



Technology of the Month

Single Roller Laboratory Model Gin (Lab Gin SR700)



* ICAR-CIRCOT has developed in collaboration with M/s. Precision Tooling Engineers, Nagpur, a 700mm roller length Single Roller Laboratory Model Gin (Lab Gin SR700) for quick measuring/evaluation of ginning percentage of raw cotton. This machine has production capacity of about 50kg raw cotton per hour. The technology was inaugurated by Dr. K. K. Singh, Chairman, Quinquennial Review Team (QRT) of ICAR-CIRCOT & Vice-Chancellor, SVPUAT, Meerut, Uttar Pradesh on 10 October, 2023 at Nagpur.

New Project Initiated



• “Development of High-Performance Woven Protective Gloves and Seamless Knitted Gloves for Industrial Uses”, under National Technical Textile Mission (NTTM) of Ministry of Textiles, with an approved budget Rs. 1.21 crores for a period of two years (2023-25).

#Swachhata Hi Sewa (SHS)



* The Swachhata Hi Seva (SHS) Campaign was held at ICAR-CIRCOT from 15 September to 02 October, 2023. A Swachhata Hi Seva slogan competition was organized at ICAR-CIRCOT for the youth from villages studying in Mumbai colleges on 01 October, 2023, as part of awareness programme under the SHS campaign. About 10 students participated.

• On the culmination day of the SHS campaign on 02 October, 2023, which is also Gandhi Jayanti Day, a ‘Thank You Safai Mitra’ campaign to felicitate sanitation workers was organized at Ginning Training Centre of ICAR-CIRCOT at Nagpur. The workers involved in cleaning and Swachhata were felicitated and gratitude towards their noble work was expressed. Later cotton clothes were distributed to them during the felicitation.

Technology Demonstration



• Thirty farmers from ATMA, Seoni, Madhya Pradesh visited Ginning Training Centre, Nagpur on 27 September, 2023. They were shown around the facility available at GTC, Nagpur.

• Demonstrations on clean cotton picking were organized at Sirsa on 27 and 29 September 2023 in 5 ha of cotton field. Total of twelve farmers participated. Clean cotton picking kits were distributed as critical inputs to the farmers to prevent contamination and improve fibre quality.

Presentations



- Shri Himanshushekhar Chaurasia (Scientist presently pursuing Ph.D at IASRI, New Delhi) presented a paper titled “Detection of Paddy panicle Stages using Deep Learning”, in the 6th International Rice Congress-2023 held at Manila, Philippines from 16-19 October, 2023
- Dr. S. K. Shukla, Director gave a presentation “CIRCOT Technologies for adoption in Industries”, at the industry interface meeting on the theme ‘Weaving the Future-Natural Fibres Processing Symposium’ at CIPHET, Ludhiana on 04 October, 2023, during the event CIPHET-IIFA 2023.

Technology Spotlight



- Article ‘Heat-generating cotton fabric hogs the spotlight on Day 2’ was reported by the Hindustan Times Ludhiana on 05 October, 2023 about the Cotton based heat-generating textiles from ICAR-CIRCOT as one of the stand-out technologies showcased at CIPHET-IIFA 2023, an industry interface fair on agro-processing, hosted by CIPHET in Ludhiana during 03-05 October, 2023. It was highlighted in the Dainik Jaagran, Ludhiana edition and Punjabi Jaagran newspaper, Ludhiana edition on 06 October, 2023

Skill Development Activities



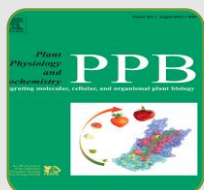
- Training on "Advanced Characterization of Cotton Quality and its Spinning and Dyeing Performance" was organised during 25-27 September, 2023 under the SCSP scheme.
- Dr (Mrs) Anagha Vaidya Soocheta, Senior Lecturer, University of Mauritius joined at the institute as senior fellow on 09 October, 2023 under CV Raman International Fellowship for African Researchers Program 2022 to work on the project Design and Development of Prototypes using Natural Dyed Banana Fibres for Entrepreneurial Prospects.
- Ms. Darshini, Ph.D scholar from Vellore Institute of Technology (VIT), Vellore Campus, Tamilnadu joined for one month internship training on Nano-fibre technology for filtration application under mentorship of Dr. G. T. V. Prabu, Senior Scientist.
- Agripreneurship Orientation Programme & SAIP of 24 start-ups from 7th cohort is completed.
- Ginning Training Centre, Nagpur organized a training under SMART Cotton on “Best Post-harvest management practices for production of world class bales from Indian Cotton” from 25-27 October, 2023. 50 participants attended this training program.
- Five training programs were conducted under CCI-CICR-CIRCOT Pilot Project entitled “Awareness and Extension Services on Best Farm Practices for Cotton Farmers to Improve Quality, Yield and Sustainability” benefitting about 300 farmers.

Human Resource Development



- Dr. Manoj Kumar Mahawar, Dr. Sharmila Patil, Dr. Jyoti Dhakane-Lad attended Hands-on training MATLAB (Online mode) from 05-16 October, 2023 conducted by Spark Institute of Advanced Science (SIAS) Research Forum, Kozhikode, Kerala.

Publications



- Sheri, V., Kumar, M., Susan Jaconis, Zhang, B. 2023. Antioxidant defense in cotton under environmental stresses: Unraveling the crucial role of a universal defense regulator for enhanced cotton sustainability. *Plant Physiology and Biochemistry*.
- Kumar, M., Barbhai, M. D., Puranik, S., Natta, S., Senapathy, M., Dhumal, S., *et al.* (2023). Combination of green extraction techniques and smart solvents for bioactives recovery. *TrAC Trends in Analytical Chemistry*, 117286.

Glimpses of Activities



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