

COTTON Innovate



Weekly Newsletter from Central Institute for Cotton Research, Nagpur

www.cicr.org.in

Issue : 2, Volume :9, September 7-13, 2015

Demonstrations on High Density Planting System in Cotton (Tamil Nadu)

High Density planting system in cotton for rainfed crop was demonstrated under National Food Security Mission (NFSM) sponsored Front Line Demonstration (FLD) programme by Central Institute for Cotton Research, Regional Station, Coimbatore with the collaboration of MYRADA, Krishi Vigyan Kendra (KVK) at Anthiyur, Gopichettipalayam Taluk Erode District on 10th September 2015. The farmers gathering was addressed by Dr. (Mrs.) B. Dhara Jothi, Principal Scientist and State Co-ordinator of the project about the High Density planting system in cotton and its advantages over normal cotton planting system. She also delivered on effective pest management strategies to be followed for the management of cotton pests. Dr. K. Sanakara Narayanan, Principal Scientist, Regional Station, CICR, Coimbatore briefed about the effective fertilizer usage under High Density planting System and the methods to be followed for the sustainable cotton production. Dr. T. Senthil Kumar, Senior Scientist, Central Institute of Agricultural Engineering, Coimbatore explained about the mechanization methods developed for sowing, weeding and for other cultural operations for cotton under High Density planting System (HDPS). At the end of the programme non-Bt cotton seeds as input were distributed to the farmers and a field demonstration was conducted by sowing of cotton using tractor drawn mechanical device. Officials from Myrada, KVK Mr .N. Shivappa, Mr. R.D. Srinivasan, Dr. R. Venkatesan, Dr. T. Muralisankar, Senior Research Fellows, Regional Station, CICR, Coimbatore were also interacted with the farmers.



Training on HDPS at CICR, Nagpur

Training on HDPS was organised at CICR Nagpur for the 25 participants of BCI (Better Cotton Initiative) and other stakeholders. The training was co-ordinated by Dr. Blaise Desouza, Head, Crop Production. A field visit was organized to demonstrate the high density planting system which was explained by Ms. Shubangi Lakde. Dr. Blaise explained about the various inter-crops grown from the view point of saving fertilizer N, obtaining additional returns and more importantly meeting the pulse requirement of the country. Some legume oilseeds such as groundnut and soybean were also being tried. After the field visit, feedback of the on-going trials in Maharashtra was shared by the participants. Dr. K. R. Kranthi, Director, CICR, gave an overview about the HDPS and why it is all the more important in to-day's system. He also made a mention about the ills of spraying pesticides unnecessarily that are creating resurgence of sucking pests such as white flies. He insisted

that the indigenous varieties are more robust and able to withstand most of the biotic and abiotic stresses, especially the desi cottons. Further, these involve a much lower cost of cultivation. A large number of questions raised by the participants were also addressed. Dr. Sandhya Kranthi, Head, Crop Protection; Dr. M.V. Venugopalan, Principal Scientist and I/C PME, Dr. S. N. Rokde, Dr. Anuradha Narala and Dr. A. Manikandan were also present.

Meeting held on Whitefly incidence and management at ICAR, New Delhi

Dr.K.R.Kranthi, Director, CICR Dr Dilip Monga, Head, CICR, RS, Sirsa and Dr Rishi Kumar, Principal Scientist (Entomology) attended meeting on present whitefly situation in North Zone of India on 8th Sept, 2015 at ICAR, Krishi Bhawan, New Delhi. The meeting was chaired by the Hon'ble Deputy Director General (CS), ICAR and other participants included Additional Director General (CC&PP), Director, CICR, Nagpur and Project Coordinator, All India Coordinated Cotton Improvement Project (AICCIP), Coimbatore, Additional Commissioner, Department of agricultural & Cooperation, Director, NCIPM, including the scientists from ICAR headquarter, Punjab Agricultural University, Ludhiana, Haryana Agricultural University, Hisar and ARS RAU, Ganganagar. Dr K.R. Kranthi made a presentation on whitefly incidence and its management strategies. Dr D. Monga highlighted the incidence of CLCuD in the zone during 2015-16. In the meeting, discussion was held regarding the reasons for outbreak, demonstration plots laid out under FLD program, advisories issued by different institutions, management strategies for the remaining part of the cotton season and planning for the coming season. At the end the video of CICR whitefly adult suction trap was also played for the information of the gathering. Hon'ble DDG (CS) advised the participants to formulate research projects with innovative ideas on this issue of whitefly/CLCuD under Extramural research projects scheme.

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Scientific Talk - Add spice to your life

As a part of weekly seminar, Dr. (Mrs.) K.P. M.Dhamayanthi, Principal Scientist (Cytogenetics) delivered a talk on "Add spice to your life" on September 11, 2015. While delivering the talk she highlighted that India is a land of Spices. The history of cooking with spices are centuries old. Spices and herbs have played a dramatic role in the development of Western civilization. Spices today are plentiful and are used mostly as flavorings. However, in ancient and medieval times, they were rare and precious products, used for medicine, perfume, incense, and flavoring. The fame of Indian spices is older than the recorded history. It was the lure of these that brought many seafarers to the shores of India. It is also said that Indian spices and her famed products were the main lure for crusades and expeditions to the East.

Black pepper (*Piper nigrum*) is a lowering vine the family *Piperaceae* cultivated for its fruit which is usually dried and used as aspic and seasoning. When dried, the fruit is known as a peppercorn. It is native to south India and is extensively cultivated there and elsewhere in tropical regions. Currently Vietnam is the world's largest producer and exporter of pepper and producing 34% of the world's *Piper nigrum* crop as of 2008. The spiciness of black pepper is due to the chemical piperine. Cardamom is a spice made from the seeds of several plants in the family *Zingiberaceae*. Cardamom has a strong, unique taste, with an intensely aromatic, resinous fragrance. Guatemala is the largest producer of cardamom in the world, with an average annual yield between 25,000 and 29,000 metric tons. India is the second producer worldwide producing 15,000 MT annually. It was exported to Europe via India in the first century AD as a result of the lucrative spice trade.

India is now the largest producer of ginger. Turmeric is a rhizomatous herbaceous perennial plant of the ginger family, *Zingiberaceae*. In India and Nepal, turmeric is widely grown and extensively used in many vegetable and meat dishes for its color, and is also used for its supposed value in traditional medicine.

Allium sativum, commonly known as garlic, is a species in the onion genus: *Allium*. With a history of human use of over 7,000 years, garlic is native to central Asia and has long been a staple in the Mediterranean region, as well as a frequent seasoning in



Asia, Africa, and Europe. It was known to Ancient Egyptians, and has been used for both culinary and medicinal purposes. Peppermint, Thyme, Sage are herbal spices. The chili pepper is the fruit of plants from the genus *Capsicum*, members of the *Solanaceae*. It is a spice obtained from the inner bark of several trees from the genus *Cinnamomum* that is used in both sweet and savoury foods. Cloves are the aromatic flower buds of a tree in the family *Myrtaceae*, They are native to the Maluku Islands in Indonesia, and are commonly used as a spice. Cloves are commercially harvested primarily in Indonesia, India, Madagascar, Zanzibar, Pakistan, Sri Lanka and Tanzania. At the end advised for adding spices for a healthy life.

'Mera Gaon – Mera Gaurav' Programme - Highlights

The team of scientists consisting of Drs. V.N. Waghmare, H.B. Santosh, S.S. Patil and Rakesh Kumar visited five adopted villages namely Mangli, Junewani, Nanda Khurd, Ukhadi and Salai Mendha of Higna Block, district Nagpur. The team contacted Krishi Mitra and other key informants such as Sarpanch, elderly farmers of the villages and collected base line information about the villages. The information on various aspects have been collected that includes- number of farm families, woman headed farm families, SC/ST and tribal families, farm size holding and distribution, irrigated/ rainfed, soil types, topography, village cropping pattern, major field and horticultural crops, livestock with farmers and major problems faced on farm and in the villages.



Interaction with Krishi Mitra Mr. Prashant Chikhale (village Junewani)



Interaction with farmer Shamrao Masaram (village Salai Mendha)



Interaction with Krishi Mitra and farmer (village Ukhadi)



Interaction with elderly farmer Sh Bhauraoji Uike (village Mangali)

Under adopted villages of Nandura cluster in Wardha District a team of CICR Scientists Dr. S. M. Palve, Dr. M. Venugopalan and Dr. V. Santhy visited on 8th September, 2015. The five villages i.e. Nandura, Nagapur, Karanji (Bhoge), Karanji (Kanji) and Madani (Dindoda) were covered by the team. They contacted Sarpanch and Gramsevak of each village and briefed villagers about the scheme. The team also collected information regarding general and agricultural problems faced by the villagers.



Interaction with Sarpanch and Gramsevak (Village: Nandura)



Interaction with farmers and Gramsevak (Village: Nagapur)

In Coimbatore District of Tamil Nadu the team of scientists consisting of Dr. N. Gopalakrishnan, Principal Scientist, Dr. K. Sankaranarayanan Principal Scientist and Dr. K.P.M. Damayanthi Principal Scientist, made visit on 8th Sep.2015 to adopted village of Vadapudur Panchayat, Kinathukadavu block, Coimbatore District, which included Vadapudur, Singaiyanpudur, Sikkalampalayam, Mampalli and Kallapuram. There was good interaction with villagers and the objectives of the programme were explained to them. Collecting of information for bench mark survey was initiated. Field visit was made to assess the cropping system followed in these villages. Cotton and tomato are the predominant crops, followed by vegetables, chillies, bhendi in addition to perennial crop of coconut. Water scarcity, lack of cold storage facilities for vegetables, credit availability, crop insurance facilities and spreading of new unknown disease in cattle are some of the major problems faced by the villagers. It was informed that scientists of CICR shall extend technological backstopping besides acting as knowledge partners in the transfer of technologies for holistic development of the adopted villages under 'Mera Gaon Mera Gaurav' programme.



Students Exposure Visit to Vermicompost Demonstration

Eight students of class 8th standard of Centre Point Schools, Wardhaman Nagar, Nagpur accompanied with two teachers (Mrs. S. Shubhura and Mrs. S. S. Preeti) visited ICAR-CICR, Nagpur on forenoon of September 10, 2015 and had interaction with Dr. M.V. Venugopalan, Principal Scientist (Agronomy) and Dr. A. Manikandan, Scientist (Soil Science). The lecture on vermicomposting was delivered by Scientists and practical demonstration of different methods of vermicomposting and vermiwash preparation had conducted by Mr. N.R. Tandulkar, (Technical Officer) and Mrs. Rachana Deshmukh, Technical Assistant.



Do you know?

India likely to produce 29 million bales (480 lb) of cotton in 2015-16 followed by China, 26 million bales.

Source: USDA

India likely to be the second leading export of cotton in 2015-16. India to export 4.9 million bales (480 lb) whereas US to export 10.2 million bales.

Source: USDA

CICR, Sirsa Scientists Visited Farmers Fields in Adopted Villages

Dr Dilip Monga, Head, CICR, RS, Sirsa and Dr Rishi Kumar visited the adopted villages under Online Pest Monitoring and advisory services adopted in collaboration with NCIPM, New Delhi on 4th Sept, 2015. They interacted with farmers of the villages (Panjuana, Sekupuria, Khuyian Nepalpur, Bhagsar and Shahuwala) about the interventions made regarding management of whitefly. During the visit a general survey of healthy and infected fields was also done.



Cotton crop at Panjuana



Late sown and thinly populated cotton crop at Sekhupuria (Sandy soil)



Cotton crop at Kuyian Nepalpur



Inspecting field at Bhagsar

Meetings Attended

- Dr. K.R. Kranthi, Director, ICAR-CICR, Nagpur participated in the meeting for presentation of works under the chairmanship of Dr. Sanjeev Kumar Balyan, Hon'ble Union Minister of State for Agriculture on 8th September, 2015 at DG Committee Room, Krishi Bhavan, New Delhi.
- Dr. K.R. Kranthi, Director, ICAR-CICR, Nagpur participated in the meeting with DDG(CS), ICAR, New Delhi on "outbreak of whitefly infestation on cotton in North India" at ICAR, Krishi Bhavan, New Delhi on 08.09.2015.
- Dr Monga participated in the 16th Steering Committee meeting of cotton TAP on 28th August, 2015 at Udyog Bhawan, New Delhi where a fresh proposal of cotton TAP including continuation and consolidation of existing activities along with new activities for its implementation in eleven countries with a budget of Rs 173 crores was presented and discussed. It was decided to forward it to Ministry of external affairs for consideration
- Dr. S. M. Wasnik, Principal Scientist, Extension attended Rural Programme Advisory Meeting of All India Radio, Nagpur at Akashwani committee hall on 7th September 2015. During the meeting programmes to be broadcasted through AIR Nagpur for the quarter period October- December 2015 was discussed. Topics from CICR Scientists in Marathi were also discussed.
- Dr. S. M. Wasnik, Principal Scientist, Extension attended Advisory committee Meeting of Doordarshan Kendra, Nagpur at Doordarshan Kendra committee hall on 11th September 2015. During the meeting programmes to be telecasted through Doordarshan Kendra Nagpur for the quarter period October-December 2015 was discussed. Topics from CICR Scientists and also from KVK were also discussed.

CICR Scientist bags two Gold Medals



Dr. A. Manivannan, Scientist, CICR, RS, Coimbatore has received two Gold medals namely "**The President of India Award**" for the best Ph.D. student for the research work in poverty alleviation and "**Thiru D.R.Thirunavukkarasu Award**" for the best Ph.D. student of the University during 36th Convocation held at Tamil Nadu Agricultural University(TNAU), Coimbatore on 17:08:2015.



Produced and Published by: Dr. K. R. Kranthi, Director, CICR, Nagpur
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Citation : Cotton Innovate, Issue-2, Volume-9, 2015,
ICAR-Central Institute for Cotton Research, Nagpur.

Publication Note: This Newsletter presented online at
http://www.cicr.org.in/cotton_innovate.html

Cotton Innovate is the Open Access CICR Newsletter

The Cotton Innovate – is published weekly by
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