



ICAR-CIRCOT

e-News



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ICAR-CIRCOT Centenary Year Celebration

ICAR-CIRCOT, established in 1924, proudly marked 100 years of exceptional service to the nation on December 3, 2024. To commemorate this milestone, a grand concluding ceremony was organized, graced by Shri Jagdeep Dhankhar, Hon'ble Vice President of India, as the Chief Guest. The event was further honoured by the presence of esteemed dignitaries, including Shri C.P. Radhakrishnan, Hon'ble Governor of Maharashtra; Shri Shivraj Singh Chouhan, Hon'ble Union Minister of Agriculture & Farmers' Welfare & Rural Development; Shri Ramnath Thakur, Hon'ble Minister of State for Agriculture & Farmers' Welfare; Dr. Himanshu Pathak, Secretary (DARE) and Director General (ICAR), New Delhi; and Dr. S.N. Jha, Deputy Director General (Agricultural Engineering), ICAR, New Delhi.



In celebration of 100 years of outstanding research and development, ICAR-CIRCOT has erected a Centenary Pillar, which was inaugurated by the Hon'ble Vice President of India in the esteemed presence of distinguished dignitaries. During the event, the Hon'ble Chief Guest unveiled three significant publications by ICAR-CIRCOT: *Contribution of ICAR-CIRCOT in Nation Building*; *Cotton: Grading, Ginning, Marketing, and By-product Utilization*; and, *Cotton in Indian Circular Economy: A Journey from Field to Fashion*. The Hon'ble Vice President of India, along with Madam Dr. (Smt.) Sudesh Dhankhar, planted saplings as part of the 'Ek Ped Maa Ke Naam' initiative.



Edited by: S.K. Shukla, N. Vigneshwaran, C. Sundaramoorthy, Bindu Venugopal & Anand Jadhav

Panel Discussion on

'Post-harvest Processing of Cotton in Amrit Kaal'

A panel discussion on 'Post-harvest Processing of Cotton in Amrit Kaal' took place under the chairmanship of Dr. S.N. Jha, DDG (Agricultural Engineering), ICAR, New Delhi on the eve of Foundation Day. Dr. C. D. Mayee, Ex-Chairman, ASRB, New Delhi and Dr. P.G. Patil, VC, MPKV, Rahuri delivered the opening remarks. Dr. Y. G. Prasad, Director, ICAR-CICR, Nagpur; Dr. R. Kachru, former ADG (PE), ICAR; Dr. Kartikeya Dhanda, Secretary, Textiles Committee, Mumbai; Dr. Ashok Athalye, Professor, ICT, Mumbai; Dr. M. K. Sharma, Whole-time Director & CEO, M/s. BSI Ltd., Nagpur; Dr. K. Narsaiah, ADG (Process Engineering), ICAR; and Shri Ram Bohra from AICOSCA, Mumbai, shared their valuable insights and ideas on post-harvest processing of cotton, highlighting key areas for the Institute to prioritize during the Amrit Kaal, as part of the panel discussion. Additionally, Dr. K. R. K. Iyer, former Director of ICAR-CIRCOT, Mumbai, presented highlights of the Institute's century-long journey in research excellence. During the award ceremony, the dignitaries unveiled three publications and a Cotton Dashboard. Best employees of the Institute, high-achieving startups, the team behind the construction of the Centenary Pillar, and the Presidents of the ISCI and IFS societies were recognized and honoured for their invaluable contributions.

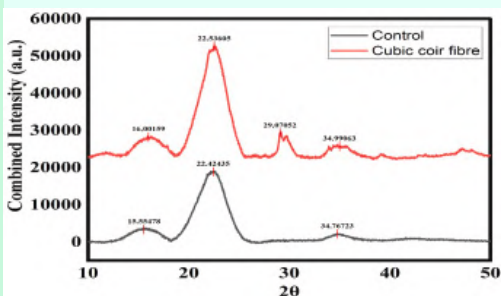
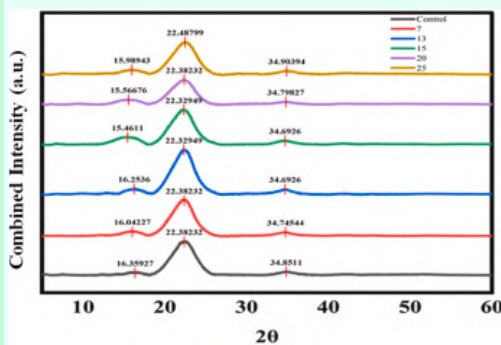


State-of-the-Art Lab Facilities Inauguration

The Pilot Plant Facility for Protein Extraction and the Genome Editing Laboratory were inaugurated at the hands of Dr. Himanshu Pathak, Secretary (DARE) and Director General (ICAR), New Delhi. These state-of-the-art facilities aim to bridge the gap between research and practical applications. By focusing on translational initiatives, they are designed to convert innovative scientific discoveries into market-ready solutions. These facilities signify a major step forward in agricultural and biotechnological research. They emphasize the importance of aligning cutting-edge science with real-world needs. This initiative highlights the commitment to fostering innovation for societal and economic benefits.

Agri Startup Conclave 2024

As part of ICAR-CIRCOT's Centenary Celebration, the ICAR-CIRCOT RAFTAAR Agri Business Incubator hosted the Agri Startup Conclave 2024 during December 3–4, 2024, under the theme "Fuelling Agri-Innovation: Empowering Entrepreneurial Passion for a Sustainable Future." The event showcased 30 pioneering startups, each presenting advancements in agricultural innovation. The conclave brought together innovators, investors, government representatives, and key stakeholders to foster collaboration and growth in the agricultural sector. As ICAR-CIRCOT celebrates 100 years of excellence, the Agri Startup Conclave 2024 stands as a testament to its commitment to nurturing innovation and driving progress in agriculture.



Technology of the Month

Coir-Composite cube-Reinforced Concrete with improved strength

In order to enhance the compressive strength of conventional concrete the coir composite cubes were incorporated as a partial replacement for coarse aggregates in concrete. Optimum performance was achieved with a 28% fibre volume fraction (coir fibre to resin) and 18% coarse aggregate replacement. The developed coir composite cube-reinforced concrete exhibited an improvement in the compressive strength at 34 MPa, which is 17% higher than that of the conventional concrete. This significant improvement in the compressive strength demonstrates the potential of coir composite cubes as an effective and sustainable alternative to traditional coarse aggregates.



MoUs Signed

(i) MoU with M/s. Vicram Yarns and Fibers, Bengaluru for "Optimization of cotton linter processing for producing nitrocellulose grade liners" was signed on December 03, 2024.

(ii) Memorandum of Agreement (MoA) with M/s. Kolba Organics LLP., Nagpur, for "Disposal and Value addition of cotton ginning waste in vermicomposting", CIRCOT R-ABI 7th COHORT startup, on December 03, 2024.

Copyrights Granted

(i) Copyright grant for "Plant Patho Ppi: Plant-Pathogen Protein-Protein Interaction Prediction Tool" 2024 (Dr. Himanshushekh Chaurasia as co-developer).

(ii) Copyright grant for, "ACRCASPPI: Anti-Crispr and Crispr-Cas Protein-Protein Interaction Prediction Tool" 2024 (Dr. Himanshushekh Chaurasia as co-developer).



Human Resource Development

(i) Dr. T. Senthilkumar attended one day Capsule Course on Textile Machinery at Western Regional Laboratory, organized by BIS, at Mumbai on December 20, 2024.

(ii) Demonstration of the 'Turbiscan Lab' instrument, which is used to analyze the stability and shelf life of suspension / nanoparticle suspension, was arranged on December 11, 2024 by M/s. Verder Scientific, Hyderabad, for all staff of the Chemical & Biochemical Processing Division.

Awareness Programme for Farmers

Ginning Training Centre, ICAR-CIRCOT, Nagpur in association with Confederation of Indian Textile Industry (CITI) -Cotton Development and Research Association (CDRA), Mumbai organized an awareness program for farmers under MGMG at village Khumari, Kalmeshwar (Taluka), Nagpur on Kisan Divas (National Farmers Day) on December 23, 2024. About 40 farmers participated including seven women.





Publications

- (i) Guruswamy Krishna Prasad, Nandan Kumar, Nachimuthu Shanmugam, A.S.M. Raja, Kasilingam Rajkumar, Anwar Hussian, Seema Patel (2024). Sustainable Approach for Development of cut-resistance seamless gloves using recycled para-aramid/cotton blends, *Cleaner Engineering and Technology*.
- (ii) Chaurasia, H., Arora, A., Raju, D., Marwaha, S., Chinnusamy, V., Jain, R., and Haque, M.A. (2024). PanicleDet: a deep learning-based model for detection of panicle stages in paddy. *Neural Computing and Applications*.

Skill Development Programmes

- (i) ICAR-CIRCOT, Mumbai conducted a 3-day specialized training on *Electrospinning for Nanofibre Production* during December 18-20, 2024. Eight lady participants from academia and research institutes attended the training.
- (ii) GTC Nagpur in association with CITI-CDRA, and TEXPROCIL, Mumbai organized a one-day on-site training programme on *Best Cotton Picking and Post-harvest Management Practices for the Production of Kasturi Quality Cotton* on November 28, 2024 at Seloo, Wardha. About 150 farmers including 15 females participated in the programme.
- (iii) GTC Nagpur conducted a training on *Double Roller Ginning Technology and Basics of Cotton Grading* for Schedule caste community under SCSP scheme during December 18-20, 2024. Total 40 participants including 23 female participants attended the training programme.

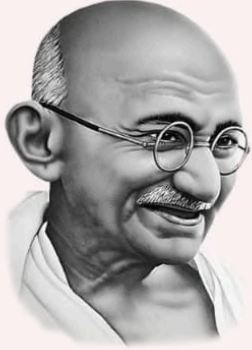


Books published on the occasion of Centenary Celebration

- N. Vigneshwaran, C. Sundaramoorthy, A. K. Bharimalla, V. G. Arude, G. T. V. Prabu, P. Jagajanantha, Ajinath Dukare (2024) *Contribution of ICAR-CIRCOT in Nation Building*. Published by ICAR-CIRCOT Mumbai, pp. 1-80.
- Raja ASM, Arputharaj A, Senthilkumar T, Prabhu GTV, Jagajanantha P, Jalgaonkar K, Patil S, Pandiselvam R, Manickam S. (2024) *ICAR-CIRCOT's strategic role in improving Indian cotton quality through AICRP on cotton*. Published by ICAR-CIRCOT Mumbai, pp. 1-143.
- Arude VG, Jalgaonkar K, Mahawar MK, Kautkar S, Dhakane-Lad J, Patil S, Satankar V. (2024) *Cotton: Grading, Ginning, Marketing & By product utilization*. Published by ICAR-CIRCOT Mumbai, pp. 1-171.
- Manoj Puniya, Kanika Sharma, Sujata Saxena, C. Sundaramoorthy, A. Arputharaj, R. Pandiselvam, Krishna Prasad and Sheshrao Kautkar. (2024) *Cotton in Indian Circular Economy: A Journey from Field to Fashion*. Published by ICAR-CIRCOT Mumbai, pp. 1-176.
- *Centenary Souvenir* (2024) Eds. S.K. Shukla, S. Saxena, V.G. Arude, C. Sundaramoorthy, A. Arputharaj, G. T. V. Prabhu, K. Pandiyan, S. Patil, R. Pandiselvam, J. Dhakane-Lad, M.K. Puniya, M.K. Mahawar, S. Kautkar, K. Sharma & H. Chaurasia. Published by Indian Fibre Society, Mumbai. pp. 1-61.



भा.कृ.अनु.प.-केंद्रीय कपास प्रौद्योगिकी अनुसंधान संस्थान, मुंबई
(कृ.अनु.शि.वि., कृषि एवं किसान कल्याण मंत्रालय, भारत सरकार)



स्वच्छ भारत अभियान



एक कदम स्वच्छता की ओर



स्वच्छता पखवाड़ा
16 दिसंबर
से
31 दिसंबर



Field Visits by Scientists



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