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ICAR-CICR Newsletter

ICAR-CENTRAL INSTITUTE FOR COTTON RESEARCH, NAGPUR

An ISO 9001:2015 Certified Organisation

Director's Message

The quarter witnessed a series of natural disasters especially; corona virus outbreak which turned out to be a global pandemic and the world was under complete lockdown for more than 2 months. It was a life changing experience for all of us making us realize the significance of living in harmony with nature and its conservation. Indian agriculture with its surplus food grain production could meet the food security of country's population during this difficult period and our hard working farming community deserves all the compliments. Cotton farmers suffered a setback due to the pandemic and lockdown since International market price of cotton came down heavily, domestic consumption slowed down, affected export and cotton stocks increased all time high. Though, the agricultural activities were exempted from lockdown, there was a delay in transportation of cotton by farmers to ginneries and thereby procurement by Cotton Federation and the CCI. The cotton production estimate has been reduced by 7% for the year 2019-20. Amidst all this, the Institute continued to take forward programmes on farmers' awareness providing inputs for technology demonstration and also food kits to the needy following measures of social distancing, use of face masks and frequent sanitization to contain the virus. Online trainings and web based workshops became the order of the day during COVID 19 pandemic. The Institute with its KVK organized several training programmes on cotton cultivation and pest management through Video Conferencing. We could successfully conduct AICRP workshop on cotton under the chairmanship of Dr. T. R. Sharma, Dy. Director General, ICAR. I feel proud to mention that three non Bt cotton varieties developed by the Institute were identified for commercial cultivation. Our annual IRC meeting was also successfully conducted through video conferencing. The Institute will continue to strive to serve the cotton farmers. In the continuing pandemic situation, I urge all the staff of ICAR-CICR to keep themselves healthy, both physically and mentally and be empathetic to the needy.



(V. N. Waghmare)
Director



Dr. T.R. Sharma, DDG (Crop Sciences), ICAR, New Delhi and Dr. C.D. Mayee, Ex-Chairman, ASRB, New Delhi interacting with Director, Project Co-ordinator and Scientists of ICAR-CICR in the annual group meet of ICAR-AICRP on cotton held through video conferencing during 18-19 May, 2020

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Events

World environment Day

ICAR-Central Institute For Cotton Research (CICR), Nagpur organized an online cotton workshop for farmers through video conferencing on June 05, 2020, to mark World Environment Day under the Chairmanship of Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur. The objective was to guide farmers on cotton crop in the coming kharif season. Dr. S.K. Chaudhary, Deputy Director General, (NRM), ICAR, New Delhi was the Chief Guest. Dr. C.D. Mayee, Former Chairman, ASRB, New Delhi inaugurated the workshop. Dr. Lakhan Singh, Director, ICAR- ATARI, Pune, Shri. Ravindra Bhosale, JDA, Nagpur, Dr. Subhash Nagre, Joint Director of Agriculture, Amravati Division were the special Guests. Dr. Siddharth Wasnik, Head KVK and Principal Scientist, (Agril. Extension), ICAR-CICR, Nagpur coordinated the programme and gave welcome address. A large number of farmers as well as agricultural staff attended the workshop online. Dr. S.K. Chaudhary in his address guided the participating farmers on the management of natural resources especially, organic carbon in the soil and critical inputs required at various crop growth stages. Dr. C.D. Mayee addressed on the issue of water management in cotton crop and ways to maximize yields by reducing cost of production. Dr. Lakhan Singh emphasized on biodiversity conservation and

mentioned the efforts of Sh. Popatrao Pawar, Sarpanch of Adarsh village Hiware Bazar and Senior social activist Anna Hazare for water conservation at Ralegan Siddhi and Sh. Rahibai Popere for seed conservation in Ahmednagar district, Maharashtra. Dr. Waghmare highlighted the importance of biodiversity and conservation of indigenous crop varieties. He also shared the information pertaining to new Bt varieties released by ICAR-CICR, Nagpur and availability of its seeds for farmers.

A technical session was arranged for the farmers in which Dr. Blaise DeSouza, Head, Crop Production Division, guided on Cotton Production Technology, Dr. Vinita Gotmare talked about the straight varieties and hybrids of cotton, Dr. Vishlesh Nagrare spoke on Insect pests and Pink Bollworm management strategies in cotton, Dr. Shailesh Gawande gave a talk on diseases management in cotton and Dr. S.M. Wasnik provided information on e-Kapas / e-Communication, Cotton App, cotton FLDs, MGMG and Scheduled Caste Sub Plan (SCSP) projects. Dr. S.S. Patil, KVK, ICAR-CICR, Nagpur, expressed vote of thanks at the end of the workshop. Shri Sanjay Kushwaha and Dr. Sachin Wankhede worked hard for successful organization of the event.



Meetings

Annual workshop on Cotton 2020

The Annual Group Meeting of All India Coordinated Research Project on Cotton was conducted through video conference on 18th and 19th May 2020 hosted by ICAR-CICR, Regional Station, Coimbatore. Dr. T.R. Sharma, Deputy Director General (Crop Science), ICAR, New Delhi, Dr. R.K. Singh, ADG (Commercial Crops), ICAR, New Delhi and Dr. C.D. Mayee, Former Chairman, ASRB, New Delhi, Dr. V.N. Waghmare, Director ICAR-CICR, Dr. P.G. Patil, Director ICAR-CIRCOT were the special guests. The members of programme advisory and monitoring committee, scientists from ICAR-CICR, various public and private institutes were also present. Dr. A.H. Prakash, Project Coordinator presented the research highlights of AICRP on cotton during 2019-20. Dr. Waghmare, in his address mentioned about the activities taken up to popularize Bt cotton varieties developed by ICAR-CICR through private participation as well as through various farmer outreach programme. He also informed about the research collaborations being executed between ICAR-CICR and, CSIR-NBRI, Lucknow for GM Cotton, CSIR-Central Mechanical

Engineering Research Institute for developing cotton picker and CSIR-Indian Institute of Chemical Technology for pheromone application. Dr. P.G. Patil, Director, ICAR-CIRCOT, Mumbai addressed about textile industry demand, shortage of ELS cotton production in the country and emphasized to attend the problem of variation in fibre strength from most genotypes resulting in reduced yarn strength.

Dr R.K. Singh, ADG (CC), ICAR in his special address complimented the achievements of AICRP on Cotton especially in terms of publications. He appreciated the support given by the private industries to the AICRP programme. He suggested that private seed industries should concentrate on development of improved high yielding Bt hybrids and not just on increasing the number of released hybrids. He also recommended strongly to initiate work on organic cotton for exports and thereby benefit farming community. Dr. C.D. Mayee in his special address, suggested to analyze the impact of COVID-19 on cotton cultivation as the entire cotton chain was disrupted during the lockdown period and market prices came down drastically. He

also stressed on breeding for quality rather than yield improvement by reconstructing the breeding programme like breeding varieties for machine picking, use of drone technology in cotton and gossypol free cotton.

Hon'ble DDG (CS), Dr. T.R. Sharma in his presidential address emphasized on importance of molecular breeding and Marker assisted selection for specific trait improvement in cotton utilizing the cotton genome sequence databases already available in the public domain.

He suggested working on genome editing technologies for breeding gossypol free seeds and utilization of wild species and land races, pre-breeding, apomixes, data mining, precision breeding, artificial intelligence etc. in cotton improvement programme.

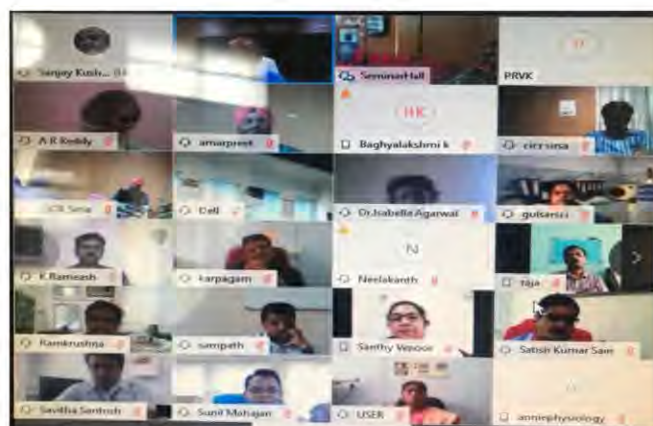
Web versions of seven publications were released, namely; Annual report of AICRP on Cotton, Annual Report of AICRP on Bt cotton (North, Central & South zone), Annual Report NFSM-FLD Frontline Demonstration in Cotton, Integrated Disease Management in Cotton-Technical Bulletin, and Fibre Technology Report of ICAR-CIRCOT, Mumbai.

The technical sessions included review of results of AICRP trial 2019-20, interactive session with stake holders, Varietal identification committee meeting, Technical committee on Agronomy, Pathology and Entomology sessions, Transfer of Technologies FLDs, and Plenary session. The meeting was concluded with vote of thanks by Dr. A.H. Prakash, Project Coordinator (Cotton). The video conference was coordinated by the committee members; Dr. M. Sabesh, Dr K. Sundaravivelu, Sh. N. Ramesh and Sh. Vedavyas.



Annual IRC Meet

The Annual Institute Research committee (IRC) meeting of ICAR-CICR was conducted virtually using video conferencing (due to pandemic Covid-19 problem) from 11th-15th May and 22nd May 2020 at ICAR-CICR, Nagpur. Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur chaired the IRC meeting. Dr. Blaise D, I/c Head, Crop Production Division, Dr. Nandini Gokte-Narkhedkar, I/c Head, Crop Protection Division, Dr. M.V. Venugopalan, Head, PME Cell, Dr. A.H. Prakash, I/c Head and PC, ICAR-CICR, RS, Coimbatore, Dr. O.P. Tuteja, I/c Head, ICAR-CICR, RS, Sirsa and all the Scientists from Nagpur, Coimbatore, Sirsa joined the virtual meeting. Among the projects presented and discussed include, 19 concluding projects, 14 new projects and 83 ongoing projects (including one student's work). There were good scientific discussions on-line and among 21 new projects presented, only 14 were approved. Similarly, a thorough review was done for all the on-going projects and those seeking extension before arriving at a consensus. The chairman in his concluding remarks provided few major recommendations such as strengthening of pre-breeding and heterotic pool development, taking up production projects in a long term programme mode especially, mechanization, hormonal application study etc., releasing technologies developed through AICRP (Cotton), publishing good research articles and utilization of seminar halls in all three stations for video conferencing through broad band connection.



Review Meeting of Insecticide Resistance Management (IRM): Dissemination of Pink Bollworm Management Strategies

The review meeting of Insecticide Resistance Management (IRM): Dissemination of Pink Bollworm Management Strategies was organized by ICAR-CICR, Nagpur on 03rd June, 2020 through video conferencing. The project is funded by Department of Agriculture, Cooperation & Farmers' Welfare (Crop Division), Ministry of Agriculture and Farmers Welfare, Govt. of India under Centrally sponsored scheme "NFSM: Commercial Crops". ICAR-CICR, Nagpur is the Nodal Institute for implementation and overall coordination of the said project. During 2019-20, the project was approved and implemented across north, central and south cotton growing zones covering 21 districts of eight major cotton growing states. The main objective of the project is to disseminate pink bollworm management strategies in Bt Cotton at different crop growth stages. In addition, overall pest situation across the cotton growing states was monitored and efforts were made to implement IRM & IPM module through this project.

Smt. Shubha Thakur, IAS, Joint Secretary (Crops and Oil Seeds), DAC&FW (Crop Division), MA&FW, Govt. of India, New Delhi chaired the meeting. Dr R.K. Singh, ADG (CC), ICAR, New Delhi, Dr A.P. Singh, Additional Commissioner (Crops), DAC&FW (Crop Division), MA&FW, Govt. of India, New Delhi were the Guests of Honour. Dr. R.P. Singh, Director, Directorate of Cotton Development, Nagpur, Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur, Dr. Blaise Desouza, Head I/c, Crop Production Division, Dr. Nandini Gokte-Narkhedkar, Head I/c, Crop Protection Division, Dr. A. H. Prakash, Project Coordinator & Head, ICAR-CICR, RS Coimbatore, Dr. O.P. Tuteja Head I/c ICAR-CICR, RS Sirsa, Dr S.M. Wasnik, Principal Scientist and I/c KVK, Dr. M.V. Venugopalan, Principal Scientist and I/c PME cell and Dr. V.S. Nagrare, Principal Scientist and Principal Investigator of the Project, ICAR-CICR, Nagpur were prominently present. Participants from ICAR-CICR, 10 State Agricultural

Universities (SAUs) and 3 KVKs, coordinating 21 districts from eight major cotton growing states, participated in the review meeting.

Action points emerged out from the review meeting were 1) Geo-tagging of IRM fields, 2) Involvement of officials from DAC&FW in monitoring of implementation of the project, 3) Emphasis to be given on role of scientific community to play active role in reaching farmers in improving their productivity, income and livelihood, 4) online weekly advisories on cotton to be provided to state agricultural department functionaries, 5) Northern state to be vigilant on sucking pests like whitefly in addition to pink bollworm, 6) Utilizing manpower involved to bring some scientific outcome from the project, 7) Inclusion of the research component in the project and to furnish information of other farmers apart from IRM and Non-IRM farmers, and 9) District authorities needs to be involved in assessing productivity.

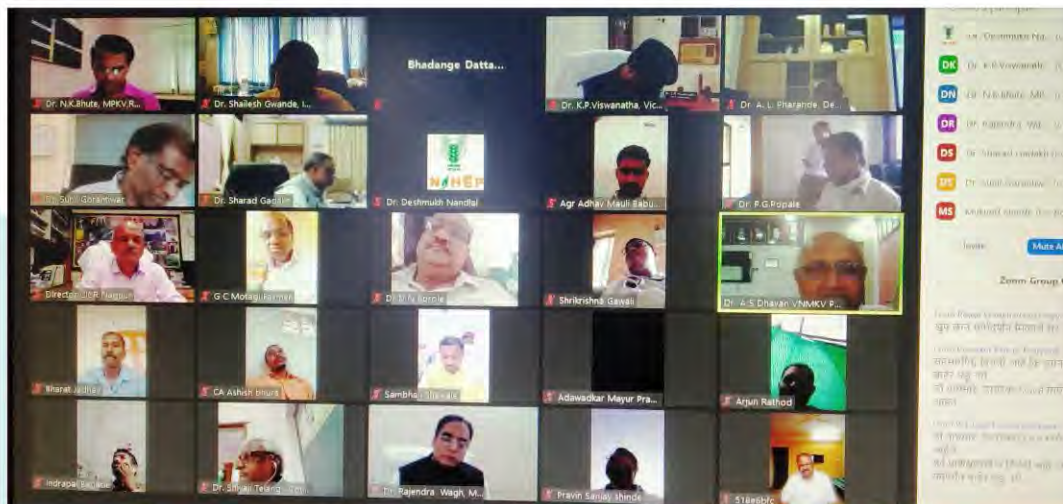


Webinars/Video Meetings attended

- Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur attended Director's Conference through VC chaired by Hon'ble Secretary (DARE) & Director General (ICAR) and, attended by Directors of ICAR Institutes on 10th April 2020.
- Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur participated in the Inaugural Session of XXVII Annual Review Meeting of the All India Coordinated Research Project on Weed Management organized by ICAR-Directorate of Weed Research, Jabalpur through Zoom on 8th June 2020.
- Dr. V.N. Waghmare, Director and Dr. M.V. Venugopalan, Principal Scientist (Agronomy) ICAR-CICR, Nagpur attended the Second Meeting of the Committee constituted to develop policy document on Futuristic Crop Planning for 2030/2050 under the chairmanship of Dr. S.K. Chaudhari, DDG (NRM) & Chairman, Futuristic Crop Planning Committee through video link on 10th June 2020
- Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur attended the 47th Academic Council Meeting of SRTMU, Nanded on 20th June 2020
- Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur chaired

the Hindi Committee Meeting held on 27th June 2020.

- Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur gave lecture in the Webinar on "Opportunities and Challenges of Cotton Farmers during COVID-19" on 31st May 2020
- Dr V.N. Waghmare Director, ICAR-CICR, Nagpur along with Dr A.H. Prakash PC, ICAR-AICRP on Cotton, Dr. S. Manickam, PI, Plant Breeding, Dr. Shankar Narayan, PI, Agronomy, Dr. Rishi Kumar, PI Entomology, Dr SK Sain, PI, Plant Pathology, ICAR-CICR participated in the webinar meeting on Bt Cotton Variety/Hybrid Varietal Identification Committee meeting of ICAR-AICRP on Cotton held under the Chairmanship of Dr T.R. Sharma DDG (CS) on 22nd June 2020.
- Dr. V.N. Waghmare, Director, ICAR-CICR, Nagpur attended the Valedictory programme of the two days online training programme on "हवामानातील बदल व कापूस उत्पादन तंत्रज्ञान" as chief guest which was organized by the Centre for Advanced Agricultural Science and Technology (CAAST) for Climate Smart Agriculture and Water Management (CSAWM) and Cotton Improvement Project, Mahatma Phule Krishi Vidyapeeth, Rahuri during 15-16 June, 2020, through online mode. Dr. Shailesh P. Gawande, Scientist Plant Pathology delivered lecture as the resource person on "कपाशीवरील एकात्मिक रोग व्यवस्थापन".



- Dr. V.N. Waghmare, Director, Dr V.S. Nagrare, Principal Scientist and Dr. Shailesh P. Gawande, Scientist, Plant Pathology, ICAR-CICR, Nagpur participated in E-Samwad

organized by Agrovision Foundation in association with ICAR-CICR Nagpur on 15th June 2020 through video conferencing. Dr. Nagrare delivered talk on 'Pest

management in cotton' and Dr. Gawande delivered lecture on "Integrated disease management in cotton" for cotton production stakeholders.

- Dr. M.V. Venugopalan, Principal Scientist (Agronomy) attended a meeting of Nodal Officers for preparing the policy document on "Futuristic Crop Planning for 2030/2050" through Video conferencing, organized by ICAR-Indian Institute of Farming Systems Research, Modipuram, Meerut-250 110, Uttar Pradesh on 25th June 2020.
- Dr. M.V. Venugopalan, Principal Scientist (Agronomy), ICAR-CICR, Nagpur attended the EFC meeting of Network program on "Precision Agriculture" under the chairmanship of Dr. Anil Rai, ADG ICT, ICAR, organized by ICAR-IARI, New Delhi on 11th June, 2020.
- Dr. M.V. Venugopalan, Principal Scientist (Agronomy), ICAR-CICR, Nagpur attended the webinar on "Covid - 19, Seed Industry Challenges & How to Overcome" organized by the Gubba seed and cold storage, Hyderabad on 13th April, 2020.
- Dr. P.R. Vijaya Kumari, Principal Scientist, ICAR-CICR, Nagpur participated in Zoom Meeting organized by IISS, Mau for Seed Physiology, seed packaging group review meeting to finalize the Technical programme for 2020-21 during 8th-9th May 2020.
- Dr. P.R. Vijaya Kumari, Principal Scientist, ICAR-CICR, Nagpur participated in Zoom Meeting organized by IISS, Mau on Joint Annual Review Meeting of AICRP(NSP) Crops & ICAR Seed Project during 14th-15th May 2020.
- Dr. P.R. Vijaya Kumari and Dr. V. Santhy, Principal Scientists, ICAR-CICR, Nagpur attended Webinar organized by NAHEP-CAAST, IARI on "National Seed System and Policy Perspectives" held on 23rd May 2020.
- Dr V.S. Nagrare, Principal Scientist and Dr. Shailesh P. Gawande, Scientist, ICAR-CICR, Nagpur delivered talk to Agriculture officers on 'Pest management in cotton' and 'Integrated disease Management in Cotton' respectively, in a webinar organized by RAMETI on 11th June 2020.
- Dr V.S. Nagrare, Principal Scientist, ICAR-CICR, Nagpur attended meeting in relation to formulation of project on Precision farming on 11th June 2020 through video conferencing.
- Dr. Jayant Meshram, Principal Scientist, ICAR-CICR, Nagpur attended one day online workshop on "Training Management Information System (TIMS) for HRD Nodal officers of ICAR held under the chairmanship of Dr. A.K. Vyas, ADG (HRM), New Delhi on May 8, 2020.
- Dr. Jayant Meshram, Principal Scientist, ICAR-CICR, Nagpur attended Online Ph.D Viva examination of Plant Physiology student conducted on June 26, 2020 of PJTSAU, Telangana.
- Dr S.K. Sain, Senior Scientist (Plant Pathology), ICAR-CICR RS Sirsa attended Webinar on "Commercialization of bio-fungicides and bio-fertilizers: Regulatory constraints" delivered by Prof MS Reddy Founder Chairman Asian PGPR Society & Consultant Auburn University, Auburn, USA on 5th June 2020.
- Dr. K.P. Raghavendra, Scientist (Ag. Biotechnology), ICAR-CICR, Nagpur participated in the International e-Conference on "Genetics and Plant Breeding Research in Post Covid-19 Era" held during 13-14 June 2020 and presented a poster on "Identification and validation of candidate genes associated with fibre quality traits in cotton (*Gossypium hirsutum*)".
- Dr. Dipak Nagrale, Plant Pathology, ICAR-CICR, Nagpur delivered a special lecture on "Preparation of Higher Agricultural Education and Opportunities in Agricultural Sector, ICAR competitive and other competitive examinations" to students of H.H. Sri Sri Muralidhara Swamiji College of Agriculture, Malegaon, (Affiliated to MKPV, Rahuri, Maharashtra) on 23rd June, 2020 through Video Conferencing.
- Dr. Neelakanth Hiremani, Scientist (Plant Pathology) attended Webinar on "Latest Development in Biosafety Regulations for Genome Engineered Plant" delivered by Dr Vibha Ahuja, Chief GM, BCIL, New Delhi on 8th June, 2020 under the Webinar series "Towards Outcome-based Agri-Biotech Education & Research: A Roadmap" organized by DBT-NECAB, AAU Jorhat, Assam.
- Dr. Neelakanth Hiremani, Scientist (Plant Pathology) attended webinar on "Endophytes and climate resilience in plants" on 12th June 2020 under the auspices of ICAR-NAHEP CAAST Activity-1C "Microbiome enabled seed priming" project (funded by World bank) and hosted by University of Agricultural Sciences, GKVK, Bangalore.

Staff attended webinars and/or online training programmes during the period April-June 2020

Sr. No.	Category	Number of employees attended Webinars (one day or More)	Number of employees attended Online Training Programmes (one day or More)
1	Scientist	11	3
2	Technical	7	6
3	Administrative Staff	1	10
Total		19	19

Farmer Outreach activities

- ICAR-CICR, Nagpur signed MoU with Telangana State Seed Development Corporation Ltd, Hyderabad and PJTSAU, Hyderabad for Seed Production & commercialization of ICAR-CICR Bt varieties on 15th June 2020.
- ICAR-CICR, Nagpur signed MoU with M/s Vikas Biosciences Pvt. Ltd, Hyderabad for commercialization of Bt varieties (ICAR-CICR Bt-6, ICAR-CICR PKV 081 Bt, ICAR-CICR Rajat Bt, ICAR-CICR Suraj Bt and ICAR-CICR GJHV 374 Bt) on 18th June 2020.



Awards and Recognitions



Dr Babasaheb B. Fand, Scientist (Agrl. Entomology), ICAR-CICR, Nagpur received the prestigious “The RES Award for the Early Career Entomologist 2020” awarded by “The Royal Entomological Society” Chiswell Green Lane, St Albans, United Kingdom for his outstanding contribution in the field of agricultural entomology, environmental protection and agricultural extension. The award consisted a commemorative certificate and a cheque of £1250.00.



Dr. Babasaheb Fand received Kanwar Veerendra Singh Memorial All India Best Publication Award 2019 from Dr. Y. S. Parmar University of Horticulture and Forestry, Nauni, Solan

Dr. V. Chinna Babu Naik, Scientist (Entomology), ICAR-CICR, Nagpur received 'SADHNA ACHIEVER Award 2019' in Recognition of the outstanding contribution in field of Agricultural Entomology awarded by Society for Advancement of Human and Nature (SADHNA), Dr YS Parmar University of Horticulture & Forestry, Solan, Himachal Pradesh.



Dr Babasaheb B. Fand, Scientist (Entomology), ICAR-CICR, Nagpur was also awarded “Prof. T.N. Ananthkrishnan Foundation-Young Scientist Award” by T.N. Ananthkrishnan Foundation, Chennai for biennium 2018-2019 with third position for his outstanding contribution in the field of agricultural entomology.

Farmer Outreach activities

Cotton FLDs under AICRP NFSM

ICAR-CICR, Nagpur conducted 150 FLDs on Cotton under ICAR-AICRP under supervision of Dr. S. M. Wasnik, Principal Scientist (Agri. Extension) & I/c Cotton FLDs. Fifty FLDs each on Integrated Crop Management (ICM), intercropping in Cotton and Desi Cotton were conducted in Nagpur, Wardha and Yavatmal districts. In the Integrated Crop Management, seeds of cotton varieties ICAR-CICR Rajat Bt and ICAR-CICR PKV-

081 Bt were provided to the farmers at villages, Nagazari, Taluka Hingna, Nagpur and village Dhurkheda in Taluka Umred, Nagpur. In the Intercropping FLDs, seeds of Bt cotton varieties ICAR-CICR GJHV-374 Bt, NHH 44 Bt and PKV Hy2 Bt were distributed along with Soybean, Urad, Mung and Tur at various villages in Yavatmal and Wardha districts. In Desi cotton FLDs seeds of cotton seed varieties, CNA-1028 and CNA-1032 were distributed at Village Gondidigras in Taluka Katol, Nagpur.



Income generation activity through vegetable plantation under SCSP

With a view to benefit the Scheduled Caste farmers and generate more income, 400 vegetable seed kits, each containing three 50 gm packets of bottle gourd, four 10 gm packets of brinjal, six 100 gm packets of Bhendi, two 500 gm packets of cowpea, three 500 gm packets of palak, two 500 gm packets of methi, two 500 gm packets of cluster bean, three 50 gm packets of cucumber, one 50 gm packet of chilli and four 50 gm packets of ridge gourd were provided to the vegetable growers in



Nagpur, Wardha & Chandrapur districts in the Vidharbha area of Maharashtra. The vegetable growers were also provided with Bio-fertilizer kits having Trichoderma (3kg), PSB (1 ltr.) and Rhizobium (1 ltr.) for the seed treatment. Dr. S.M. Wasnik,

Principal Scientist (Agri. Ext.) and Nodal officer, SCSP Co-ordinated the activities. Sh Akshay Kamble Technician (T1) assisted in successful conduct of the programme.

Inputs distributed under various schemes

ICAR-CICR RS Sirsa

Dr S.K. Verma, Principal Scientist (PBG) distributed the seeds of male and female lines of *G. arboreum* hybrid CICR-2 to progressive farmers of North cotton growing zone for hybrid seed production.

Dr Amarpreet Singh, Scientist (Agronomy), distributed the seeds of improved cotton varieties developed by ICAR-CICR, Regional Station, Sirsa, Haryana i.e., CICR Bt-6 (Bt variety), CSH 3075 and CSH 3129 (non-Bt varieties) for Front Line Demonstrations (FLDs) on Integrated Crop Management (ICM)



under National Food Security Mission-Commercial Crops (NFSM-CC) during 2020-21 cropping season in various cotton growing districts of Haryana and nearby cotton growing districts of Punjab & Rajasthan.

ICAR-CICR Nagpur

Food kits

ICAR-CICR distributed food kit and mask to one hundred and twenty three needy farmers of Khursapar and adjoining villages under SCSP during the lockdown due to COVID-19 in April 2020.



Seeds of ICAR-CICR Bt varieties

Each of the scientists' team under MGMG visited the adopted villages of various clusters under Mera Gaon Mera Gaurav during 2nd to 3rd week of June for distributing seeds of Bt cotton varieties (Suraj Bt and Rajat Bt) developed by ICAR-CICR, Nagpur to cotton farmers. The technical bulletins having complete package of practices was also supplied. The teams

advised the farmers to adopt management strategies suggested by ICAR-CICR, Nagpur. During interaction with farmers, the team explained the farmers about benefits of using varietal seeds over hybrids and urged the farmers to take up timely sowing at suggested spacing for better returns.



Hingna Cluster



Tivsa Cluster



Parsioni Cluster



Girad Cluster



Navegaon Cluster



Umred Cluster

Technology Developed

Three non Bt varieties developed by ICAR-CICR were identified for release and commercial cultivation in the Annual workshop of ICAR-AICRP on cotton held during May 18-19, 2020 through video conferencing.

1. CNA 1032

A *G. arboreum* variety, CNA 1032 from ICAR-CICR, Nagpur has been identified for commercial cultivation in central zone rainfed conditions.

S.No.	Characters	Value
1	Boll weight (g)	2.50
2	Ginning Outturn (%)	34
3	Seed cotton yield potential (Kg/ha.)	1317
4	Days to maturity (days)	150-160
Fibre characteristics		
5	Fibre length (at 2.5% SL)	28.7mm
6	Micronaire	5.7
7	Bundle strength (g/tex)	27.9
8	Zone of cultivation	Central Zone



2. CCB-51

A *G. barbadense* variety, CCB-51 from ICAR-CICR Regional Station, Coimbatore has been identified for commercial cultivation in South zone irrigated condition.

S.No.	Characters	Value
1	Boll weight (g)	3.10
2	Ginning Outturn (%)	35
3	Seed cotton yield potential (Kg/ha.)	1407
4	Days to maturity (days)	160-175
Fibre characteristics		
5	Fibre length (at 2.5% SL)	37.4 mm
6	Micronaire	3.3
7	Bundle strength (g/tex)	38
8	Zone of cultivation	South Zone

3. CCH 15-1

A *G. hirsutum* variety, CCH 15-1 from ICAR-CICR Regional Station, Coimbatore has been identified for commercial cultivation in both Central and South Zone States under irrigated condition.



S. No.	Characters	Value
1	Boll weight (g)	4.2
2	Ginning Outturn (%)	34.0
3	Seed cotton yield potential (Kg/ha.)	4019
4	Days to maturity (days)	150-160
Fibre characteristics (HVI Mode)		
5	Upper Half Mean Length	32.4 mm
6	Micronaire	3.7
7	Bundle strength (g/tex)	34.3
8	Zone of cultivation	Central & South Zone

Publications

- Biswas KK, Bhattacharyya UK, Palchoudhury S, Balram N, Kumar A, Arora R, Sain SK, Kumar P, Khetarpal RK, Sanyal A, Mandal PK. (2020). Dominance of recombinant cotton leaf curl Multan-Rajasthan virus associated with cotton leaf curl disease outbreak in northwest India. PLoS ONE 15(4):
- Blaise D, Manikandan A, Verma P, Nalayini P, Chakraborty M. and Kranthi, K R. (2020). Allelopathic intercrops and its mulch as an integrated weed management strategy for rainfed Bt-transgenic cotton hybrids. Crop Protection, 105214.
- Hiremani NS, Verma P, Gawande SP, Sain SK, Nagrale DT, Salunkhe VN, Shah V., Narkhedkar NG, Waghmare VN. (2020). Antagonistic potential and phylogeny of culturable endophytic fungi isolated from desi cotton (*Gossypium arboreum* L.). South African Journal of Botany. <https://doi.org/10.1016/j.sajb.2020.03.008>
- Raghavendra KP, Rakesh Kumar, Joy Das, Santosh HB, Sachin A more, Ramakrishna N, Shilpa G Chawla, Sandhya Kranthi, Keshav Raj Kranthi 2020. Quantitative real-time PCR based evaluation and validation of reference genes in *Gossypium arboreum* L. Indian Journal of Agricultural Sciences 90(1): 40-47
- Rishi Kumar, D. Monga, V. Chinna Babu Naik, Paramjit Singh and V. N. Waghmare 2020. Incipient infestations and threat of pink bollworm *Pectinophora gossypiella* (Saunders) on Bollgard-II cotton in the northern cotton-growing zone of India. Current Science: 118(9) 1454-56
- Shah V, Pande R, Verma P, Narkhedkar N G and Waghmare VN. (2020). Identification of oviposition deterrents from pink bollworm, *Pectinophora gossypiella* Saunders). J. Environ. Biol., 41, 644-649 .
- V. Santhy, K. Rathinavel, M. Saravanan, Mithila Meshram and C. Priyadarshini (2020). Genetic diversity assessment of extant cotton varieties based on Principal Component Analysis (PCA) and cluster analysis of enlisted DUS traits Electronic Journal of Plant Breeding 11 (2): 430-438
- Venugopalan MV, Reddy AR and Vandana Satish (2020) COVID-19 and the Indian Cotton Industry-Impact Analysis and Revival Strategies. ICAC Recorder, 38 (2) 53-69,
- Book Chapter: Sharma P, Jambhulkar PP, Raja M, Sain SK, Javeria S (2020) *Trichoderma* spp. in consortium and their rhizospheric interactions. In: Sharma A., Sharma P. (eds) *Trichoderma. Rhizosphere Biology*. Pp 267-292. Springer, Singapore https://doi.org/10.1007/978-981-15-3321-1_14.
- Venugopalan MV (2020) Will Indian Farmers Plant Less Cotton This Year? Cotton Statistics and News, No.1, 2020-21, Pages 1-4
- Valarmathi P. (2020). Antibiotics- Miracle Drugs as Crop Protectants: A Review. Agricultural Reviews. 41(1): 43-50
- Valarmathi P. 2020. Necrosis Disease (TSV) on Cotton: A Devastating One. AGROBIOS Newsletter Vol. XVIII (12): 73-74.
- Valarmathi P. 2020. Post harvest diseases caused by abiotic factors. AGROBIOS Newsletter Vol. XIX (1): 108.

KVK Round Up

Scientific Advisory Committee Meeting

Twenty fifth Scientific Advisory Committee Meeting (SAC) of Krishi Vigyan Kendra, ICAR-CICR, Nagpur was held on 10th June 2020. Project Director ATMA, Members of State Agriculture Department, District Animal Husbandry

Department, RBI, NABARD, All India Radio -Nagpur, ATARI, Pune, MAFSU, District Soil Testing Officer, Associate Dean, College of Agriculture-Nagpur, Professor and Associate Professor, LAD College, Nagpur, and Innovative farmers of Nagpur district attended the meeting online.

Dr. V. N. Waghmare, Director, ICAR-CICR, Nagpur chaired the

meeting. He appreciated the work of KVK, Nagpur for conducting outreach activities extensively along with Scientists of ICAR-CICR, Nagpur and suggested to further take up seed production of various crops. He advocated to organize trainings on seed production techniques at fields of KVK, ICAR-CICR, Nagpur. He also stressed on creating awareness regarding “Mera Mobile Mera Marketing” and “Per Drop More Crop” as suggested by Sh. Sanjay Chepurkar (RBI).

Dr. S. M. Wasnik, Principal Scientist, Extension and Head I/c, KVK and Member Secretary SAC, KVK, ICAR-CICR presented achievements of KVK, ICAR-CICR, Nagpur. He also shared ICAR-CICR activities such as e-Kapas, Cotton App, MGMG, IRM, ARYA, DAMU, SCSP, TSP, DAESI all of which were implemented in Nagpur District during the year 2019-20. Annual Action Plan for 2020-21 was also discussed and suggestions from various Department officials who joined on-line were noted for inclusion and implementation in the action plan of 2020-21.

Dr. Panchabhai, Associate Dean, College of Agriculture, Nagpur, Dr. Pradnya Godghate, JDA-Nagpur, Dr. Nalini Bhojar, Project Director ATMA, Smt. Maithili Kowe, NABARD, Nagpur, Sh. Rathod, District Manager, MAHABEEJ, Nagpur, Sh. Sanjay Chepurkar, RBI, Nagpur, Dr. Manjusha Pundalik, DDCAH, Nagpur, Dr. Arvind Thakre, DAHO, Nagpur, Dr. Kalpna Jadhav, PGD Home Science, RTMNU, Nagpur, Sh. T.K. Patil, District Soil Testing Officer, Dr. Ankush Kamble, ATARI, Pune, Dr. D. Blaise, Head I/c., Division of Crop Production and Dr. Nandini Gogte, Head I/c., Division of Crop Protection, ICAR-CICR, other line department officials and SAC farmer members also attended the deliberations. Dr. S. S. Patil, SMS (Extension) proposed vote of thanks. Smt. Sunita Chauhan, SMS (Home Science), Dr. U. V. Galkate, SMS (Veterinary Science) and Dr. P.B. Deulkar, Farm Manager acted as rapporteurs.

25th Scientific Advisory Committee meeting held at CICR

■ Staff Reporter

THE 25th Scientific Advisory Committee (SAC) meeting of Krishi Vigyan Kendra (KVK), ICAR-Central Institute of Cotton Research (CICR) was held at CICR campus here on Wednesday.

Dr Vijay N Waghmare, Director, ICAR-CICR, chaired the meeting. Addressing the meeting, Dr Waghmare appreciated the work of KVK-Nagpur in conducting outreach activities extensively along with scientists of ICAR-CICR. He suggested to take up seed production of various crops and organise training on seed production at KVK, ICAR-CICR, Nagpur field. He further stressed upon creating awareness regarding 'Mera Mobile, Mera Marketing' and 'Per Drop, More Crop' concepts as suggested by Sanjay Chepurkar of Reserve Bank of India (RBI).



Dr V N Waghmare, Director, ICAR-CICR, Nagpur speaking during 25th Scientific Advisory Committee meeting. Dr Siddhartha M Wasnik and other officials also are seen.

Earlier, Dr Siddarth M Wasnik, Principal Scientist, Extension and Head, KVK and Member Secretary of SAC, presented achievements of KVK, ICAR-CICR, Nagpur. He also shared ICAR-CICR activities like e-Kapas, Cotton App, MGMG, IRM,

ARYA, DAMU, SCSP, TSP, DAESI implemented in Nagpur district during the year 2019-20. Annual Action Plan for 2020-21 was also discussed and suggestions from various department officials, who joined on-line, were recorded. The suggestions will

be incorporated for implementing the Action Plan of 2020-21.

Dr D M Panchabhai, Associate Dean, College of Agriculture, Nagpur; Dr Pradnya Godghate from the office of Joint Director of Agriculture-Nagpur; Dr Nalini

Bhojar, Project Director, ATMA; Maithili Kowe, NABARD; Rathod, District Manager, Mahabeej; Sanjay Chepurkar from RBI; Dr Manjusha Pundalik, DDCAH; Dr Arvind Thakre, District Animal Husbandry Officer; Dr Kalpana Jadhav, Post-Graduate of Home Science, Rashtrasant Tukadoji Maharaj Nagpur University; T K Patil, District Soil Testing Officer; Dr Ankush Kamble, ATARI, Pune; Dr Blaise D, Head of Department, Crop Production; and Dr Nandini Gogte, Head of Department, Crop Protection, ICAR-CICR, and other line department officials and SAC farmer members attended the meeting either in person or on-line.

Dr S S Patil, SMS (Extension), proposed a vote of thanks. S Chauhan, SMS (Home Science); Dr U V Galkate, SMS (Veterinary Science); and Dr P B Deulkar, Farm Manager, acted as rapporteurs.

Use of ICTs during COVID-19 lockdown period

KVK, ICAR-CICR, Nagpur played an important role in spreading awareness on the installation of Arogya Setu Mobile Application among the farmers. KVK took efforts in forwarding this application to more than 7000 farmers for installing the application in their mobile phones. This application enable us to know if there are likely COVID-19 positive cases nearby the user of app.

Cluster FLD's on Oilseeds & Pulses

One CFLD on oilseeds i.e. Soybean var. MAUS-158 and one on pulses i.e. Pigeonpea BDN-716 were conducted in the adopted villages of Nagpur district viz. Chargaon, Muradpur, Ambazari and Saleghat. These demonstrations were conducted on 100 farmer's field covering 40 hectares. Seeds of soybean & pulses were also provided under CFLD Oilseeds

Gramin Krishi Mausam Seva-District Agromet Unit

Under the scheme “KVK Gramin Krishi Mausam Seva (GKMS)- Atmosphere and Climate Research Modeling



observing system and services”, block wise Agro Advisory Service bulletins were prepared and disseminated through what's App group of farmers formed for Bhivapur, Narkhed, Katol, Kalameshwar, Kuhi, Mauda, Parseoni, Ramtek, Umred, Kamthee, Hingna, Saoner and Nagpur (Gramin) blocks of Nagpur district based on the value added forecast received on Tuesday and Friday of every week from Regional Meteorological Centre, Nagpur. The crops includes Chilli, Cotton, Groundnut, Soybean, Sesame, Castor, Linseed,

Mustard, Sorghum, Paddy, Maize, Wheat, Green gram, Black gram, Pigeon pea, Citrus, Acid lime, Sweet orange, Mango, Okra, Brinjal, Tomato, Cabbage, Cauliflower, Watermelon etc. A total of 2913 farmers registered their what's app number with KVK-ICAR-CICR which includes Nagpur (739), Kalmeshwar (194), Kuhi (238), Mauda (173), Parseoni (78), Ramtek (215), Umred (189), Katol (118), Bhivapur (248), Narkhed (254), Kamthee (148), Hingna (138), Saoner (127), Nagpur rural (54).

Online Workshops / Webinars / Meetings Attended

- Dr. S.M. Wasnik, Head I/c, KVK, ICAR-CICR and Principal Scientist, (Extension) participated in the online video conferencing meet of Vidarbha KVKs organised by Director, ATARI, ZONE-VIII Pune on 15th April 2020.
- Dr. S.M. Wasnik participated in the Online Video Conferencing meet of All India Coordinated Research Project on Cotton organised by Project Coordinator on 18-19th May 2020 and Co-Chaired the session on Transfer of Technology.
- Dr. S.M. Wasnik participated in the State Level On-line Annual Action Plan Workshop of KVKs of Maharashtra and Goa organised by Director, ATARI, ZONE-VIII Pune, held during 27-28th May, 2020 and presented the Annual Action Plan for KVK Nagpur for the period of January - December 2020.
- Dr. S.M. Wasnik and Dr. S.S. Patil participated in the On-line IRM Pink Boll Worm workshop organised at ICAR-CICR, Nagpur on 6th June 2020.
- Dr. S.M. Wasnik participated in the On-line Zonal Research and Extension Advisory Committee (ZREAC) meeting organised by Dr PDKV on 11th June 2020 & presented annual progress report of KVK, ICAR-CICR, Nagpur for the year 2019-20.
- Dr. S.M. Wasnik guided farmers on cotton production

technology during On-line Cloud HD Video meeting on Zoom organised by Dhanuka on 13th June 2020

- Dr. S.M. Wasnik participated in the Online ARYA Workshop chaired by Dr. Trilochan Mohapatra, Hon'ble Secretary, DARE & DG, ICAR on 16th June 2020. Hundred KVKs of India implementing ARYA participated in the online workshop. Dr. Lakhani Singh, Director, ATARI, ZONE-VIII, Pune presented the success stories and impact of rural youth engaged in various enterprises under ARYA. Dr. S.S. Patil (SMS, Extension), Smt. Sunita Chauhan (SMS, Horticulture) and Smt Jaishri Khobragade, SRF, ARYA also joined the meeting.
- Dr. S.M. Wasnik participated in the On-line Scientific Advisory Committee Meeting (SAC) of Krishi Vigyan Kendra, Yeotmal on 20th June 2020
- Dr. S.M. Wasnik participated in the On-line Scientific Advisory Committee Meeting (SAC) of Krishi Vigyan Kendra, Wardha on 24th June 2020

Radio Talk Delivered

Dr. S.M. Wasnik, Principal Scientist (Agri. Extension) & Head KVK, ICAR-CICR, Nagpur delivered On-line Radio Talk on May 29, 2020 on "Krishi Vigyan Kendra Nagpur & ICAR-CICR technologies for farmers" for the coming Kharif Season

Leaflet Published

1. Processing of Fruits and Vegetables: Profitable Enterprise. (Authored by Smt. Sunita Chauhan, SMS (Horticulture), Editor- Dr. S.M. Wasnik, Principal Scientist (Agri. Ext.) & Head KVK; Published by Director, ICAR-CICR, Nagpur)
2. Value addition of Custard Apple. (Authored by Smt. Sunita Chauhan, SMS (Horticulture), Edited by Dr. S.M. Wasnik, Principal Scientist (Agri. Ext.) & Head I/c KVK; Published by Director, ICAR-CICR, Nagpur)

Hindi Corner

Hindi workshop

One day Hindi workshop was organized for administrative staff on 30th June 2020 at ICAR-CICR, Nagpur under the chairmanship of Dr. V.N. Waghmare, Director ICAR-CICR, Nagpur, and in presence of Shri A.A. Goswami, Senior Administrative officer, ICAR-CICR Nagpur. Dr. Mahendra Kumar Sahoo was the guest speaker and delivered talk on "COVID-19 pandemic: Awareness, guidelines and compliance" which was exactly the need of time. Addressing the staff during the introductory session, Dr. V.N. Waghmare, Director, ICAR-CICR stressed upon the precautions to be taken during this ongoing pandemic and useful means to boost our immunity. Dr. Sahoo discussed about how we can continue performing our official work/duties during this pandemic, keeping ourselves safe. He also mentioned the staff to follow all the COVID-19 guidelines/protocols issued by Government strictly. The other speakers, Shri A.A. Goswami and Shri Rajnikant Chaturvedi focussed on scientific and technical aspects related to COVID-19 and on measures to contribute to the society and country's progress, in this difficult time. Dr. Mahendra Kumar Sahoo,

Hindi Officer, ICAR-CICR Nagpur conducted the workshop and Shri Rajnikant Chaturvedi proposed the vote of thanks.



Personnel

Superannuation

S.No.	ICAR - CICR, NAGPUR		
1	Sh. Bandu Wankhede	Skilled Support Staff	April 2020
2	Sh. N. V. Dande	Personal Secretary	June 2020
3	Sh. A. N. Khan	AAO	June 2020
4	Sh. Baba Shelke	Skilled Support Staff	June 2020
5	Sh. Udayabhan Niswade	Skilled Support Staff	June 2020
ICAR - CICR RS, COIMBATORE			
6	Dr. Dhara Jyoti	Principal Scientist	April 2020
ICAR - CICR RS, SIRSA			
7	Sh. Dalip Singh	AAO	May 2020



Promotion

Sh. A.N. Khan, Assistant, ICAR-CICR, Nagpur promoted to the post of AAO w.e.f. 01.04.2020.

Appointment

Dr. Debashis Paul joined as Scientist (Seed Science and Technology) at ICAR-CICR, Nagpur on April 4, 2020 and was posted at ICAR-CICR Regional Station, Sirsa.



Produced & Published by :

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