





Global Excellence in Cotton Technology

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New Projects Initiated

- 1) 'Safety of cottonseed protein isolate for human consumption: Validation through in-vitro toxicological studies' under the Indo-German Science & Technology Centre (IGSTC)-Small Immediate Need Grant (SING) [IGSTC-SING 2023] initiative, with a budget of Rs. 9.00 lakhs.
- 2) 'Development of portable instrument to measure cotton quality at farm gate and textile industries' with a budget of Rs. 56.64 lakhs funded by Rajiv Gandhi Science and Technology Commission (RGSTC).
- 3) 'To Assess the Farmer's Behaviour on Production and Marketing of Cotton in India' with a budget of Rs. 17.70 lakhs, funded by Cotton Corporation of India (CCI).
- 4) 'Design and development of seed cotton baling machine for effective handling and storage', with budget of Rs. 58.73 lakhs funded by Rajiv Gandhi Science and Technology Commission (RGSTC).



IRC Meeting

The 125th Annual Institute Research Council (IRC) meeting of the Institute was held during May 01-02, 2025 under the chairmanship of Dr. S. K. Shukla, Director, ICAR-CIRCOT, Mumbai to review the ongoing research projects and to initiate newer areas of research.



Human Resource Development

A two-day awareness programme was conducted by Dr. R. K. Sharma, Lead Assessor of ISO 9000-2015, NABL Lead Assessor of ISO/IEC-17025, 17043 & 17034 on the topic, 'ISO 17043: Conformity Assessment – General Requirements for the Competence of Proficiency Testing Providers' and 'ISO 17034: General Requirements for the Competence of Reference Material Producers' for the scientific and technical staff of the institute on May 21-22, 2025.



National Seminar on Ginning

A half-day National Seminar (in hybrid mode) on "Potential for Improvement of Indian Ginning Sector" was organized by ISAE Mumbai Chapter in collaboration with ICAR-CIRCOT on May 26, 2025 in VC Hall, ICAR-CIRCOT, Mumbai, and attended by stakeholders from the Textile Industry, Cotton Associations, Textile Committee, CCI and scientists/technical officers of the institute. Total about 100 delegates participated.



World IP Day

The World IP Day was celebrated on May 02, 2025, by organizing an online lecture on 'Innovator's Mindset: Intellectual Property as the Foundation for Scientific Breakthroughs', delivered by Dr. Avinash Thakur, Senior Director at Accures IP Care, New Delhi.

Leaflets in Marathi Language

Under the Viksit Krishi Sankalp Abhiyaan (VKSA), four leaflets in Marathi language are published as given below.

- 1. Swachh Kapus Vechnisathi Sarvottam Sheti Padhati [Best Farming Practices for Clean Cotton Picking]
- 2. Kaapus Pikaachya Avashesh Vyavasthapanasaathi Sarvottam Sheti Padhati [Best Farming Practices for Cotton Crop Residue Management]
- 3. Kapus Vahatuk Aani Saathavnukisaathi Sarvottam Sheti Padhati [Best Farming Practices for Cotton Transportation and Storage]
- 4. Kaapsaacha Utpannaat Vaadh: Yogya Biyaanyanchi Nivad Va Tantu Gunavatteche Mhahatva [Increasing Cotton Yield: Importance of Right Seed Selection and Fibre Quality]

Publication

 Kautkar S, Pandey JP, Singh A, Kumar A, Raj R, Patil AK, Mahawar MK, Jagajanantha P, Bharimalla AK, Singh SK (2025). Development and optimization of ohmic heating device for extraction of oil from enzymatically hydrolyzed rapeseed slurry using multilevel factorial design. Agriculture Association of Textile Chemical and Critical Reviews Journal (2025) 482-489.



International Yoga Day Celebration

In the modern work environment, where demands are constantly rising, employees often face considerable mental and physical stress. Prolonged hours at a computer, pressure to meet targets, and the struggle to maintain work-life balance all contribute to fatigue, health issues, and decreased productivity. In this context, yoga offers a comprehensive remedy. More than just a form of physical exercise, yoga supports mental clarity, emotional stability, and spiritual well-being. Introducing yoga in the workplace is a practical and impactful approach to enhancing employee efficiency, fostering mental calmness, and boosting the overall productivity of an organization. As per the directive from the Ministry of Ayush, Government of India, the 11th International Day of Yoga 2025 was celebrated by the Institute on May 30, 2025 at 4.00 pm in the green environment set up (HARIT YOGA). All employees of the Institute actively participated in this programme.

TIMES CITY

CIRCOT-BSIL make pre-grooved rollers tech

Nagpur: In a breakthrough for Indin's cotton sector the ICAR-Central Institute for Research on Cotton Technology (CIRCOT) in Mumbai, in collaboration with M/s Bajaj Steel Industries Limited (BSIL) in Nag-pur, developed an innovative preoved ginning roller technology. This advancement, spearheaded by scientists Dr Sheshrao Kautkar, Dr SK Shukia, Dr VG Arude, and Er DU Patil, promises to revolutionise cotten ginning, a critical process in In-dia's cotton value chain that sup-

Cotton ginning involves separa ting lint from seeds using machines ting lint from seeds using machines called gins, with double roller (DR) gins being the most common in India. DR gins rely on chrome leather rollers with shallow 2 mm grooves that wear down due to fric-

high pressure operations at 100 rpm.
This causes fibre slippage, reducing ginning efficiency and requiring

labour-intensive re-grooving every 2-3 days, which involves three workers and 20-30 minutes per machine, increasting downtime and costs.

The pre-grooved rollers address these challenges with spiral grooves up to 25mm deep, created by compressing 100-110 chrome leather washers onto a metallic shaft and precision-grooving them. Compatible with various gin models, including

COTTON FILLIP single and DR gins, these rollers maintain consistent surface roughness, eliminating the need for frequent re-grooving. This reduces labour and energy costs by 10%, mi-nimises downtime, and boosts lint output without compromising fibre quality parameters like seed cuts,

The technology proved its worth in commercial settings, with 1,000 units across 40 ginning mills in Maharush-tra. Shree Krishna Cotton Company in Malegaon, Nagpur, a pioneer in adop ting this technology operates 56 DR gins on pre-grooved rollers.

Proprietors Narendra and Gauray Chandak report a lint output hike from 63.0 kg/hour/gin to 70.0 kg/hour/gin. raising capacity from 20.5 to 23 bales. hour. This translates to an additional 2.5 bales/hour, saving Rs 3,000/hour at Rs 1,300 per bale. The technology also cuts energy and labour costs by 10%

ICAR-CIRCOT Technology in newspaper



Launch of Viksit Krishi Sankalp Abhiyan

Technologies developed by ICAR-CIRCOT were showcased by Dr. S. K. Shukla and team at the exhibition held during the launch of the **Viksit Krishi Sankalp Abhiyan** by Hon'ble Union Minister Shri Shivraj Singh Chauhan and Maharashtra CM Shri Devendra Fadnavis in the presence of Dr. M. L. Jat, Secretary DARE and DG ICAR, at NBSSLUP, Nagpur on May 18, 2025.

Launch of Viksit Krishi Sankalp Abhiyan in Maharashtra

The 53rd 'Joint Agricultural Research and Development Committee Meeting - 2025' (AGRESCO) of the four agricultural universities of Maharashtra was held at Vasantrao Naik Marathwada Agricultural University, Parbhani from May 29 to 31, 2025. The event was inaugurated on May 29 by the Hon'ble Chief Minister of Maharashtra, Shri Devendra Fadnavis. Also present were Shri Ashish Jaiswal, Minister of State for Agriculture, Smt. Meghana Bordikar, Minister of State, Shri Vikas Chandra Rastogi, Principal Secretary of Agriculture, and the Vice Chancellors of all state agricultural universities. Dr. S. K. Shukla shared an overview of the research and development activities and technologies developed at ICAR-CIRCOT, Mumbai. This event also marked the launch of the Viksit Krishi Sankalp Abhiyan in Maharashtra state.

ICAR-CIRCOT Scientists in Viksit Krishi Sankalp Abhiyan (29-5-2025 to 12-6-2025)







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जनजागृती • प्रभारी जिल्हाधिकारी नरेंद्र फुलझेले : कृषी संकल्प अभियान, शास्त्रज्ञ बांधावर

शास्त्रज्ञाचा सल्ला घ्यावा

 वर्धा, ब्युरो. जिल्ह्यामध्ये विकसित कृषी संकल्प अभियान 29 मे ते 12 जूनदरम्यान राबविण्यात येत आहे. या अभियानाची सुरुवात जागरूकता रथाचे उद्घाटन करून प्रभारी जिल्हाधिकारी नरेंद्र फुलझेले यांच्या हस्ते बरबडी येथे करण्यात आली. शेतकऱ्यांनी नवीन तंत्रज्ञान व अधिक उत्पन्न देणारे वाण याविषयी माहिती जाणून घ्यावी. अभियानादरम्यान शास्त्रज्ञ शेतकऱ्यांसोबत थेट संवाद साधणार असून या संधीचा लाभ घ्यावा, असे आवाहन प्रभारी जिल्हाधिकाऱ्यांनी यावेळी संबंधित अभियान भारतीय कृषी अनुसंधान परिषद, कृषी विज्ञान केंद्र, कृषी विभाग, आत्मा, बजाज कृषी महाविद्यालय व इफ्कोच्या संयुक्त विद्यमाने आयोजित करण्यात आले आहे. उद्घाटनप्रसंगी विकसित कृषी संकल्प अभियानाची



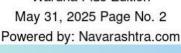
संकल्पना वरिष्ठ शास्त्रज्ञ व प्रमुख डॉ. जीवन कतोरे यांनी सांगितली. आत्माच्या उपसंचालिका राणी गायकवाड यांनी शासनाद्वारे राबविल्या जाणाऱ्या योजनांची माहिती दिली. आयसीएआर, सिरकोट, मुंबई येथील प्रमुख शास्त्रज्ञ डॉ. विष्णू अरुडे व डॉ. शेषराव कौटकर यांनी कपाशी पिकाबद्दल मार्गदर्शन केले. कृषीविद्या विषयतज्ज्ञ डॉ. रुपेश झाडोदे यांनी सोयाबीन पीकपद्धती विषयी माहिती दिली. पशुवैद्यकीय महाविद्यालय नागपूर येथील डॉ. चेतक पंचभाई यांनी जनावरांच्या लसीकरणाबाबत, डॉ. सचिन मुळे यांनी पशूंची निगा कशी राखावी या विषयी, डॉ. प्रेरणा धुमाळ यांनी महिलांना गृहउद्योग सुरू करताना आवश्यक बाबी याबद्दल मार्गदर्शन केले. या दरम्यान शेतकऱ्यांना डोन फवारणी तंत्रज्ञानाचे

शेतकऱ्यांमध्ये जनजागतीसाठी कुषी रथ

अभियानादरम्यान वर्घो तालुक्यातील मांडवगड, येसंबा, गोजी, भानखेडा, धानोरा या गावातील शेतकऱ्यांना खरीप पीकपद्धती, माती परीक्षण, अझोला उत्पादन, जनावरांनाची निगा, मशरूम उत्पादन या विषयी शास्त्रज्ञांनी मार्गदर्शन केले. तसेच गावांमध्ये कृषी जागरूकता रथ फिरविण्यात आला.

प्रात्यक्षिक डॉ. सविता पवार व गजानन म्हसाळ यांनी करून दाखविले. राजेंद्र खर्चे यांनी कीड व रोग नियंत्रण याविषयी मार्गदर्शन केले. अभियान राबविण्याकरीता उपविभागीय कृषी अधिकारी वैष्णवी शिंदे, तालुका कृषी अधिकारी एस. एस. मुढे, प्राचार्य डॉ. देशमुख, डॉ. किरणापुरे, गटविकास अधिकारी गोपाल दासरवार, कुणाल बुलकुंडे, पायल उजाडे, वैभव चौधरी, ऋतुजा कोरडे, वसीम खान आदींनी सहकार्य केले.

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