

Cotton Innovate

A Monthly Newsletter from ICAR-Central Institute for Cotton Research, Nagpur



Contributed by Dr. P. Valarmathi, Scientist, Plant Pathology, ICAR- CICR, RS, Coimbatore

Post harvest drying of Cotton

Research Note Clipping
Identification of Host Cues from Cotton (*Gossypium hirsutum*) to elicit the behaviour of female Pink bollworm (*Pectinophora gossypiella*)

Rachna Pande, et al.,
Page 1 - 2

CICR Happenings:
World Cotton Day celebrated, Survey of Pink Bollworm, Farmers' training, Field visits, Visit of Nodal Officer, XVI Agriculture Science Congress & ASC Expo, Vigilance Awareness Week, Monitoring visit, Student Visit

Page 3-16

Happenings of AICRP Centres:
Page 17-19

Scientists' Corner:
Page 20-21

Cotton Statistics:
Page 22-23

Cotton in Media
Page 24-25



Research Notes- Clipping

Identification of Host Cues from Cotton (*Gossypium hirsutum*) to elicit the behaviour of female Pink bollworm (*Pectinophora gossypiella*)

Rachna Pande¹, Pooja Verma² and Prabhulinga T³

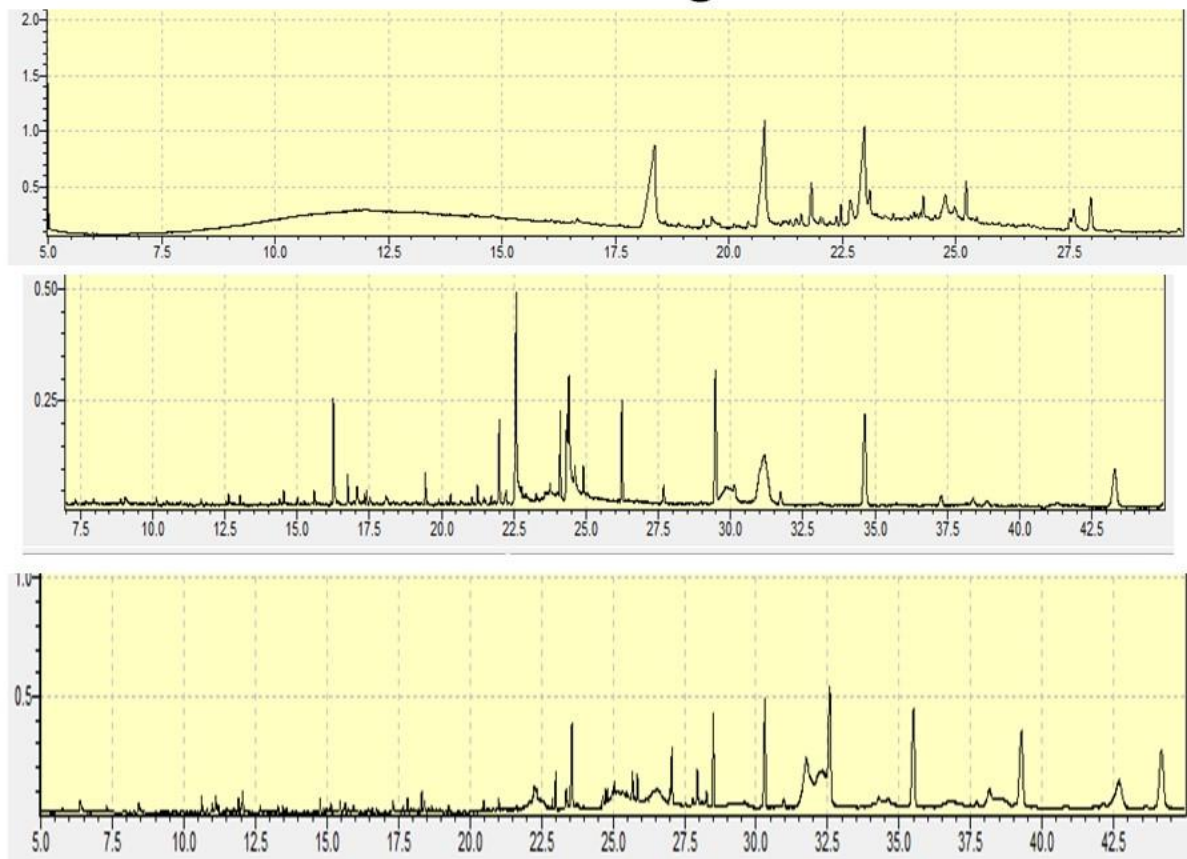
¹Senior Scientist, Agricultural Entomology, ICAR-CICR Nagpur

²Scientist, Plant Biochemistry, ICAR-CICR Nagpur

³Scientist, Agricultural Entomology, ICAR-NBAIR, Bengaluru

Use of sex attractant pheromones as predictive tools to forecast pest numbers or potential damage levels is significantly limited because attractants are usually directed at only one sex i.e. male. A few surviving males can fertilize a substantial number of females. Therefore, more successful control of Pink bollworms would be achieved by targeting females rather than males. Pink bollworm is a monophagous pest which greatly increases the scope for using semiochemicals to manage this noxious pest. Hence, plant volatile profile from different parts of the plant at different stages of the crop was studied for a particular damage window. The samples were collected at 35 to 135 Days after sowing at 25 days interval that was analysed under GCMS. Different stages of plants (*Gossypium hirsutum*, *G. raimondii*, *G. indicum*) like a leaf (tender, fully developed), square, bud, flower (yellow and pink), and bolls were taken as per the availability.

Chromatograms



A maximum of 69 compounds were detected and identified from *G. indicum* for tender leaf and a minimum 32 again from *G. indicum* but from flower (yellow). Compounds were compared among the spp. for different plant parts. Specifically, for the 50 DAS for matured leaf 7 compounds were among among the species, 4 compounds were common between *G. indicum* and *G. hirsutum*, 3 compounds between *G. raimondii* and *G. hirsutum*. Other than these common compounds each species have some specific compounds like 1 in *G. indicum* 6 in *G. raimondii* and 2 in *G. hirsutum*.

All the plant parts within the species were also compared. Surprisingly, a variation of compounds was exhibited by the plants on different days after sowing. For instance, in the tender leaf of *G. hirsutum*, 9 compounds were common and others may be present or absent or may be specific like in previous comparisons. 4H pyran was absent in the tender leaf of plants collected 125 DAS however it was present up to 100 DAS. Based on the literature, it was found that identified compounds are the components of sex pheromone, repellent, attractant, and insect hormone of many insects. Hence, these components individually or in blend can be harnessed to moderate the behaviour of pink bollworms.

CICR Happenings

World Cotton Day celebrated at ICAR, CICR-Nagpur

World Cotton Day was celebrated at ICAR-CICR, Nagpur on October 7, 2023 with the theme "Making Cotton fair and sustainable for all from farm to fashion".



The Ministry of Textiles marked World Cotton Day 2023 by organizing a conference on "Enhancing Quality & Productivity of Indian Cotton through Policy, Innovation, & Technology Upgradation." This event was conducted in collaboration with the Cotton Corporation of India (CCI) and the EU-Resource Efficiency Initiative, an initiative by GIZ.



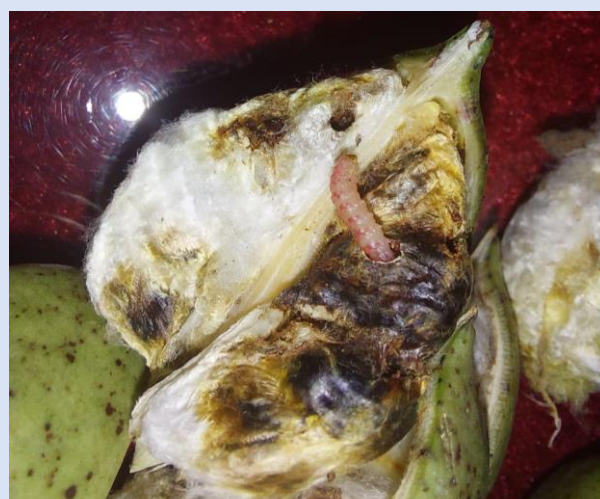
Brainstorming sessions addressed crucial topics, including "Enhancing Sustainability & Circularity in the Cotton Value Chain" and "Cotton Mission for Enhancing Quality & Productivity." Dr Y G Prasad, Director,

ICAR-CICR attended as Panelist – Session Cotton Mission for Enhancing Quality & Productivity on the World Cotton Day 2023 on 7th October, 2023 at New Delhi organized by The Cotton Corporation of India Ltd., New Mumbai.



Survey of Pink Bollworm affected cotton farmers' field in Hanumangarh and Sriganganagar districts of Rajasthan

The Department of Agriculture & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India has constituted a central team to review the Pink Bollworm affected cotton crop in Sriganganagar and Hanumangarh districts of Rajasthan during 09 - 10th of October 2023. The team comprising of Dr. Prabhulinga T., Scientist, ICAR-CICR, Dr. Sunita Pandey, Joint Director (Entomology), DPPQ&S, Faridabad, Mr. Satpal Singh, Technical officer, ICAR-CICR, RS, Sirsa, Dr. G. R. Matoria, Joint Director (Agril. Extension), Sriganganagar, Dr. B. R. Bakolia, Assistant Director of Agriculture, Hanumangarh. The team surveyed PBW affected farmers field from different blocks of Sriganganagar and Hanumangarh districts of Rajasthan. The detailed report on the possible reasons for the PBW and Bollrot damage to the cotton has been submitted to the Ministry of Agriculture & Farmers Welfare.





श्रीगंगानगर जिला भास्कर 10-10-2023

भास्कर पड़ताल • स्टेट डिजास्टर रिलीफ फंड नियमों के लिए किसानों को 2 से 34 हजार रुपए तक की मिल पाएगी राशि आचार संहिता से ऐन पहले सुंडी और आंधी-बारिश से प्रभावित किसानों के लिए 1125 करोड़ रु. का पैकेज

स्टेट डिजास्टर रिलीफ फंड नॉर्मस अनुसार ऐसे मिलेगी मुआवजा राशि

दो करोड़ तक की विशेष मुआवजा

किसानों में सुखी सूखी या जलोढ़ मिट्टी से पहले की बारिश के कारण होने वाली सूखे से किसानों को 2 से 34 हजार रुपए तक की मिल पाएगी राशि आचार संहिता से ऐन पहले सुंडी और आंधी-बारिश से प्रभावित किसानों के लिए 1125 करोड़ रु. का पैकेज स्टेट डिजास्टर रिलीफ फंड नॉर्मस अनुसार ऐसे मिलेगी मुआवजा राशि

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Farmers' training program at Chistur village, Nagpur district

A training programme on “Nutrient Expert Cotton Production” at Chistur village of Arvi taluka in Wardha district was organized by ICAR-CICR, Nagpur on 26.10.2023, under the CCI Pilot project on “Awareness and Extension Services on Best Farm Practices for Cotton Farmers to Improve Quality, Yield and Sustainability”. Dr. D. Blaise emphasized the advantages of potassium nutrition in cotton cultivation and the critical role of microbes in enhancing soil health. Dr. A. Manikandan elaborated on the pre-requisites for implementing the Nutrient Expert-based fertilizer management system. Dr. R. Jaya Kumaravaradan highlighted the principles of 4-R nutrient stewardship (Right source, right rate, right time and right place). About 85 cotton farmers have attended the programme held at farmer’s field.



Farmer training program at Adasa Village, Wardha district

A training Programme on “Integrated /Advanced Cotton Production Technology” was organized by ICAR-CICR, Nagpur at Adasa village of Kalmeshwar Taluka in Nagpur district on 26.10.2023 under the CCI Pilot project on “Awareness and Extension Services on Best Farm Practices for Cotton Farmers to Improve Quality, Yield and Sustainability”. Dr. Ramkrushna G.I. elaborated on the nutrient and irrigation management in HDPS cotton production technology.



Dr. Rahul M. Phuke explained the importance of cultivar selection in enhancing cotton productivity and informed about the newly released cotton varieties. Dr. Shailesh Gawande deliberated on the Integrated Disease Management in cotton with special reference to Grey Mildew and Boll Rot. Dr. Shivaji Thube explained the nuances of aerial spraying pesticides through drone. Dr. Babasaheb Fand elaborated the Integrated Pest Management with special reference to Pink Boll Worm. Later, a demonstration was conducted on aerial spraying of pesticide using drone. About 85 cotton farmers have attended the programme held at farmer's field.



Farmer field visits under the project “Targeting technologies to agroecological zones large scale demonstration of best practices to enhance cotton productivity”

The team comprising of Dr. Prabhulinga T, Scientist, ICAR-CICR, Nagpur and district nodal officer of Dharwad district of Karnataka, Dr. Shanwad, nodal officer, KVK, Dharwad and Mr. Sharat, representative of Rasi seeds of Dharwad district conducted the monitoring visits to the farmers’ fields under the project “Targeting technologies to agroecological zones large scale demonstration of best practices to enhance cotton productivity” in Dharwad district from 23rd and 25th of October 2023. A total of 16 farmers were selected from the district for demonstration of best practices to enhance cotton productivity by the KVK, Dharwad.



XVI Agriculture Science Congress & ASC Expo at Kochi

ICAR – CICR participated and showcased the cotton production and protection technologies at the XVI Agriculture Science Congress & ASC Expo organized by the National Academy of Agricultural Sciences (NAAS) at Kochi from 10 to 13th October 2023. An exhibition stall with 18 posters and live specimens were displayed at the event. Shri. Parshottam Rupala, Hon'ble Minister of State for Animal Husbandry, Dairying and Fisheries, Govt. of India and Hon'ble DG, ICAR visited our stall.



Visit of Nodal Officer, Cotton Special Project, Siddipet District (Telangana) to HDPS Cotton Fields on 16, and 17 October 2023.

As part of the Cotton Special Project, Training Programme on High-Density Planting System (HDPS) in Cotton was organized at Ahmidhipur (Vlg), Cheriya cluster of Siddipet District on 16 October, 2023 and in Chebarty (Vlg), Markook cluster of Siddipet District on 17 October, 2023. Dr. R. Raja, Principal Scientist (Agronomy), ICAR-CICR Regional Station, Coimbatore and Nodal Officer of Cotton Special Project, Siddipet District (Telangana) along with Scientific Team, EGVF-KVK, Medak and Mandal Agriculture Officer (Cheriya and Markook) participated in the programme. The team also visited the HDPS cotton fields of beneficiary farmers at Cheberthy, Ahmadipur, Tadoor, Gajwel villages and interacted with the farmers. Representatives from M/s. Nuziveedu seeds and M/s. Rasi Seeds also participated in the training cum field visit programme.



Monitoring of NFSM Special Project Cotton Fields in Mancherial district in Telangana and Participation in Farmers Training Programme and Field Day

Dr A. Sampathkumar, Senior Scientist (Plant Pathology), CICR RS Coimbatore, Nodal Officer for Mancherial district, Telagana monitored the NFSM Special Project Cotton Fields in Bellampally, Luettipet divisions in Mancherial district starting from 30 October to 1 November, 2023. He also participated in farmers training programme and fields days conducted in different villages. Dr Sivakrishna, Programme Co-ordinator and Head, KVK, Bellampally along other KVK Staff and Shri. Ilaiah, Territory Manager and his team, RASI Seeds Coordinated the visit and organized the training programmes and field days.



Survey on TSV incidence and collection of samples from Kurnool, Nandyal and Anantapur districts of Andhra Pradesh, 2023 and visit to TSV screening experimental field at RARS, Nandyal

Dr A. Sampathkumar, Senior Scientist (Plant Pathology), CICR RS Coimbatore conducted diagnostic field survey on TSV incidence of cotton from 4 to 6 October, 2023 along with Dr Sivaramakrishna, Scientist (Agrl. Entomology), RARS, Nandyal (ANGRAU). On 4 October, 2023, along with Dr Venkataramanamma, Senior Scientist (Plant Pathology) and Dr Lakshmi Kalyani, Scientist (Agronomy) from RARS, Nandyal he surveyed the cotton fields in Kurnool district. On 5th October, Kurnool and Anantapur districts and on 6th October, Kurnool and Nandyal districts were surveyed. On 6th October, 2023, experimental fields at RARS, Nandyal were observed along with Dr N C Vekateshwarlu, ADR, RARS, Nandyal.



Monitoring of AICRP on Cotton and ICAR Bt cotton trials (2023-24) in Telangana

Monitoring of AICRP on Cotton and ICAR Bt Cotton trials in Telangana State was carried out from 16 to 21 October, 2023 under the Chairmanship of Dr Rishikumar, Principal Scientist (Agrl Entomology) and Head, ICAR-CICR RS, Sirsa with a team comprising of Dr V Santhy, Principal Scientist (Seed Technology), ICAR-CICR, Nagpur, Dr A. Sampathkumar, Senior Scientist (Plant Pathology), ICAR-CICR RS, Coimbatore, Dr Rajesh Patil, Principal Scientist (PBG) and Head, ARS, Dharwad Farm, Dr Sanjay Kakade, Agronomist (AICRP on Cotton), Dr PDKV, Akola and Dr Shyam Pardeshi, Principal Cotton Breeder (Nath Biogene India Ltd, Aurangabad).



One day training Program on Fertilizer Management

In commemoration of World Cotton Day 2023, a one-day training program on Nutrient Expert®-based fertilizer management for cotton was organized on 9th October 2023 at Bhugaon village, Kamptee Taluka, Nagpur. The training program witnessed the active participation of 80 farmers from the neighboring villages of Bhugaon, Selu, Ninai, Zarap, Chikhali, Wadoda, and Palsad.

Vigilance Awareness Week:

Vigilance Awareness Week was celebrated by ICAR-CICR, Regional Station, Coimbatore from October 30 to November 4, 2023. The observance week commenced with an integrity pledge administered by Dr K. Rathinavelu, Head (i/c) and all the staff members of the Regional Station participated in the oath-taking ceremony.



National Unity Day: National Unity Day (Rashtriya Ekta Diwas) was celebrated at ICAR- Central Institute for Cotton Research, on October 31, 2023 to remember the birth anniversary of Sardhar Vallabhbhai Patel. Rashtriya Ekta Diwas was celebrated at ICAR-CICR, Nagpur on 31st October, 2023. All the staff of ICAR-CICR Nagpur took a pledge on National Unity Day.





At, CICR, RS, Coimbatore, the observance week commenced with an integrity pledge administered by Dr K. Rathinavel Head (I/c) of the regional station. About 57 staff members of the Regional Station including SRF, YP participated in the oath-taking ceremony.

Student Internship Program - Attachment of B.Sc. (Hons) Agricultural Students of Karunya Institute of Technology and Sciences with Research Station under RAWE

Fifteen students from Karunya Institute of Technology and Sciences underwent 30 days RAWE programme at ICAR-CICR, RS, Coimbatore from September 25, 2023 to October 28, 2023. The students interacted with all the scientists of the institute and got exposure to the entire research activities of the institute. They also underwent hands-on experience in lab activities carried out at the institute. Dr A. H. Prakash, Head, ICAR-CICR, Coimbatore was the Convener of the programme. Dr. S. Usha Rani, Principal Scientist (Agrl. Extension), D. K. Rathinavel, Principal Scientist (Seed Technology), Dr. P. Nalayini, Principal Scientist (Agronomy), Dr. J. Gulsarbanu Principal Scientist (Nematology) acted as Co-Conveners for the programme

Rastriya Swachhta Diwas

Special Swacchata Campaign was organised during 10th to 12th October, 2023. Various cleanliness activities under Swachhta Hi Sewa Abhiyan were undertaken at ICAR-CICR, Nagpur. Dr YG Prasad, Director, ICAR-CICR, Nagpur delivered the valedictory remarks and emphasized the importance of Cleanliness drive throughout year on 31st October 2023 on the account of Swacchata Campaign 3.0.





It was also observed at ICAR- CICR, Regional Station, Coimbatore during 23 October 2023, under the leadership of Dr. AH Prakash, Head, CICR, RS, Coimbatore. All staff members, SRF, YP participated in the programme and cleaned the office premises. The day was observed to promote cleanliness and educate people on how they can contribute to keeping Mother Nature clean and green.

Students visit ICAR-RS, Coimbatore

One hundred and eleven students of III BSC (Hons.) Agriculture from JSA college of Agriculture and Technology, Cuddalore visited CICR, Regional Station on October 05, 2023, to learn about the technologies in cotton. Dr. P. Valarmathi, Scientist (Plant Pathology) explained the research activities of the station.



Seventy students of final B.Sc.,(Hons.) Agriculture from Karunya Institute of Technologies and Science, Coimbatore as a part of their RAWE programme visited CICR, Regional Station on October 11, 2023. They interacted with Dr R. Raja, Principal Scientist (Agronomy) and got exposure to the field mechanization and other recent technologies related to cotton cultivation. They were given brief note on the research activities of the institute.

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Thirty nine III BSc (Hons.) Agri students from Sri Krishnadevaraya College of Agricultural Sciences, Alamuru, Ananthapuramu visited the Regional Station of ICAR, CICR, Coimbatore on October 13, 2023 as part of their study tour programme. The students interacted with Dr K. Shankar Ganesh, Senior Scientist (Entomology), and got exposure to the institute activities and ongoing research programmes of the station.



Ninety first year students from Sardar Vallabhbhai Patel International School of Textiles and Management (SVPISTM), Central University affiliated college in joint aegis with the Ministry of Textiles visited CICR Regional Station on October 13, 2023. Dr S. Manickam, Principal Scientist, Genetics and Plant Breeding, briefed on the inception of our institute, cotton improvement and the industrial needs in India. They were also given exposure to different cultivated species of cotton by Dr. K. Baghyalakshmi, Scientist (Genetics and plant Breeding).



Sixty final year Agricultural students from ANGRAU – Agriculture College, Mahanandi, Andhra Pradesh visited ICAR-CICR Regional Station, Coimbatore on October 19, 2022 as a part of their study tour programme. The students interacted with Dr K Rameash, Principal Scientist (Entomology), and got exposure to the institute activities. They got acquainted with the inception, research activities and significant achievements in various areas of the Station.



Twenty one diploma students from Department of Biotechnology, Sahrdaya College of Engineering and Technology, Kodakara visited CICR, Regional Station on 20 October 2023. Dr. K. Baghyalakshmi explained them about different cultivated species of cotton, biotechnology aspects, and modern breeding practices in cotton.



Hundred Botany UG students from NGM College, Pollachi visited our institute as part of their study tour programme on October 20, 2023. Dr. J Annie Sheeba, Senior Scientist (Plant Physiology) explained them about various research activities of the institute.



Happenings of AICRP Centres

Farmers Workshop Organized under CCI-ICAR-CICR Cotton BMPs Extension Project by Main Cotton Research Station, NAU, Surat

A Farmer's workshop was organized under CCI-ICAR-CICR Cotton BMPs Extension Project at APMC, Nizar, by Main Cotton Research Station, Navsari Agricultural University, Surat on the occasion of World Cotton Day Event Celebration on 7th Oct.2023. Dr. Z. P. Patel, Hon'ble Vice Chancellor, Navsari Agricultural University, Navsari presided over the function. Dr. Nikul Singh Chauhan, Director of Extension Education, NAU, Navsari was present. A total of 253 cotton growing farmers of Tapi district participated in the workshop. Hon'ble Vice Chancellor, NAU, Navsari visited the demonstration plot of drip irrigation of farmer, Shri Kiranbhai Sharadbhai Patel and interacted in detail about the technology and praised the farmers for continued cultivation of cotton since British era and urged them to adopt Bt cotton hybrids released from Main Cotton Research Station, NAU, Surat. To create awareness among the farmers of the region, the MCRS team has performed a very informative drama "JAG RE KHEDUT JAG" covering scientific approach in modern cotton cultivation and production which received great attention from the audience.



Inaugural function under the chairmanship of Honorable Vice chancellor, Dr. ZP Patel, Navsari Agricultural University



Audience of Farmers' workshop at Nizar



Farmer Workshop held under CCI-ICAR-BMP Project

A Farmer's Workshop was organized under CCI-ICAR-CICR Cotton BMPs Extension Project at Tuna village of Valia Taluka of Bharuch district by Regional Cotton Research Station, Navsari Agricultural University, Bharuch on 21st Oct. 2023. Dr. Z. P. Patel, Hon'ble Vice Chancellor, Navsari Agricultural University, Navsari presided over the function. About 266 cotton growing farmers participated in the event. The farmers were taught about best management practices of cotton by different scientists of Regional Cotton Research Station, Bharuch and Main Cotton Research Station, Surat.



Training Programme under CCI-ICAR-BMP Project

A Training program was organized under CCI-ICAR-CICR Cotton BMPs Extension Project at Valia Taluka of Bharuch district under the leadership of Dr. P. K. Agarwal, Advisor (Sustainability), CCI-Mumbai by Regional Cotton Research Station, Navsari Agricultural University, Bharuch on 25th Oct. 2023. About 56 cotton growing farmers of valia taluka participated in the event.



The farmers were taught about high quality cotton production with low and no cost technologies by different scientists of Regional Cotton Research Station, Bharuch and Main Cotton Research Station, Surat. Dr. PK. Agarwal, Advisor (Sustainability), CCI-Mumbai and Shri. AK Maheshwar Reddy, Regional Manager, CCI, Ahmedabad created awareness about Minimum Support Price of cotton and importance of selling cotton to Cotton Corporation of India. CCI officials also informed about role of Cotton Corporation of India in the upliftment of farmers in the country. The officers also visited the fields and discussed with beneficiary farmers on HDPS and drip fertigation.



AICRP team visits CRS, Talod

Monitoring team constituted by Director ICAR-CICR, Nagpur visited the Cotton Research Station, Talod and monitored the cotton breeding, agronomy and entomology trials on 17th October 2023. Interaction was carried out about strengthening the cotton improvement programme. Dr Shailesh Gawande Senior Pathologist gave information on disease identification and scoring.

CRS, Talod celebrated World Cotton Day

Cotton Research Station, Sardarkrushi Nagar, Dantiwada Agricultural University, Talod, celebrated "World Cotton Day" on 7th October 2023. Dr A G Patel, DEE presided over the function. Shri RK Patel, General Secretary, Kisan Sangh, Gujarat and Shri Satishbhai Somani MD, RSB Cottex LTD were the special guests of the programme. More than 90 farmers participate in the function. Discussion regarding para wilt, pest management and quality aspects in cotton was done. Some farmers expressed interest in organic cotton farming.



Scientists' Corner:

- Dr. S. K. Sain, Principal Scientist (Plant pathology) and Dr. Amarpreet Singh, Scientist (SS), Agronomy, ICAR-CICR, Regional Station, Sirsa monitored AICRP Bt & non Bt trials in Central Zone (Odisha and Maharashtra) during October 3-10, 2023.



- Dr. Rishi Kumar, Head (I/c) & Principal Scientist (Entomology), ICAR-CICR, Regional Station, Sirsa attended Probation Clearance and Confirmation Committee meeting of Dr. Debashis Paul on October 04, 2023 through online mode.
- Dr. P. Valarmathi, Scientist (Plant Pathology) acted as a resource person for Student Internship Program - Attachment of B.Sc. (Hons) Agricultural Students of Karunya Institute of Technology and Sciences with Research Station under RAWA on October 6, 2023.
- Dr YG Prasad, Director, ICAR-CICR had attended as panelist for a session on “Cotton Mission for Enhancing Quality and Productivity” on the occasion of World Cotton Day on 7th October, 2023 at New Delhi organized by the Cotton Corporation of India Ltd., New Mumbai.
- Dr. Rishi Kumar, Head (I/c) & Principal Scientist (Entomology), ICAR-CICR, Regional Station, Sirsa attended and participated in monitoring of trial “Evaluation of GEAC approved BG-II cotton hybrids for North Zone for the year 2023” during October 06-07, 2023.
- Dr. K. Baghyalakshmi, Scientist (Plant Breeding and Genetics) gave a lecture on "Cotton plant breeding and research" through "Online mode" to B. Tech students, Department of Biotechnology and Biochemical Engineering of JCT College of Engineering and Technology, on the occasion of "World Cotton Day" during 7th October 2023.
- Dr YG Prasad, Director, ICAR-CICR participated in ‘Agri Climate Nexus: Food, Fibre and Regeneration for Sustainable Growth in India’ on 12th October 2023 organized by Better Cotton Initiative, New Delhi.
- Dr. P. Valarmathi, Scientist (Plant Pathology) attended an online training programme on “Next Generation Sequencing and Data Analysis” (NGS) organized by ICAR-National Academy of Agricultural Research Management (NAARM), Hyderabad from 16th-20th October, 2023.
- Dr YG Prasad, Director, ICAR-CICR, Nagpur organized “Farmers field school, survey and monitoring of cotton” and “Swachhata Campaign Activities” on 20th October, 2023 in Umred cluster villages, Nagpur district under DAPST/TSP (Tribal Sub Plan) scheme. Fifteen farmers were trained on pest and disease management in cotton.
- Dr. Rishi Kumar, Head (I/c) & Principal Scientist (Entomology) along with ADG (Seeds), ICAR, New Delhi conducted a survey in the farmers field at Dabwali, Haryana; Sangaria, Abohar, Punjab and Sriganganagar, Rajasthan on October 22, 2023 to estimate the PBW and Boll Rot incidence at these locations.
- Dr YG Prasad, Director, ICAR-CICR, Nagpur and Dr B Venkateswarlu, Chairman, Quinquennial Review Team (QRT) interacted with DDG (CS), ICAR, New Delhi on 26th October 2023. Dr. SS Patil, Dr SR Bhat, Dr (Mrs.) CR Ballal, Dr AJ Shaikh, Dr S. Manickam and Dr K Velmourougane also attended the meeting.

- Dr. Rishi Kumar, Head (I/c) & Principal Scientist (Entomology) and Dr. Debashis Paul, Scientist (Seed Technology), ICAR-CICR, Regional Station, Sirsa monitored the trials under the project “Evaluation of commercially available BG-II hybrids for the State of Haryana” at CCSHAU, Hisar and ICAR-CICR, RS Sirsa centre on October 13, 2023. Dr. Rishi Kumar, Head (I/c) & Principal Scientist (Entomology) monitored the AICRP South Zone *Bt* & non-*Bt* trials during October 16-21, 2023



- Dr YG Prasad, Director, ICAR-CICR, Nagpur organized IRC Farewell programme for Dr MV Venugopalan, Principal scientist, Agronomy and Head, PME Unit on 25th October 2023. All the Scientific Staff participated in the programme.



- Dr YG Prasad, Director, ICAR-CICR, Nagpur and Dr B Venkateswarlu, Chairman, Quinquennial Review Team (QRT) interacted with DDG (CS), ICAR, New Delhi on 26th October 2023. Dr. SS Patil, Dr SR Bhat, Dr (Mrs.) CR Ballal, Dr AJ Shaikh, Dr S. Manickam and Dr K Velmourougane also attended the meeting.
- Dr YG Prasad, Director, ICAR-CICR, Nagpur co ordinated the monitoring by Quinquennial Review Team in the North Zone centres on 26th October, 2023. Dr B Venkateswarlu, Dr. SS Patil, Dr SR Bhat, Dr (Mrs.) CR Ballal, Dr AJ Shaikh, Dr S. Manickam and Dr K. Velmourougane were part of the team.
- Dr. Rishi Kumar, Head (I/c) & Principal Scientist (Entomology), ICAR-CICR, Regional Station, Sirsa along with the team participated in QRT monitoring and visited PAU, Bathinda, CCS HAU, Hisar during October 26-28, 2023.
- Dr YG Prasad, Director, ICAR-CICR, Nagpur hosted a one-day workshop on 28th October 2023 for Cotton Production Technology in partnership with the Confederation of Indian Textile Industry - Cotton Development & Research Association (CITI-CDRA). The workshop was inaugurated by Dr. TR Sharma, Deputy Director General (Crop Science), Indian Council of Agricultural Research, New Delhi. Seventy Five cotton farmers from Hingna and Umredtaluka of Nagpur district, Hinghan ghat and Chistur in Wardha district, as well as Palwadi and Akatwada in Amravati district participated in this event. Dr A Tayade, Mr. Govind Vairale, Dr A Manikandan, Dr Ramkrushna, Dr R Pande, Dr SP Gawande and Dr M Saravanan participated in the workshop and guided the participated farmers.

Cotton Trade Scenario during the month of October '2023

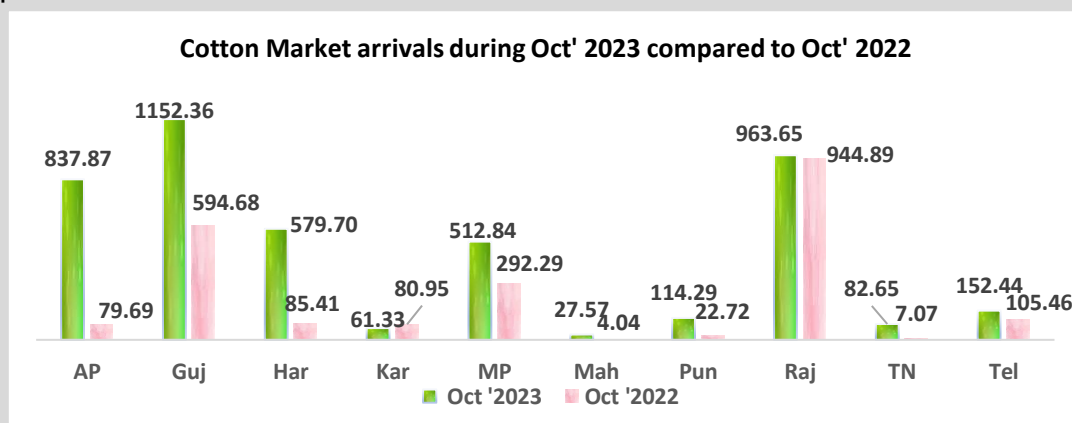
Dr. Isabella Agarwal, Principal Scientist , Agricultural Economics, CICR, RS, Coimbatore

World cotton market

The October crop saw fluctuations in world prices but with an overall downward trend, reflecting some erratic movements of New York futures. The Cotlook A Index declined to 93.20 cents per lb on 23rd October, its lowest level since July, while its high for the month proved to be 97.85, reached on October 3. The A Index recently shifted a little lower alongside NY/ICE futures, with values easing slightly from 98 to 96 cents/lb. Indian spot prices (Shankar-6 quality) decreased from 95 to 90 cents/lb. In domestic terms, values fell from 62,000 to 59,000 INR/candy. The INR was steady against the dollar over the past month, nearly 83 INR/USD. For the past year and a half, global mill demand has not only been affected by concerns regarding slower economic growth, but also by sharp reductions in order placement driven by inflation, higher financing costs, and inventory management throughout supply chains. World 2023-24 beginning stocks of cotton are 10.3 million bales, lower this month than September. This decline to 82.8 million, is entirely attributable to a permanent accounting change in the balance sheet for Brazil back to 2000- 01. Ending stocks for the 2023-24 world balance sheet are also down by 10.0 million bales because of this change. The global cotton industry is also grappling with reduced production and consumption, with projections indicating lower production and exports, particularly in the U.S.

Domestic Cotton Market

As freshly-picked cotton trickles into the market with the commencement of the new season (October 2023 to September 2024), farmers, traders, and the textile industry are waiting to see how production, demand, and price trends will evolve.



A total of 4.49 lakh tonnes cotton arrivals was registered during the month of Oct' 2023 compared to 2.22 lakh tonnes in Oct' 2022. Phenomenal increase of arrivals was from Punjab and Haryana in North Zone, Maharashtra in Central zone and Tamil Nadu and Andhra Pradesh in South Zone followed by fair increase in Gujarat, MP and Telangana. The arrivals during the comparison period were almost same to the tune of 94 to 96, 000 tonnes while Karnataka registered a decrease in arrivals by 24 per cent during the same period. In Telangana, the production is expected to be better than last year. However, Haryana cotton crop is said to be affected by pink bollworm infestation. Deficit rainfall is expected to impact production in Karnataka. The feedback is mixed in Maharashtra and Gujarat, with reports of extreme dry weather affecting crops in some areas while the production may be good in others. Domestic cotton spot prices are down by 8 per cent in October compared to the previous month as the fresh arrival of crop has been picked in Northern markets of Punjab, Haryana and Rajasthan. The current domestic prices of natural fibre

in North are almost at parity international prices (land costs) after ruling higher in the last six months. Factor like dry spell during August-September and pink bollworm damage in North India could affect cotton yields and quality in the 2023-24 crop. The Indian Cotton Federation estimates that India will produce 330-340 lakh bales of cotton in the 2023-2024 seasons. In Rajkot, a major spot market, cotton prices ended at 27,942.65 Rupees, dropping by 0.62%

Training programme on pest control for cotton organised

LOKMAT NEWS NETWORK NAGPUR

The Season Long Training Program (SLTP) in Cotton is being conducted from last 15 days by Regional Centre for Integrated Pest Management (RCIPMC) of Directorate of Plant Protection, Quarantine and Storage (DPPQ&S) under the Ministry of Agriculture & Farmers Welfare.

Total 40 Agricultural Extension Officers from Maharashtra and Madhya Pradesh had been nominated to attend this training. As a part of this training programme, all trainees were taken to village Khairi and Uparwahi, Kalmeshwar tehsil to educate them about Agro Ecosystem Analysis (AESA). The objective of AESA was to educate trainees about how to observe the crop, how to analyse the field situation and how to make the proper decisions for crop management.



Trainees during field visit in Kalmeshwar in district.

Agro ecosystem analysis is a vital tool in the quest for sustainable agriculture. All trainees visited the field at village Khairi & Uparwahi. Trainees were divided into four groups and each group was allotted one field in order to understand the ecosystem of pests and their bio agents and application of IPM strategies harmonizing with agricultural ecosystem.

Trainees were taught in a scientific manner to take Field observations. The observations like Agronomic and general information of the allotted crop and plant protection data with the pest and defender ratio was also recorded by the trainees. The observations recorded in field were then collected, discussed and presented by respective group leaders.



पालासावळीत कपाशी उत्पादकांना मार्गदर्शन

पाराशिवनी, ११ ऑक्टोबर

जागतिक कापूस दिनाभिमिताने शेतकरी बांधवांसाठी कापूस उत्पादन आणि गुलाबी बोंड अळी जागरूकता आणि व्यवस्थापन या विषयावर शेती शाळा आयोजित करण्यात आली होती. प्रमुख मार्गदर्शक म्हणून कापूस अनुसंधान केंद्र नागपूर येथील वरिष्ठ वैज्ञानिक डॉ. मणिकानंद यांनी शेतकऱ्यांना मार्गदर्शन केले. प्रमुख

अतिथी म्हणून गावातील सरयंच राजेंद्र ठाकुर, सिटी-सिडिआरएचे प्रकल्प समन्वयक गोविंद वेराळे आदी मान्यवरांची प्रामुख्याने उपस्थिती होती. प्रकल्प अधिकारी जगदीश नेरलावार यांनी कार्यक्रमाचे सूत्रसंचालन केले. उपस्थित मान्यवरांनी शेतकऱ्यांना मोलाचे मार्गदर्शन केले. गावातील प्रगतशील शेतकरी रमेश सहारे आणि अभय मैद

यांच्या शेतावर प्रत्यक्ष भेट देऊन शेतकऱ्यांना बोंड अळी विषयी माहिती दिली. पावेळी कामगंध सापळे वाटप करण्यात आले. कार्यक्रमाचे आयोजन सिटी-सिडिआरएचे कापूस वितरार सहायक सनी शेंडे, राहुल दाते, सुमिध भोयर, सिद्धार्थ चांदेकर, दिनेश तांडे यांनी केले.

(तमा वृत्तसेवा)

Tarun Bharat, 12.10.2023

Lokmat Times, 15.10.2023

वस्त्रोद्योग सहसचिवांनी जाणले 'एचडीपीएस' तंत्रज्ञान

शेतकऱ्यांच्या शिवाराला दिली भेट

अंत्रोवन वृत्तसेवा

नागपूर : देशात कापूस बाबीसाठी प्रोत्साहन देण्याकरिता केंद्रीय कृषी आणि वस्त्रोद्योग मंत्रालयाच्या वतीने षष्टशी प्रकल्प राबविला जात आहे. या प्रकल्पाच्या अंमलबजावणीचा केंद्रीय वस्त्रोद्योग सहसचिव प्राजक्ता वर्मा यांनी आढावा घेतला. प्रकल्पात सहभागी शेतकऱ्यांशी त्यांनी संवादही साधला.

देशाच्या विविध कापूस उत्पादक राज्यांसह महाराष्ट्रातील १६ जिल्हांमध्ये कापूस उत्पादकता वाढीसाठी अतिसघन लागवड प्रकल्पाची अंमलबजावणी होत आहे. त्यामध्ये १००० शेतकऱ्यांनी

एकरी सहा पाकिटे बियाण्यांचा, तर ६८० शेतकऱ्यांनी तीन पाकिटांचा वापर केला आहे. ९० बाय ३० सेंटमीटर याप्रमाणे लागवड अंतर यात आहे. कॅनॉपी मॅनजमेंट तंत्रज्ञानांतर्गत कॉम्पॅक्ट हायब्रीड वापरून ५५०० एकठांमध्ये हा प्रकल्प राबविला जात आहे. वस्त्रोद्योग सहसचिव प्राजक्ता वर्मा यांनी या प्रकल्पाच्या अंमलबजावणीचा नागपूर, चर्चा आणि यवतमाळ जिल्ह्यात शेतकऱ्यांच्या बांधावर जात आढावा घेतला. या वेळी त्यांच्यासोबत केंद्रीय कापूस संशोधन संस्थेचे संचालक डॉ. वाय.जी. प्रसाद, 'सीसीआय'चे (कॉटन कॉर्पोरेशन ऑफ इंडिया) व्यवस्थापकीय संचालक ललित कुमार गुप्ता, सहव्यवस्थापक निज

कुमार, पीक उत्पादन विभागाचे डॉ. ए.एस. तायडे उपस्थित होते.

यवतमाळ जिल्हातील दिनेश रामगडे (कळंब), माणिक ओ (राठेगाव), संभाजी दोडेवार (राठेगाव), चर्चा जिल्हातील उल्हास जेठ (चर्चा), चुशाल सावरकर (सेरू) या शेतकऱ्यांचा त्यामध्ये समावेश होता. सुरगाय येथे आयोजित शेतकरी संवाद कार्यक्रमात प्राजक्ता वर्मा यांनी प्रकल्पाविषयी सविस्तर माहिती दिली.

डॉ. वाय. जी. प्रसाद यांनी गुलाबी बोंड अळीच्या प्रादुर्भावामुळे व्यवस्थापन करण्यास कठीण मतदान होते, याविषयी माहिती दिली. सीसीआयचे ललीतकुमार गुप्ता यांनी सीसीआयची कापूस खरेदीच्या कार्यपद्धती विषयी सांगितले.

Sakal Agroone, 13 October, 2023

माझा महाराष्ट्र

विठ्ठलवाडी, मुंबई, ११ ऑक्टोबर २०२३

छत्रपती संभाजीनगर

दिवाळीपूर्वी एकरकड्यात ३०% वाढू शकते ८ राज्यांतील कोरडवाहू कापसाचे उत्पादन

नागपूरच्या केंद्रीय संशोधन केंद्राचा प्रयोग वसवी, ५१ जिल्हे, २८६ क्लस्टरसह ८ राज्यांतील १०,२९१ शेतकरी लाभार्थी... अजय केशव / नागपूर... अजय केशव यांनी याबाबतचा प्रयोग वसवी येथे केला आहे. या प्रयोगात ५१ जिल्हे आणि २८६ क्लस्टरसह ८ राज्यांतील १०,२९१ शेतकरी लाभार्थी यांच्यासाठी प्रयोग केला आहे. या प्रयोगात ५१ जिल्हे आणि २८६ क्लस्टरसह ८ राज्यांतील १०,२९१ शेतकरी लाभार्थी यांच्यासाठी प्रयोग केला आहे.

Vanamati experts witness innovation in cotton rainfed soils

Nagpur: A delegation of experts from Vasant Rao Naik State Agriculture Extension Management Training Institute (Vanamati) embarked on a visit to witness firsthand the groundbreaking high density planting system (HDPS) in Malegaon.

Led by Mittali Sethi, director of Vanamati, the team aimed to gain insights into the innovative cotton production techniques being demonstrated by the ICAR-Central Institute for Cotton Research (ICAR-CICR) in collaboration with the Cotton Corporation of India (CCI). The project, funded by CCI, has been setting benchmarks in cotton farming practices. During the visit, Dr A Manikandan, senior scientist (soil science) at ICAR-CICR, elaborated on the significance of site-specific nutrient management in enhancing cotton yields.

The delegation was given a demonstration of the HDPS and other techniques. TNN

Times of India, 15.10.23

'सीआयसीआर'चे कपाशीसाठी खत वापराचे 'सॉफ्टवेअर'

विनोद इंगोले : अंत्रोवन वृत्तसेवा

नागपूर : पिकाच्या बाबीसाठी किती प्रमाणात कोमकोणत्या खातांची गरज आहे हे जाणून घ्यायलाच लागते. गरजेचे असते. त्यातून अनावश्यक वापर टाळतोच, निव्वळ उत्पादकता खर्चातही बचत होते. याच अनुषंगाने नागपूर येथील केंद्रीय कापूस संशोधन संस्थेने 'न्यूट्रिएट प्लॅनर' नावाची खास संगणकीय प्रणाली (सॉफ्टवेअर) विकसित केली आहे. त्याआधारे प्रतिक्वेट्रल उत्पादकता जाणत त्यासाठी संतुलित प्रमाणात किती खातांची गरज आहे, हे शेतकऱ्यांना जाणून घेता येणार आहे.

नमितोबा पोत, सेंटिय बर्न हे परक कापूस व अन्य पिकांच्या उत्पादकता वाढीसाठी परिणाम करणारे उदात्त. परंतु काही वेळा केवळ पिकाची उत्पादकता हेच फक्तच लक्ष देऊन रासायनिक खातांचा वापर होऊ लागतो. त्यातून खातांचा अनावश्यक वापर होऊ शकतो. उत्पादकता खर्चात वाढ होते. अपेक्षित उत्पादन मिळवतच असे नाही. त्यावर उपाय म्हणून केंद्रीय कापूस संशोधन संस्थेने कपाशी पिकात

सॉफ्टवेअरची कार्यपद्धती

इंटरनेशनल फॅट न्यूट्रिएशन इन्स्टिट्यूट व केंद्रीय कापूस संशोधन संस्थेने संयुक्तरूपाने हे सॉफ्टवेअर विकसित केले आहे. जावा बेट्ट हे सॉफ्टवेअर आहे. त्या अंतर्गत शेतकऱ्याला पाच कालीतील व्यवस्थापनाच्या नोंदी विचारल्या जातात. त्यासाठी खास प्रश्नावली तयार केली आहे. ती शेतकऱ्याला भरावी लागते. खातार हेक्टरी वार्षिक किती खर्च येतो हे देवाील विचारण्यात येते. हे माहिती तसेच शेतामधून घेतलेल्या माती म्युन्याचा परीक्षण अहवाल यांची नोंद सॉफ्टवेअरमध्ये केली जाते. त्या आधारे अंमिनीला नेमण्या कोणत्या खातांची किती गरज आहे हे कळते. सोमवार, धान, गहू, मका या पिकांसाठी देवाील हे तंत्रज्ञान उल्लेख आहे.

Workshop on agricultural waste management held

Nagpur: Under the banner of Swachhata Campaign 3.0, Kamla Nehru Mahavidyalaya and ICAR-Central Institute for Cotton Research (CICR), Nagpur, jointly organized a one-day workshop on agricultural waste management with active participation of 100 students from the department of biotechnology and environmental science.

The workshop focused on the principles of Reduce, Reuse, and Recycle (the 3Rs), cutting-edge techniques like biofertilizers and sustainable practices for soil health, better environment and agriculture. YG Prasad, director of ICAR-CICR, addressed the topic of hazardous waste disposal in agriculture, while DS Badwaik, principal of Kamala Nehru Mahavidyalaya, urged students to maintain a clean campus.

A Manikandan, senior scientist (soil science), delivered a guest lecture on the formulation of bio-fertilizers derived from agricultural waste. Furthermore, he introduced attendees to innovative biofertilizer formulations, including liquid, polymer-entrapped, nano-biofertilizers, biofilms, and lyophilized dry powders. TNN

Times of India, October 26, 2023

ICAR-CICR organises Nutrient Expert training to enhance cotton yield



Participating farmers during the training camp held at Chistur village.

■ Staff Reporter

COTTON farmers from three districts - Amravati, Nagpur, and Wardha, have recently received specialised training on the use of the Nutrient Expert, an advanced decision support system designed to improve fertilizer management for cotton cultivation. The primary goal of this software is to enhance cotton

yields by optimising nutrient usage and fostering balanced nutrition within cotton fields, stated a press release.

The comprehensive training programme took place on the farm of Swapnil Shelke, in Chistur village, Asti Taluka, Wardha district, on October 26. A total of 125 cotton farmers hailing from the three districts benefited from this valuable ini-

tiative.

Dr D Blaise, Principal Scientist in Agronomy, provided valuable strategies to enhance cotton productivity. He also emphasised the advantages of potassium nutrition in cotton cultivation and the critical role of microbes in enhancing soil health. Dr A Manikandan, Senior Scientist in Soil Science, elaborated on the prerequisites for implementing the Nutrient Expert-based fertilizer management system. He highlighted the significance of site-specific nutrient management (SSNM) and the principles of 4-R nutrient stewardship (Right Source, Rate, Time, and Place) for cotton cultivation.

Under guidance of Dr Y G Prasad, Director-ICAR-CICR, Nagpur, a series of comprehensive demonstrations are being carried out at 95 different sites across districts in Vidarbha during the ongoing year 2023-2024.

The Hiatvada, 30 October, 2023



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Dr. Y. G. Prasad, Director, ICAR-CICR, Nagpur

Chief Editor:
Dr. Y. G. Prasad

Senior Editor:
Dr. Annie Sheeba

Associate Editor, Cover page & Layout Design:
Dr. M. Sabesh

Editors: Dr. Pooja Verma, Dr. K. Baghyalakshmi,
Dr. Debashis Paul

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Director ICAR-Central Institute for Cotton Research Post Bag No. 2, Shankar Nagar PO, Nagpur 440010, India
Phone: 07103-275536; Fax: 07103-275529
Email: cicrnagpur@gmail.com, director.cicr@icar.gov.in

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