

Technical Programme

XXII Biennial National Symposium

Climate Smart Agronomy for Resilient Production Systems and Livelihood Security

22-24 November, 2023

Venue: St. Joseph Vaz Spiritual Renewal Centre, Old Goa



Registration: Venue: St. Joseph Vaz Spiritual Renewal Centre, Old Goa

November 21, 2023

Time: 16:00–18:00 hrs

November 22, 2023

Time: 08:00–09:00 and 11:00–17:00 hrs

November 23–24, 2023

Time: 09:00–13:00 hrs

November 22, 2023 DAY 1

09:00–11:00

INAUGURAL SESSION

Hall I

11.00– 11:30

High Tea

11:30–12:15

Dr O.P. Gautam, Memorial Lecture:

Chair: Dr. Himanshu Pathak, Secretary, DARE and DG, ICAR, New Delhi

Co-Chair: Dr. S.K. Chaudhari, DDG (NRM) ICAR, New Delhi

Convener: Dr J.V.N.S. Prasad, PC, CRIDA, Hyderabad

Speaker: Dr. Arvind Kumar, Former VC, RLBCAU, Jhansi

Topic: Pioneering Agronomic Solutions for Sustainable Development Goals

DAY 1 Concurrent Session 1

12:30–16:30

Session I: Organic Farming and Natural Farming

Hall I

Chairs: Dr. S.K. Chaudhari, DDG (NRM) ICAR, New Delhi

Dr. B.R. Kamboj, VC, CCS HAU, Hisar

Dr. B.S. Mahapatra, Former VC, BCKV, Mohanpur

Co-chairs: Dr. S. Bhaskar, Former ADG, (AAF&CC), ICAR, New Delhi

Dr. S.K. Sharma, ADG (HRM), ICAR, New Delhi

Convener: Dr. H.B. Bablad, Dean, OFRC, UAS, Dharwad

Rapporteurs: Dr Subhash Babu, Senior Scientist, ICAR-IARI, New Delhi and

Dr Md. Hasnain, Scientist, ICAR-IARI, Samastipur

12:30-12.50

Keynote:

Dr. S.K. Sharma, ADG (HRM), ICAR, New Delhi

Organic and Natural Farming for Transitioning to Sustainable Agri-Food Systems: Opportunities and Challenges

12.50–13.30

Lead:

Dr. Anup Das, Director, ICAR-Research Complex for Eastern Region, Patna

Organic and Natural Farming: opportunities and challenges for northeast India

Dr. N. Ravisankar, PC IFS and NC, ICAR-IIFSR, Modipuram *Organic and Natural Farming: Research Status and Agro-Ecological benefits*

Dr. D.K. Singh, Professor, Agronomy, GBPUAT, Pantnagar

Organic Farming: Transforming Science into Practice towards Healthy Ecosystem

13:30–14:30

LUNCH

14.30–15.45

Oral:

Dr. S.P. Singh, Professor, GBPUAT, Pantnagar

Effect of establishment methods and weed management under organic production system of rice-vegetable pea-sweet corn cropping system

Dr. P.P. Chaudhari, Associate Professor, Directorate of Research, SDAU, Sardarkrushinagar

Effect of organic manures and bio-fertilizers on growth, yield and economics of kharif cowpea

Dr Adinath N. Paslawar, Chief Scientist, PDKV, Akola
Productivity potential of major crops and cropping systems under different organic nutrient modules in Vidarbha region of Maharashtra

Dr. Elisa Azura Azman, Senior Lecturer, Universiti Putra Malaysia
Effect of liquid organic fertilizer (LOF) on the soil enzymes grown with Brassica rapa var. Chinensis

Dr. Ashis Maity, Senior Scientist (SS), ICAR-IIWM, Chandrasekharapur, Bhubaneswar
Influence of organic fertilizers on soil fertility, microbial activity, flowering and fruiting and fruit yield of pomegranate (Punica granatum L.)

Dr. Renu Singh, Principal Scientist, ICAR-IARI, New Delhi
Effect of natural farming inputs on crop yield of rice-wheat cropping system

Dr B.L. Manjunath, Principal Scientist, ICAR-Indian IHR
Rainfed Mango based integrated farming systems for sustainable productivity and profitability

Dr Madhumitha Srinivasan, Research Analyst Sustainable Food Systems Council on Energy, Environment and Water ISID Campus, Vasant Kunj, New Delhi
Predictors of awareness and interest in natural farming-Findings from Andhra Pradesh

Dr. Samrath Lal Meena, Principal Scientist, ICAR-IARI, New Delhi
Soil moisture and nutrient management for enhanced system productivity, rainfall-use efficiency, profitability and sustainability of pearl millet–mustard system in a semi-arid agro-ecology

15.45-16.30

Rapid Fire:

Dr Jayanta Layek, ICAR-IIAB, Ranchi
Integrated organic farming system (IOFS) enhanced system productivity and food security in hill Agriculture

Dr Amit A. Shahane, Assistant Professor, College of Agriculture (CAU-I), Kyrdemkulai
Evaluation of lowland rice varieties in acidic soil under organic production system

Dr Mude Ramesh Naik, Scientist, ICAR-NAARM, Rajendranagar, Hyderabad
Organic Farming in India: Production Constraints and Policy Recommendations

Dr Deepak Kumar Meena, Ph.D. Scholar, Agronomy, ICAR-IARI, New Delhi
Topic: PROM and biodynamic manure for sustainable soil management in rainfed agro-ecosystems

Dr Supriya Singh, Ph.D. Scholar (Agronomy), ICAR-NDRI, Karnal
Yield attributes and yields of Organic Scented Rice (Oryza sativa L.) in North-West plains of India

Dr P.C. Ghasal, Scientist (Agronomy), ICAR-IIFSR, Modiupuram, Meerut
Mustard Oilcake Integration for Organic Nutrient Management in Wheat under Upper Gangetic Plain Zone

Dr Bharat Arjun Gudade, Deputy Director, Spices Board, Chhindwara
Impact of foliar nutrition of zinc, manganese and magnesium on productivity and economics of large cardamom under Sikkim condition

Dr Mangesh R. Thakur, Assistant Research Scientist (Agronomy), NAU, Achhalia
Integrated nitrogen management in sorghum to sustain productivity, profitability and soil fertility

16:30–16:40

November 22, 2023

12:30–16:30

Day 1 Concurrent Session 2

Session II: System approaches for agro-ecosystem sustainability and integrated farming systems

Hall II

Chair: **Dr. A.K. Vyas**, VC, Agriculture University, Kota

Co-chairs: Dr. D.K. Sharma, Former Director, ICAR-CSSRI, Karnal
Dr. Sunil Kumar, Director, ICAR-IIFSR, Modipuram
Convener: Dr. N. Ravishankar, PC(IFS), ICAR-IIFSR, Modipuram
Dr. S.K. Sarangi, PS, ICAR-CSSRI, RRS, South 24 Parganas
Rapporteurs: Dr R.S. Bana, Senior Scientist, ICAR-IARI, New Delhi
Dr Bappa Das, Scientist, ICAR-CCARI, Goa

12:30-13.10

Keynote:

Dr B. Gangwar, Editor-in-Chief, ISA and Ex Director, IIFSR, Modipuram
Farming Systems Approach for Ensuring Sustainability in Agriculture
Dr. Sunil Kumar, Director, ICAR-IIFSR, Modipuram
Agroecology concepts on Integrated Farming Systems, Organic Farming and Natural Farming

13.10-13.40

Lead:

Dr. K.G. Mandal, Director, ICAR-MGIFRI, Motihari, East Champaran
Efficient water management and crop intensification
Dr Jacob John, Professor Agronomy & Head, Thiruvananthapuram
Integrated farming Systems Suited for West Coast Plain

13:30-14:30

LUNCH

14.30-14.45

Lead:

Dr. S.S. Rathore, Head, Agronomy, ICAR-IARI, New Delhi
IFS as climate-smart agronomy to ensure resilience in production system under changing climate conditions

14.45-15.45

Oral:

Dr. S.P.S. Tanwar, Head, Division of Transfer of Technology & Training, ICAR- CAZRI, Jodhpur
On Farm performance and farmers participatory assessment of newly introduced Fodder beet crop in farming systems of arid Western Rajasthan
Dr. Sachin Rautaray, Principal Scientist and Programme Leader, CAR-Indian Institute of Water Management, Bhubaneswar
Systems approach for a water use efficient integrated farming system in high rainfall zone
Dr. Shivani, Principal Scientist (Agronomy), ICAR Research Complex for Eastern Region, Patna
Enhancement of cropping intensity and system productivity through diversification of rice-wheat cropping system in middle Indo-Gangetic Plains
Dr. Sanjeev Kumar, Head, ICAR Research Complex for Eastern Region, Patna, Bihar
Production and income sustainability through Integrated farming system approaches for small and marginal farmers of Eastern India
Dr P.M. Shanmugam, Professor (Agronomy), Tamil Nadu Agricultural University, Coimbatore
Integrated farming system: A tool to achieve national food security with sustainability
Dr. G. Suresh, Principal Scientist, ICAR-IIOR, Rajendranagar, Hyderabad
Evaluation of castor genotypes for their suitability in rabi season
Dr. Paramesha V., Scientist Agronomy, ICAR-Central Coastal Agricultural Research Institute, Old Goa, Goa
Environmental impact assessment of rice based lowland integrated farming system in the west coast of India
Dr Sanjay Kumar Yadav, Senior Scientist, ICAR-Indian Institute of Sugarcane Research, Lucknow, Uttar Pradesh
Enhancing sugarcane productivity through diversification of sugarcane based cropping system with medicinal and aromatic plants

- Dr Rakesh Kumar**, Senior Scientist (Agronomy), Division of Crop Research, ICAR-RC for Eastern Region, Patna
Conservation agriculture-based crop management practices improved system productivity and soil physical health in rice- fallow system of eastern India
- Dr Panneerselvam Peramaiyan**, International Rice Research Institute
Mechanized crop establishment methods for improving rice-based systems productivity in Eastern India
- 15.45-16.30 **Rapid Fire:**
- Dr Dinesh Jinger**, ICAR-Indian Institute of Soil and Water Conservation, Research Centre, Vasad, Anand, Gujarat
Dragon fruit based-horti-silviculture system for enhancing ecosystem services of Mahi ravines of Central Gujarat
- Dr. Bipin Kumar**, WTC, ICAR-IARI, New Delhi
Impact of concentrated application of FYM inside the raised bed on productivity of maize-wheat at different water regimes
- Dr. Mavji Patidar**, ICAR-CAZRI, RRS, Jaisalmer
Improving farm productivity through livestock based farming system in Arid Regions
- Dr R.L. Meena**, ICAR-National Bureau of Soil Survey and Land Use Planning, Regional Centre, Udaipur
*Suitability Assessment of Wheat (*Triticum aestivum* L.) under Land Management Units of Arid Western Plain of Gujarat (AESR 2.4), India*
- Dr Satish Imade**, Anand Niketan College of Agriculture, Warora, Dist-Chandrapur
Direct and residual effect of INM on green gram under rice-green gram cropping sequence
- Dr Amit Kumar**, ICAR Research Complex for NEH Region, Sikkim Centre, Tadong, Gangtok, Sikkim
Impact of organic nutrition on productivity and economic viability of maize based cropping systems in terraced land of Sikkim Himalayas
- Dr G. Manjulatha**, Principal Scientist, Agricultural Research Station, Karimnagar, Professor Jayashanker Telangana State Agricultural University, Telangana
Integrated effect of biofertilizers, organic manures and inorganic fertilizers on growth and yield of winter maize
- 16:30-16:40 **Tea**
- Day 1 Concurrent Session 3**
- 12:30-16:30 **Session III: Agro-ecological approaches for biotic and abiotic stress management** **Hall III**
- Chairs:** **Dr. P.K. Ghosh**, Director, ICAR-NIBSM, Raipur
Dr N.P. Singh, Former Director, ICAR-NIASM, Baramati
- Co-chair:** **Dr K. Sammi Reddy** Former Director, ICAR-NIASM, Baramati
Dr. M. Madhu, Director, ICAR-IISWC, Dehradun
- Convener:** **Dr G. Ravindra Chary**, Former PC AICRPDA, ICAR-CRIDA, Hyderabad
- Rapporteurs:** **Dr Subash Babu**, Senior Scientist, ICAR-IARI, New Delhi
Dr Dinesh Jinger, ICAR-IISWCR, Anand
- 12:30-13.10 **Keynote:**
- Dr. P.K. Ghosh**, Director, ICAR-NIBSM, Raipur
Biotic and abiotic stress scenario and its interaction
- Dr. J.S. Mishra**, Director, Indian Institute of Weed Science, Jabalpur
Ecological approaches for sustainable weed management
- 13.10-13.40 **Lead:**
- Dr K. Sammi Reddy**, Director, NIASM, Baramati
Agro-Ecological Approaches for Abiotic Stress Management in different Crops

13:30–14:30

LUNCH

14.30-15.00

Dr. Anil Dixit, Joint Director, ICAR-NIBSM, Raipur

Recent advances in biotic stress management

Dr. H.B. Babalad, Dean, OFRC, UAS, Dharwad

Environment Friendly Ecological Approaches for Sustainable Food Production

Dr C.R. Chinnamuthu, Professor, TNAU, Coimbatore

Using nano technological approach to control cyperus rotundus

15.00–16.00

Oral:

Prof. Murali Arthanari Palanisamy, Professor and Head, Sugarcane Research Station, and Programme Coordinator, KVK, Sirugamani, Thiruchirapalli

Weed biology and its impact on crop weed competition in direct seeded rice ecosystem

Dr. Kuldeep Singh, Director and Principal Agronomist, Punjab Agricultural University, Regional Research Station, Faridkot

Exploring climatic resilience in promising sugarcane varieties through irrigation scheduling in semi-arid regions of Punjab

Dr D.D. Chaudhari, AICRP on Weed Management, AAU, Anand

Integrated weed management in dry direct seeded rice under irrigated condition

Dr Rajvir Sharma, Principal Scientist, ICAR-IARI, New Delhi

Bio-efficacy and selectivity of herbicides in chickpea

Dr G.A. Rajanna, ICAR-Directorate of Groundnut Research, RRS, Ananthapur

Agro-techniques for minimizing groundnut yield losses in frequent drought situations

Dr Prabhu Govindasamy, Division of Agronomy, ICAR-IARI, New Delhi

Early deduction of Malva parviflora (Common mallow) invasion in wheat crop

16.00-16.30

Rapid Fire:

Dr Shiv Ram Samota, ICAR-IIW&BR, Karnal

Pyroxasulfone based herbicide combinations for weed control in conservation tillage wheat

Dr Bonti Gogoi, Krishi Vigyan Kendra, Nagaon, Simaluguri

Chemical management of orobanche in toria (Brassica campestris L. var. toria)

Dr V.K. Choudhary, ICAR-Directorate of Weed Research, Adhartal

Optimizing seed rate and weed management for weed control, crop productivity and profitability in dry-seeded rice

Dr Bharat Lal Meena, RARI, SKNAU, Durgapura

Influence of different intercrops on yield attributes and productivity of pigeonpea based cropping system

Dr. Tushar Kumar, Assistant Professor, Navsari Agri. University, Bharuch Campus

Dr. Dibakar Ghosh, Scientist, ICAR-IIWM, Bhubaneswar

Organic manure alleviates hexavalent chromium (Cr)-induced phytotoxicity by restricting Cr translocation in rice (Oryza sativa L.)

Dr. Maruthadurai R, Senior Scientist, ICAR-CCARI Ela, Old Goa

Impact of pulses and legume-based intercropping on the incidence of invasive fall armyworm in Fodder Maize

Dr Prithwiraj Dey, Agricultural and Food Engineering Department, IIT-Kharagpur, Kharagpur

Lodging reduction and quality improvement of fibre flax with seed rate and nutrient management

	Dr E. Rajanikanth , Professor Jayashankar Telangana State Agricultural University, Telangana <i>Effect of tillage, mulching and hydrogel on performance of rainfed maize</i> Tea	
16.00-16.30		
November 22, 2023	Day 1 Concurrent Session 1	Hall I
16.30-18.30	Session IV: Machine learning and artificial intelligence in smart agronomic management Chairs: Dr P.S. Pandey , Vice Chancellor, Dr RPCAU, Pusa Samastipur Dr Praveen Rao , Former VC, PJTSAU, Hyderabad Co-chairs: Dr P.S. Brahmanand , Project Director, WTC, New Delhi Dr Sudeep Marwaha , Head, CA and PI NAHEP-II, ICAR-IASRI, New Delhi Convener: Dr. E.V.S. Prakasa Rao , Hon. Scientist, CSIR-Fourth, Paradigm Institute, Bengaluru Rapporteurs: Dr Prabhu G. , Senior Scientist, ICAR-IARI, New Delhi Dr Rishi Raj , Senior Scientist, ICAR-IARI, New Delhi	
16.30-17.10	Keynote: Dr. E.V.S. Prakasa Rao , Hon. Scientist, CSIR-Fourth Paradigm Institute, Bengaluru <i>Role of Digital Technologies in Developing Smart Agronomy for Resilient Production Systems and Livelihood Security</i> Dr P.S. Brahmanand , Project Director, WTC, ICAR, New Delhi <i>IoT enabled precision water management</i>	
17.10-17.40	Lead: Dr. N. Ravikumar , Principal Scientist, Computer Applications in Agriculture, ICAR-CRIDA, Hyderabad <i>Assessing crop abiotic stress using computer vision technologies for better management</i> Dr S.N. Islam , ICAR-IASRI, New Delhi <i>Artificial Intelligence; Roles, Application and Prospects in Modern Agriculture</i> Dr Kantha Rao Bhimala , Scientist, CSIR Fourth Paradigm Institute, Bengaluru <i>soil moisture monitoring and modelling from multi source data to aid irrigation management in crop fields</i>	
17.40-18.30	Oral: Dr M. Malla Reddy , Professor, Agronomy, PJTSAU, Hyderabad <i>New Approaches in Mechanization of Cotton (<i>Gossypium hirsutum</i> L.) Production in India</i> Dr Shivashankar K. , University of Agricultural Sciences, Dharwad, Karnataka <i>Artificial intelligence-based leaf nitrogen estimation in Maize</i> Dr. Ram Swaroop Bana , Senior Scientist, ICAR-IARI, New Delhi <i>Identifying optimum residue levels under conservation agriculture for sustainable crop and water productivity of rice-wheat rotation using APSIM model</i>	
November 22, 2023	Day 1 Concurrent Session 2	Hall II
16:30-18.30	Panel Discussion I: Innovative products development and delivery in Agronomic Research Chair: Dr. Neeraj Kumar Awasthi , Country Head, Anglo, America Co. Ltd., Sriganganagar Co-chair: Dr. Shashi Kant Bhide , Mosaic India Pvt. Ltd., Gurugram Moderator: Dr. Tarunendu Singh , Manager (A.S.) & Head, (Agricultural Services), IFFCO Sadan, New Delhi Rapporteurs: Dr Vipin Mishra , Regional Manager, India, AngloAmerican Vipin.mishra@angloamerican.com	

Panelist.

Ajeet Singh Tomer, President, Dhanuka, Agri-tech Limited Dhenuka House, Karol Bagh, New Delhi
Dr. Anand Jha,/Dr. **Shashikant Kulkarni**, TD lead Special, Projects – South Asia, UPL Limited, Hyderabad
Mr. K.R. Saxena, Managing Director & CEO Rallis India Limited, Mumbai
Mr. Sanjiv Kanwar, Managing Director, Yara Fertilisers, India Private Limited
Dr. G.V. Subbareddy, Vice President, Coromandel International Ltd., Secunderabad

18.30-19.00 **Award Ceremony**
19.00-20.30 **Cultural Programme**
20.30 **Dinner**

November 23, 2023

DAY 2

0900-10.00 **Plenary Lecture: Dr. Sudhanshu Singh**, Director IRRI, Varanasi **Hall I**
Topic: Transforming rice-based agri.-food systems to improve small holder, Livelihood and Climate resilience in South-Asia
Chair: **Dr B. Gangwar**, Editor-in-Chief, ISA and Ex Director, IIFSR, Modipuram, Meerut
Co-Chair: **Dr R.K. Rai**, Former Professor & Head (Agronomy), (HUDA), Gurgaon
Convener: **Dr N.K. Jain** Principal Scientist (Agronomy), HRM Unit, KAB-II, ICAR, New Delhi
Rapporteurs: **Dr Anchal Dass**, Principal Scientist, ICAR-IARI, New Delhi
Dr Sanjay Kumar Yadav, ICAR-IISR, Lucknow

November 23, 2023

Day 2 Concurrent Session 1

Hall I

10.00-13.00

Session V: Revitalizing Goan Agriculture and Allied Sectors for resilient Farmer's Income

Chairs: **Dr Praveen Kumar**, Director, ICAR-CCARI, Goa,
Dr. V.S. Korikanthimath, Former Director, ICAR-CCARI, Goa,
Mr. Nevil Alphonso, Director, Directorate of Agriculture, Govt. of Goa
Convener: **Dr. Paramesha, V.**, Scientist (Agronomy), ICAR-CCARI, Goa
Rapporteurs: **Dr. Bappa Das**, Scientist, ICAR-CCARI, Goa
Dr. Amiya Ranjan Sahu, Scientist, ICAR-CCARI, Goa

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Revitalizing Goan Agriculture and Allied Sectors for Doubling Farmer's Income

Dr. Praveen Kumar, Director, ICAR-CCARI, Goa
Shri Nevil Alphonso, Director, Directorate of Agriculture, Govt. of Goa
Shri Prasad Volvoikar, Director, Animal Husbandry and Veterinary Services, Govt. of Goa
Shri Deepesh Priolkar, Director, Directorate of Fisheries, Govt. of Goa
Dr. Milind R Bhirud, Chief General Manager, NABARD, Goa
Dr. Pradip V. Sarmokadam, Member Secretary, Goa State Biodiversity Board
Dr. Suresh Kunkaliker, Principal, Goa College of Agriculture
Dr. Jose Romeno Faleiro, FAO Consultant
Dr. Sachin Tendulkar, Mineral Foundation of Goa
Shri Madhav Sahakari, Sahakari Spice Farms, Goa
Shri Paul Fernandes, Freelance Agriculture Journalist

November 23, 2023

Day 2 Concurrent Session 2A

Hall II

10.00-12.00

Session VI: Carbon management in agricultural production systems

Chair: **Dr Arvind Kumar**, DDG ICRISAT, Patancheru, Hyderabad
Co-Chairs: **Dr Rajender Kumar Yadav**, Director, ICAR-CSSRI, Karnal
Dr C. Tiwari, Professor & Head, KVK, Jyolikot, Nainital
Dr G. Ravindrachary, Former PC, AICRPDA, ICAR-CRIDA, Hyderabad

Convener: Dr S.S. Rathore, Head, Agronomy, ICAR-IARI, New Delhi

Rapporteurs: Dr Manoj Kumar Singh, BHU, Varanasi, U.P.

Dr Asha Ram, ICAR-CAFRI, Jhansi, U.P.

10.00-10.20

Keynote:

Dr. R.K. Yadav, Director, ICAR-CSSRI, Karnal

Managing salt affected ecologies: issues and strategies in changing world

10:20-10.50

Lead:

Dr. H.S. Jat, Director, IIMR, Ludhiana

Carbon Management in Indian Agriculture towards Net Zero: Challenges, Opportunities and Strategies

Dr T.K. Das, Professor (Agronomy), ICAR-IARI, New Delhi

Conservation Agriculture for Crop Productivity Soil Health and Suitability

10.50-11.30

Oral:

Dr. Raj Singh, Principal Scientist, Agronomy, ICAR-IARI, New Delhi

Improving soil properties, organic carbon storage and productivity through tillage and residue management in pearl millet-based cropping systems under semi-arid environments

Dr. Bipin Bihari Panda, Head, RCRRS, ICAR-NRRS, Naira, Srikakulam

Effect of residue management on productivity and greenhouse gas emissions from rice in an intensive rice based cropping systems

Dr. A.V. Ramanjaneyulu, Head and Professor, AICRP on Agroforestry, PJTSAU, Rajendranagar

Carbon sequestration and performance of fodder grasses under Melia dubia based silvi-pastoral system

Dr. Subhash Babu, Senior Scientist, Division of Agronomy, ICAR-Indian Agricultural Research Institute, New Delhi

Designing system approach for Enhancing Energy Use Efficiency and Reducing Carbon Footprint in Indian Agriculture

Dr Raman Jeet Singh, ICAR-IIS&WC, Dehradun

Modified tillage and surface residue cover management practices for successful implementation of conservation agriculture on rainfed sloping crop lands of Himalaya

Dr Teekam Singh, Principal Scientist, ICAR-IARI, New Delhi

Tillage and concentrated urea spray as defoliator effect on pigeon pea productivity and shaded leaf biomass in pigeonpea-wheat rotation

Dr Sukanta K. Sarangi, Principal Scientist (Agronomy), ICAR-Central Soil Salinity

Research Institute (CSSRI), Regional Research Station, Canning Town-743 329, South 24 Parganas, West Bengal

Smart cropping systems for climate change adaptation, mitigation and economic gain in the coastal region

11.00-11.30

Tea

11.30-12.00

Rapid Fire:

Dr. Mhaskar N.V., AICRP on IFS, RARS, Karjat, Dist. Raigad

Management of green house gas emissions through integrated farming systems

Dr. Ravikumar Chinnathambi, Assistant Professor, Agronomy, Annamalai University Annamalai Nagar

Estimation of soil organic carbon stock in INM practised post-harvest soils of the rice-sunflower cropping system

Dr. Abir Dey, Division of Soil Science and Agricultural Chemistry, ICAR-IARI, New Delhi

Temperature sensitivity of carbon mineralization from different crop residues with different biochemical compositions

Dr. Manish Kushwaha, Scientist (Seed Production), PAU Seed Farm, Nabha, Patiala
Combined application of fertilizer and municipal solid waste compost affects nutrient dynamics and fodder yield of baby corn

Dr. Sunil Kinge, Ph. D. Scholar, Agronomy, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli

Dr. Alize Pradhan, Scientist, ICAR-NIASM, Baramali
Influence of Land Configuration and Crop Residue Management on Yield of Soybean

Dr Pragya Naithani, GBPUAT, Pantnagar
Mitigating Carbon Footprint through Tillage and Nutrient Management in Wheat Cultivation Precision

Dr Krutika Subodh Patel, NAHEP-CAAST Student, Agronomy, NAU, Navsari
Biochar : A sustainable way of organic farming

Dr Gunjan, Guleria, CoA, RLB CAU, Jhansi
Effect of tillage and weed management practices on mustard crop in Bundelkhand region

13.00-14.00

Lunch

Day 2 Concurrent Session 2B

Hall II

12.00-13.30

Panel discussion II: Farming System Approach for one health

Chair: **Dr. Sunil Kumar**, IIFSR Director, ICAR-IIFSR, Modipuram, Meerut

Moderator: **Dr. A. Velumurugan**, ADG, SWM, ICAR, New Delhi

Rapporteurs: **Dr. Jayanta Layek**, Division of Crop Production, ICAR-Research Complex for NEH Region, Umiam, Meghalaya
Dr Rakesh Kumar, Scientist (Agronomy), ICAR, RC for Eastern Region, Patna

Panelists:

Dr. Nachiketa Kotwaliwale, Director, ICAR-Central Institute of Post-harvest Engineering Technology, PAU, Ludhiana

Dr. Hari Ram, Principal Agronomist (Wheat), PAU, Ludhiana

Dr Ashwin Kotnis, Additional Professor, Department of Biochemistry, AIIMS Bhopal

Dr. Anand Shekhar Mishra, Animal Nutrition, ICAR-Krishi Bahawan, New Delhi

Dr. Neeraj Awasthi, Country Head, Anglo, America Co. Ltd., New Delhi

Dr Raghavendra Singh, Principal Scientist & Head, Cropping Systems & Resource Management, Modipuram, Meerut

Dr. Soumitra Das, Director, South Asia-Zinc Nutrient Initiative, IZA, New Delhi

Day 2 Concurrent Session 3

HALL III

10:00-13:00

VII: Precision input management

Chairs: **Dr V.K. Singh**, Director, ICAR-CRIDA, Hyderabad

Dr J.S. Mishra, Director, ICAR-DWR, Jabalpur

Co-Chairs: **Dr N.T. Yaduraju**, Former Director, ICAR-DWR, Jabalpur

Convener: **Dr S.K. Shukla**, Director, UPCR, Shahjahanpur

10.00-10.20

Keynote:

Dr. V.K. Singh, Director, ICAR-CRIDA, Hyderabad

Precision input management for sustainable productivity and addressing climate change issues

10.20-11.20

Lead:

Dr. Neeraj Awasthi, Anglo American Plant Nutrients

Potential role of natural minerals fertilizers for climate friendly strategies

Dr. Anchal Dass, Principal Scientist, ICAR-IARI, New Delhi

Precision nutrient and water management using latest tools and technologies

Dr T.K. Srivastava, Principal Scientist, ICAR-IISR, Lucknow

Sugarcane in sub-tropics not a water guzzler but an efficient rain water harvesting crop

11.20-12.20

Dr. S.C. Tripathi, PI, Resource Management, AICRPW, ICAR-IIWBR, Karnal, Haryana
Precision nitrogen and water management in wheat: viable technologies for enhancing use efficiency

Prof. Samunder Singh, MICADA, Haryana, President, International Weed Science Society
Interaction of drip irrigation and herbicides on rice and wheat

Oral:

Dr Raghavendra Singh, Principal Scientist & Head, ICAR-IIFSR, Modipuram
Effect of conservation tillage and precision irrigation scheduling on productivity and resource use efficiency in fieldpea

Dr Kodary Avil Kumar, Water Technology Centre, Professor Jaya Shankar Telangana State Agricultural University, Rajendranagar, Hyderabad
Yield and Economics of Different Rabi crops underneath AgroPhotoVoltaic System

Dr V. Visha Kumari, Senior Scientist, ICAR-CRIDA, Hyderabad
Bhopal

Integrated nutrient management practices for crop growth and productivity in maize-chickpea cropping sequence in Vertisol

Dr Anil Choudhary, Principal Scientist, Division of Crop Production, ICAR-Central Potato Research Institute, Shimla, Himachal Pradesh-171 001, India
Influence of organic farming, integrated crop management and conventional farming practices on potato productivity, profitability & ecological footprints in wet-temperate Himalayas

Dr T. Selvakumar, Professor, TNAU, Vagarai, Dindigul
Efficacy of nano urea application in maize productivity

Prof. Manukonda Srinivas, Principal Scientist (Agronomy) & Head, ANGRAU, RARS, Maruteru
*Performance of Rice (*Oryza sativa. L*) under different Puddling practices and Planting techniques*

Dr V. Ramulu, Principal Scientist (Agronomy), Water Technology Centre, Professor Jayashanakar Telangana State Agricultural University, Rajendranagar, Hyderabad, Telangana

Field evaluation of nano soil moisture sensors for higher water productivity

Dr. B.T. Sinare, Associate Professor of Agronomy, MPKV, Rahuri
*Efficacy of different weed management methods for weed control and yield of soybean (*Glycine max L.*)*

Dr S. Vijay Kumar, Scientist, IRRI, *Determination of optimum spray volume for systemic herbicide application in dry direct seeded rice through Unmanned Aerial Vehicle*

12.20-13.30

Rapid Fire:

Dr. K.C. Sharma, Principal Scientist, ICAR-Indian Agricultural Research Institute, Regional Station, Indore

*Effect of growth retardants and nitrogen levels on the lodging, growth and productivity of wheat (*Triticum aestivum L.*) in Vertisols of Central India*

Dr. Saroj Kumari, CSK HPKV, Palampur

Effect of regulated water deficit scheme on plant height of wheat

Dr Vishal Tyagi, Scientist, Division of Agronomy, ICAR-IARI, New Delhi
Assessing the effect of cropping system and phosphorus management on growth and economics of maize based systems under conservation agriculture

Dr Dogga Sreelatha, Principal Scientist (Agro), Regional Agricultural Research Station, Polasa, Jagtial district, Telangana

Nitrogen levels and Schedules for enhancement of yield in Dry Direct Seeded Rice (D-DSR) in Telangana

Dr. Mohammad Hasanain, Scientist, ICAR-IARI RS Pusa Samastipur
Precision Nutrient Management under Conservation Agriculture based Wheat in Indo-Gangatic Plain Zone of India

Dr. Harish M.N., Scientist (Agronomy), ICAR-ATARI, JNKVV, Jabalpur
Effect of Tillage and Phosphorus fertilization on growth indices in wheat under Maize-Wheat Cropping System

Dr. Hemalatha Muniyandi, Tamil Nadu Agricultural University
Iron and Zinc fortification of rice seeds for Production of sturdy seedlings suitable for machine transplanting

Dr Mukesh Kumar, Dr Rajendra Prasad Central Agricultural University (RPCAU), Pusa, Samastipur, Bihar
Tillage and irrigation methods affect the root growth, water use efficiency and productivity of wheat

Dr Bharat Prakash Meena, Senior Scientist, ICAR-Indian Institute of Soil Science, Bhopal

Dr Debarup Das, Scientist, Division of Soil Science and Agril. Chemistry, ICAR-IARI, New Delhi

Effects of seaweed extract-based products on the performance of wheat crop under sub-optimal NPK fertilization

Day 2 Concurrent Session 1

14.00-17.00 **Session VIII: Millets (Shree Anna) for human and environmental health** Hall I

Chair: **Dr Arun Kumar**, VC, SKRAU, Bikaner

Co-chairs: **Dr Praveen Singh**, Former VC, SKNAU, Jobner

Dr Vilas Tonapi, Former Director, ICAR-IIMR, Hyderabad

Convener: **Dr G. Suresh**, Principal Scientist, ICAR-IIOR, Hyderabad

Rapporteurs: **Dr S.C. Tripathi**, Principal Scientist (Agronomy), ICAR-IIW&BR, Karnal

Dr. A.V. Ramanjameyulu, Head & Professor, ASCRP, AF, PJTSAC, Hyderabad

14.00-14.20

Keynote:

Dr. Vilas Tonapi, Former Director, ICAR-IIMR, Hyderabad, Telangana
Millets (Shri Anna) for Food and Nutrition Security in the climate change scenario

14.20-15.20

Lead:

Dr. D.D. Patel, Principal Scientist, COA, Bhrauch, Gujarat

Sensitization of millet cultivation technologies for food and nutritional security

Dr. Sangappa, Senior Scientist, IIMR, Hyderabad

Farmer producer organizations for enhancing rural entrepreneurship in climate resilient millets

15.20-17.00

Oral:

Dr R. Srinivasa Rao, PJTSAU, Krishi Vigyan Kendra, Bhadradi Kothagudem

Evaluation of Sorghum Varieties under Late Rabi conditions in Bhadradi Kothagudem District of Telangana

Dr. Ashok Kumar, Senior Scientist, ICAR-NBSS&LUP, RC, New Delhi

Evaluation of soil suitability for pearl millet as an alternate land use option towards achieving food and nutritional security and climate resilience -A case study in IGP

Dr Ranjita Brahma, Department of Agronomy, S.C.S. CoA Rangamati, Bahalpur, Distt. Dhubri

Performance of finger millet cultivars under different sowing windows in rainfed upland of Lower Brahmaputra Valley Zone of Assam

Dr G. Ravi Shankar, Professor of Agronomy and Officer In Charge, College of Agriculture, HAGARI, Ballari Taluk & District

Response of browntop millet to dates of sowing, fertilizer levels and row spacings

Dr Sonali Chaudhari, NAU, Navsari

Millets : Resilient Staples

Dr Vikas Gupta, Scientist, SKUAST, Jammu

Performance of pearl millet varieties and their relationship with weather parameters in Shivalik range of N-W Himalayas

Dr B.O. Mallikarjuna, Scientist (Agronomy), KVK Road, Kadalivana Vidyanagar, Davanagere

Assessment of Different Foxtail Millet Varieties for Growth and yield under Rainfed Farming

Dr Parminder Singh Sandhu, Farm Advisory Service Center, Tarn Taran

Descriptive analysis of Scenario of Millet Consumption in the District Moga and Tarn Taran Punjab - A Survey

Dr P. Uday Deleep, Trichanoor post, Tirupati

Strategic approach of nitrogen sources on yield of finger millet

Dr P. Ashoka, Senior Agronomist and Head, ARS, UAS, Dharwad

Studies Of Establishment Techniques And Varied Nutrient Levels On Yield And Economics Of Teff- An Emerging New Climate Crop

Dr Biswajit Pramanick, Agronomy, Dr. RPCAU, Pusa Samsatipur

Site-specific nutrient management using GreenSeeker-based N-management can improve the bioenergetics of finger millet cultivation

Dr Aalok Yewale, KVK, Ranichauri, Tehri Garhwal

Assessment on perception of farmers towards consumption pattern and health benefits of millets among rural inhabitants of Tehri Garhwal

Dr Keshav Patidar, NAHEP CAAST, NAU, Navsari

Incredible Post-Harvest Value Added Products of Millets

Day 2 Concurrent Session 2

Hall II

14.00-17.00

Session IX: Post-harvest management to achieve the farm-to-fork concept

Chair: **Dr Nachiket Kotwaliwale**, Director, ICAR-CIPHET, Ludhiana

Co-chairs: **Dr Pratap Singh**, Director Research & Professor (Agronomy), Kota, Rajasthan

Dr D.S. Rana, Former Emeritus Scientist, ICAR-IARI, New Delhi

Convener: **Dr C.S. Prahraj**, Principal Scientist and Head, ICAR-Directorate of Groundnut Research, Junagarh

Rapporteurs: **Dr. Harish M.N.**, Scientist (Agronomy), ICAR-ATARI, JNKVV Campus, Jabalpur

Dr Biswajit Pramanick, Assistant Professor, Agronomy, Dr. RPCAU, PUSA, Samastipur, Bihar

14.00-14.20

Keynote:

Dr. Nachiket Kotwaliwale, Director, ICAR-CIPHET, Ludhiana

Engineering the path of prosperity through post-harvest processing and Secondary Agriculture

14.20-15.20

Lead:

Dr. R. Jaganmohan, Professor & Head, Department of Food Product Development, NIFTEN, Thanjavur

Value chain management in selected crops for better food and nutritional security

15.20-16.20

Mr. Satish Chudasama, NAU, Navsari *Agronomic bio-fortification –an excellent approach for alleviating malnutrition*

Ms. Tejasvini Amrutbhai Patel, Ambach, Navasari

Turning Waste into Wealth: The Case of Distillery Spent Wash

Dr C.S. Prahraj, Principal Scientist and Head, ICAR-DGR, Junagarh

Pulses as the climate and nutrition smart crops

November 23, 2023

Day 2 Concurrent Session 3

Hall III

10:00-12:00

Panel Discussion III: Agronomic Research for Last Mile Delivery

Chair: Dr U.S. Gautam, DDG (AE), ICAR, New Delhi

Co-Chairs: Dr R.R. Burman, ADG (AE), ICAR, New Delhi

Dr Anjani Kumar, Director, ICAR-ATARI, Garbhuchak,

Moderator: Dr Parvender Sheoran, Director, ICAR-ATARI, Ludhiana

Rapporteurs: Dr Anil Kumar Choudhary, Senior Scientist, CPRI, Shimla

Dr Bipin Bihari Panda, Crop Production Division, ICAR-NRRI, Cuttack

Panelist:

Dr J.P. Misra, Director, ICAR-ATARI, Zone-II, CAZRI Campus, Jodhpur

Dr S.R.K. Singh, Director, ICAR-ATARI, JNKVV, Jabalpur

Dr Venkat, Director, ICAR-ATARI, Bengaluru

Dr Shantanu Kumar Dubey, Director, ICAR-ATARI, Kanpur

Dr Pardeep Dey, Director, ICAR-ATARI, Kolkata

Dr A.K. Mohanty, Director, ICAR-ATARI, Umiam (Barapani)

Dr Shaik N. Meera, Director, ICAR-ATARI, CRIDA Campus, Santhosh Nagar, Hyderabad

17:30-19:30

General Body Meeting

Dr D.S. Rana, Former, Emeritus Scientist, ICAR-IARI, New Delhi

November 24, 2023

DAY 3

09:00-10:30

Session X: Redesigning agronomy for knowledge and skill development

Hall I

Chair: Dr. Panjab Singh, Former DG, ICAR and President, FAARD Foundation, Varanasi, Uttar Pradesh

Co-chair: Dr V.M. Bhale, Former VC, Dr PDKV, Akola

Dr Kalyan Singh, Former Dean, BHU, Varanasi

Convener : Dr Pratap Singh, Director of Research, Agriculture University, Kota

09:00-10:30

Keynote:

Dr. S.K. Malhotra, Project Director, DKMA, ICAR-KAB I, Pusa, New Delhi
New Knowledge management tools for crop production

Dr. M.A. Shankar, Former DoR, UAS, Bengaluru

Agronomy-way forward for knowledge and skill development

Dr. Sahdev Singh, Dean & Professor, SOAG, Galgotia University, G. Noida

10:30-11:00

Tea

11:00-13:00

VALEDICTORY FUNCTION

Hall I

Chair: Dr. Panjab Singh, Former DG, ICAR and President, FAARD Foundation, Varanasi, Uttar Pradesh

Co-chair: Dr J.S. Mishra, Director, ICAR-DWR, Jabalpur

Dr. M.A. Shankar, Former DoR, UAS, Bengaluru

Convener: Dr D.S. Rana, Former Emeritus Scientist, ICAR-IARI, New Delhi

AWARD CEREMONY

13:00-14:00

Lunch

14.00

Field visit