

# MAJOR ACTIVITIES OF NAAS – REGIONAL CHAPTER – COIMBATORE (2022 & 2023)



## Coimbatore Chapter:

- Lecture by Dr. KS Subramanian, Director of Research, TNAU on ‘Recent Developments in Nanotechnological Applications in Agriculture’ was organized on 31 January 2022 in hybrid mode.
- ‘World Pulses Day’ was celebrated jointly with ICAR-SBI on 10 February 2022, organizing a lecture on ‘Pulses to empower youth in achieving sustainable agricultural food system’ by Dr Subbalakshmi Lokanadhan, Professor (Agronomy), Tamil Nadu Agricultural University, Coimbatore. • National Science Day was celebrated with a lecture on ‘How to deliver technologies’ by Dr K.A. Mohan, Biotechnologist and Chief Advisor, Rasi Seeds, Attur, Salem, on 28 February 2022.
- As part of the curtain raiser of ‘International Year of Millets 2023’, a campaign on Nutri-garden was organized on 22 March 2022 jointly with ICAR-SBI Research Centre, Agali, Palakkadu District, Kerala highlighting the nutritional values of millets in the human diet. More than 150 tribal farmers and students from the villages of Palakaiyur, Vallmari, Omappodiyur, Vadakottathara, Therkumokkayur, Kalkandiyur, Salaiyur and Pudu attended the program.
- One-day training programme on Viral and phytoplasmal diseases and their management to seed cane growers and progressive farmers in three districts in Tamil Nadu on 07 May 2022 was organized. Around 40 farmers, cane officers and seed cane entrepreneurs were benefited from the training programme.
- Demonstrations of efficient delivering of *Trichoderma* in banana and turmeric rhizomes in a mechanized sett treatment device were organized for farmers on 13.06.2022 and 01 July 2022, in Kuppapur village and Kondayampalayam village, Thondamuthur Block, Coimbatore, respectively. Many farmers, specially those practicing organic agriculture participated in these program.



To turmeric farmers



To Banana farmers

- A lecture on “Biotechnological interventions for sustainable food production” by Dr C. Appunu, ICARSBI, Coimbatore, was organized on 08 August 2022, highlighting the need for biotechnological interventions to improve specific traits, bio-safety guidelines and genome editing approaches. About 100 college students participated in the event.
- A 'Science Quiz' competition for college students was organized on 12 August 2022 as part of the 75<sup>th</sup> Independence Day celebrations at ICAR-SBI, Coimbatore. About 50 students participated.



- A speech Competition in Tamil for Coimbatore Corporation school students was conducted on 12-8-2022 on the topic India at 75 years of independence. Prizes were distributed to the winners.



- Discussion on Researchable Issues in Plant Pathology was organized on 06 September 2022. The main focus of the Session genome approached to understand host-pathogen interactions,



identifying resistant and susceptible genes and genome editing strategies to develop disease resistant crops.

- A campaign on nutrition literacy for school children of Panchayat Union Middle School in Veerakeralam village, Coimbatore was organized on 14<sup>th</sup> November 2022. Importance of millets and Nutricereals in daily diet and adverse impact of junk foods was elaborated to the students. An oratory competition among students was also organized on the occasion.



- Coimbatore Chapter in collaboration with the School of Post Graduate Studies, TNAU organized a one-day Interactive meeting on ‘Quality Assurance in Agriculture Education through Accreditation’ at TNAU, Coimbatore on 05 December 2022. The meet was addressed by a number of senior officials from ICAR-SBI, TNAU, ICAR and IARI, and active discussions were held on issue including the accreditation process.
- The year 2023, being the International Year of Millets, ICAR-Sugarcane Breeding Institute along with NAAS Chapter, Coimbatore launched the yearlong activities by sowing seven kind of millets (Pearl millet, Finger millet, Foxtail millet, Kodo millet, Banyard millet, Little millet and Proso millet) under the leadership of Hon’ble Member of Parliament Smt. Sangeetha Yadhav Maurya, MP, Rajya Sabha on 09 January 2023 at Coimbatore. She addressed the scientists and students and highlighted the Governments’ plan to take the Millets mission to global level.



- On February 28, 2023, coinciding with the National Science Day, over 1000 students from schools and colleges visited ICAR-SBI. NAAS Chapter made special campaigns for school students and impressed upon them the relevance and scope of Agriculture Education in India. About 200 BEd. Students were educated on the need of classes and practical sessions on Agriculture from middle school level onwards and impressed upon them the nutritional value of millets and the need to include millets in mid-day meal scheme.



- As part of the Government of India's flagship programme "International year of Millets -2023", **an awareness program** on nutritional values of millet crops and to eradicate malnutrition in the country. ICAR-Sugarcane Breeding Institute and NAAS Coimbatore chapter organized an awareness campaign at its Agali Research Centre on 18.03.2023. The programme was presided by

G. Hemaprabha, Director and around fifteen scientists from ICAR-Sugarcane Breeding Institute, Coimbatore belonging to various sections and divisions participated in the awareness campaign. Totally, 87 tribal families from five villages' viz., Vellamari, Kalkandiyoor, Malle Chavadiyoor, Kerala Kudapatti and Tamilnadu Kudapatti participated in the programme. In the meeting, a lecture on importance of millets in human nutrition was organized for the benefit for the tribal community. At the end of meeting, six types of millets viz., Ragi, Bajra, Little Millet, Foxtail millet, Kodo millet and Proso millet were sown in the millet cafeteria at the centre.



- Tamilnadu Kudapatti village Head hugging the Director during honoring ceremony in the 8 day- Mega Exhibition organized by the Central Bureau of Communication, Ministry of Information & Broadcasting at Coimbatore. The Institute participated in this unique exhibition by putting up a stall. A large number of students and general public from different walks of life visited the exhibition to learn about the Institute activities and on agricultural education and opportunities.





- Honouring Former Director Dr Bakshi Ram and a NAAS Fellow belonging to Coimbatore chapter on being conferred with Padma Shri, one of the highest Civilian awards of the Government of India . The Institute and The NAAS Coimbatore chapter honoured him on May 10, 2023.



**Dr Bakshi Ram receiving the Civilian award from Her Excellency Mrs. Draupathi Murmu, the President of India at the Rashtrapati Bhavan , On 05-04-2023.**

Dr. Bakshi Ram was felicitated by NAAS-Coimbatore chapter, besides the Institute for receiving the Padma Shri award in the field of Science and Engineering.

- **A brainstorming session on “sugarcane scenario : research and industry perspective”**, as held at ICAR Sugarcane Breeding Institute, Coimbatore on 10.05.2023.

Delivering the Inaugural address, Dr. T.R. Sharma, DDG (CS), ICAR lauded the scientists of ICAR-Sugarcane Breeding Institute. Sugarcane scientists should focus on developing climate resilient varieties that have high water-use and nutrient-use efficiency, develop appropriate machinery for mechanical harvesting, deploy gene editing and improvise the technologies available for inter-cropping sugarcane with oil seeds & pulses. Dr.R.K. Singh, ADG (CC), ICAR in his Special address, highlighted the importance of adopting PPP approach in agricultural research. Trust among the collaborators is essential for this approach to succeed, he said. Dr. D. K. Yadava, ADG (Seeds), ICAR, in his Special address said that seed production and seed health are the major factors that would help in doubling the income of the farmers. Quality seed material that meets the minimum seed standards and free from all biotic stresses need to be supplied to the sugarcane farmers, he added. Dr. M. Manickam, Chairman and Managing Director of Sakthi Sugars Ltd., stressed the need for having long-term policies in the sugar sector. Citing the case of China where farmers are being pressurized to grow only food crops and move away from allied farm enterprises, he said that the recent ethanol policy has been helping the Indian sugarcane

farmers. Dr R. Viswanathan, Director , ICAR- Indian Institute of Sugarcane Research, Lucknow spoke on disease management in sugarcane vis-à-vis evolution of pathotypes.

Dr Bakshi Ram, Former Director, ICAR – Sugarcane Breeding Institute who served as the Chairperson of the Technical session spoke on the varietal requirements to meet sugar and energy demands for Atmanirbhar Bharat. He called upon the scientists to develop techniques to overcome the negative traits of varieties such

as shy-tillering nature of Co 0118, red rot/top borer susceptibility of Co 0238 and water-stress intolerance of Co 86032.

Shri M. Silvester, Vice-President of the South Indian Sugar Mills Association – TN (SISMA-TN) & Whole time Director of Kothari Sugars spoke on the challenges faced by sugarcane farmers and the need for mechanization. Dr G. Hemaprabha, Director of ICAR-Sugarcane Breeding Institute, served as the Cochairperson of the Technical session, listed out the recommendations of the brainstorming session.

- A talk on Conservation of water bodies in Coimbatore city: ICAR- Sugarcane Breeding Institute and NAAS Coimbatore chapter organizes a talk on ‘Reviving water bodies’ as part of Azadi Ka Amrit Mahotsav’ celebrations\*. Shri. R. Manikandan, Co-Ordinator, Coimbatore Lakes and Water bodies Conservation Organization (Kovai Kulangal Pathukappu Amaippu) & Ministry of Jal Shakti Award winner – 2019, delivered a talk on ‘Reviving water bodies’ at ICAR-Sugarcane Breeding Institute on 26 May 2023.



**Presentation of NAAS Fellow Award by President NAAS cum DG ICAR to Dr. A. Ramesh Sundar, PS and HD (Crop Protection), ICAR-SBI, Coimbatore on 31st AGM held on June 5, 2024, at NAAS Complex, New Delhi.**

**Citation:**

Dr. A. Ramesh Sundar has made significant contributions in deciphering disease resistance in sugarcane. I have been extensively working on decoding the molecular basis of sugarcane x pathogen(s) interactions involving *Colletotrichum falcatum* and *Sporisorium scitamineum*. A pioneering work was done by me on identification of resistance inducers/PAMPs/effectors and establishing their role in inducing systemic acquired resistance (SAR) in sugarcane. I have established a reference stalk proteome of sugarcane for the first time in the world. Remarkably, I have been involved in development of commercial products such as sugarcane sett treatment device (STD) and soil moisture indicator (SMI), for which I have received the First Prize in the National Water Awards - 2019 from Ministry of Jal Shakti, GOI. To my credit, I have got four design patents (SMI) and one product patent (STD) granted by The Patent Office, GOI. On the technological front, I have been involved in the development of four sugarcane varieties. The accomplishments of mine were evinced by publications in highly rated peer-reviewed journals and a good number of externally funded projects.