

A Monthly Insight into the ICAR-CIRCOT

e - News Letter

December 2015, Vol.2. No.9

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Director's Desk...

The International Cotton Advisory Committee (ICAC) met in Mumbai, from December 7th – 11th, 2015 for its 74th plenary meeting. The meeting was attended by 398 delegates including representatives from 28 member countries, 9 International organizations and 13 Non-member countries. After five consecutive seasons of excess supply, overall production had fallen below the estimated consumption in the 2015/16 season. World stocks remain at very high levels i.e. 22.02 million metric tons, International prices remain weak. Cotton demand continues to expand at a slow rate. Projected cotton production of India for 2015/16 is 6.27million metric tons and ranks 1st in the world.

Indian Council of Agricultural Research celebrated 'Jai Kisan Jai Vigyan' Week from December 23-29, 2015 on the birth anniversary of former Prime Ministers Shri Atal Bihari Vajpayee and Late Shri Chaudhary Charan Singh. The celebration is being organized keeping in view their immense contribution for promoting use of science for the welfare of farmers. ICAR Institutes and KVKs across the country are organizing various farmer awareness programs aiming showcasing and demonstration of new technological advances for enhancing productivity and profitability of agriculture. Progressive farmers who have successfully adopted latest technologies and have made contribution in wide scale adoption of technologies by farmers were honored.

ICAR-CIRCOT celebrated 'Jai Kisan Jai Vigyan' by organizing workshop to create awareness among cotton farmers on preparation of different value added products from cotton stalks and other agro-residues, On-farm Demonstration of "Clean cotton picking technology" to farmers and lecture on "Indian agriculture: Current scenario".

P.G. Patil









Technology Insight/Exhibition



Technology Insight

Surface Modification Process for Banana Fibres for Use in Composite Making

The natural fibre reinforced composite materials have successfully substituted the traditional materials in several lightweight and high strength applications. The banana fibre is difficult to use in the fibre reinforced composites due to its moisture absorption and poor fibre-matrix adhesion properties. overcome this problem, Xylanase enzyme treatment was used for modifying the fibre surface properties of banana pseudo stem so that the composites made will have better mechanical properties. The morphological analysis shows that the surface roughness of the banana fibre increased with increase in concentration of the enzyme. The changes in the fibre surfaces and functional groups will help in better fibre-matric compatibility and increase the mechanical properties of the composites.

Exhibition

7th AGROVISION 2015

ICAR-CIRCOT, Mumbai along with Ginning Training Centre, participated in 7th AGROVISION held at Reshimbhag Ground, Nagpur, during 11-14th December, 2015. The exhibition was inaugurated at the hands of **Shri Nitin Gadkari**, Chief Patron, Agrovision;

Hon'ble Minister of Road Transport and Highways; Shipping in the presence of Shri Devendra Fadnavis, Chief Minister, Maharashtra and Mrs. Vasundhara Raje Scindia, Chief Minister, Rajasthan. It has emerged as one of the largest Agri-**Summit** in Central India with the primary aim to increase farm yield and making agriculture an economically viable and sustainable profession. In this event, about 5 lakh farmers participated and over 300 exhibitors demonstrated their technologies. In addition, 52 experts from across the country delivered lectures as resource persons in 42 comprehensive workshops. Shri Radha Mohan Singh, Hon. Union Minister of Agriculture and Farmers Welfare visited ICAR stall and witnessed demonstration of Liliput ginning machine. Many farmers, Entrepreneurs, representatives of Mahila Bachat Gat visited **ICAR-CIRCOT** exhibition stall and interacted with institute staff. The visitors were briefed about the post-harvest technologies in the field of cotton and informed about the training and testing facilities available at the Institute.



Exhibition





ICAR – CIRCOT Stall at Agro vision Exhibition, Nagpur



Demonstration of Lilliput ginning machine to visitors (Nagpur)







Meeting

Participation of CIRCOT in 74th Plenary Meeting of International Cotton Advisory Committee held at Mumbai

ICAR-CIRCOT participated in 74th Plenary Meeting of International Cotton Advisory Committee (ICAC) which was held during December 06-11, 2015 at J W Marriott, Andheri, Mumbai. The theme of this summit was 'From Farm to Fabric: The many faces of Cotton.

Officials from about 41 cotton producing countries participated in this meeting and 7 exhibitors such as Cotton Association of India, APACHI cotton, Bajaj Steel Ind. Ltd. etc including ISCI-CITI-CRDA-ICAR-CIRCOT put their respective stalls for six days. During this event many cotton experts spoke on topics related to Sustainable Agriculture, World Cotton Market, Cotton by-products, Climate change and Cotton etc. Many dignitaries, and national as well as international visitors visited ISCI-CITI-CRDA-ICAR-CIRCOT stall and interacted with the institute staff.



Mr. Santosh K Gangwar, Hon. Minister of state for Textiles along with dignitaries at ISCI-CIRCOT-CITI-CRDA stall (Mumbai)



74th Plenary Meeting - ICAC



Mr. Sanjay Panda, Secretary, Ministry of Textiles at ISCI-CIRCOT-CITI-CRDA stall (Mumbai)



Dr. Kavita Gupta, Textile Commissioner and other dignitaries at ISCI-CIRCOT-CITI-CRDA stall (Mumbai)



74th Plenary Meeting - ICAC





Dr. C. D. Mayee, Former ASRB Chairman Dr. A. J. Shaikh, Former Director, CIRCOT visited exhibition stall (Mumbai)



International delegates with ICAR-CIRCOT staff at exhibition stall (Mumbai)

Meeting/Event





Half-yearly Institute Research Council Meeting

The Half-yearly Institute Research Council Meeting was held on December 22 & 23, 2015 at Dr. V. Sundaram Committee Room to review the progress of all research projects implemented in the institute. Dr. P.G. Patil, Director, ICAR-CIRCOT was in the chair, Dr. A. J. Shaikh, former Director and Dr. R.P. Nachane, former Head, QEID as the subject matter experts, all Heads of Divisions, Scientists and Technical Officers above T-(7-8) attended the meeting. Institute as well as externally funded projects were discussed in the meeting. New project proposals were presented by the scientists.

NABL Audit ISO/IEC17025:2005

The National Accreditation Board for Testing Laboratories and Calibration (NABL) conducted the NABL reassessment audit for ISO/IEC17025:2005 accreditation of institute on 19-20th December, 2015. Shri C.R. Venkitachalam, Lead Assessor & Technical Assessor for chemical Testing and Shri C.R. Prayag, Technical Assessor for Mechanical testing, conducted audit in the Quality Evaluation and **Improvement** (QEID), Mechanical Processing (MPD), Chemical & Bioprocessing Division (CBPD) and Test House, which come under the scope of NABL. There was opening meeting in the forenoon on 19th December and closing meeting in the afternoon of 20th December, 2015. During the closing meeting, the Assessors expressed satisfaction over Reliability of Testing of CIRCOT as per ISO/IEC17025:2005.

Event

Mera Gaon Mera Gaurav

To implement MGMG programme, six groups consisting of four scientist each adopted 30 villages to promote best farming practices and government's policies. Group consisting of Dr.Sujata Saxena, Principal Scientist (Organic Chemistry) Dr. R. Guruprasad, Scientist (Textile Manufacturing), Arputharaj, Scientist (Textile Chemistry), ICAR-CIRCOT, Mumbai and Er. Varsha Satankar, Scientist (Agricultural Structure and Process Engineering) (GTC, Nagpur) visited five villages Anji, Dorli, Majra, Pavnur and Satoda located in Wardha district of Maharastra. The baseline data of the selected villages was collected by the team during 30th November to 2nd December, 2015.



Discussions with cotton farmer Shri Sanjeeth Karande, Satoda village, Wardha

Event







Meeting with Sarpanch and farmers at Majra panchayat office, Wardha (Maharashtra)

Jai Kisan Jai Vigyan Week Celebrations at ICAR-CIRCOT

ICAR-CIRCOT celebrated 'Jai Kisan Jai Vigyan' week during December 23-29, 2015. Dr. P.G. Patil, Director of ICAR-CIRCOT, initiated various activities at the headquarters and regional units in celebration of Jai Kisan Jai Vigyan week. At headquarters, a lecture was delivered by Dr. C. Sundarmoorthy, Senior scientist, Technology Transfer Division on

December 29th, 2015 on "Indian agriculture: Current scenario".All the scientific, technical and administrative staff of the institute attended the event.



Dr. C. Sundaramoorthy delivering the lecture on "Indian agriculture: Current scenario" as a part of celebration of "Jai Kisan Jai Vigyan" programme.



Dr. P.G. Patil, Director ICAR-CIRCOT addressing the gathering at ICAR-CIRCOT, Mumbai

Event





Ginning Training Centre (GTC) of ICAR-CIRCOT, Nagpur organised a farmers' visit to its campus on 28.12.2015. Around 20 farmers visited the facilities at GTC to understand the various activities related to post-harvest processing of cotton. A large scale Awareness workshop was conducted in the village of Ghorad, Seloo Tahsil, Wardha district on December 29th, 2015.

Around 120 farmers from Ghorad and nearby villages attended the event. The workshop was held to create awareness among cotton farmers regarding preparation of different value added products from cotton stalks and other agro-residues. The workshop was conducted in association with Agro Plus Foundation, Nagpur and CITI-CRDA, Mumbai.



CIRCOT Scientist, and Farmers during workshop on farmer centric activities initiated by CIRCOT at Ghorad, Wardha, Maharashtra



Dr. S. K. Shukla felicitating a progressive farmer from Ghorad village, Maharashtra







QE Unit of Sirsa has organised two awareness programmes to famers in celebration of Jai Kisan Jai Vigyan week. The programme "Unnat Krishi Takneek Aadharit Charcha" was organised on 23.12.2015 at Rangri village in the district of Sirsa, Rajasthan. Dr. Hamid Hasan, Officer In-charge, QE Unit, Sirsa; Dr. Rishi Kumar, Principal Scientist, CICR Regional station, Sirsa; Dr. OP Tuteja, Principal Scientist, CICR Regional Station, Sirsa and Shri Pyare Lal, Agricultural Development Officer, State Department of Agriculture, Sirsa participated in the programme.

Agricultural practices for the enhancement of Income of farmers by means of clean cotton picking, proper utilisation of cotton by-products, judicious use of pesticides and fertilisers and adoption of recommended pre and postharvest techniques were detailed to the farmers. On December 29th, 2015, a programme on "Accelerated process for preparation of compost from cotton plant residues" was organised at Shahpur Begu village of Sirsa district, Rajasthan.

ICAR-CIRCOT QE unit at Coimbatore conducted an On-farm Demonstration of "Clean cotton picking technology" to local farmers of Coimbatore district, Tamil Nadu. Twenty women farmers participated in the event. Dr. S. Venkatakrishnan, Officer-In charge and other staff of the centre conducted the above programme. Clean cotton picking kits were distributed to the farmers during the event.



Dr. Hamid Hasan interacting with the famers as a part of celebration of "Jai Kisan Jai Vigyan" programme (Haryana)



Dr. S. Venkatakrishnan explaining clean picking women famers cotton Coimbatore, Tamil Nadu as a part of celebration of "Jai Kisan Jai Vigyan" programme

Swachh Bharat Abhiyan



Institute staff during undertaking the cleaning activities on 1st December, 2015 in the Institute

Event/ Director's Visit





Demonstration on Fire Fighting

A demonstration on firefighting was arranged as a part of making staff aware of fire safety on December 08, 2015 in the institute premises. It was demonstrated by Shri S.V. Kokane, Incharge, Security and Housekeeping.



Fire Fighting Demonstration for staff of the Institute

Director's Visit

 Dr. P. G. Patil, Director, ICAR-CIRCOT attended the "Demonstration on Mechanical Picking of Cotton" jointly organised by Vasantrao Naik Marathwada Krishi Vidyapeeth (VNMKV), Parbhani, M/s.Monsanto India Ltd., M/s. New Holland Tractors and to took part in the "Farmers Mela" held at NARP, Aurangabad on 11th December, 2015.

Mr. Umakant Dangat, Divisional Commissioner, Govt. of Maharashtra State and Hon'ble Vice Chancellor, VNMKV were present along with Joint Director Agriculture, Superintending Agricultural Officer. Harvesting machine has two rowsspindle pickers with capacity to cover 1.5 – The machine picked cotton 2 Acre/h. samples were sent to Ginning Training Centre of CIRCOT at Nagpur for further processing in terms of trash percentage and cleaning trials. In addition, He delivered a talk on "Mechanical cotton picking with reference to trash in seed cotton and machinery required to remove the trash and further ginning protocol to handle machine picked cotton".

2. Dr. P. G. Patil, Director, ICAR-CIRCOT delivered a lecture on 'Cotton by-products and its potential industrial application' at 74th Plenary Meeting of International Cotton Advisory Committee (ICAC) on December 8th, 2015 at J W Marriott, Andheri, Mumbai.



Dr. P. G. Patil, Director, ICAR-CIRCOT delivering lecture on Cotton By-product and their uses



Visit of Dignitaries



Visit of Dignitaries

Visit of ICAC delegates to GTC, Nagpur

A group of 38 delegates from eight countries (Egypt, Zimbabwe, Kenya, Mali, Uzbekistan, Sudan, Uganda and Zambia) of 74th ICAC Plenary Meeting visited GTC, Nagpur on Dec 12, 2015.

Dr. S. K. Shukla, Sr. Scientist & Officer Incharge, demonstrated CIRCOT technologies, testing facilities and plants to the delegates. International training programmes offered by CIRCOT on ginning and value addition to cotton produce was also elaborated to them.



Demonstration of lab model gin to 74th ICAC Plenary Meeting Delegates at GTC, Nagpur



Group Photo: 74th ICAC Plenary Meeting Delegates along with officials of GTC, Nagpur



Visit of Dignitaries



Visit of Textile Commissioner to GTC, Nagpur

Dr. Kavita Gupta, Textile Commissioner, Ministry of Textiles, Govt. of India visited GTC, Nagpur on Dec 26, 2015. Dr. S. K. Shukla, Sr. Scientist and Officer In-charge elucidated various CIRCOT activities, technologies, training and testing facilities to the Textile Commissioner.

She lauded the training infrastructure, machinery and expertise available with GTC for conducting research, imparting training and offering consultancies. She appreciated the collaboration of CIRCOT with private sector in designing, developing and marketing of various essential machinery for ginning industry. She urged CIRCOT for participation in Integrated Skill Development Scheme (ISDS) implemented by Textiles Committee, MOT, Mumbai.



Demonstration of High Volume Instrument to Dr. Kavita Gupta, Textile Commissioner, Ministry of Textiles, Govt. of India at GTC, Nagpur

Dr. Rafiq. M. Choudhry, Head, Technical Information Section, ICAC visited ICAR-CIRCOT on 5th

December, 2015



Dr.Rafiq. M. Choudhry at Nanocellulose Pilot Plant at ICAR-CIRCOT, Mumbai



Farmers and Student's visit/Conferences/Workshop



Farmers' Visit at GTC, Nagpur

A group of 20 farmers have visited GTC, Nagpur on Dec 29, 2015 from Taluka-Vadamalhara, Dist.-Chhatarpur, Madhya Pradesh. Dr. S. K. Shukla, Sr. Scientist & Officer In-charge, elaborated on appropriate logistics for collection of cotton stalks for value addition. The farmers were also explained on training programmes conducted by GTC, Nagpur and showcased CIRCOT technologies and demonstration plants.



Visit of a group of farmers from Madhya Pradesh at GTC, Nagpur

Student's visit to the Institute



Students of DKTE, Textile and Engineering Institute, Ichalkaranji visited CIRCOT on 22nd December, 2015 (31 Students).



Students of University of Agricultural Sciences, Bangalore visited CIRCOT on 28th December,2015 (32 Students).



Students of College of Agril. Engg. and Postharvest Technology, Ranipool, Gangtok visited CIRCOT on 23rd December, 2015 (35 Students)

Conferences/Workshop

- Dr. C. Sundaramoorthy, Senior Scientist, participated in 23rd Annual Conference of Agricultural Economic Research Association at CIFE, Mumbai on 2-4th, December, 2015.
- 2) Er. Ashok Kumar Bharimalla, Senior Scientist, participated in Conference on patinformatics for technological Competitive Intelligence and Licensing, 7th to 9th December, 2015, Pune.



Conferences/ Workshop/ Upcoming Event



- 3) Dr. P. G. Patil, Director, ICAR-CIRCOT participated in the 74th Plenary Meeting on 'From Farm to Fabric: The Many Faces of Cotton' organised by International Cotton Advisory Committee (ICAC), USA held at Mumbai on 8th December, 2015.
- 4) Dr. N. Vigneshwaran, Senior Scientist participated in "Indian Nanoelectronics Users Program (INUP) Familiarization Workshop on Nanofabrication Technologies" during 15-16th December, 2015 held at IIT Bombay, Mumbai.
- 5) Er. V. G. Arude, Scientist, Dr. S. K. Shukla, Sr. Scientist & Officer In-charge and Dr. V. Mageshwaran, Scientist participated and presented lead research papers on the occasion of National Symposium on 'Future technologies: Indian cotton in the Next Decade' at Acharya Nagarjuna University, Guntur jointly organized jointly by CRDA, Hisar and ANGRAU, Guntur during 17-19th December, 2015.
- 6) Er. V. G. Arude, Scientist and Dr. S. K. Shukla, Sr. Scientist and Officer In-charge participated and presented research papers in the international conference on 'Caring for People: Humanizing Work and Work Environment (HWWE)-2015' organised by IIT, Mumbai.

Upcoming Events

1) Training Course on "Quality Evaluation of Cotton" at ICARCIRCOT, Mumbai

Training Calendar for 2015 -16

S. No	From	То
1	04.01.2016	08.01.2016
2	11.01.2016	15.01.2016
3	08.02.2016	15.02.2016

Course Contents

- Advances in Ginning Technology
- Cotton Grading
- Cotton Crop By-products
- Fiber Length Measurement
- Demonstration in Fibre Fineness and Maturity
- Cotton fibre Testing using High Volume Instrument (HVI) and Advanced Fibre Information System (AFIS)
- Mechanical Processing of Cotton
- Contamination in Cotton and Marketing & Commercial aspect of Cotton
- Techno Entrepreneurial Activities and Business Planning Development
- Visit to Cotton Association of India

Fee: Rs. 5618/- (Inclusive of taxes)

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2) ICAR-CIRCOT and IFS is jointly organizing a "National Seminar on Recent Advances in Textile Finishing" on February 13, 2016 at CIRCOT Mumbai. For more details regarding registration, paper presentation please visit www.circot.res.in



Down Memory Lane





(Right to Left) - Shri Vasantrao P. Naik, Hon'ble Chief Minister of Maharashtra, addressing the gathering during the Golden Jubilee Celebrations of ICAR-CIRCOT, which at that time was known as Central Technological Research Laboratory, Mumbai on 29th December, 1974, Shri Jagjivan Ram, Hon'ble Union Minister for Agriculture and Irrigation, Dr. M. S. Swaminathan, Director General, ICAR and Dr. V. Sundaram, Director, CTRL, Mumbai.



ADDRESS FOR CORRESPONDENCE

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