



PROGRAMME SCHEDULE

6th CWSS INTERNATIONAL CONFERENCE ON

“Agricultural Innovations for Sustainable Development Goals with Special Focus on Natural Farming”
(AISDGONF-2023)

Organized by the Crop and Weed Science Society (CWSS)

at

Farmers' Academy & Convention Centre (FACC), Kalyani, Nadia, West Bengal, India

September 30 – October 02, 2023

Date: September 30, 2023

Inaugural Function: 10:00 AM - 11:55 AM at FACC Auditorium Hall

10:00 – 10.10 am	: Invocation Song by Prof. Anupam Pariari and Dr. Anannya Ghosh
10:10 – 10.20 am	: Lamp Lightening Ceremony by the dignitaries
10:20– 10.30 am	: Welcome address by Prof. R. K. Ghosh, President, CWSS and Organizing President AISDGONF-2023
10:30 - 10:35 am	: Address by Guest of Honour Prof. Samunder Singh, President, IWSS, USA
10:35 - 10:40 am	: Address by Guest of Honour Prof. Luis Avila, Secretary, IWSS, Mississippi, USA
10:40 - 10:45 am	: Address by Guest of Honour Prof. Te-Ming Paul Tseng, MSU, Mississippi, USA
10:45 - 10:50 am	: Address by Guest of Honour Prof. K. G. Prematilake, UVA Wellassa University, Sri Lanka
10:50 - 10:55 am	: Address by Guest of Honour Dr. Sudhanshu Singh, Director, IRRI-SARC, Philippines
10:55 – 11:00 am	: Address by Guest of Honour Dr. Virender Kumar, Deputy Platform Leader, Philippines
11:00 - 11.05 am	: Address by Guest of Honour Shri Partha Sengupta, Director of Agriculture & Ex-Officio Secretary, Dept. of Agriculture, Govt. of West Bengal
11:05 - 11.15 am	: Address by Chief Guest Prof. D. Basu, Vice-Chancellor, UBKV, SAU, WB, India
11:15- 11:25 am	: Presidential Address by Prof. G. Saha, Vice-Chancellor, BCKV, SAU, WB, India
11.25– 11.50 am	: Release of the <i>Journal of Crop and Weed</i> , <i>Crop and Weed Science News</i> , <i>Book of Abstracts</i> – AISDGONF-23 Presentation of CWSS Awards and Felicitation
11.50 -11.55 am	: Vote of Thanks by Prof. A. K. Basu, Secretary, CWSS and Organizing Sec., AISDGONF-23
Plenary Lecture 12.00 – 12.20 pm	: Chairpersons: Prof. Samunder Singh, President, IWSS, USA and Prof. Dr. D. Basu, Vice-Chancellor, UBKV, SAU, WB, India Programme coordinator: Dr. Kusal Roy, Convener, Technical Committee, AISDGONF-2023 Rapporteurs: Prof. Mrityunjoy Ghosh, BCKV and Dr. M. K. Bhowmick, IRRI-SARC, UP Plenary Lecture by Dr. Sudhanshu Singh, Director, IRRI-SARC, IRRI- Philippines
12.30- 2.30 pm	: Lunch at FACC Dinning Hall

Technical Sessions

Date: 30.09.2023 (Oral Presentation)

Time: 2:30 – 5:30 pm

Venue: Conference Room 1

Theme- A: Technology outreach and agri-trade for convergence of farm with institute, industries and policy makers

Chairpersons: Prof. T. K. Maity, Principal, Tripura University &

Dr. Jayanta Chakraborty, President, BCC & BSED

Programme Coordinator: Prof. Pintoo Bandyopadhyay, DEE, BCKV

Rapporteurs: Prof. Biplab Mitra, UBKV; **Dr Hiralal Jana**, COA-Burdwan, BCKV &

Dr. Priyankar Mondal, Corteva Agriscience

Sl No.	Title	Speaker	Time	Presentation
1.	Increase in farmers' income through FPO-led marketing of maize in Davanagere district of Karnataka	Anbukani Perumal	2:30-2:37 pm	Oral (7 min)
2.	Reform in agri-market in the context of APMC, national agriculture market (e-NAM) and MSP in India: A general perspective	Banani Das	2:38-2:45 pm	Oral
3.	Effectiveness of cash transfers in benefitting the small and marginal farmers by providing income support: A special reference to PM-KISAN Scheme	Bhaskar Ghosh	2:46-2:53 pm	Oral
4.	Extension approach for revival of Darjeeling mandarin cultivation	Sujit Sarkar	2:54-3:01 pm	Oral
5.	Harvesting Sustainability: Empowering small farmers through pond-based integrated farming system	Sourav Pore	3:02-3:09 pm	Oral
6.	Diffusion of NRR1 varieties in eastern and north-eastern parts of India: A micro-level assessment	Sudipta Paul	3:10-3:17 pm	Oral
7.	Innovative mycoherbicides application against alien invasive weeds parthenium, lantana and water hyacinth: Commercialization perspectives	Ajay Kumar Singh	3:18-3:28 pm	Corporate Presentation (10 min)

Stakeholders' Meet & Panel Discussion Conference Room 1	:	Panel Speakers: Dr. Suhrid Barik, Corteva Agriscience; Dr. Sajal Biswas, Adama India Pvt. Ltd.; Dr. Pardeep Sagwal, Bayer Crop Science; Dr. Nilanjan Sanyal, BASF; Mr. Ranadip Das; CEO InGreens & representatives of the Dhanuka, Syngenta, UPL, PI Industries, Sumitomo and other corporates.
2:30 – 5:00 pm Conference Room 2	:	CWSS Young Scientist Award Selection Programme Coordinators: Dr. Kusal Roy , Convener, Technical Committee, AISDGONF-23 Time allotted for each presentation: 10 min
2:30 – 6:00 pm Poster Session	:	Theme: D Poster Presentation Venue: Auditorium Hall
6:00 – 7:00 pm	:	General Body Meeting, CWSS; Convener- Prof. A. K. Basu, Secretary, CWSS
7:00 - 8:30 pm	:	Cultural Programme Programme Convener: Dr. Sujit Adhikary, ISI, Kolkata
8:30 – 9:30 pm	:	Dinner at FACC Dinning Hall

Technical Sessions

Date: 01.10.2023 (Oral Presentation)

Time: 10:00am – 4:00 pm (Tea Break: 12:31-12:45 PM; Lunch Break: 2:00 PM - 3:30 PM)

Venue: Conference Room 1

Theme- D: Advances in crop improvement, biotechnological approaches and biotic & abiotic stress management

Chairpersons: Prof. Dr. Luis Avila, Secretary, IWSS, Mississippi, USA & **Prof. Dr. Te-Ming Paul Tseng**, MSU, Mississippi, USA

Programme Coordinator: Prof. Dr. R. K. Ghosh, Organizing President, AISDGONF-23

Rapporteurs: Dr. Indrani Dana, DRR, Chinsurah, Govt. of WB and **Dr Nilima Karmakar**, Navsari, Gujarat

Sl No.	Title	Speaker	Time	Presentation
1.	Enhanced selectivity of herbicides in tomato through the safening effects of melatonin and 2,4,6-trichlorophenoxyacetic acid	Prof. Te Ming Tseng	10:00-10:15 am	Plenary Lecture (15 min)
2.	Advances and challenges in the use of RNAi as a tool for weed management	Prof. Luis Avila	10:16-10:31 am	Plenary Lecture
3.	Futuristic weed management in natural farming	Prof. Samunder Singh	10:32-10:47 am	Plenary Lecture
4.	Weed biology and ecology : The important science to understand behaviour of weeds in agro-ecosystems	P. K. Mukherjee	10:48-10:58 am	Lead Lecture (10 min)
5.	Weeds are not enemies always – their role in ecosystem services for ecological restoration	Sanjoy Saha	10:59-11:09 am	Lead Lecture
6.	Potential rice genotypes for drought-affected areas of West Bengal	Indrani Dana	11:10-11:15 am	Lead Lecture
7.	Herbicide tolerant crops as an option of biotechnological approaches for weed management in Indian agriculture	C. Chinnusamy	11:15-11:25 am	Lead Lecture
8.	Intellectual property rights for rice in West Bengal: Scope and achievements	Mrityunjay Ghosh	11:26-11:36 am	Lead Lecture
9.	Environmental concern of herbicides and role of phytochemicals as source of bio-herbicides in natural farming	Shobha Sondhia	11:37-11:47 am	Lead Lecture
10.	Search for fungal pathogens as mycoherbicides against the invasive aquatic plant waterhyacinth	Puja Ray	11:48-11:58 am	Invited (10 min)
11.	Chemical and non-chemical weed management options for transplanted finger millet in coastal deltaic ecosystem of Puducherry UT	P. Saravanane	11:59 am - 12:09 pm	Invited
12.	Baseline sensitivity of <i>Ustilaginoidea virens</i> , a pathogen causing rice false smut disease, to EBI and QoI fungicides in India	M. K. Bag	12:10- 12:20 pm	Invited
13.	Integrated weed management in taro at different agro-climatic conditions of India	J. Suresh Kumar	12:21- 12:31 pm Tea Break	Invited
Tea Break 12.31 -12.45 pm				

14.	Evaluation of infrared thermometry based stress indices for monitoring water stress of potato (<i>Solanum tuberosum</i> L.) under irrigation and graded dose of potassium in New Alluvial Zone of West Bengal	Trisha Manna	12:45 - 12:52 pm	Oral (7 min)
15.	Exploring natural resistance alleles and fruit colour mutants in tomato through marker assisted breeding	T. Chattopadhyay	12:53-1:00 pm	Oral
16.	Field efficacy of novel formulated emulsifiable concentrate of essential oil and azadirachtin against insect-pests on <i>kharif</i> rice	S. Chatterjee	1:01-1:08 pm	Oral
17.	Assessment of different weed management practices for increasing the yield of groundnut in farmer's field of Howrah district of West Bengal	K. Barui	1:09-1:16 pm	Oral
18.	Characterization of CAMTA gene family members from rice (<i>Oryza sativa</i> L.)	J. Banerjee	1:17-1:24 pm	Oral
19.	Haploid embryogenesis from in vitro cultured anther of limonium misty blue	Priyanka Raha	1:25-1:32 pm	Oral
20.	Enhancing plant growth by restricting chromium translocation through organic manure application	D. Ghosh	1:33-1:40 pm	Oral
21.	Multiple stress gene pyramiding for abiotic and biotic stress in rice through marker-assisted backcross breeding	H. Swain	1:41-1:48 pm	Oral
22.	Elytral polymorphism of <i>Cheilomenes sexmaculata</i> (Fabricius), <i>Harmonia octomaculata</i> (Fabricius) and <i>Coccinella septempunctata</i> (Linnaeus) (Coccinellidae: Coleoptera)	T. Majumder	1:49-1:56 pm	Oral
Lunch Break (2:00-3:30 pm)				
23.	An evolutionary 'footprint' developed at vascular sap in million years' of plant-aphid interaction biology	H. A. Mondal	3:30-3:37 pm	Oral (7 min)
24.	Identifications of brinjal genotypes for mosaic disease tolerance in the Gangetic plains of West Bengal	Sanjay Bairagi	3:38-3:45 pm	Oral
25.	Silicon amendment in rice for enhanced plant defense against yellow stem borer, <i>Scirpophaga incertulas</i> (Walker) and increased grain yield	Surabhika Panda	3:46-3:53 pm	Oral

Date: 01.10.2023 (Oral Presentation)

Time: 10:00am – 2:00 pm (Tea Break: 12:01-12:16 PM; Lunch Break: 1:00 PM - 2:30 PM)

Venue: Conference Room 2

Theme- B: Frontier areas in crop production and natural resource management with special reference to Natural Farming

Chairpersons: Prof. K. G. Prematilake, UVA Wellassa University, Sri Lanka &

Dr. Virender Kumar, Principal Scientist, IRRI, Philippines

Programme Coordinator: Prof. Kajal Sengupta, RKMVERI, Narendrapur

Rapporteurs: Dr. Asis Mukherjee, BCKV and Dr Amitava Banerjee, BCKV

Sl No.	Title	Speaker	Time	Presentation
1.	Sustainable rice production for improving food and nutrition security, environmental sustainability, and smallholders' income	Virender Kumar	10:00-10:15 am	Plenary Lecture (15 min)
2.	Evaluation of non-chemical approaches of weed management in brinjal (<i>Solanum melongena</i>) under organic farming	S. Radhamani	10:16-10:26 am	Lead Lecture (10 min)
3.	Tapping the potentials of weed-competitive rice cultivars under direct-seeded conditions	M. K. Bhowmick	10:27-10:37 am	Lead Lecture
4.	A land use system for natural resource management in Nagaland through traditional knowledge	D. Nongmaithem	10:38-10:48 am	Lead Lecture
5.	Bringing seed inoculations to smallholder farms for improved crop performance, nutritional security, and agricultural sustainability	Amitava Rakshit	10:49-10:59 am	Lead Lecture
6.	Significance of living mulch for sustainable crop production- a review	R. R. Upasani	11:00-11:10 am	Lead Lecture
7.	Conservation agriculture for bringing sustainability in intensive agricultural systems	Biplab Mitra	11:11-11:21 am	Lead Lecture
8.	Effect of seaweed extract based growth promoter on crop productivity and soil health	Abir Dey	11:22-11:29 am	Oral (7 min)
9.	Evaluating the effect of nano-urea and herbicide mixtures on weeds along with growth and yield of wheat	Ayan Sarkar	11:30-11:37 am	Oral
10.	Effect of sowing time, tillage and variety management on growth, yield parameters, nitrogen uptake and economics of lentil after <i>kharif</i> rice in New Alluvial Zone of West Bengal	Bishal Mukherjee	11:38-11:45 am	Oral
11.	The disparity in soil organic carbon under short-term conservation agriculture in a clayey soil	Jayashree Dey Sarkar	11:46-11:53 am	Oral
12.	Weed management in wet direct seeded rice	Sheela Barla	11:54 am -12:01 pm	Oral
Tea Break (12:01-12:16 PM)				
13.	Maize based intercropping system under deficit irrigation management for higher crop and water productivity	R. Poddar	12:16-12:23 pm	Oral (7 min)
14.	Root characterization of rice genotypes in drought prone rainfed environment	Biswajit Karmakar	12:23-12:30 pm	Oral
15.	Growth and yield of sisal (<i>Agave sisalana</i>) as affected by planting materials and fertilizer levels	Sitangshu Sarkar	12:31-12:38 pm	Oral

16.	Land shaping for improving yield and economics of low land rice-rice system of New Alluvial Zone of West Bengal	Manabendra Ray	12:39-12:46 pm	Oral (7 min)
17.	GIS -based evaluation of soil irrigability and land capability for agricultural sustainability affected by fly ash	Subhas Adak	12:46-12:53 pm	Oral
18.	Enhanced corm yield, water and energy productivity in elephant foot yam (<i>Amorphophallus paeoniifolius</i>) (Dennst.) Nicolson through water smart practices	Sunitha S.	12:54-1:01 pm	Oral
Lunch Break (1:00 PM - 2:30 PM)				

Date: 01.10.2023 (Oral Presentation)

Time: 4:00 – 6:30 pm (Tea Break: 5:35-5:50 PM)

Venue: Conference Room 1

Theme- C: Horticulture as a growth engine in achieving sustainable developmental goals

Chairpersons: Prof. Pranab Kumar Hazra, BCKV; Dr Hilloljyoti Singha, Bodoland, Assam

Programme Coordinator: Dr. Abhijit Ghoshal, Joint Secretary, CWSS

Rapporteurs: Dr. Ashim Kr Dolui, CU, Kolkata and Dr Saikat Gantait, BCKV

Sl No.	Title	Speaker	Time	Presentation
1.	Horticulture for sustainable development and livelihood security	Pranab Hazra	4:00-4:15 pm	Plenary Lecture (15 min)
2.	Ecosystem services for ecological restoration through jute and allied fibre crops	G. Kar	4:15-4:29 pm	Plenary Lecture
3.	Underutilized vegetable crops vis-à-vis food and nutritional security of Tripura	Prof. T. K. Maity	4:30-4:40 pm	Lead Lecture (10 min)
4.	Growth and yield of potato (<i>Solanum tuberosum</i> L.) as influenced by biostimulant under soilless culture system	Prof. Umesh Thapa	4:41-4:51 pm	Invited (10 min)
5.	Potential of commercial cultivation of tropical orchids and way forward	Dr. Dwijendra Barman	4:52-5:02 pm	Invited
6.	Pollen biology and pollen-pistil interaction following pollination of tuberose cultivars	Rosalind Lallawmzuali	5:03-5:10 pm	Oral (7 min)
7.	Response of new brinjal varieties to varied doses of nitrogenous and potassic fertilizers	Shirin Akhtar	5:11-5:18 pm	Oral
8.	Efficacy of packaging material, ventilation and storage condition on shelf life and quality of mint (<i>Mentha arvensis</i> L.)	A. K. Banik	5:19-5:26 pm	Oral
9.	Studies on the effects of different developmental stages on biochemical composition of the rhizome reserves in <i>Curcuma caesia</i> Roxb.	Jayoti Majumder	5:27-5:34 pm	Oral
Tea Break (5:35-5:50 PM)				
10.	Integrated nutrient management of ginger grown as inter crop with curry leaf	D. K. Ghosh	5:50-5:57 pm	Oral (7 min)
11.	Induction of in vitro microrhizome formation of <i>Aloe vera</i> and its application in micropropagation	Ishita Khatua	5:58-6:05 pm	Oral

12.	Effect of different growing media on early seedling growth of lettuce and pakchoi in hydroponics	Dinkar Gaikwad	6:06-6:13 pm	Oral
13.	Introducing organic/ natural farming in schools	Ekadashi Nandi	6:14-6:21 pm	Oral

Date: 01.10.2023 (Oral Presentation)

Time: 3:00 – 6:30 pm (Tea Break: 5:00-5:15 PM)

Venue: Conference Room 2

Theme- E: Role of farm mechanization, IT, bioinformatics, postharvest technology, big data management in agriculture, livestock farming, fisheries, sericulture, apiculture etc.

Chairpersons: Prof. Nilotpal Ghosh, WBUFS, Kolkata; Prof. B. K. Chakraborty, Former Director, Department of Fisheries, Bangladesh

Programme Coordinator: Dr. Malay Kumar Bhowmick, IRRI-SARC, Varanasi, UP

Rapporteurs: Dr. Sheela Barla, BAU, Ranchi and Dr Tirthartha Chatterjee, BAU, Sabour, Bihar

Sl No.	Title	Speaker	Time	Presentation
1.	Potentialities for natural farming	K. G. Prematilake	3:00-3:15 pm	Plenary Lecture (15 min)
2.	Effects of pesticide and heavy metal toxicants on fish and human health	B. K. Chakraborty	3:16-3:31 pm	Plenary Lecture
3.	Livestock production and productivity in Indian context	Nilotpal Ghosh	3:32-3:47 pm	Plenary Lecture (15 min)
4.	Implementing of ecological restoration and achieving ecosystem services in traditional way: A case study	Hilloljyoti Singha	3:48-3:58 pm	Lead Lecture (10 min)
5.	Hunger-poverty-silence: The lethal combination that keeps adding entropy to agrarian ecosystem	S. K. Acharya	3:59-4:09 pm	Lead Lecture
6.	Sustainable utilization of fishery byproducts: A promising post-harvest management	Priyanka Halder Mallick	4:10-4:20 pm	Invited (10 min)
7.	Technology assessment of pulses and oilseeds in eastern India over last decade	Adrita Dam	4:21-4:28 pm	Oral (7 min)
8.	Forecasting onion price volatility in the presence of long memory using the FIGARCH model	Chiranjit Mazumder	4:29-4:36 pm	Oral
9.	Measuring instability in production of major pulses in India	Sh. Herojit Singh	4:37-4:44 pm	Oral
10.	Block-wise potato crop acreage estimation of Purba Bardhaman, West Bengal using Sentinel-2 satellite data	Debolina Sarkar	4:45-4:52 pm	Oral
11.	Accuracy assessment among different machine learning algorithms for estimating <i>boro</i> rice growing areas of Haringhata CD Block of Nadia district	Aloy Adak	4:53-5:00 pm	Oral
Tea Break (5:00-5:15 PM)				

Sl No.	Title	Speaker	Time	Presentation
12.	CNN_FunBAR: deep learning technique for fungi taxonomic classification based on DNA barcode sequences	Ritwika Das	5:15-5:22 pm	Oral (7 min)
13.	Prediction map of soil organic carbon created by an advanced geostatistical technique using remote sensing and terrain data	Santanu Mallik	5:23-5:30 pm	Oral
14.	Geographically weighted regression based model - calibration approach under two stage sampling design	Ankur Biswas	5:31-5:38 pm	Oral
15.	Waste valorization: catalyst and traditional soda from post harvested agricultural waste	Biswajit Nath	5:39-5:46 pm	Oral
16.	Agriculture waste-based nanostructure for sustainable development	Manasi Buzar Baruah	5:47-5:54 pm	Oral
17.	Selection of best performing climate models from 37-CMIP6 GCMs over Indian Sundarban for projecting bias corrected future rainfall scenarios	Ratul Roy Choudhury	5:55-6:02 pm	Oral
18.	Assessing bottlenecks in the rice-straw value chains and markets in Punjab region	Suryakanta Khandai	6:03-6:10 pm	Oral

Dinner: 8:30-9:30 pm

Poster Presentation

Date: 30.09.2023

Time: 2:30 – 6:00 pm

Venue: FACC Auditorium Hall

Theme- D: Advances in crop improvement, biotechnological approaches and biotic & abiotic stress management

Date: 01.10.2023

Time: 10:00am – 2:00 pm

Venue: FACC Auditorium Hall

Theme- B: Frontier areas in crop production and natural resource management with special reference to Natural Farming

Date: 01.10.2023

Time: 2:30 – 4:30 pm

Venue: FACC Auditorium Hall

Theme-A: Technology outreach and agri-trade for convergence of farm with institute, industries and policy makers

Theme- C: Horticulture as a growth engine in achieving sustainable developmental goals

Time: 4:30 – 6:30 pm

Venue: FACC Auditorium Hall

Theme-E: Role of farm mechanization, IT, bioinformatics, postharvest technology, big data management in agriculture, livestock farming, fisheries, sericulture, apiculture etc.

Valedictory Function

Date: 02.10.2023

Time: 10:30 am – 1:00 pm

Venue: Conference Hall-1

Chairpersons: Prof. Gautam Saha, VC, BCKV

Prof. Debabrata Basu, VC, UBKV

Prof. Samunder Singh, President, IWSS, USA

Prof. Dr. Luis Avila, Secretary, IWSS, Mississippi, USA &

Prof. Dr. Te-Ming Paul Tseng, MSU, Mississippi, USA

Programme Coordinator: Prof. A. K. Basu, Organizing Secretary, AISDGONF-23

Rapporteur: Prof. Pintoo Bandyopadhyay, DEE, BCKV and Prof. A. K. Nandi, BCKV

Vote of Thanks: Prof. R. K. Ghosh, Organizing President, AISDGONF-23

Conference Closing Declaration by Prof. Goutam Saha, VC, BCKV

Lunch Time: 1:00 – 3:00 pm

For Sightseeing at Kolkata on 02.10. 2023 and Sundarban, West Bengal on 03.10.2023

Contact Person: Mr. D. Roychoudhury, World Link Tour and Travels, Kolkata

Tel: 91-7042785190

Registration: Prof. C. K. Kundu (M: 09433252351) Convener, Registration Committee

➤ **September 29, 2023 at FACC BCKV: 5.00 pm 9.00 pm**

➤ **September 30, 2023 at FACC BCKV: 8.00 am 10.00 am**