dr. N.P. Thakur, SKUAST, Jammu, India <i>Integrated farming system-A sustainable approach towards doubling farmer's income, livelihood, nutritional security and mitigating the agrarian crises in North-Western region of Jammu</i></p> <p>Dr Subhash Babu, ICAR-IARI, New Delhi, India <i>Designing integrated farming systems models for food security and environmental sustainability</i></p>
Rapid Fire: (05 Minutes)	<p>Dr. Ram Prakash Yadav, ICAR-VPKAS, Almora, Uttarakhand, India <i>Performance of soybean-wheat cropping under fruit tree based agri-horti system</i></p> <p>Dr. Ch. Pragathi Kumari, PJTSAU, Hyderabad, Telangana, India <i>Productivity and profitability of crop sequence module for integrated farming systems of Telangana</i></p> <p>Dr. M. Thoithoi Devi, ICAR-ATARI, Guwahati, Assam, India <i>Integrated farming system: An alternative to jhum cultivation in hilly region</i></p> <p>Dr. G.I. Ramakrushna, ICAR-CICR, Nagpur, Maharashtra, India <i>Integrated farming system to improve income of cotton farmer in Indian Himalayas</i></p>
	*Tea (15:30-16:30)
18:00-19:00	Plenary Lecture 1 (Hall-1)
Chair:	Dr. P.V. Vara Prasad , Kansas State University, Manhattan, Kansas, USA
Co-Chair:	Prof. Samar Singh , Maharana Pratap Horticultural University, Karnal, Haryana, India
Convener:	Dr. S. S. Rathore , ICAR-IARI, New Delhi, India
Rapporteur:	Dr. Raghavendra Singh , ICAR-IIPR, Kanpur, Uttar Pradesh, India
Speaker: (40 Minutes)	<p>Dr. Panjab Singh, Chancellor, RLBCAU, Uttar Pradesh & Former Secretary, DARE and DG, ICAR, New Delhi, India <i>Agricultural Transformation through Agronomic Innovations</i></p>
19:00-20:30	Cultural Programme
20:30-21:30	Dinner
	Day 2: November 24, 2021
08:00-09:00	Breakfast
09:00-10:00	Plenary Lecture 2 (Hall-1)
Chair:	Dr. Arvind Kumar , DDG, ICRISAT, Hyderabad, Telangana, India
Co-Chair:	Dr. Samunder Singh , CCSHAU, Hisar, Haryana, India
Convener:	Dr. V. Maruthi , ICAR-CRIDA, Hyderabad, Telangana, India

Rapporteur:	Dr. C.S. Praharaaj , ICAR-IIPR, Kanpur, Uttar Pradesh, India
Speaker: (40 Minutes)	Prof. P.V. Vara Prasad , Kansas State University, Manhattan, Kansas, USA <i>Sustainable Agricultural Intensification to Combat Food Security and Climate Change</i>
	CONCURRENT SYMPOSIA (III & IV)
10:00-13:15	Symposium III: Agronomic Innovations for Tapping Genetic Potential (Hall - 1) *
Chair:	Dr. A.K. Singh , ICAR-IARI, New Delhi, India
Co-Chair:	Dr. V.M. Bhale , Dr. PDKV, Akola, Maharashtra, India Dr. R.M. Sundaram , ICAR-IIRR, Hyderabad, Telangana, India
Conveners:	Dr. M.A. Shankar , Formerly with UAS, Bengaluru, Karnataka Dr. K.A. Gopinath , ICAR-CRIDA, Hyderabad, Telangana, India
Rapporteurs:	Mrs. V. Visha Kumari , ICAR-CRIDA, Hyderabad, Telangana, India Dr. Ravindra Singh , ICAR-NRC on Seed Spices, Ajmer, Rajasthan, India
Keynote Speaker: (30 Minutes)	Dr. Kuldeep Singh , ICRISAT, Hyderabad, Telangana, India <i>Innovations for Tapping Potential of Plant Genetic Resources</i>
Lead Speakers: (20 Minutes)	Dr. N.T. Yaduraju , Formerly with ICAR-DWR, Jabalpur, Madhya Pradesh, India <i>Hand Hoes to Robotic Weeders: The Fight Against Weeds Continues</i> Dr. Sudhanshu Singh , IRRI-SARC, Varanasi, Uttar Pradesh, India <i>Agronomic Innovations for Tapping Potentials of Improved Rice Genotypes</i> Dr. R.M. Sundaram , ICAR-IIRR, Hyderabad, Telangana, India <i>Breeding for Nutrient Use Efficiency in Rice: Present status and future prospects</i> Dr. Blaise Desouza , ICAR-CICR, Nagpur, Maharashtra, India <i>Agronomic Interventions for Exploiting Genetic Potential of Fibre Crops</i> Dr. B.M. Chittapur , Formerly with UAS, Raichur, Karnataka, India <i>Improved Agronomic Practices for Harnessing Genetic Yield Potential in Semi-arid Tropics of India</i>
Oral Presentations: (10 Minutes)	Dr. U.V. Mahadkar , DBSKKV, Dapoli, Maharashtra, India <i>Impact of various planting geometries and integrated nutrients on growth and yield of sugarcane (<i>Saccharum officinarum</i> L.)</i> Dr. S.K. Thakral , CCSHAU, Hisar, Haryana, India <i>Yield maximization of wheat through nutrient management and growth retardants</i> Dr. V. Maruthi , ICAR-CRIDA, Hyderabad, Telangana, India <i>Exploiting the pigeonpea plasticity in strip intercropping systems during extended monsoon season for tapping its genetic potential in rainfed ecosystem</i> Dr. Amit Kumar Singh , ICAR-NBPGR, New Delhi, India <i>Exploring genetic diversity in Indian national gene bank wheat germplasm collection for improving salinity tolerance</i>
Rapid Fire: (05 Minutes)	Dr. Arvind Kumar Singh , BAU, Ranchi, Jharkhand, India <i>Nutrient expert-based site-specific nutrient management in soybean</i> Dr. R.S. Bana , ICAR-IARI, New Delhi, India <i>Multi-micronutrient foliar fertilization in brinjal for enhancing yield, biofortification and soil microbial activities under diverse fertility scenarios</i> Dr. Ekta Joshi , RVSKVV, Gwalior, Madhya Pradesh, India <i>Optimizing crop geometry and nutrition management of kharif groundnut (<i>Arachis hypogaea</i> L.) for better yield, economics and higher water productivity</i>

	<p>Mrs. V. Visha Kumari, ICAR-CRIDA, Hyderabad, Telangana, India <i>Effect of foliar micronutrient spray on lentil (<i>Lens culinaris</i>) growth, yield, and quality in West Bengal's new alluvial zone in changing climatic scenario</i></p> <p>Dr. Mohammad Hashim, Regional Station, ICAR-IARI, Pusa Samastipur, Bihar, India <i>Foliar application of iron and zinc enhances wheat growth, yield and related attributes</i></p> <p>Dr. P. Sudhakar, Annamalai University, Tamil Nadu, India <i>Effect of different irrigation levels and drought mitigation strategies on productivity enhancement in greengram</i></p>
10:00-13:15	Symposium IV: New Vistas in Biotic and Abiotic Stress Management (Hall-2) *
Chair:	Dr. P.K. Ghosh , ICAR-NIBSM, Raipur, Chhattisgarh, India
Co-Chair:	Dr. J.S. Mishra , ICAR-DWR, Jabalpur, Madhya Pradesh, India
Convener:	Dr. M. Prabhakar , ICAR-CRIDA, Hyderabad, Telangana, India
Rapporteurs:	<p>Dr. Shivani, ICAR-RC for Eastern Region, Patna, Bihar, India</p> <p>Dr. G. Santhosh Kumar, PJTSAU, Hyderabad, Telangana, India</p>
Keynote Speaker: (30 Minutes)	<p>Dr. S.P. Wani, Formerly with ICRISAT, Hyderabad, Telangana, India <i>Harnessing the Power of New Science tools to Manage Biotic and Abiotic Stress in Agriculture</i></p>
Lead Speakers: (20 Minutes)	<p>Dr. B. Muthukumar, Texas A&M University, Texas, USA <i>Advances in Weed Management Technologies for Sustainable Food Production</i></p> <p>Dr. Jagadish Rane, ICAR-NIASM, Baramati, Maharashtra, India <i>New Vistas in Management of Abiotic Stress in Agriculture</i></p> <p>Dr. Senthil Kumar Muthappa, NIPGR, New Delhi, India <i>Combined Biotic-Abiotic Stresses and their Interaction in Crop Plants: Current Understanding, Challenges and Avenues</i></p>
Oral Presentations: (10 Minutes)	<p>Dr. M. Madhavi, PJTSAU, Hyderabad, Telangana, India <i>Non-chemical weed management in okra-carrot cropping system under organic farming</i></p> <p>Dr. N.N. Angiras, CSK HPKV, Palampur, Himachal Pradesh, India <i>Integration of non-chemical methods to manage weeds in groundnut (<i>Arachis hypogaea</i> L) under semi-arid conditions of Eritrea</i></p> <p>Dr. M. Srinivasa Rao, ICAR-CRIDA, Hyderabad, Telangana, India <i>Prediction of future pest scenario of <i>Helicoverpa armigera</i> (Hub.) on pigeonpea under RCPs based climate change scenarios</i></p> <p>Dr. P.K. Mukherjee, ICAR-DWR, Jabalpur, Madhya Pradesh, India <i>Ecology and management of <i>Alternanthera paronychioides</i> A. St.-Hil. (Smooth joyweed), an invasive weed in upland ecosystems</i></p> <p>Dr. R.K. Yadav, ICAR-CSSRI, Karnal, Haryana, India <i>Cut-soiler assisted sub-surface placement of gypsum and rice residue helps to manage sub-surface soil sodicity and improve crop yield in Indo Gangetic Plains</i></p>
Rapid Fire: (05 Minutes)	<p>Dr. G.A. Rajanna, ICAR-DGR, RRS Ananthapuramu, Andhra Pradesh, India <i>Seed treatment and slurry application of hydrogels enhances wheat yields under soybean-wheat system</i></p> <p>Dr. B.A. Gudade, Spices Park, Spices Board of India, Chhindwara, Madhya Pradesh, India <i>Impact of in-situ soil moisture conservation practices on productivity of large cardamom in terraces land of Sikkim Himalayas</i></p>

	<p>Dr. V.K. Choudhary, ICAR-DWR, Jabalpur, Madhya Pradesh, India <i>New generation herbicide influences weed control, crop productivity and profitability in transplanted rice</i></p> <p>Dr. Teekam Singh, ICAR-IARI, New Delhi, India <i>Crop-weed interference in rainfed maize and pearl millet based intercropping systems under tillage-based establishment</i></p>
	*Tea (11:00-12:00)
13:15-14:00	Lunch break
	CONCURRENT SYMPOSIA (V & VI)
14:00-18:00	Symposium V: Secondary Agriculture and Farmers Prosperity (Hall-2) *
Chair:	Dr. K. K. Singh , ASRB, New Delhi, India
Co-Chair:	Dr. S.N. Jha , ICAR, New Delhi, India
Conveners:	Dr. S.S. Singh , RLBCAU, Jhansi, Uttar Pradesh, India Dr. R.K. Singh , ICAR-CIPHET, Ludhiana, Punjab, India
Rapporteurs:	Dr. Madhu Bindu , PJTSAU, Hyderabad, Telangana, India Dr. A.K. Singh , T.D.P.G. College, Jaunpur, Uttar Pradesh, India
Keynote Speaker: (30 Minutes)	Prof. D.C. Joshi , Agriculture University, Kota, Rajasthan, India <i>Effective Supply Chain for Sustainable Agro and Food Processing in India</i>
Lead Speakers: (20 Minutes)	Dr. P. Chandra Shekara , MANAGE, Hyderabad, Telangana, India <i>Agripreneurship to Boost Secondary Agriculture</i> Dr. Nachiket Kotwaliwale , ICAR-CIPHET, Ludhiana, Punjab, India <i>Agri-Byproduct Utilization for Extraction of High-Value Compounds</i> Shri. Kanwal Singh Chauhan , Progressive Farmer, Sonipat, Haryana, India <i>Chemical Free Farming for Health and Environment Security</i>
Oral Presentations: (10 Minutes)	Dr. A. Nath , ICAR-IIFSR, Modipuram, Uttar Pradesh, India <i>Development of process protocol for immune boosting organic jaggery: New avenues to enhance income of sugarcane farmers</i> Dr. Sanjay Singh , ICAR-IGFRI, Jhansi, Uttar Pradesh, India <i>Design, development and evaluation of evaporative cooled hydroponic fodder production structure (ECHFPS)</i>
Rapid Fire: (05 Minutes)	Dr. K. Viswanatha Reddy , ICAR-CTRI, Rajahmundry, Andhra Pradesh, India <i>India's position in production and export of high value commercial crops: A critical analysis of scope for export promotion</i> Dr. Tushar Patel , NAU Campus Bharuch, Gujarat, India <i>Banana mulching, sleeving and nutrient pouch technology</i>
14:00-18:00	Symposium VI: Soil-Plant-Animal and Human Health Continuum (Hall-1) *
Chair:	Dr. A.S. Dhawan , VNMKV, Parbhani, Maharashtra, India
Co-Chair:	Dr. D.K. Sharma , ICAR-CSSRI, Karnal, Haryana, India
Conveners:	Dr. M. Madhu , ICAR-IIS&WC, Dehradun, Uttarakhand, India Dr. Subbalakshmi Lokanadhan , TNAU, Coimbatore, Tamil Nadu, India

Rapporteurs:	Dr. P. Revathi , PJTSAU, Hyderabad, Telangana, India Dr. P.C. Ghasal , ICAR-IIFSR, Modipuram, Uttar Pradesh, India
Keynote Speaker: (30 Minutes)	Dr. Kaushik Majumdar , APNI, Ben Guerir, Morocco <i>Soil-Plant-Animal-Human Health Continuum-Connecting the Dots</i>
Lead Speakers: (20 Minutes)	Dr. Joska Gerendas , Institute of Applied Plant Nutrition (IAPN), Carl-Sprengel-Weg, Germany <i>Soil Quality and Plant Nutrition - A European Perspective</i> Dr. S.P. Datta , ICAR-IARI, New Delhi, India <i>Risk Assessment and Remediation of Metal and Metalloid Contaminated Soils</i> Dr. Ashwin L. Kotnis , AIIMS, Bhopal, Madhya Pradesh, India <i>Soil-Plant-Animal-Human Continuum</i>
Oral Presentations: (10 Minutes)	Dr. R.N. Kumawat , ICAR-CAZRI, Jodhpur, Rajasthan, India <i>Effect of spacing and irrigation levels on the fodder production of annual moringa (<i>Moringa oleifera</i>) in arid Rajasthan</i> Dr. Sudarshan Dutta , African Plant Nutrition Institute, Benguerir, Morocco <i>Carbon farming - A win-win for smallholder farmers and global industries</i> Dr. Prabhat Kumar Pankaj , ICAR-CRIDA, Hyderabad, Telangana, India <i>Micro-mineral status under soil-plant-animal continuum in dryland agro-ecosystem of Telangana</i> Dr. Ummed Singh , College of Agriculture, Baytu, Barmer, Rajasthan, India <i>Customized fertilizers: Precursor for higher nutrient use efficiency and productivity of field crops</i>
Rapid Fire: (05 Minutes)	Dr. Manish Kushwaha , PAU, Ludhiana, Punjab, India <i>Quality fodder production of dual-purpose barley under integrated use of fertilizer and municipal solid waste compost</i> Dr. Ashok Kumar , ICAR-NBSS&LUP Regional Centre, Delhi, India <i>Evaluation of productivity and profitability of major agricultural crops for sustainable land use planning-a case study</i> Dr. Md. Latheef Pasha , PJTSAU, Hyderabad, Telangana, India <i>On farm rice-rice (<i>Oryza sativa</i> L.) cropping system influenced by rational NPK in Medak district of Telangana</i> Dr. Hanamant M. Halli , ICAR-IGFRI, Jhansi, Uttar Pradesh, India <i>Economics and resource use efficiency of fodder maize seed production under deficit irrigation and nutrients management in semi-arid conditions</i> Dr. Biswaranjan Behera , ICAR-IIWM, Bhubaneswar, Odisha, India <i>Weed management and soil properties under live and dead mulches in no-till agriculture</i>
	*Tea (15:30-16:30)
18:00-19:00	Plenary Lecture 3 (Hall-1)
Chair:	Dr. Panjab Singh , Chancellor, RLBCAU, Uttar Pradesh & Former Secretary, DARE and DG, ICAR, New Delhi, India
Co-Chair:	Dr. A.K. Singh , Formerly with ICAR, New Delhi, India
Convener:	Dr. G. Ravindra Chary , ICAR-CRIDA, Hyderabad, Telangana, India

Rapporteur:	Dr. Jayanta Deka , AAU, Jorhat, Assam, India
Speaker: (40 Minutes)	Prof. Rattan Lal , World Food Prize Awardee, C-MASC, The Ohio State University, Columbus, USA <i>Sustainable Eco System Services: Management Through Agronomic Means</i>
20:00-21:30	Gala Dinner
	Day 3: November 25, 2021
08:00-09:00	Breakfast
09:00-10:00	Plenary Lecture 4 (Hall-1)
Chairs:	Dr. D. P. Singh , Former Vice Chancellor, JNKVV, Jabalpur, Madhya Pradesh, India Dr. Kaushik Majumdar , APNI, Ben Guerir, Morocco
Co-Chairs:	Dr. Arun Kumar , Vice Chancellor, BAU, Sabour, Bihar, India Dr. Yadavindra Singh , INSA Scientist, PAU, Ludhiana, Punjab, India
Convener:	Prof. Raihana Habib Kanth , SKUAST - Kashmir, Jammu & Kashmir, India
Rapporteur:	Dr. Anil Dixit , ICAR-NIBSM, Raipur, Chhattisgarh, India
Speaker: (40 Minutes)	Prof. Raj Khosla , Kansas State University, Manhattan, Kansas, USA <i>Future of Farming: Big Data, Analytics and Precision Agriculture</i>
	CONCURRENT SYMPOSIA (VII & VIII)
10:00-13:15	Symposium VII: Big Data for Smart Agriculture (Hall-2) *
Chair:	Dr. N.C. Patel , Formerly with AAU, Anand, Gujarat, India
Co-Chairs:	Dr. Rajender Parsad , ICAR-IASRI, New Delhi, India Dr. N.H. Rao , Formerly with ICAR-NAARM, Hyderabad, Telangana, India
Conveners:	Dr. E.V.S. Prakasa Rao , CSIR-CIMAP, Bengaluru, Karnataka, India Dr. Sunil Kumar , ICAR-IGFRI, Jhansi, Uttar Pradesh, India
Rapporteurs:	Dr. K. Sekhar , PJTSAU, Hyderabad, Telangana, India Dr. Sanjeev Kumar , ICAR-NDRI, Karnal, Haryana, India
Keynote Speaker: (30 Minutes)	Dr. Simon Cook , Future Food Institute, Murdoch University, Australia <i>Digital Agriculture for Smart Agriculture</i>
Lead Speakers: (20 Minutes)	Dr. K.V. Ramesh , CSIR-FPI, Bengaluru, Karnataka, India <i>Integrated Data Analytics Platform for Sustainable Crop Management: Developing Intervention Strategies for Increasing Quality Production</i> Dr. Scott Murrell , APNI, Ben Guerir, Morocco <i>Big Data for Smart Agriculture: What are we hoping for?</i> Dr. P. Rajalakshmi , IIT Hyderabad, Telangana, India <i>Drone-Based Sensing for Agriculture: Way Forward</i>
	Dr. Steve Phillips , APNI, Ben Guerir, Morocco <i>Precision Agriculture for Small Holder Systems</i>
Oral Presentations: (10 Minutes)	Dr. Shantanu Kar , Coromandel International Ltd., Secunderabad, Telangana, India <i>Mid-season prediction of paddy grain yield from normalized difference vegetation index recorded through optical active canopy sensor</i> Dr. B.M.K. Raju , ICAR-CRIDA, Hyderabad, Telangana, India <i>Towards achieving self-sufficiency in oilseeds production in India: Identifying districts with untapped yield potential</i>

	<p>Dr. S. Pazhanivelan, TNAU, Coimbatore, Tamil Nadu, India <i>Spatial yield estimates of rice from remote sensing products assimilated with ORYZA crop simulation model for crop insurances</i></p> <p>Dr. N. Ravi Kumar, ICAR-CRIDA, Hyderabad, Telangana, India <i>Online interactive thematic map generator: A spatial data visualization tool</i></p>
Rapid Fire: (05 Minutes)	<p>Dr. S. Vennila, ICAR-NRC for IPM, New Delhi, India <i>An Android Mobile app as knowledge and communication tool for integrated pest management of fall armyworm in maize</i></p> <p>Dr. S.K. Dubey, Mahalanobis National Crop Forecast Centre, New Delhi, India <i>Remote sensing based operational crop yield forecasting in India</i></p> <p>Dr. Pooja Mankar, ICAR-CPRI Regional Station, Modipuram, Uttar Pradesh, India <i>Export quality grading of Indian potato varieties using image processing</i></p> <p>Dr. K. Surekha, ICAR-IIRR, Hyderabad, Telangana, India <i>Nutrient Expert ® assisted site-specific nutrient management: An alternative, precision fertilization technology for rice in India</i></p>
10:00-13:15	Symposium VIII: Conservation Agriculture, Smart Mechanization and Energy Use (Hall - 1) *
Chair:	Dr. N. S. Rathore , MPUA&T, Udaipur, Rajasthan, India
Co-Chairs:	Dr. B.S. Dwivedi , ICAR-NBSS&LUP, Nagpur, Maharashtra, India Dr. P.C. Sharma , ICAR-CSSRI, Karnal, Haryana, India
Conveners:	Dr. M. L. Jat , CIMMYT-CCAFS, New Delhi, India Dr. G. Pratibha , ICAR-CRIDA, Hyderabad, Telangana, India
Rapporteurs:	Dr. B. Padmaja , PJTSAU, Hyderabad, Telangana, India Dr. Sumanta Kundu , ICAR-CRIDA, Hyderabad, Telangana, India
Keynote Speaker: (30 Minutes)	Dr. Bruno Gerrard , UM VI P, Ben Guerir, Morocco <i>Conservation Agriculture - A Global Perspective</i>
Lead Speakers: (20 Minutes)	Dr. H.S. Jat , ICAR-CSSRI, Karnal, Haryana, India <i>Conservation Agriculture in Irrigated Intensive Systems of South Asia: Progress and Prospects</i> Dr. A.R. Sharma , RLBCAU, Jhansi, Uttar Pradesh, India <i>Proven Benefits from Research on Conservation Agriculture but Adoption still Eludes India: Some Apprehensions and Fallacies</i> Dr. Kanchan K. Singh , ICAR, New Delhi, India <i>Mechanization in Conservation Agriculture</i>
Oral Presentations: (10 Minutes)	Dr. T.K. Das , ICAR-IARI, New Delhi, India <i>Conservation agriculture impacts on productivity, resource-use efficiency, greenhouse gases emission and soil health in diversified cropping systems: experiences from long-term experiments</i> Dr. C.M. Parihar , ICAR-IARI, New Delhi, India <i>Conservation agriculture based sustainable intensification: Can be an option for enhancing the crop and water productivity with lower environmental footprints</i>

	<p>Dr. Sumanta Kundu, ICAR-CRIDA, Hyderabad, Telangana, India <i>Effect of conservation agriculture on yield and soil properties of rainfed pearl millet based cropping system in Alfisols of semi-arid southern India</i></p> <p>Dr. Janardan Singh, CSKHPKV, Palampur, Himachal Pradesh, India <i>Growth and productivity of soybean (<i>Glycine max L.</i>) as influenced by conservation tillage and fertility levels</i></p>
Rapid Fire: (05 Minutes)	<p>Dr. Rishi Raj, ICAR-IARI, New Delhi, India <i>Effect of long-term conservation agriculture and herbicide on productivity and soil physical properties in rice-wheat cropping system</i></p> <p>Dr. Arjun Singh, ICAR-NRC for Banana, Tiruchirapalli, Tamil Nadu, India <i>Performance of wheat under the mechanized system of wheat intensification</i></p> <p>Dr. Rakesh Kumar, ICAR-Research Complex for Eastern Region, Patna, Bihar, India <i>Conservation agriculture-based crop management practices for sustainable production of rice-fallows in eastern India</i></p> <p>Dr. A.V. Ramanjaneyulu, PJTSAU, Hyderabad, Telangana, India <i>Mechanization for enhancing yield and energy use in rainfed cotton</i></p> <p>Dr. A. Ghosh, ICAR-IARI, New Delhi, India <i>Prospect of different rice types at dry direct-sown establishment (DDSR) with modern N management protocol</i></p>
	*Tea (11:00-12:00)
13:15-14:00	Lunch break
	CONCURRENT SYMPOSIA (IX & X)
14:00-18:00	Symposium IX: Agronomic Education: A Paradigm Shift in the Offing (Hall-1) *
Chair:	Dr. Arvind Kumar , RLBCAU, Jhansi, Uttar Pradesh, India
Co-Chair:	Dr. P.S. Pandey , ICAR, New Delhi, India
Conveners:	<p>Dr. J. Bohra, BHU, Varanasi, Uttar Pradesh, India</p> <p>Dr. Ashok Kumar, Formerly with HAU, Hisar, Haryana, India</p>
Rapporteurs:	<p>Dr. Rashmi Yadav, ICAR-NBPGR, New Delhi, India</p> <p>Dr. K. Sridhar, PJTSAU, Hyderabad, Telangana, India</p>
Keynote Speaker: (30 Minutes)	<p>Dr. D.P. Singh, Formerly with JNKVV, Jabalpur, Madhya Pradesh, India <i>Agronomic Education: Present Status and Future Strategies</i></p>
Lead Speakers: (20 Minutes)	<p>Dr. Rameshwar Kanwar, Iowa State University, Ames, Iowa, USA <i>Need for Peer Reviewed Quality Research at SAUs in Collaborations with US Land Grant Universities</i></p> <p>Dr. V.M. Bhale, Dr. PDKV, Akola, Maharashtra, India <i>Agronomy Education and New Education Policy</i></p> <p>Dr. Jayanta Deka, AAU, Jorhat, Assam, India <i>Reorienting Agronomic Education</i></p> <p>Dr. A.K. Gupta, SKNCoA, Jobner, Rajasthan, India <i>Transforming Agronomic Education to Address Future Challenges</i></p> <p>Dr. R.M. Kathiresan, Formerly with Annamalai University, Chidambaram, Tamil Nadu, India <i>Curriculum Enrichment in Agronomy Education- Need for Integration of Allied Sciences</i></p>

Oral Presentations: (10 Minutes)	Dr. M. Mohamed Yassin , TNAU, Coimbatore, Tamil Nadu, India <i>Transforming agronomic education for the next generation students: integrating teaching with innovative technologies</i>
14:00-18:00	Symposium X: Advances in Soil-Microbe-Plant-Water and Environmental Interactions (Hall-2) *
Chair:	Dr. B. Venkateswarlu , Formerly with VNMKV, Parbhani, Maharashtra, India
Co-Chair:	Dr. H. Pathak , ICAR-NIASM, Baramati, Maharashtra, India
Conveners:	Dr. Man Singh , ICAR-WTC, New Delhi, India Dr. D.K. Swain , IIT, Kharagpur, West Bengal, India
Rapporteurs:	Dr. K. Bhanu Rekha , PJTSAU, Hyderabad, Telangana, India Dr. S.P.S Panwar , ICAR-CAZRI, Jodhpur, Rajasthan, India
Keynote Speaker: (30 Minutes)	Prof. Biswapati Mandal , BCKV, Kalyani, West Bengal, India <i>Advances in Soil-Microbe-Plant-Water and Environmental Interactions</i>
Lead Speakers: (20 Minutes)	Dr. Ajit K. Sarmah , The University of Auckland, Auckland, New Zealand <i>Role of Soil, Water and Climate Change in Global Food Security during COVID-19 Pandemic - A Perspective</i> Dr. Anil Kumar Saxena , ICAR-NBAIM, Kashmaur, Uttar Pradesh, India <i>Microbe based Technologies for Nutrient Management</i> Prof. Binayak P. Mohanty , Texas A&M University, Texas, USA <i>Estimating High Resolution Soil Moisture and Hydraulic Properties for Sustainable Agriculture</i>
Oral Presentations: (10 Minutes)	Dr. K. Sammi Reddy , ICAR-CRIDA, Hyderabad, Telangana, India <i>Assessing the environmental performance of Indian agriculture using sustainable nitrogen management index (SNMI) approach</i> Dr. S. Karmakar , BAU, Ranchi, Jharkhand, India <i>Phosphorus and zinc economy with phosphate and zinc solubilizing microbes in field pea</i> Dr. K. Avil Kumar , Water Technology Centre, PJTSAU, Hyderabad, Telangana, India <i>Rabi maize (<i>Zea mays L.</i>) yield and economics under fertigation of microbial consortium combined with chemical fertilizers</i> Dr. Junya Onishi , JIRCAS, Tsukuba, Japan <i>Low-cost water saving method under surface irrigation</i> Dr. Yogeshwar Singh , RLB CAU, Jhansi, Uttar Pradesh, India <i>Promising in-situ rainwater management options and crop diversification for climate resilient agriculture in Bundelkhand region</i> Dr. S.K. Shukla , ICAR-IISR, Lucknow, Uttar Pradesh, India <i>Minimum tillage intervention through subsoiling for improving soil carbon conservation, activity of soil enzymes and sugarcane yield in subtropical India</i>
Rapid Fire: (05 Minutes)	Dr. Dinesh Jinger , ICAR-IISWC Research Centre, Vasad, Gujarat, India <i>Combined phosphorus and silicon fertilization improve productivity and water use efficiency of aerobic rice</i> Dr. S.K. Yadav , ICAR-IISR, Lucknow, Uttar Pradesh, India <i>Irrigation scheduling in sugarcane with trash mulching under trench method of planting in subtropics</i>

	<p>Dr. Kapila Shekhawat, ICAR-IARI, New Delhi, India <i>Developing nitrogen management options for various crop establishment methods under rice-wheat system</i></p> <p>Dr. Mangal Deep Tuti, ICAR-IIRR, Hyderabad, Telangana, India <i>Exploring phosphorus use efficiency potential of drought tolerant rice varieties grown in low phosphorus soil</i></p> <p>Dr. G. Bhargavi, Visakhapatnam, Andhra Pradesh, India <i>Performance of Oryza sativa (Co-45) under different irrigation regimes and potassium levels</i></p> <p>Dr. Shyamrao Kulkarni, College of Agriculture, Bheemarayanagudi, UASR, Karnataka, India <i>Soil microbial interaction and c-sequestration dynamics in foxtail millet- Melia dubia agroforestry under organic production system</i></p> <p>Dr. Kailash Prajapat, ICAR-CSSRI, Karnal, Haryana, India <i>Agro-physiological evaluation and standardization of plant geometry and seeding rate of quinoa under salinity stress</i></p>
	*Tea (15:30-16:30)
18:00-19:00	Plenary Lecture 5 (Hall - 1)
Chair:	Dr. S.K. Malhotra , MOA&FW, Government of India
Co-Chair:	Dr. R. P. Singh , Formerly with ICAR-IARI & IAUA, New Delhi, India
Convener:	Dr. K. Ramesh , ICAR-IIR, Hyderabad, Telangana, India
Rapporteur:	Dr. S.K. Thakral , CCSHAU, Hisar, Haryana, India
Speaker: (40 Minutes)	Dr. Gerald A. Herrmann , Organic Services GmbH, Tutzing, Germany <i>Organic Agriculture - A Local and Global Perspective</i>
19:00-21:00	General Body Meeting, ISA (Hall-1)
21:00-22:00	Dinner
	Day 4: November 26, 2021
08:00-09:00	Breakfast
09:00-10:00	Plenary Lecture 6 (Hall-1)
Chair:	Dr. T.C. Jain , Former Senior Agriculturist, World Bank, New Delhi India
Co-Chair:	Dr. R. K. Rai , Formerly with ICAR-IARI, New Delhi, India
Convener:	Dr. M. V. Ramana , University Head, PJTSAU, Hyderabad, Telangana, India
Rapporteur:	Dr. V. Ramamurthy , ICAR-NBSSLUP, Regional Station, Bengaluru, Karnataka, India
Speaker: (40 Minutes)	Dr. Bram Govaerts , CIMMYT, Texcoco, Mexico <i>Agri-food Systems for Sustainability and Resilience</i>
	CONCURRENT SYMPOSIA (XI & XII)
10:00-13:15	Symposium XI: Perspective in Organic Agriculture (Hall-1) *
Chair	Dr. B.S. Mahapatra , BCKV, Nadia, West Bengal, India
Co-Chair:	Dr. S. Bhaskar , ICAR, New Delhi, India
Conveners:	Dr. S.K. Sharma , MPUAT, Udaipur, Rajasthan, India Dr. Dhananjay K. Singh , GBPUA&T, Pantnagar, Uttarakhand, India
Rapporteurs:	Dr. M.H. Manjunatha , UAS, Bengaluru, Karnataka, India Dr. Ishwar Singh , ICAR-NBPGR, New Delhi, India

Keynote Speaker: (30 Minutes)	Prof. Dr. Gerold Rahmann , Thuenen - Institute of Organic Farming, Westarau, Germany <i>Organic Agriculture a Global Perspective</i>
Lead Speakers: (20 Minutes)	Dr. Vandana Dwivedi , DAC&FW, MOA&FW, New Delhi, India <i>Government Initiatives for Promotion of Organic Farming in India</i> Dr. A.K. Yadav , Formerly with NCOF, Ghaziabad, Uttar Pradesh, India <i>Overall Scenario of Organic Agriculture in India</i> Mr. Rajashekar Reddy , CEO, 24 Mantra, Hyderabad, Telangana, India <i>Organic Food: Prospect in Indian Context</i>
Oral Presentations: (10 Minutes)	Dr. V.S. Kubsad , UAS Dharwad, Karnataka, India <i>Effect of organic nutrient and weed management in growth and yield of rainfed toria</i> Dr. K.B. Suneetha Devi , Agriculture College, Jagtial, PJTSAU, Telangana, India <i>Yield and economics of sesame as influenced by organic nutrient management practices</i> Dr. N. Ravisankar , ICAR-IIFSR, Modipuram, Uttar Pradesh, India <i>Long-term influence of organic and towards organic approaches on yield, economics and soil organic carbon in major cropping systems of India</i> Dr. D.K. Singh , GBPUAT, Pantnagar, Uttar Pradesh, India <i>Assessment of sustainability in organic farming</i>
Rapid Fire: (05 Minutes)	Dr. S.C. Sharma , ICAR-CSWRI, Avikanagar, Rajasthan, India <i>Effect of organic manure and biofortification sources on growth and yields of Indian bean (Dolichos lablab L.)</i> Dr. Jayanta Layek , ICAR RC for NEH Region, Meghalaya, India <i>Integrated organic farming system (IOFS) enhanced system productivity and livelihood of hill farmers in Meghalaya</i> Dr. Dibakar Mahanta , ICAR-IARI, New Delhi, India <i>Organic agriculture: key for the sustainability in the north-western Himalayas</i>
	Dr. Amit Kumar , ICAR RC for NEH Region, Sikkim Centre, Sikkim, India <i>Evaluation of performance of ginger cultivars under organic management condition in terraces land of Sikkim Himalayas</i> Dr. M. Srinivas , RARS, Maruteru, ANGRAU, Andhra Pradesh, India <i>Performance of liquid biofertilizers on yield of rice (Oryza Sativa L.) in deltaic alluvial soils of Andhra Pradesh</i>
10:00-13:15	Symposium XII: Innovative Delivery System for Agronomic Technologies (Hall-2) *
Chair:	Dr. A.K. Singh , Formerly with BAU, Bhagalpur, Bihar, India
Co-Chairs:	Dr. D.P. Biradar , UAS, Dharwad, Karnataka, India
Conveners:	Dr. Rajbir Singh , ICAR-ATARI, Ludhiana, Punjab, India Dr. Chandreshwar Tiwari , Horticulture University, Pauri, Uttarakhand, India
Rapporteurs:	Dr. M. Madhu , PJTSAU, Hyderabad, Telangana, India Dr. T.L. Neelima , PJTSAU, Hyderabad, Telangana, India
Keynote Speaker: (30 Minutes)	Dr. B.R. Kamboj , CCSHAU, Hisar, Haryana, India <i>Innovative Delivery Options for Agricultural Technologies</i>

Lead Speakers: (20 Minutes)	<p>Dr. Ross Mitchell, Anglo American Crop Nutrients, New Delhi, India <i>Considerations in Fertilizers Choice</i></p> <p>Dr. Peter Craufurd, CIMMYT, Lalitpur, Nepal <i>Connecting End User Through Efficient Delivery System</i></p> <p>Dr. Kamal Jeet Singh, Kisan Sanchar, Chandigarh, India <i>Daily Income Model in Agriculture</i></p> <p>Dr. Sreenath Dixit, ICRISAT, Hyderabad, Telangana, India <i>From the Science of Discovery to the Science of Delivery: Key to Creating Large Impacts of Science-based Technologies</i></p>
Oral Presentations: (10 Minutes)	<p>Dr. S.N. Singh, ICAR-IISR, Lucknow, Uttar Pradesh, India <i>Assessing potentiality of cane node technology for saving of seed cane planting material and rapid multiplication of new sugarcane varieties in real farming situations of Indian subtropics</i></p> <p>Dr. C.A. Rama Rao, ICAR-CRIDA, Hyderabad, Telangana, India <i>Enhancing yield and income resilience to drought through adaptation interventions in Central India</i></p> <p>Dr. Sudipta Paul, ICAR-IARI, New Delhi, India <i>Reaching the unreached through designing and validating an innovative extension model: The IARI-Post Office linkage extension Mmodel</i></p> <p>Dr. Atar Singh, ICAR-ATARI, Kanpur, Uttar Pradesh, India <i>Effect of Cluster Frontline Demonstrations of Pulses (CFLD-P) to harness techno-economic advantages in India: A nation level analysis</i></p>
Rapid Fire: (05 Minutes)	<p>Dr. N.K. Jat, ICAR-CAZRI, Jodhpur, Rajasthan, India <i>Increasing productivity of cumin (<i>Cuminum cyminum</i>) through cultivar choice and sowing time in the western arid region of India</i></p> <p>Dr. Suryendra Singh, KVK, Barnala, GADVASU, Ludhiana, Punjab, India <i>Foliar nutrients application enhanced yield and profitability of direct-seeded rice under Frontline Demonstrations in Barnala district of Punjab, India</i></p> <p>Dr. Versha Gupta, ARS, Ummedganj, AU, Kota, Rajasthan, India <i>Effect of phosphate and zinc solubilizing microbes on yield and economics of fieldpea</i></p> <p>Dr. Prvin Kumar Upadhyay, ICAR-IARI, New Delhi, India <i>Effect of Urea-S on the productivity of potato (<i>Solanum tuberosum</i>) under trans-gangetic plains zone of India</i></p>
	*Tea (11:00-12:00)
13:15-14:00	Lunch break
14:00-17:00	Symposium XIII: Farmers-Scientist Interface (Hall-1) *
Chair:	Dr. A.K. Singh , ICAR, New Delhi, India
Co-Chair:	Dr. R. L. Yadav , Formerly with ICAR-IISR, Lucknow and IIFSR, Modipuram, India
Conveners:	<p>Dr. Anjani Kumar Singh, ICAR-ATARI, Patna, Bihar, India</p> <p>Dr. Atar Singh, ICAR-ATARI, Kanpur, Uttar Pradesh, India</p>
Rapporteurs:	<p>Dr. Gaurendra Gupta, ICAR-IGFRI, Jhansi, Uttar Pradesh, India</p> <p>Dr. N. Navatha, PJTSAU, Hyderabad, Telangana, India</p>
Keynote Speaker: (30 Minutes)	<p>Dr. A.K. Singh, ICAR, New Delhi, India <i>Nutri-Sensitive Agri Resources and Innovations for Food and Nutrition</i></p>

Lead Speakers: (20 Minutes)	Dr. S.S. Singh , RLBCAU, Jhansi, Uttar Pradesh, India <i>Role of Krishi Vigyan Kendra to Farmers and ATMANIRBAR in Agriculture Sector of India</i> Mr. Abhishek Kumar , Bihar Entrepreneurs Association, Patna, Bihar, India <i>Building startup ecosystem for agri innovation technologies</i>
Oral Presentations: (10 Minutes)	Dr. R. Roy Burman , ICAR-IARI, New Delhi, India <i>Impact of innovative crop diversification models through farmer participatory research</i> Dr. Ranjay Kumar Singh , KVK, Chatra, Jharkhand, India <i>Study the adoption level of soil and water conservation technology in NICRA village of Chatra district in Jharkhand</i> Dr. Awani Kumar Singh , ICAR-IARI, New Delhi, India <i>Effect of agronomical package of practices on growth, yield and economics of long melon during off-season under protected structure in plains conditions of India</i>
Rapid Fire: (05 Minutes)	V. Gouri , KVK, Kondempudi, ANGRAU, Andhra Pradesh, India <i>Yield enhancement of Rajmash through FLDs in tribal areas of Visakhapatnam district, A.P, India</i> Dr. Anil K. Choudhary , ICAR-CPRI, Shimla, Himachal Pradesh, India <i>Potato based cropping systems for enhanced productivity and profitability in north-western Himalayas</i>
	*Tea (15:30-16:30)
14:00-17:00	Symposium XIV: Scientist-Industry-Farmer Interface (Hall-2) *
Chair:	Dr. Ross Mitchell , Anglo American Crop Nutrients, New Delhi, India
Co-Chair:	Dr. S. K. Sharma , Formerly with ICAR-IIFSR, Modipuram, Uttar Pradesh
Conveners:	Shri. G. V. Subba Reddy , Coromandel International Limited, Secunderabad, Telangana, India
Rapporteurs:	Er. Ashish Dhimate , ICAR-CRIDA, Hyderabad, Telangana, India Dr. C.N. Anshida Beevi , ICAR-CRIDA, Hyderabad, Telangana, India
Keynote Speaker: (30 Minutes)	Dr. K. J. Satyasai , NABARD, Mumbai, Maharashtra, India <i>Scientist-Industry-Farmer Interface for Combating Food and Nutrition Challenges: Role of Banking System</i>
Lead Speakers: (20 Minutes)	Dr. Neeraj Awasthi , Anglo American Crop Nutrients, New Delhi, India <i>POLY4 - A Modern Amplitude of Sustainable Crop Nutritional Solutions to Occlude Food and Nutritional Challenges</i> Dr. Tarunendu Singh , IFFCO, New Delhi, India <i>Next Generation of Fertilizer for the Benefit of Farmer</i> Mr. Sanjiv Kanwar , Yara Fertilizers India Pvt. Ltd, Gurugram, Haryana, India <i>Sustainable food system and balanced crop nutrition</i> Mr. Srinivasakumar Karavadi , Bayer Crop Science India, Hyderabad, Telangana <i>Transformation of market place and relevance of agronomy</i> Dr. Shashikant Bhende , Mosaic India Private Limited, Gurgaon, Haryana, India <i>Mosaic experience in promoting balanced crop nutrition</i> Dr. Surender Roperia , K+S Fertilizers India Pvt. Ltd, Gurgaon, Haryana, India <i>Educating Farmers for Optimising Returns through use of Water-Soluble Fertilizers</i>

Oral Presentations: (05 Minutes)	Dr. B. K. Jha , ICAR-RCER, Ranchi, Jharkhand, India <i>Improving Cropping Intensity in Rice Fallow by Conservation Agriculture Technology in Eastern Plateau and Hill Region of India</i>
	*Tea (15:30-16:30)
17:00-18:00	Panel Discussion on ‘Developing Sustainable Food Systems’ (Hall-1)
Chair:	Dr. V. Praveen Rao , President ISA & Vice Chancellor, PJTSAU, Hyderabad, Telangana, India
Moderators:	Dr. Anup Das , ICAR Research Complex for NEH Region, Umiam, Meghalaya, India Dr. Kapila Shekhawat , ICAR - IARI, New Delhi, India
Panelists:	Mr. Sameer Goel , CEO, Coromandel International Limited, Hyderabad, Telangana, India Dr. S. N. Pasupalak , Former Vice Chancellor, OUAT, Bhubaneswar, Odisha, India Dr. Ravi Gopal Singh , CIMMYT, New Delhi, India Mr. Ajay Vir Jakhar , Bharat Krishak Samaj, New Delhi, India Dr. B. Gangwar , Former Director, ICAR-IIFSR, Modipuram, Uttar Pradesh, India Dr. Purnima Menon , IFPRI, New Delhi, India Dr. B. Rajender , Minister (Agriculture) & Alternative Permanent Representative to FAO, WFP & IFAD, Embassy of India, Rome
18:00-19:30	Plenary Lecture 7 (Hall-1)
Chair:	Dr. S. N. Pasupalak , Former Vice Chancellor, OUAT, Bhubaneswar, Odisha, India
Co-Chair:	Dr. Masood Ali , Formerly with ICAR-IIPR, Kanpur, Uttar Pradesh, India
Convener:	Dr. N. K. Jain , ICAR, New Delhi, India
Rapporteur:	Dr. Tarunendu Singh , IFFCO, New Delhi, India
Speakers: (40 Minutes)	Prof. Jeffrey Volenec , Purdue University, West Lafayette, Indiana, USA <i>A Confluence of Opportunities: Agronomic Partnerships for a Better Tomorrow</i> Dr. Samunder Singh , CCSHAU, Hisar, Haryana, India <i>Herbicide Resistant Weeds Problem in India and their Management</i>
20:00-21:00	Dinner
	Day 5: November 27, 2021
08:00-09:00	Breakfast
09:00-10:00	Plenary lecture 8 (Hall-1)
Chair:	Dr. Ashok Dalwai , CEO, NRAA, Government of India
Co-Chair:	Dr. B. Gangwar , Former Director, ICAR-IIFSR, Modipuram, Uttar Pradesh, India
Convener:	Dr. Pratap Singh , Director of Research, AU, Kota, Rajasthan, India
Rapporteur:	Dr. M. Osman , ICAR-CRIDA, Hyderabad, Telangana, India
Speaker:	Prof. Ramesh Chand , NITI Ayog, New Delhi, India <i>Role of Agronomy in Food System Transformation and SDGs</i>
10:00-11:30	Closing Ceremony (Hall 1)
Rapporteurs:	Dr. M. Yakadri , PJTSAU, Hyderabad, Telangana, India Dr. R. Mahendra Kumar , ICAR-IIRR, Hyderabad, Telangana, India
11:30-12:00	High Tea
12:00-17:00	Field visit to experimental sites at PJTSAU, ICRISAT and ICAR-CRIDA, Hyderabad, Telangana, India