

SBI News

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ICAR-SBI CONGRATULATES THE NEW DIRECTOR

Dr. G. Hemaprabha has assumed charge as the first woman Director of ICAR-Sugarcane Breeding Institute on 27 October 2022. Prior to this, she was serving as Head In Charge, Division of Crop Improvement of the Institute and has 36 years of research career in sugarcane.



She joined ICAR Sugarcane Breeding Institute as a Scientist in 1986 after passing out completing MSc. Plant Breeding and Genetics from the University of Kerala with gold medal and distinction. She completed her Ph.D. in 1996, which was the first Ph.D work in molecular markers in sugarcane in India.

Her major areas of research are development of suitable sugarcane varieties for tropical and subtropical India, interspecific hybridization, genetic improvement, gene identification for climate resilience and genetic transformation, botanical characterization and DNA fingerprinting of elite sugarcane clones, inbreeding for developing true breeding parental lines, recurrent selection, development of database of 'Co' canes bred in 100 years of breeding and genomic selection. Her assessment of progress of genetic gain in 100 years of breeding for different yield and quality parameters showed steady improvement in sucrose content and bred several clones combining high sucrose and red rot

resistance, which was considered to be hard to combine, and several proven parents and cross combinations for routine use in sugarcane improvement. She contributed to the development of 27 notified varieties for Peninsular and North West Zone, among which a few are very popular in the country. She has registered 14 varieties with PPVFRA and 16 genetic stocks with ICAR-NBPGR.

Dr. Hemaprabha has published over 95 research papers in peer reviewed journals, 18 books and over 250 research articles were presented in seminars / symposia and 74 manuals, book chapters and pamphlets. She has received several awards and fellowships including NAAS Fellowship, Sir T.S. Venkatraman Award for outstanding research in sugarcane agriculture, Noel Deer Gold Medal award (1991, 2016, 2019) by Sugar Technologists' Association of India (STAI), STAI Silver Medal (2014), . Fellow Award-2019 of Society for Sugar Research & Promotion, Indian Institute of Sugarcane Research and Fellow of Society of Sugarcane Research and Development 2020. She also served as DBT Nominee of Institute Biosafety Committee of Tamil Nadu Agricultural University for nine years and expert committee member in several committees including DBT Task Force in molecular breeding.

The staff of ICAR-Sugarcane Breeding Institute take pride in congratulating Dr. Hemaprabha and wish her all success.

ICAR-SBI congratulates the new Director Triumphing against all odds: the life of a tribal lady Outreach activities Other activities CONTENTS 1 2 2 4 - 8

TRIUMPHING AGAINST ALL ODDS: THE LIFE OF ATRIBALLADY

Tribal Sub Plan funded by the Ministry of Tribal Affairs through the Indian Council of Agricultural Research is being implemented at ICAR-SBI since 2015. In our quest to select beneficiary villages to implement developmental activities in tribal villages during 2020-21, Karamadai hill range near Tholampalayam came as an area yet unexplored by us. This hill range comprises four tribal villages namely Neelampathi, Ookaiyanoor, Motiyur and Ookapatti lying contiguously.

The village of Ookapatti in Karamadai hill range with 61 families was beset with a multitude of problems. It is a remote downtrodden tribal village with not much basic facilities. With limited arable land, the tribal villagers rely on the forest produce, while the menfolk go for work in the nearby areas. Agriculture, be it crop cultivation or animal husbandry, tribal women play a major role as seen in many other tribal villages. This village is predominant with the cultivation of vegetables like bhendi, tomato, chilly, brinjal and cluster beans.

Smt. Renkammal, affectionately called as 'Renkipaati' is a tribal women aged over 75 years and lives all alone in the foothills of the forest in her single roomed tiny hut after the death of her husband at an early age. Gifted with a peculiar voice with which she can chase even elephants, she is sought after by everybody in the village for her valour and innate strength. She owns two acres of land in which she has planted coconut trees on the border and the crops cultivated include banana, cluster beans, chilly and tomato. She has a flock of sheep and she says that each kid is sold for nothing less than Rs. 10000 at the age of two to three years. She also has few poultry birds which is fed

freelance and the eggs and birds are sold to neighbours. Her main stake was vegetable cultivation and was getting low yield for various reasons including the usage of growing local varieties. As demanded we had supplied seeds of a high yielding hybrid tomato variety, PKM1 procured from Tamil Nadu Agricultural University, Coimbatore.

PKM 1 (Periyakulam 1) tomato variety gives red flat round fruits with prominent green rings at the top. The variety is suitable for long distance transport and best for long storage. The manure applied was just wood ash and residues from the previous crop. She could reap a bumper harvest of almost 3000 kg of tomatoes in an area of less than 50 cents, which is a very high yield for her.



Fig. 1. Tomato cultivation in a tribal village

(T. Rajula Shanthy, C. Jayabose, Malakappa B. Medegar, R. Kannaiyan)

OUTREACH ACTIVITIES

One-day training programs

The following four one-day training programs were organized:

- For 17 cane staff from MRK Cooperative Sugars Ltd. on 18 November 2022.
- For 33 farmers and one staff from Villupuram district on 23 November 2022.
- iii. For 45 farmers and two staff from Annur block, Coimbatore on 24 November 2022.
- For 40 trainees of DAESI program from Chamrajnagar, Karnataka on 24 November 2022. (Fig. 2).



Fig. 2. DAESI trainees from Chamrajnagar (24 November 2022)

Exposure Visits

The following 19 exposure visits were organized:

- For 21 students and two staff from Baithul Izza Arts and Science College, Calicut, Kerala on 10 October 2022.
- ii. For 40 students and three staff from RKMVERI, Ranchi, Jharkhand on 12 October 2022.
- For 80 students and five staff from SRS Institute of Agriculture, Vedasandhur on 12 October 2022.
- For 115 students and four staff from Thanthai Roever Institute of Agriculture and Rural Development, Perambalur on 12 October 2022.
- For 119 students and four staff from Thanthai Roever Institute of Agriculture and Rural Development, Perambalur on 14 October 2022.
- For 119 students and four staff from Don Bosco School of Agriculture, Arakkonam on 19 October 2022.
- vii. For 80 students and three staff from Best Innovation University, AndhraPradesh on 25 October 2022.
- viii. For 44 students and one staff from TNAU, Coimbatore on 9 November 2022.
- ix. For 81 students and two staff from TNAU, Coimbatore on 11 November 2022.
- x. For 57 students and one staff from Rathinam College, Coimbatore on 11 November 2022.
- xi. For 60 students and two staff from Nehru College, Coimbatore on 14 November 2022
- xii. For 62 BSc (Agri) students of College of Agriculture, Theni on 22 November 2022.
- xiii. For 12 farmers from Sham-Hira Agrovision Hightech Nursery, Kolhapur on 01 December 2022.
- xiv. For 50 farmers and one staff from Bhavanisagar block, Sathyamangalam on 09 December 2022.
- xv. For 12 students and two staff from University of Kerala, Thiruvananthapuram on 16 December 2022.
- xvi. For 39 farmers and three staff from Kurukshetra, Haryana on 20 December 2022.
- xvii. For 22 students and two staff from PSMO College, Tiruvangadi on 20 December 2022.
- xviii. For 32 students and three staff from College of Food Science and Technology, Rudrur, AP on 23 December 2022.
- xix. For 10 students from UAS, Mysore on 26 December 2022.

Farmers Meet

A Farmers Meet was organized by the Institute in collaboration with Coconut Development Board, Kochi and Tamil Nadu Agricultural University, at TNAU, Coimbatore on 14 October 2022 and was formally inaugurated by the Shri. Narendra Singh Tomar, Hon'ble Minister for Agriculture and Farmers Welfare. A stall displaying sugarcane varieties and package of practices for sugarcane cultivation was put up (Fig. 3).





Fig. 3. Farmers meet at TNAU (14 October 2022)

'Kisan Mela' at Karnal

A one-day 'Kisan Mela' was conducted at ICAR-SBI Regional Centre, Karnal on 12 October 2022 (Fig. 4).





Fig. 4. Kisan Mela at ICAR-SBI RC, Karnal

Research Advisory Committee

The XXVII Research Advisory Committee of ICAR-Sugarcane Breeding Institute, Coimbatore was held during 21-22 November 2022, Dr. S. Solomon, Former Vice Chancellor of CSA, University of Agriculture & Technology, Kanpur & Former Director, ICAR-Indian Institute of Sugarcane Research, Lucknow and Chairman, RAC chaired the meeting (Fig. 5). The following members of the committee participated in the meeting: Dr. R.K. Singh, ADG (Commercial Crops), ICAR, New Delhi; Dr. H.K. Senapati, Ex-Dean - Post Graduate Faculty, OUAT, Bhubaneswar; Dr. S.R. Bhat, Ex-Emeritus Scientist, ICAR-NIAB, IARI, New Delhi; Dr. Chandish R Ballal, Former Director, ICAR-NBAIR, Bangalore; Dr. G. Hemaprabha, Director, ICAR-Sugarcane Breeding Institute, Coimbatore; Dr. A. Ramesh Sundar (Member Secretary), Principal Scientist (Plant Pathology), Heads of Divisions, Sections and Research Centres of ICAR-SBI.



Fig. 5. RAC meeting in progress

Recommendations of the deliberations are:

- ICAR-SBI houses the largest germplasm of sugarcane and a pre-breeding programme is already in place. However, this activity needs to be specifically intensified for trait specific enhancement viz. water stress, red rot resistance and nitrogen use efficiency as a means to achieving genetic gain of these traits of interest for sustaining and increasing sugarcane productivity and resilience.
- 2. Though Indian sugarcane commercial pool is more divergent with the successful incorporation of about 100 germplasm lines, a vast proportion of the germplasm remains unutilized, many of which are characterized as sources of different economic traits including diversified uses. Induction of flowering of these trait specific lines and their further utilization in breeding following a Speed breeding approach is essential for faster transfer of the desired traits into

- commercial pool. Also, in order to facilitate hybridization of important trait specific lines, a pollen cryopreservation facility for long term storage of pollen should be in place.
- Standardization of genome editing protocol in sugarcane to develop marker free genome edited products has to be undertaken on a collaborative mode.
- 4. The number of ratoon crops in India is 1-3, which is very less, and needs to be increased to improve the profitability of farmers. In this context, improving the productivity *vis-a-vis* physiological efficiencies of plant & ratoon crops of sugarcane for enhancing multi-ratooning potential is recommended.
- 5. Yield optimization through STCR equations to be optimized to recommend fertilizer schedule for popular varieties in terms of Soil, water and fertilizer use efficiencies, which needs to be implemented and also Carbon Trading vis a vis Natural/Organic farming in Sugarcane need to be critically evaluated under Conservation Agriculture system as a possible strategy towards doubling farmers' income, while conserving the natural resources.
- 6. Breakdown of successful commercial varieties to red rot is a cause of concern, especially in sub-tropical India. There is urgency to develop efficient formulations of biopesticides including antagonistic microbes as well as endophytes, for devising a management strategy for red rot and major pests of sugarcane, including white grubs. This should be integrated in the on-going management practices to contain red rod spread in popular variety Co 0238 and others.
- Development of low cost field diagnostic kits for important non-fungal pathogens infecting sugarcane -YLD, GSD etc.
- 8. Strengthening of ICT based transfer of technologies (TOT) by mobile-based applications is suggested.
- Socio-economic analysis of important technologies of the Institute is to be critically analysed and ways and means to bring down the cost of production (COP) in States like Tamil Nadu to the level of national average has to be worked out.
- Performance evaluation & field stability of the variety Co 0238 versus Co 15023 in sub-tropical parts and specifically on Eastern/Central UP should be undertaken up to second ratoon crop. It should include the response to biotic and abiotic stresses,

popular intercrops of the region and farmers acceptability. Relative performance with respect to quality parameters and sugar recovery should be evaluated in collaboration with the sugar mills.

General recommendation

- Develop and standardize drone-based diagnostics and amelioration protocol to expedite problems arising due to biotic/abiotic stresses in sugarcane.
- A demonstration plot (1.0 ha)/ SBI Model to be set up showcasing & integrating all agri-technologies developed so far by ICAR-SBI in plant and successive ratoon crops (one each in ICAR-SBI Coimbatore & Karnal).
- More intensive collaborations with Sugar factories in tropical and sub-tropical parts for addressing critical issues viz. varietal performance, pests and disease surveillance, production and commercialization of effective bio-agents/bio -pesticides and any other constraints is to be undertaken.
- Extensive efforts to be made to improve revenue generation of the Institute.
- Capacity building in frontier areas of research and major face-lifting of the campus/farm/hostel/guest house/main building is suggested as part of improvement of infrastructure facilities of the Institute.

Vigilance Awareness Week

Vigilance Awareness Week was observed from 31.10.2022 to 06.11.2022. Integrity Pledge was taken by the staff on 31.10.2022 followed by an essay competition for the staff members. A Sensitization Program for Bidder/Stakeholder was conducted on 02.11.2022, Tamil elocution competition for school children on 03.11.2022 followed by Sensitization program for staff members on 04.11.2022. Dr. A. Srinivasan, IRS, Additional Commissioner of Income Tax, Tiruppur delivered a speech on Vigilance related matters (Fig. 6).



Fig. 6. Integrity Pledge taking by the staff on 31 October 2022

National Unity Day

Rashtriya Ekta Diwas/National Unity Day was observed on 31.10.2022. Pledge taking Ceremony was conducted on 31.10.2022 to commemorate the birth Anniversary of Sardar Vallabhai Patel.

ICAR-SBI Foundation Day

The 111th Foundation Day of ICAR-Sugarcane Breeding Institute was organized on 18 November 2022 (Fig. 7). Dr. S. Solomon, Former Director, IISR, Lucknow was the Chief Guest. Sir T.S. Venkatraman Awards and Foundation Day Awards to the selected persons under different category as well as various staff of the institute were felicitated. Cultural programs were organized by various sections of the institute.





Fig. 7. Foundation Day Celebration

World Soil Day

World Soil Day was organized at the Institute on 5 December 2022 (Fig. 8) and conducted an awareness programme to 100 farmers from Kothari Sugars and Chemicals Ltd, Chennai on the importance of healthy soil with healthy life.



Fig. 8. World Soil Day

Hindi Workshop

Hindi Workshop was organized on 28 December 2022, wherein Dr. Sajitha, Head of Department (Hindi), Sri Ramakrishna college of Arts and Science, Coimbatore was the Chief Guest.

'Azadi Ka Amrut Mahotsay'

Organized 'Fit India Freedom 3.0' under the theme 'Azadi ke 75 saal, fitness rahe bemisaal' for staff members & contractual staff on 27 October 2022.

Meetings

- Assessment Committee meeting for considering promotion cases of technical staff held on 19.12.2022.
- Senior Officers Committee meeting held on 27.10.2022 & 08.12.2022.

- Selection Committee meeting for considering application for the post of Private Secretary held on 01.12.2022
- Selection Committee meeting for Junior Research Fellow held on 07.10.2022 & 28.11.2022.
- Selection Committee meeting for Senior Research Fellow held on 10.10.2022.
- Selection Committee meeting for Field Workers held on 29.11.2022.
- Screening Committee meeting for grant of MACP to Skilled Support Staff held on 13.12.2022.
- Departmental Promotion Committee meeting for probation clearance of SSS held on 19.12.2022.
- Grievance Committee meeting held on 20.10.2022, 09.11.2022 & 12.12.2022.
- Women Cell meeting held on 14.12.2022.
- 'Tier II of AO & FAO Examination conducted during 28.12.2022 to 30.12.2022.

Scientific participation

Title	Date	Participant (s)
34 th Biennial Workshop of AICRP on Sugarcane at ICAR-IISR, Lucknow	14-15 October 2022	Drs. G. Hemaprabha, R. Viswanathan, A. Ramesh Sundar, K.P. Salin, R.M. Shanthi, A. Annadurai, V. Sreenivasa, K. Mohanraj, C. Appunu, S. Anusha, S.K. Pandey, M.L. Chhabra, Ravinder kumar
7 th IAPSIT International Sugar Conference-2022 organized by ICAR- IISR at Lucknow	17–19 October 2022	Drs. G. Hemaprabha, R. M. Shanthi, A. Annadurai, R. Viswanathan, K.P. Salin, A. Ramesh Sundar, P. Murali, V.P. Sobhakumari, P. Malathi, K. Lakshmi, A. Suganya, D. PuthiraPratap, C. Appunu, K. Mohanraj, V. Sreenivasa, G. S. Suresha, K. Nithya, M.R. Meena, K. Chandran
International Conference on Physiological and molecular mechanisms of abiotic stress tolerance in plants organized by ISPP at University of Calicut, Kerala	26-28 October, 2022	Drs. R. Gomathi, C. Appunu, V. Krishnapriya
National Conference on 'Advances in agro-meteorological interventions for climate resilient agriculture' held at Tamil Nadu Agricultural University	2-4 November 2022	Drs. R. Arunkumar, P. Geetha
Agri start-up conclave 'Kisan Samman Sammelan' inaugurated by the Hon'ble Prime Minister through on-line mode	17 October 2022	Director and all Scientists
Webinar presentation on Revitalizing ICAR: Aspirations and action plan by Dr. Himanshu Pathak, Secretary (DARE) & DG (ICAR)	11 November 2022	All staff
Hackathon 3.0 South Zone Meeting as Member of the committee	11 November 2022	Dr. G. Hemaprabha

Title	Date	Participant (s)
Online presentation by DDG (CS) on 'Activities and aspirations of ICAR'	14 November 2022	Director and all Scientists
National Conference on 'Enhancing competitiveness of horticulture through technology innovations' at ICAR-CPCRI, Kasaragod, Kerala	17–18 November 2022	Dr. R. Manimekalai
Online presentation by the DDG (Animal Science)	22 November 2022	Dr. G. Hemaprabha
Online presentation delivered by Deputy Director General (Education)	25 November 2022	Dr. G. Hemaprabha
XXXIX meeting of Plant Germplasm Registration Committee held on virtual mode	8 December 2022	Dr. G. Hemaprabha
Dr. Janaki Ammal memorial talk on 'Cytogenetics - Past, present and future' delivered on the occasion of 125 th anniversary of Dr. E.K. Janaki Ammal at Kannur University, Kannur, Kerala	29 November 2022	Dr. V.P. Sobhakumari
Online presentation delivered by DDG (Fisheries) ICAR	13 December 2022	Director, all Scientists & Technical staff
Meeting with Dr. Suyash Agarwal from Redcliffelabs, Hyderabad on 'NGS pipelines and approaches to assemble and annotate a denovo complex genome'	15 December 2022	Director and all scientists
Entrepreneurs Meeting organized by State Bank of India and displayed the ICAR-Sugarcane Breeding Institute products	15 -16 December 2022	Dr. P. Murali
KISAN DIWAS 2022 celebrated under the chairmanship of Shri. Narendra Singh Tomar, the Hon'ble Minister of Agriculture and Farmers' Welfare through online mode	23 December 2022	Director and all staff

Training programs attended

- Drs. P. Geetha, Arun Kumar and V. Vinu: Online training program on Analysis of multi environment trial organized by ICAR NAARM during 3-8 November 2022.
- Dr. K. Lakshmi: State Level Workshop on Genome editing in agriculture: Opportunities and enabling policies organized by Tamil Nadu Agricultural University, Coimbatore on 29 November 2022.
- Smt. R. Nirmala, Shri R. Karuppusamy: Online training on Computer applications for technical personnel of ICAR organized by ICAR-IASRI, New Delhi during 15-21 December 2022.

Appointment/transfer

- Dr. M. Alagupalamuthirsolai joined ICAR-SBI, Coimbatore on his transfer from ICAR- Indian Institute of Spices Research, Kozhikode on 02 December 2022.
- Dr. R. Viswanathan, Principal Scientist & Acting Head, Crop Protection was relieved from this

Institute on 08 December 2022 on his appointment as Director, ICAR-Indian Institute of Sugarcane Research, Lucknow.

Promotion

- Drs. S.Anusha, Krishnapirya Vengavasi, H.K. Mahadevaswamy, B. Mahendran, R. Valarmathi and V. Vinu, Scientists were promoted to the next higher grade pay of Rs.7000 in RGP Level 11 of w.e.f. 01.01.2020.
- Shri T. Lakshmipathy, Scientist promoted to the next higher grade pay of Rs.7000/- w.e.f. 01.01.2021.
- Shri M. Thangaraj, SSS granted 1st MACP in Level-2 of 7th CPC Pay Matrix w.e.f. 27.11.2022.
- Shri S. Shanmugam, SSS granted 1st MACP in Level-2 of 7th CPC Pay Matrix w.e.f. 15.12.2022.

Retirements

 Dr. S. Vasantha, Principal Scientist (Plant Physiology) retired on superannuation on 30 November 2022. Smt. R. Revathi, Skilled Support Staff retired on superannuation on 30 November 2022.

Awards and Recognitions

- Dr. G. Hemaprabha and Dr. R. Viswanathan were conferred, SSRP-Lifetime contribution award in the 7th IAPSIT International sugar conference and SUGARCON 2022 held at Lucknow during 16-18 October 2022.
- Drs. S. Alarmelu, R.M. Shanthi, R. Manimekalai, A. Ramesh Sundar, R. Gomathi and J. Srikanth were elected as Fellow (2022) of Society for Sugarcane Research and Promotion (FSSRP-2022) by Sugar Tech, India.
- Drs. S. Alarmelu, A. Ramesh Sundar, R. Gomathi, J. Srikanth and K. Chandran were elected as Fellow (2022) of Society of sugarcane research and development (SSRD), Coimbatore, Tamil Nadu.
- Dr. Pooja received Young Researcher Award-2022 of SSRD, ICAR-SBI, Coimbatore.
- Drs. S. Alarmelu and P. Malathi received the Sir T.S. Venkatraman Award for outstanding research in sugarcane agriculture for the Biennium 2020-21 during the Foundation Day held at the institute on 18 November 2022.

Best paper awards given by SSRD for the articles published in Journal of Sugarcane Research

- Drs. G. Hemaprabha, K. Mohanraj, S. Alarmelu and Bakshi Ram: Assessment of breeding methods and parental value of Co canes developed during 1918-2017.
- Drs. B. Singaravelu, G. S. Suresha, J. Srikanth, C. Appunu, C. Sankaranarayanan, P. Mahesh, R. Nirmala and M. Rajeshkumar: Prospecting in western ghats of Karnataka for indigenous Bacillus thuringiensis isolates harbouring novel crystal toxin genes for sugarcane pest management.
- Drs. S. Karthigeyan, P. Govindaraj and Adhini S. Pazhany: Wild sugarcane, Saccharum sp. germplasm collection in the states of Punjab and Haryana, India.
- Drs. R. Valarmathi, H.K. Mahadevaswamy, K. Preethi, J. Ashwin Narayan, C. Appunu and Hifzur Rahman: Characterization and in silico analyses of RTCS gene from sugarcane encoding LOB protein family of transcription factors: a key regulator of shoot-borne root initiation.

- Drs. P. Swathik Clarancia, M. Naveenarani, R. Valarmathi, G.S. Suresha, G. Hemaprabha, Bakshi Ram, C. Appunu: Isolation, characterization and expression analysis of novel water deficit stress -responsive DEEPER ROOTING 1 (DRO1) gene from drought-tolerant Erianthus arundinaceus.
- Drs. J. Srikanth, S. Alarmelu, T. Rajula Shanthy, A. Anna Durai and V.P. Sobhakumari received Prolific contributor award to the Journal of Sugarcane Research (2022) from SSRD, Coimbatore.
- Certificate of Appreciation awards during Foundation Day 2022: Drs. P. Malathi and A. Annadurai under Principal Scientist category; Dr. Mintu Ram Meena under Senior Scientist category; Dr. V. Raffee Viola under Technical category; Smt. M. Lalitha Rani and Shri. A. Sathasivam under Administrative category; Shri. N. Murugesan under Skilled Support Staff category.

Deputation abroad

Dr. N. Geetha deputed as an external expert to Sugar Research Institute of Fiji (SRIF), Government of Fiji as Crop Protection Entomologist and Pathologist for a period of two years from November 2022 under ITEC program of Ministry of External Affairs.

Distinguished Visitors

- Delegates from Coconut Development Board, Kochi visited the Institute on 13 October 22.
- A team of experts, Shri Narmdeshwar Lal, IAS, Secretary, Sugarcane Industries Development, Shri Giriwar Dayal Singh, IAS, Cane Commissioner, Shri Jitendra Prasad Sah, BAS, Joint Secretary,



Fig. 9. Visit of delegates from Bihar

Sugarcane Industries Department, Sri Surendra Prasad. BAS, Private Secretary to Hon'ble Minister, Revenue and Land Reforms & Sugarcane Industries Department, Sri Omkarnath Singh, Joint Director, Sugarcane Industries Department from Government of Bihar visited ICAR - Sugarcane Breeding Institute during 29-30 November 2022 (Fig. 9).

Death

Shri N. Subramanian, Skilled Support Staff expired on 15 October 2022.

ICAR-SBI

Phone

Website

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Editors

: Dr. T. Rajula Shanthy and Dr. G. Hemaprabha

Quarterly

: 0422 - 2472621, Fax: 0422 - 2472923

E-mail

: director.sbi@icar.gov.in

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