COTTON INNOVATE

Cotton Innovate

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

Male Fertile flower of GMS-DS-5

Contributed by: Dr. Debashis Paul, Scientist (Seed Technology), ICAR-CICR, Regional Station, Sirsa

Cotton Innovate | Volume 06(3), 2023
www.cicr.org.in

Research Notes Clipping

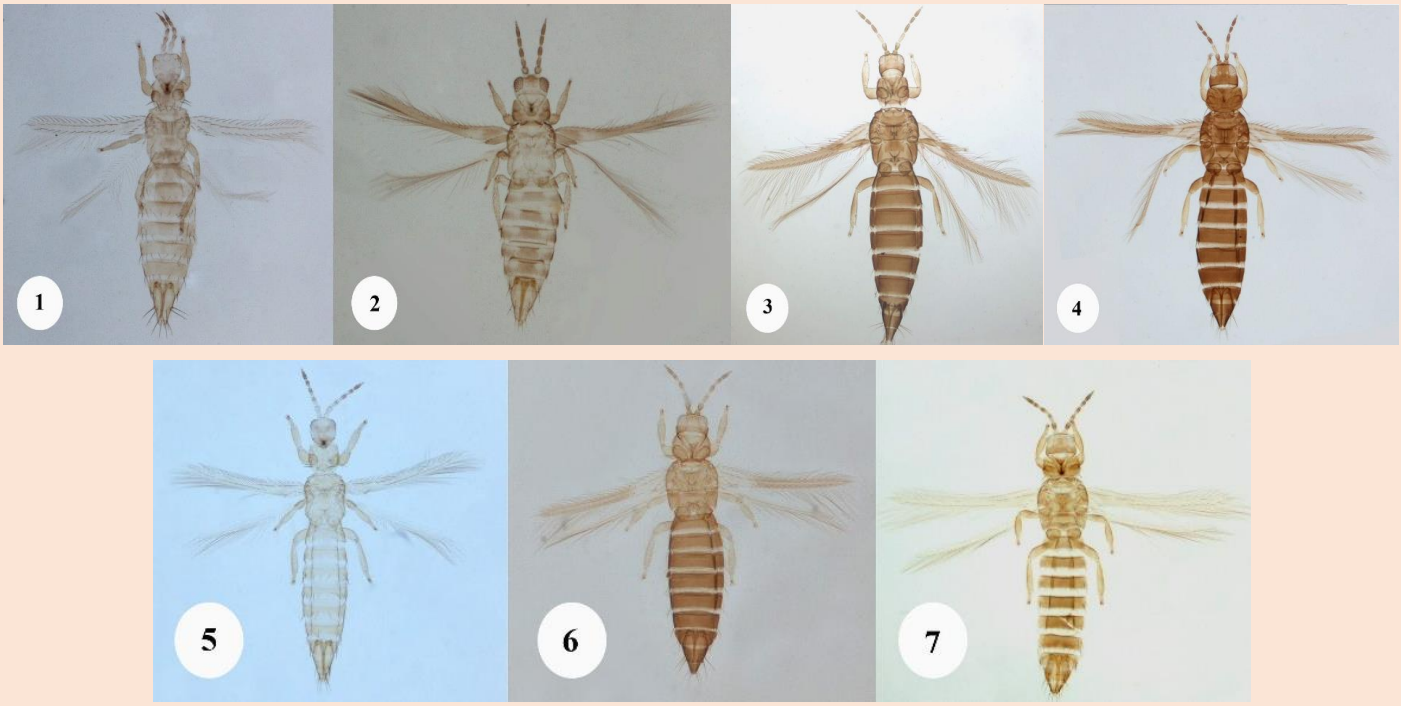
Diversity, Ecology and eco-compatible management of thrips in cotton ecosystem

M Amutha 1, K Sankaranarayanan 2, SP Gawande 3, Rishi Kumar4
1- Principal Scientist, Agricultural Entomology, ICAR-CICR, RS, Coimbatore
2 – Principal Scientist, Agronomy, ICAR-CICR, RS, Coimbatore
3 – Senior Scientist, Plant Pathology, ICAR -CICR, Nagpur
4- Principal Scientist, Agricultural Entomology, ICAR-CICR, RS, Sirsa

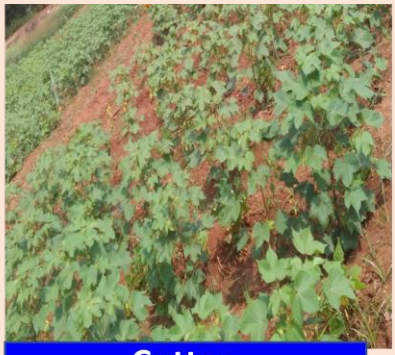
An experiment was conducted to study the species diversity, population dynamics and eco-compatible management of thrips in cotton ecosystem. Based on the morphological taxonomic characters, there are three species *viz*. *Scirtothrips dorsalis* Hood, *Thrips palmi* Karny and *Thrips tabaci* Lindeman were present on leaves. On flowers there are four species recorded *viz*., *Thrips florum* Schmutz, *Thrips hawaiiensis* (Morgan), *Frankliniella schultzei* (Trybom) and *Thrips parvispinus* (Karny) were recorded at cotton ecosystem. Among the thrips present in leaves, *Scirtothrips dorsalis* is the dominant one (47%) followed by 32 and 21% of *Thrips palmi* and *Thrips tabaci* espectively. *T. parvispinus*, is a prevalent pest species of thrips of quarantine importance.

The order of efficacy of intercropping system to reduce the infestation of thrips were as follows. Cotton + marigold > Cotton + ground nut > cotton+ onion = cotton + vegetable cowpea> cotton + french bean. Amongst the intercropping systems, the highest net return (Rs. 18,482 /ha) and benefit cost ratio (1.3) were recorded with cotton + onion system.

The order of efficacy of insecticides were as follows spinoteram > fipronil > flonicamid > clothianidin > thiacloprid > thiamethoxam > diafenthiuron > imidacloprid > profenophos > buprofezin. Among biopesticides, *Metarhizium anisoplea* and among essential oils, neem oil followed by castor oil recorded for higher efficacy against thrips. Among six colour sticky traps, blue colour (93.67) followed by yellow (78.89) attracted more number of thrips.



Figs 1-7. (1) *Frankliniella schultzei*; (2) *Scirtothrips dorsalis*; (3) *Thrips hawaiiensis*; (4) *Thrips florum*; (5) *Thrips palmi*; (6) *Thrips parvispinus*; (7) *Thrips tabaci*.



Cotton

Cotton+Marigold

Cotton+cowpea

Cotton+ French Bean

Cotton+ Onion

Cotton+ Ground Nut

Pest suppressive diversified agro ecosystem based management technique for cotton thrips

Protection of Plant Varieties and Breeders Rights on cotton

K Rathinavel 1, V Santhy2 and A Manivannan3
1-Principal Scientist, Seed Science and Technology, ICAR-CICR, RS, Coimbatore
2- Principal Scientist, Seed Science and Technology, ICAR-CICR, Nagpur
3- Senior Scientist, Plant Breeding and Genetics, ICAR-CICR, RS, Coimbatore

Intellectual Property is the property created by the human intellect-which can be incorporated in tangible objects and reproducible in different locations. Depending on the nature and tangibility of the IP, different type of rights, called intellectual property rights (IPR), are granted in India and they are Patent (Indian patents act 1970), Copy rights (Indian copyright act 1957), Trade marks (Trade Marks act, 1999), Industrial designs (Designs act –2000), Layout designs (The Semiconductor Integrated Circuits Layout-design act, 2000), Protection of undisclosed information, Protection of database (Indian IT Act 2000), Geographical indications (Geographical Indications of Goods (Registration & Protection) Act, 1999), Plant breeder's or farmer's rights (PPV&FR Act, 2001). The Concept of IPR in agriculture was conceived with a need to provide incentives to individuals and institutions, monetary return on investment in research and breeder's rights for sustaining breeding.

The Indian patents act 1970 does not provide patent for the method of agriculture or horticulture and other innovations from biological research. However, The Article 27.3(b) of the Section on TRIPs in GATT (GATT 1994) provides that the member country shall provide for the protection of plant varieties either by patents or by an effective *sui generis* system or any combination thereof. Accordingly legal frame work was made and for an effective *sui generis* system (Unique, of its own) in India and the "**Protection of Plant Varieties and Farmer's Rights"** (PPV&FR) Act 2001 was enacted. This act specifies the rights of farmers, rights of breeders, rights of researchers and rights of communities on protected varieties.

Breeders' Rights'

An exclusive right on the breeder or his successor, his agent or license, to produce, sell, market, distribute, import, or export the variety. A breeder may authorize any person to produce, sell, market, or otherwise deal with the variety registered under this Act subject to such limitations and conditions as may be specified in the regulations. Breeder shall enjoy provisional protection of his variety against any abusive act committed by any third party during the period between filing of application for registration and decision taken by Authority [Section 24(5)]. Breeder should bring any act of such abuse to the notice of Registrar. Registrar has powers to issues directions in such cases (and powers of a breeder – Sec. 24(5)).

Granting of Breeders' rights will help to stimulate further research, develop new varieties, encourage growth of seed industry, ensure quality seeds to farmers, and accelerate growth in agriculture. The researcher's rights include the use of protected variety for conducting experiment or research. The protected variety can be used by any person as an initial source of variety for the purpose of creating other varieties. However, authorization of the breeder is required where repeated use of such variety as a parental line is necessary for commercial production of such other newly developed variety.

Plant Varieties which may be registered

Genera and species of new plant varieties as notified by the central government under section 29 (2) of the act.

1. Extant variety- Notified under section 5 of the Seeds Act -1966, Farmer's variety, A variety about which there is a common knowledge, any other variety in public domain.

2. Essentially Derived Variety- is predominantly derived from such initial variety, or from a variety that itself is predominantly derived from such initial variety while retaining the expression of the essential characteristics that result from the genotypes or combination of genotype or such initial variety

Persons who may make application:

An application for registration under section 14 shall be made by (a) Any person claiming to be the breeder of the variety; or (b) Any successor of the breeder of the variety; or (c) Any person being the assignee of the breeder of the variety in respect of the right to make such application; or (d) Any farmer or group of farmers or community of farmers claiming to be the breeder of the variety; or (e) Any person authorized in the prescribed manner by a person specified under clauses (a) to (d) to make application on his behalf; or (f) Any university or publicly funded agricultural institution claiming to be the breeder of the variety.

Requirement for making application:

Filled in Form I, Technical Questioner, Form PV I, Form PV II, an affidavit for non-use of Terminator Technology or the Genetic Use Restriction Technology or any other Restriction Technology, Agronomic and Commercial Attributes of the variety, Deed of Assignment by the breeder, one colour photograph of plant, copy of the notification proposal along with de linted, non-treated seeds of 200 gram of ten pockets. The seed should have at least 75 % germination, 98 % physical purity; The moisture content of the seed shall not exceed 10 %. Registration fees (Rs.10, 000), DUS test fees (Rs.4, 50,000) and application processing fee (Rs. 200) are to be paid along with application for each variety. Application for hybrid and for its parental lines is to be submitted individually.

Acceptance of application:

On receipt of an application under section 14, the Registrar may, after making such inquiry as he thinks fit with respect to the particulars contained in such application, accept the application absolutely or subject to such conditions or limitations as he deems fit.

Total period of validity:

Total period of validity shall not exceed eighteen years from the date of registration of the variety in the case of trees and vines, In the case of extant variety, fifteen years from the date of the notification of that variety by the Central Government under section 5 of the Seeds Act, 1966; and in other cases, fifteen years from the date of registration of the variety.

Conduct of DUS test

DUS test for cotton conducted at least two independent similar growing seasons. The test shall normally be conducted at least at two test locations. Observations shall not be recorded on plants in border rows. Each test plots consists of 12 rows of 10 dibbles in a row adopting the spacing of 90 x 60 cm. Randomized block design is followed with three replications. Candidate varieties are sown along with reference varieties and compared. The data on morphological traits are recorded in different growth stages. DUS tests are conducted following the national test guidelines published in Plant Variety Journal, individually for tetraploid and diploid cotton, respectively. Field observation on 37 morphological traits in tetraploid cotton and 32 traits in diploid cotton are to be recorded, of which 22 are essential and the rest are optional. The data thus recorded for two seasons and two locations are compared with reference varieties for the establishment of Distinctiveness, Uniformity and Stability. A variety, clearly distinguishable by at least one essential characteristics from any other variety, sufficiently uniform in its essential characteristics, and if, its essential characteristics remain unchanged after repeated propagation are granted PVP certificate by the Plant Variety Registry of PPV&FRA. Additional test protocols for special purpose shall be established by the PPV & FR Authority.

Six DUS test centers are notified for cotton DUS testing; representing two centers for each cotton growing zone such as North, Central, and south and ICAR-CICR Coimbatore is the Nodal Center.

Progress of DUS test since 2008

Since the inception of the programme DUS test was conducted for 558 New Varieties, 311 Varieties of Common Knowledge, 2 Farmers Variety, 184 Essentially Derived Variety, 183 Initial variety, across six centres.

ICAR-CICR Cotton Varieties protected

- Shresth (CSHH-198), Hybrid kalyan (CSHH-238),
- Hy. CISAA 2 (CICR-2),
- CISA 310, CSHH-243,
- Sumangala (CWROK-165),
- Surabhi (VRS-7),
- CCH510-4 (SURAJ),
- CCH2623**,**
- Pratima (CNH 120 MB),
- CNHO12,
- CNA1003 (Roja),
- CICR B Cotton 37,
- CICR B Cotton 45,
- CICR-H Cotton 58 (CNH 17395),
- CICR-A Cotton 59 (CNA17522),
- CICR-H Cotton 54 (Nano) are the ICAR-CICR cotton varieties protected.

CICR Happenings

Cotton advisory for Contingency measures

According to IMD prediction, El Nino conditions are likely to occur during the monsoon season 2023. In view of the IMD forecast on deficit monsoon rainfall for the ensuing kharif cropping season, ICAR CICR issued "Cotton Advisory for Continency ". Under rainfall deficit situation, pest and disease incidence in cotton crop is likely to be altered. Timely interventions can help mitigate crop loss in the changed scenario of pests and disease occurrence. The cotton advisory was disseminated to all stakeholders ahead of the season.

CITI-CDRA Master Trainers Training on HDPS Cotton

A one day training of on HDPS Cotton production Technology was conducted for the staff of CITI-CDRA, Maharastra at ICAR-CICR, Nagpur on 22nd June 2023. Dr YG Prasad, Director ICAR-CICR, Nagpur, Dr AL Waghmare, Director, Directorate of Cotton Development, Nagpur, Dr GT Behere, Head, Division of Crop Pretection, ICAR-CICR, Nagpur, Shri.Govind Wairale Program Coordinator, CITI CDRA, Maharastra and Mr Sandeep Mali from Nuziveedu seeds were present during the inaugural session.

Dr. YG, Prasad, Director, had elaborated the details about the special pilot project in PPP mode sponsored by NFSM, Government of India and emphasized the importance of the pilot project to increase the yield of

cotton. Dr. Ramkrushna, Dr. Shailesh Gawande, Dr. Manikandan, Dr. Babasaheb Fand, Dr. Rahul Phuke and Dr. M. Sarvanan had given the detailed information about selection of cotton varieties, best cotton cultivation practices on plant protection and canopy management in cotton. About 30 Trainees of CITI-CDRA had participated and discussed their queries during training program. CITI-CDRA Project Coordinator of Madhya Pradesh Shri Nitin Zade had also participated in the training. The training was coordinated by Dr. Ramkrushna G. I., Dr. A. Manikandan, and Dr Shailesh P. Gawande.

Students visit ICAR-CICR-Regional Station, Coimbatore

One hundred and forty one II year B.Sc. (Hons) Agriculture students from Adhiparasakthi Agricultural College, Kalavai visited the ICAR-CICR, Regional Station, Coimbatore on June 15, 2023, as a part of their course work programme. Lectures on importance of cotton and institutional activities, cotton variety, fibre quality, improved cotton protection, and production technologies were delivered by Dr. K. Ramesh, Principal Scientist (Agricultural Entomology). They got acquainted with the inception, research activities, and significant achievements in various areas of the station. One hundred and fourteen II B. Sc. (Ag) students from The Indian Agriculture College, Raja Nagar, Radhapuram, Tirunelveli District, visited the ICAR- CICR, Regional Station, Coimbatore on June 23, 2023 as a part of their study tour programme. The students interacted with Dr. K. Shankar Ganesh, Senior Scientist (Agricultural Entomology) and got exposure to the institute activities. They got accustomed to the research activities and significant achievements in various researchable areas of the station.

Ninety-six B. Sc. (Ag) students from RVS Agricultural College, Thanjavur, visited the Regional Station of ICAR, CICR, Coimbatore on June 27, 2023 as a part of their study tour programme. The students interacted with Dr A. Sampathkumar, Senior Scientist (Pathology), and got exposure to the institute activities and ongoing research programmes of the station.

Scientists' Corner:

- Dr YG Prasad, Director, ICAR-CICR participated as a expert in session VII : Crop Protection (AICRP-Castor during the Annual Kharif Oilseeds Group Meet [AICRP on Oilseeds (Castor & Sunflower) and AICRP on Sesame & Niger, 2023] organized on June 1-2, 2023 at ARS Mandor, Rajasthan.
- Dr YG Prasad, Director, ICAR-CICR and Dr MV Venugopalan participated in the fifth meeting of committee on Cotton and Consumption (COCPC) for the cotton season 2022-23 and fifth meeting of Stakeholders for the Cotton Season 2022-23 held on 01.06.2023 through video Conferencing.
- Dr YG Prasad, Director, ICAR-CICR participated as an expert in session VII: Crop Protection in the Annual Kharif Oilseeds Group Meet [AICRP on Oilseeds (Castor & Sunflower) and AICRP on Sesame and Niger, 2023 held on June 1-2, 2023 at ARS Mandor, Rajasthan on virtual mode

On the occasion of World Environment Day 2023, KVK- ICAR-CICR, Nagpur conducted tree sapling plantation under "Mission Life" as a part of series of activities to mark the celebration of World Environment Day in ICAR-CICR premises on 05.06.2023. Tree saplings were planted by Dr. Y. G. Prasad, Director, ICAR-CICR, Nagpur, Sh. A. Goswami, Chief Administrative Officer and the other staff under "Mission Life."

- Dr YG Prasad, Director, ICAR-CICR participated in a meeting to review the implementation of special project on cotton of ICAR-CICR held on 09.06.2023 in Krishi Bhavan, New Delhi under the Co-Chairpersonship of Joint Secretary (Crops), DA&FW and Joint Secretary (Fibre), MoT. Smt. Shubha Thakur, Smt PL Verma, Dr RK Singh, Dr R P Singh, Dr KK Dash, Sh. BS Patil, Sh. Suraj Prakash, ShPawan Kumar, Sh Anmol Gupta, Sh Rakesh Khandelwal & Sh Shekhar Singh participated in the meeting along with Director ICAR-CICR Nagpur.
- Dr YG Prasad, Director, ICAR-CICR and Dr G. Balasubramani participated in the meeting (Hybrid Mode) to discuss the various issues relating to spurious / sub-standard seeds of cotton organised by Dr. Dilip Kumar Srivastava, Deputy Commissioner (QC) under the Chairmanship of Joint Secretary (Seeds) DA&FW on 14.06.2023 at Krishi Bhavan, New Delhi.
- Dr YG Prasad, Director, ICAR-CICR and Dr V. Santhy, Principal Scientist, Seed Technology participated in online training on Agricultural Research Management System (ARMS) of Nodal Officers of ICAR institutes conducted by IT, Unit, IASRI held during 14th -15th June 2023

- Dr YG Prasad, Director, ICAR-CICR, Nagpur organized an online meeting regarding Special Project on Cotton-Discussion on DBT for beneficiaries on 15thJune, 2023. All concerned officers attended the meeting
- ICAR-Central Institute for Cotton Research (ICAR-CICR), Nagpur organized a one-day training program on "ELISA based Testing of Cry Protein in Bt Cotton" for the technical staff of the institute on 22nd June 2023 at Seminar Hall, ICAR-CICR, Nagpur. Dr. YG Prasad, Director, ICAR-CICR, Nagpur, inaugurated the training program. Heads of various divisions, Dr V N Waghama Dr YG Prasad, Director, ICAR-CICR organized 4th Meeting of Sub-Group I - Special Project on Cotton on 6th June 2023. To review progress, changes and finalize the operational details & discuss mode of Direct Benefit Transfer (DBT) to project farmers and issues thereof. All associated partners of Special Project on Cotton (NFSM) attended the meeting along with Chairman of subgroup - I.
- Dr. Rishi Kumar, Head (i/c) and Principal Scientist (Entomology), ICAR-CICR, Regional Station, Sirsa trained the Agricultural Department Supervisors in a training program organized by Haryana Agricultural Management and Extension Training Institute (HAMETI), on June 08, 2023. Dr. Kumar delivered lectures on “Scope of cotton cultivation in Haryana” and “Integrated Pest Management in Cotton”. Thirty five officials have participated in the training.

- Dr YG Prasad, Director, ICAR-CICR participated in a meeting to review the implementation of special project on cotton of ICAR-CICR held on 09.06.2023 in Krishi Bhavan, New Delhi under the Co-Chairpersonship of Joint Secretary (Crops), DA&FW and Joint Secretary (Fibre), MoT. Smt. Shubha Thakur, Smt PL Verma, Dr RK Singh, Dr R P Singh, Dr KK Dash, Sh. BS Patil, Sh. Suraj Prakash, ShPawan Kumar, Sh Anmol Gupta, Sh Rakesh Khandelwal & Sh Shekhar Singh participated in the meeting along with Director ICAR-CICR Nagpur.
- Dr YG Prasad, Director, ICAR-CICR and Dr G. Balasubramani participated in the meeting (Hybrid Mode) to discuss the various issues relating to spurious / sub-standard seeds of cotton organised by Dr. Dilip Kumar Srivastava, Deputy Commissioner (QC) under the Chairmanship of Joint Secretary (Seeds) DA&FW on 14.06.2023 at Krishi Bhavan, New Delhi.

- Dr YG Prasad, Director, ICAR-CICR and Dr V. Santhy, Principal Scientist, Seed Technology participated in online training on Agricultural Research Management System (ARMS) of Nodal Officers of ICAR institutes conducted by IT, Unit, IASRI held during 14th -15th June 2023
- Dr YG Prasad, Director, ICAR-CICR, Nagpur organized an online meeting regarding Special Project on Cotton-Discussion on DBT for beneficiaries on 15thJune, 2023. All concerned officers attended the meeting
- Dr YG Prasad, Director, ICAR-CICR, Nagpur organized an online meeting to discuss Special Project on Cotton- Finalization of Pneumatic Planter specification on 19.06.2023. Dr GI Ramkrushna, Er Majumdar, CAO, Dr Ashutosh Pandirwar and Dr B M Nandede also participated in the meeting
- ICAR-Central Institute for Cotton Research (ICAR-CICR), Nagpur organized a one-day training program on "ELISA based Testing of Cry Protein in Bt Cotton" for the technical staff of the institute on 22nd June 2023 at Seminar Hall, ICAR-CICR, Nagpur. Dr. YG Prasad, Director, ICAR-CICR, Nagpur, inaugurated the training program. Heads of various divisions, Dr V N Waghamare, Dr G T Behere and Dr Venugopalan attended the inaugural programme
- Dr YG Prasad, Director, ICAR-CICR organized an online meeting to discuss cotton based natural farming in collaboration with IGGAARL on 22.06.2023. Dr AH Prakash, Dr K Rathinavel and Dr S Manickam attended the meeting along with Director
- Dr. Y.G. Prasad, Director, ICAR-CICR, Nagpur inaugurated the specialized capacity building training program on “Nutrition Garden for nutritional sustainability” organized by Krishi Vigyan Kendra (KVK), ICAR-CICR, Nagpur under home science discipline for tribal farm women of Mandawa village, Taluka-Bhiwapur, Nagpur district dated 22 nd June, 2023 at ICAR-CICR Campus, Nagpur
- Dr. S. K. Sain, Principal Scientist (Plant Pathology) & Dr. Amarpreet Singh, Scientist (SS), (Agronomy), ICAR-CICR, Regional Station, Sirsa delivered a lecture on “Crop health management with special reference to cotton” in cotton promotion programme under new state plan scheme at Haryana Agricultural Management and Extension Training Institute (HAMETI) on June 23, 2023. A total of 40 farmers participated in the training programme
- Dr. Rishi Kumar, Head (i/c) & Principal Scientist (Entomology), ICAR-CICR, Regional Station, Sirsa attended an Agro Input Dealers Workshop as Chief Guest organized by Indian Cotton Association on June 25, 2023 at Padampur, Rajasthan and delivered a lecture on “Cotton Production Technology and Integrated Pest Management”. Total 50 Agro-input dealers participated in the workshop
- Dr. YG Prasad, Director- ICAR-CICR, Nagpur attended the online meeting of the committee for certification of Technologies/Product under Agricultural engineering organized by Dr. K Narsaiah ADG (Process Engineering) on 26.06.2023. All committee members participated in the meeting
- Dr YG Prasad attended the third meeting of the Organizing Committee (OC) of 81st plenary meeting of ICAC under the chairpersonship of Smt. Rooprashi, Textile Commisisoner, Government of India, Ministry of Textiles held on 27th June, 2023 through video conference.
- Director, ICAR-CICR Nagpur, Heads of various divisions and scientific staff for ICAR-CICR participated in the meeting regarding SPARROW for Scientific staff on 27.06.2023 organized by ICT Unit, IASRI, New Delhi
- Dr. Rishi Kumar, Head i/c) & Principal Scientist (Entomology), Dr. Subhash Chandra, Scientist, Plant Breeding and Dr. Debashis Paul, Scientist (Seed Technology), ICAR-CICR, Regional Station, Sirsa interacted with NITI Ayog members, New Delhi regarding the farmers’ issues in oilseed production.

- Dr. Rishi Kumar and Dr. Subhash Chandra visited farmers' villages with NITI Ayog members and interacted with farmers about the issues related to oilseed production and marketing on June 27, 2023
- Dr YG Prasad, Director, ICAR-CICR, Nagpur participated in the virtual meeting regarding Stakeholder Consultation on Organic Cotton held under the chairpersonship of Joint Secretary (Fibre) on 28.06.2023.
- Dr Y G Prasad, Director, ICAR-CICR, Nagpur participated in the first meeting of the Committee to suggest roadmap for mechanization of cotton harvesting in India on 28.06.2023 organized by Dr V G Arunde, Principal Scientist & Member Secretary, ICAR-CIRCOT, Mumbai.
- Dr. Rishi Kumar, Head (i/c) and Principal Scientist (Entomology), Dr. S. K. Sain, Principal Scientist (Plant Pathology), Dr. Amarpreet Singh, Scientist (SS) (Agronomy), Dr. Subhash Chandra, Scientist (SS), Plant Breeding and Dr. Debashis Paul, Scientist (Seed Technology) ICAR-CICR, Regional Station, Sirsa participated in the training programme on Agro-Ecosystem Analysis (AESA) based Farmers Field School (FFS) under CCI-CICR pilot project at ICAR-CICR, Research Farm Area on June 28, 2023.
- Dr. Rishi Kumar also delivered a lecture on "Integrated Pest Management in Cotton" and practicals on FFS and Dr. S. K. Sain conducted a session on AESA with the participants. A total of 50 farmers participated in the training programme and actively interacted with the scientists.
- Dr. Rishi Kumar, Head (i/c) & Principal Scientist (Entomology) and Dr. Debashis Paul, Scientist (Seed Technology), ICAR-CICR, Regional Station, Sirsa attended a review meeting on Cotton at Chandigarh on June 30, 2023. The Additional Chief Secretary (Agriculture), Govt. of Punjab, Hon'ble Vice Chancellor, PAU, Ludhiana, Director of Research, PAU, Ludhiana and Entomologists from PAU,

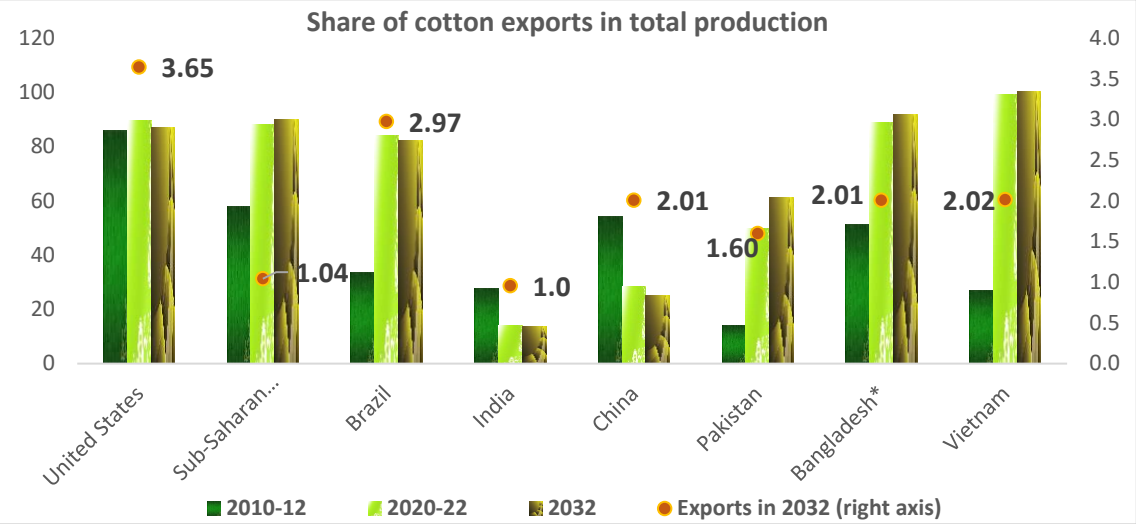
Ludhiana had participated in the meeting. Dr. Rishi Kumar presented the North Zone Cotton Scenario 2023-24 with special emphasis on recent pink bollworm incidence and its possible management options in North Zone.

- Dr. Rishi Kumar, Head (i/c) & Principal Scientist (Entomology), ICAR-CICR, Regional Station, Sirsa attended a training programme at Village Kharian (Sirsa) on June 30, 2023 organized by Bayer Crop Science. Dr. Rishi Kumar virtually delivered a lecture on “Integrated Pest Management in Cotton with a special emphasis on PBW”. A total of 200 farmers participated in the training programme.

Cotton Trade Scenario during the month of June '2023

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

Cotton plays an important role in the Indian economy as the country's textile industry is predominantly cotton based. According to OECD/FAO (2023) report, production in India is estimated to grow by around 2.5% p.a. over the next decade, mainly on account of yield improvements rather than area expansion, since cotton already competes for acreage with other crops, such as soybeans and pulses. Raw cotton productivity has remained stagnant in recent years and is among the lowest globally. Global production of cotton is expected to grow steadily and reach 28.15 Mt by 2032, 12% higher than in the base period. The foreseen increase will mostly come from growth in the main cotton producers: United States will account for about 29% of the global increase followed by India (25%), and China (7%).



Source: OECD/FAO (2023), "OECD-FAO Agricultural Outlook"

Brazilian exports are expected to grow strongly over the next decade, consolidating the country's position as the second largest exporter by 2032, followed by Sub-Saharan Africa. In Sub Saharan Africa, cotton is an essential export crop, accounting for around 13% of global exports. Global trade is forecast up 400,000 bales from the previous month to 43.9 million as higher exportable supplies in Brazil support stronger import demand in China. This more than offsets lower U.S. exports which are down 1.3 million bales to 12.5 million. Over the next decade, world consumption of raw cotton is foreseen to grow 1.8 % p.a. on account of population and income growth in middle- and low-income countries. Overall, India and China will continue to lead world cotton production, accounting for nearly 46 % of the global output in 2032. As a consequence of a slowing global demand for cotton from June 2022, cotton prices dropped significantly. The Chinese textile industry has substituted raw-cotton imports by yarn imports and from 2012-21, the latter increased at 21.7 % p.a. As a result, lint demand has been absorbed by other Asian economies.

The A Index followed the same pattern as NY/ICE futures. Values varied between 88 and 93 cents/lb. Indian spot prices (Shankar-6 quality) shifted slightly lower in recent trading, easing from levels near 89 in much of June to values near 86 cents/lb more recently. Domestic prices decreased from 58,000 to 55,500 INR/candy. The INR was steady against the dollar, holding near 82 INR/USD. (https://www.cottoninc.com)

Cotton in Media

उत्पादनवाढीसाठी अन्नद्रव्य व्यवस्थापन करा

खरीपपूर्व शेतकरी संमेलनात तज्ज्ञांचा सल्ला

◆ नागपूर, ४ जून

शेती करताना उत्पादन वाढीचा प्रश्न शेतकऱ्यांचा नेहमीच रक्तदाब वाढवित असतो. यापुढे शेतकऱ्यांनी तणावमुक्त राहून उत्पादन वाढवायचे झाल्यास तज्ज्ञांनी दिलेल्या सल्ल्यानुसार अन्नद्रव्य व्यवस्थापन पहिल्यांदा करा, असे आवाहन भारतीय कृषी अनुसंधान केंद्राचे संचालक डॉ. वॉय. जी. प्रसाद यांनी केले.

केंद्रीय कापूस संशोधन संस्थेच्या वतीने खरीप पूर्व शेतकरी संमेलनात ते बोलत होते. यावेळी वनामतीच्या संचालक मिताली सेठी, माजी कुलगुरू डॉ. एस.एन.पूरी, डॉ. एन.जी.पाटील, डॉ. जयंत मेश्राम उपस्थित होते. महाराष्ट्रात कापूस उत्पादकता वाढविण्यासाठी उत्पादन व संरक्षण धोरणांचा समावेश असलेल्या व्यवस्थेचा अवलंब करावा, अशी सूचना डॉ. वाय.जी. प्रसाद यांनी केली. यात प्रामुख्याने हलक्या जमिनीसाठी सघन कपाशी लागवड प्रणाली, पिकांचे अन्नद्रव्य व्यवस्थापन, मातीचे आरोग्य सुधारण्यासाठी शेंगा आधारित आंतरपीक, आयपीएम/आयआरएम आधारित किड व रोग व्यवस्थापनाचा समावेश करावा. कार्यक्रमाचे संचालन व उपस्थितांचे आभार डॉ. शैलेश गावंडे यांनी मानले.

(तभा वृत्तसेवा)

कापूस अनुसंधान केंद्रात खरीपपूर्व मार्गदर्शन कार्यक्रमात सहभागी शेतकरी व कृषितज्ज्ञ

Tarun Bharat, 5 June, 2023

Hitavada 7/6/2023

ICAR-CICR hold workshop for cotton farmers

Staff Reporter

ICAR-Central Institute for Cotton Research held a workshop for cotton farmers for pre-Kharif consultation to acquaint them with technologies and best management practices for enhancing cotton productivity. It was held under centrally sponsored Development Action Plan for Scheduled Cast (DAPSC) at ICAR-CICR campus.

In welcome address, Dr Y G Prasad, Director, ICAR-CICR, explained various scalable ICAR-CICR technologies including High Density Planting System (HDPS) for rainfed cultivation, shallow-medium soils, drone technology demonstration, e-kapas program, weekly advisory services and collaboration with state agriculture department, public and private partnership to enhance cotton yield with climate resilience techniques, weather forecast, canopy and fertiliser-nutrient management, legume-based intercropping for improving soil health, IPM/IRM strategy for pest and disease management.

Dr S N Puri, former VC, Central Agricultural University, CAU, Imphal, and MPKV, Rahuri, was the chief guest. He reiterated that the farmers should take the benefits from this DPASC scheme in cotton production at different stages of the crop for enhancing productivity of cotton. He also suggested the farmers to take technical guidance from CICR scientists of various disciplines for doubling the income. Infestation of sucking pest and bollworm complex and their suitable management are the key factors in production and application of IPM strategies with suitable use of biocontrol agents and microbial pesticides should be initiated in cotton cultivation for effective pest management.

The guest of honour Mitali Sethi, IAS, Director, VANAMATI, briefed about the significance of nurturing the farm soil and 52-week course DAESI scheme for agriculture experts and stakeholders training programme especially for pesticide dealers.

Dr N G Patil, Director, NBSS&LUP, sensitised the farmers on the importance of water conservation, contingency planning, soil type-depth, its fertility and respected water holding capacity for the impending drought which is estimated this year.

At the outset, Dr Jayant H Meshram, Nodal Officer-DAPSC, presented an overview of several activities conducted under DAPSC scheme with farmers-scientist interactions.

Dr C D Mayee, former Chairman, ASRB, New Delhi, was one of the chief guest.

Five progressive cotton farmers were felicitated by providing kits containing battery operated Knapsack sprayer, vegetable seeds kit, pest management kit, soluble fertilizers and printed leaflets of cotton cultivation and pest management in cotton, required for adoption of best practices in the ensuing cropping season. Three self help groups namely Udan Unnati and Rakhi were provided with gravy machines under the Arya Project of KVK-CICR.

More than 200 farmers including women from Nagpur district namely Vadegaon, Kadki, Butibori, Pawani and Parsodi participated and each A technical session was also conducted for farmers which included interactive lectures on weather-based crop management advisory, selection of cotton cultivars having high boll retention and good yield potential under rainfed and irrigated conditions, pre-sowing operations, soil health management and nutrition management during the initial growth stage, pest and disease management strategies during cropping season followed by scientists- farmers interactions.

Dr B B Fand, Senior Scientist, conducted the programme while vote of thanks proposed by Dr S P Gawande, Senior Scientist, ICAR-CICR.

One of the progressive farmer being felicitated by Dr C D Mayee as other dignitaries look on.

The Hitvada, 7 June, 2023

'Nutrient management of crops necessary'

Experts and farmers during a pre-kharif sesssion for farmers on the premises of Central Institute For Cotton Research.

LOKMAT NEWS NETWORK
NAGPUR

The farmers' often face the problem of increasing production and productivity from their land area.

However, to increase both, the ryots should always do nutrient management as per the tips given by the experts.

This was stated by director of Central Institute of Cotton Research (CICR), Dr Y G Prasad here.

He was addressing farmers during a pre-kharif meeting organised here.

Director of Vanamati, Mitali Sethi, former vice-chancellor, Dr S N Puri, Dr N G Patil, Dr Jayant Meshram and other dignitaries were present on this occasion.

Dr Y G Prasad further advised farmers to adopt productivity enhancement principles to increase production of cotton, he further said.

This should include, apart from nutrient management, pulses based intercrop system, IPM and IRM based insecticide and disease management, he informed.

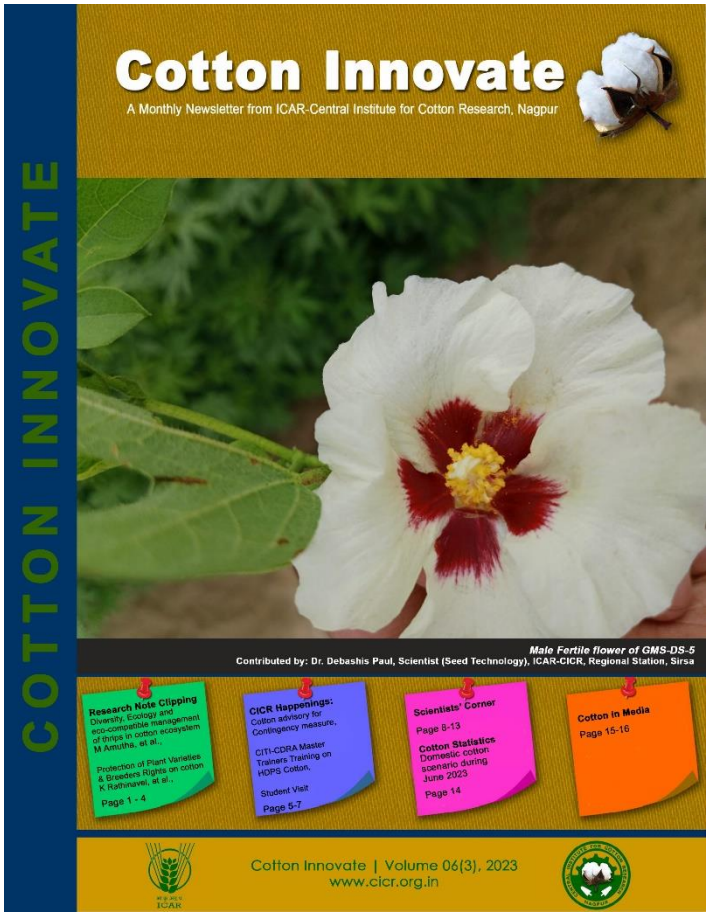
Dr Shailesh Gawande proposed a vote of thanks.

Lokmat Times, 13 June, 2023

कपास उत्पादन के लिए पायलट प्रोजेक्ट

नागपुर | केंद्रीय कृषि मंत्रालय द्वारा कपास उत्पादन बढ़ाने के लिए पायलट प्रोजेक्ट शुरू करने का निर्णय लिया है। उक्त प्रकल्प के लिए देश में आईसीएआर-सीआईसीआर के प्रमुख मार्गदर्शन में चलाया जाएगा। महाराष्ट्र के वर्धा व नागपुर जिले में कॉन्फेडरेशन ऑफ इंडिया टेक्सटाइल्स इंडस्ट्रीज कॉटन डेवलपमेंट एन्ड रिसर्च एसोसिएशन, मुंबई द्वारा 1000 एकड़ क्षेत्र में प्रकल्प चलाया जाएगा।

Dainik Bhaskar, 14 June, 2023



Produced and published by
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

Publication Note: Cotton Innovate is an Open Access monthly newsletter of ICAR-CICR, Nagpur available online at https://cicr.org.in/cicr-cotton-innovate/

Published by

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

Citation: Cotton Innovate 2023, ICAR-Central Institute for Cotton Research, Nagpur, India, Volume: 06 (03), pp-14, available at https://cicr.org.in/cicr-cotton-innovate/

To subscribe for receiving an electronic copy of this newsletter, please write a request mail to cicrinnovate@gmail.com

ICAR-CICR
ICAR - Central Institute for Cotton Research
(An ISO 9000 : 2015 Certified Organisation)