



CICR NEWSLETTER



CENTRAL INSTITUTE FOR COTTON RESEARCH, NAGPUR

VOL.24, No.1

JAN.- MARCH, 2008

MEETING OF ICAR REGIONAL COMMITTEE NO. VII HELD AT NAGPUR



Release of publications by Dr. Mangala Rai, DG ICAR



Inauguration of exhibition by Dr. P. L. Gautum DDG (CS)



Dr. Gautum addressing scientists of CICR

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The 20th meeting of ICAR Regional Committee No. VII comprising the states of Maharashtra, Madhya Pradesh, Chhattisgarh and Goa was organized by CICR, Nagpur on Feb. 29 & March 1, 2008. The main objective of the meeting was to address key issues pertinent to the prevailing status of Centre-State co-ordination in Agricultural Research, Education and Extension in this region. The meeting was chaired by Dr. Mangala Rai, Secretary DARE & DG, ICAR, New Delhi and attended by six DDGs' of ICAR, Directors of seven ICAR Institutes, Vice-Chancellors and Directors of Research of six agricultural universities, Project Coordinators of All India Coordinated Projects and Commissioners of Agriculture.

In his opening address the Director General welcomed the delegates and explained the importance of addressing emerging concerns in agriculture in the country as well as in the region. He pointed out that if agriculture fails, no other sector can progress. He expressed the need for diversification & commercialization of agriculture, processing and value addition especially for soybean and grape. He also highlighted the need for water harvesting and utilization in rainfed areas and arid horticulture which can boost rural economy. Earlier, in his opening remarks, Dr. Nawab Ali, DDG (Engg.) and Nodal Officer for 19th Meeting of ICAR Regional Committee pointed out the importance of the meeting. Two books viz., 'CICR at a Glance' and 'Cotton Bollworm Control in Small Scale Production Systems' were also released by the Hon'ble Director General on this occasion.

During this meeting, an exhibition depicting salient achievements of CICR was also organised on the institute premises. The exhibition was inaugurated by Dr. P.L. Gautum DDG (CS). The exhibition was also visited by Dr. H.P. Singh, DDG (Hort.) and Dr. G. Kalloo, Vice-Chancellor, JNKVV, Jabalpur. Dr. Gautum took keen interest in acquainting himself about research programmes going on at CICR, Nagpur. Apart from experimental fields, Dr. Gautum, Dr. Singh & Dr. Kalloo also visited important laboratories at CICR Nagpur.



Dr. Mangala Rai, Secretary DARE & DG ICAR delivering opening address.

Introduction of *G. Darwinii* (AD5) a-tetraploid wild species of *Gossypium* in India

Seeds of *G. darwinii* (AD5) were procured from Dr. R.J. Kohel, USDA, USA under enrichment of existing collection of wild species in India. *G. darwinii* (AD5) is a wild allotetraploid species, one of the sources of primary germplasm and has originated from the Galapagos Island. It is a relative of cultivated tetraploid *G. barbadense* (AD2).

Taxonomical description:-

This is a perennial shrub, densely branched and moderately hairy. The plant grows to a normal height of about 68 cm while one of the three plants established in existing wild species garden of CICR, Nagpur has grown exceptionally tall to a height of 167 cm with spreading of branches up to 94 cm. Leaves are 8.5-9 x 5 cm, softy tomentose when young, central lobe much longer, linear-oblong acuminate, with deep sinuses on both side drawn and turned in folds, veins prominently covered by trichomes, petioles 3.8-4 cm long. Inflorescence axillary, flower solitary, on short rigid pedicels, bracteoles quite free with no extra floral glands (nectarines), ovate cordate, cut into many very narrow awl-shaped teeth that become almost forked and hooked, membranous, prominently reticulated completely enclosing the capsule. Flowers very large, wide spreading, yellow, with a dark red plant blotch, calyx undulated or cut square, pollen grains distinctive, capsule elongated, long with acute apex and four loculed with 8-10 seeds per capsule and light brown lint and fuzz.

The introduction and establishment of this wild tetraploid species has opened up avenues for its utilization in introgressive hybridization for the improvement of cultivated cotton.

Vinita Gotmare, B.M. Khadi, Punith Mohan and Prafulla Raut

Validation of Infocrop model for prediction of seed cotton yield and biomass production in Bt and nonBt cotton hybrids

A generic simulation model INFOCROP was validated to predict the seed cotton yield of RCH2 Bt vs Non Bt cotton under winter-irrigated cotton in a mixed red and black calcareous clay loam soil (Vertic Ustropept) of Periyanaickan Palayam series at the Central Institute for Cotton Research, Regional Station, Coimbatore. It was observed that the variation between the observed and simulated seed cotton yield ranged from 4.5 to 10.6% for RCH2 Bt cotton whereas the variation was from 3.5 to 21.6% for RCH2 Non Bt cotton.

K.K. Bandyopadhyay, A.H. Prakash, K. Shankaranarayanan and B. Dharajothi

Potential of locally available farm wastes for reducing the cost of cultivation in Cotton

Matching production technologies along with improved cultivars including Bt hybrid cotton has revolutionized Indian cotton scenario over the last few years as the production is expected to reach 310 lakh bales during 2007-08. Yet cotton acreage & productivity in south zone, especially in Tamil Nadu has not registered an upsurge as has been experienced by Gujarat and Punjab. This is mainly attributed to higher cost of cultivation because of high input and labour cost due to competition from other sectors and less return on the produce in addition to decreasing input use efficiency, which is aggravating the situation further. In this backdrop, application of locally available nutrient sources in combination with costly fertilizer inputs may serve as a viable technology for reduction in input cost. Keeping this in mind, a trial was taken up with available ex-situ and in-situ farm dried wastes along with required soil test based NPK for the last 2 years on a medium fertile sandy clay loam soil (pH = 8.27, EC = 0.19 dsm-1 & BD = 1.35 g/cc.) in Coimbatore, Tamil Nadu. FYM (% NPK as 0.52:0.20:0.51), grass (0.94:0.06:1.16) and neem leaves (1.65:0.12:1.08) were applied to cotton as per treatment at the time of ridging as surface-ridge mulch.

Application of neem leaves @ 5 t/ha in conjunction with recommended dose of NPK was superior to control with respect to seed cotton yield and net returns (Table-1), and was statistically at par with FYM @ 5 t/ha - a costly input now-a-days. Besides this, both FYM and neem act as surface mulch resulting in conservation of moisture and add organic matter to soil. Although soil properties except for K (due to reduced crop uptake and higher K status) were not affected, yet higher residual fertility was evident under organic cover. Fibre qualities were not affected by the treatments. Significantly higher fibre productivity efficiency was also observed in plots with soil cover over control and was 13.2 % higher over NPK alone (Table-1). Highest biological efficiency (calculated from total biomass & total NPK uptake) was also observed under neem cover due to greater nutrient assimilation efficiency. Thus, organics grown in situ or locally available may act as an effective component in crop nutrition.

Therefore integrated Plant Nutrient System involving rational and appropriate use of fertilizers and organics viz., neem leaves @ 5 t/ha as soil cover along with NPK @ 60:13:25 kg/ha, can result in higher nutrient use efficiency in cotton, low cost of production and higher return in this region.

Table-1: Cotton plant attributes efficiency factors & economics

Treatments	SCY(q/ha)	Uptake (kg/ha)		FPE (kg/ha/day)	B.E. (kg/kg)	Net Return (‘000Rs./ha)	B:C Ratio
		N	NPK				
Control	18.6	77	138	10	-	23.9	2.63
NPK	23.0	102	181	12.4	16.3	31.7	2.98
NPK+Neem	26.2	84	158	14.1	59.3	36.5	3.07
NPK+Grass	26.1	116	204	14.1	16.3	36.8	3.14
NPK+FYM	25.8	117	205	13.9	20.4	34.8	2.87
C.D.(0.05)	3.6	16	31	1.9	-	7.3	NS

SCY: Seed cotton yield, FPE: Fibre Productivity Efficiency, BE: Biological Efficiency
C.S. Praharaj, K. Sankaranarayanan, K.K. Bandyopadhyay and N. Gopalakrishnan

JTHC 1104 - A Genetic Stock of *Gossypium hirsutum*, with Higher Compensation for Bollworm Damage

JTHC 1104 is a genetic stock of upland cotton *Gossypium hirsutum* L. with its uniqueness for higher tolerance to bollworm damage through

phenological mechanism of compensation. The plants of JTHC 1104 produce additional fruiting structures that contribute to higher yields, despite higher damage due to bollworms. JTHC 1104 originated from plant selections made from the progeny of a cross between Mysore and NC 51 as parents from the germplasm working collection of the Central Institute of Cotton Research, Nagpur. While selections from F₂ population were made on an individual plant basis for jassid tolerance cum higher yields over the local checks under unprotected conditions, plant to progeny rows of F₃ were grown both under

unprotected and bollworm protected situations. Best row showing highest yield level under unprotected over protected conditions (measured as genotypic resistance ratio (GRR); $GRR = Y_{up} / y_p$, where Y_{up} and Y_p are the yields of unprotected and protected plants or plot, respectively) was grown in multiple rows in F₄ under bollworm protected and unprotected regimes. Seeds from progenies having highest GRR (>2) were collected through selfing, and generations of F₅ followed by F₆ were raised under completely unprotected situation along with local checks. Tolerance to jassids manifested as crop symptoms measured through injury grades in relation to susceptible LRA 5166, was also given emphasis during advancement of JTHC 1104. The feature of higher compensation was confirmed in the homogenous progeny of F₅ during crop season

2005-06 by testing with checks under protected and unprotected condition. The GRR for JTHC 1104 was 2.7 as against 1.2, 1.1 and 0.4 for PKV Rajat, LRA 5166 and CNH 36, respectively. Validation of compensation through yield levels over local checks under unprotected condition in 2006-07 confirmed the higher compensation combined jassid tolerance in JTHC 1104 with yield potential of > 100g/plant as against 46.8 and 66.4 in LRA 516 and CNH 36, respectively.

S. Vennila, R.M.Lokhande, Vinita Gotmare and B.M.Khadi

Technology to enhance the better crop establishment and yield in cotton

In North Zone, uneven and poor plant stand under farmer field condition is one of the major reasons for low productivity of cotton. The poor seed quality followed by adverse climate with high temperature during seedling stage, seed / soil born pathogens and saline nature of soil & irrigation water are the major reasons for poor plant stand. In recent years, area under Bt. Cotton hybrids is increasing and proper plant stand is assuming even greater significance. The available reports indicate that the improved seed physiological properties / vigour of seed and pre sowing seed treatments act to improve survival rate under such adverse field situations. In addition to that transplanting of seedlings has also been reported beneficial for improvement in the plant stand.

The contribution of transplanting of raised seedling for improvement in plant stand in field was assessed against normal sowing. The seedling of two Bt. hybrids RCH 134 and MRC 6301 were raised in various sizes of containers in the mixture of coir pit + FYM + soil in the ratio of 50 : 35 : 15. The raised



Jassid tolerance in JTHC 1104 Grade -I



Jassid susceptibility in LRA 5166 Grade -III



seedlings were transplanted in the field at 15 days, 20 days and 25 days seedling age. The field was flood irrigated after transplanting of the seedling for proper establishment of plants.

The percent plant stand was significantly higher in both the hybrids when seedling were raised in

medium type container and transplanted at seedling age of 15 days (92.9 %) and 20 days (98.8 %). Transplanting of 25 days old seedling resulted in reduced plant growth with significant reduction in boll no./ plant and yield/ha.

D.Monga

MEETINGS HELD

National consultation on 'Mealy Bug Management' held at CICR, Nagpur

National consultation on 'Mealy bug Management' was organized at Central Institute for Cotton Research, Nagpur on January 28-29, 2008. Dr. O.M.Bambawale, Director, National Center for Integrated Pest Management, New Delhi chaired the proceedings, Dr. B.M.Khadi, Director, CICR, Nagpur welcomed the participants and enumerated examples of newly emerging pest problems which need to be addressed immediately. Alongwith mealy bug, Dr. Khadi mentioned pests as Thrips, Mirid bug and Pink bollworm which must engage attentions of researchers immediately.

Dr. K.R.Kranthi, Head, Crop Protection Division gave brief introduction about organization of National Consultation on 'Mealy bug management'. He mentioned that elucidation of genesis of mealy bug problem on cotton is a new challenge for

entomologists who will have to devise strategies for its management. In his opening remarks, Dr. Bambawale mentioned contribution of industry in research and emphasized that there should be synergy between private and public sector. He added that for management of mealy bug we should start with

workable strategies and should not wait till perfect standardization of technologies. Presentations on different aspects of mealy bug management were made by entomologists from CICR, Nagpur and its regional stations at Coimbatore and Sirsa, TNAU, Coimbatore, IIHR, Bangalore and ANGRAU, Hyderabad. The experts deliberated on various aspects of Mealy Bug Management and formulated strategies for mealy bug management to be adopted in the coming season. The meeting convenors were Dr. Sandhya Kranthi and Dr. S.Vennila, Sr. Scientists, CICR, Nagpur. Dr. Vishlesh Nagrare, Scientist (SS) acted as the rapporteur.

A meeting on "Action plan & Implementation of Management strategies of Mealy Bug" was held at CICR, RS, Sirsa on Feb.5, 2008. The meeting was chaired by Sh. Anup Malik, Director (Plant Protection), Department of Agriculture & Cooperation, Ministry of Agriculture New Delhi. The scientists from PAU, Ludhiana, State Agriculture Department functionaries, Deputy Director Agriculture and Joint Director Agriculture

(Cotton) participated in the meeting and discussed the strategies (Adhoc) for controlling the pest.

Cotton Field day organized

Cotton Field Day was organized at CICR, Nagpur on Jan. 10, 2008. On this occasion more than 75 farmers from villages of Wardha and Yavatmal districts participated. The programme was organized to create awareness about latest cotton production

technologies in the districts of Vidarbha. While speaking on the occasion, Dr. B.M.Khadi, Director, CICR appealed to the farmers to adopt full package of low cost cotton production technologies developed by CICR and thus to reduce cost of production in cotton farming. He advised the farmers to select only the best 3-4 cotton varieties /hybrids demonstrated at CICR, Nagpur instead of going through large number of varieties available in the market. Dr. L.A.Deshpande, Head, Crop Improvement Division informed the farmers about the improved cotton varieties recommended for commercial cultivation. Dr. P.R.Bharambe, Head, Crop Production Division advised the farmers to get their soil tested and also to use micronutrients in addition to major nutrients as per the soil testing report. Dr. K.R.Kranthi, Head, Crop Protection Division discussed the importance of plant protection in cotton production. He cautioned the farmers about the threat of emerging minor pests as mealy bug and mirid bug in cotton.

Er. G.Majumdar, Sr. Scientist gave presentation on mechanization in cotton. Earlier Dr. S.M.Wasnik, Principal Scientist and co-ordinator of the programme welcomed the participants. The field visits to various experimental fields and demonstration plots were

also organized where scientists as Dr. A.R.Raju Scientist, Dr. Jagvir Singh Principal Scientist, Dr. S.M.Palve Principal Scientist and Dr. S.Vennila, Sr. Scientist explained the farmers about different technologies demonstrated on cotton. Dr. S.M.Wasnik coordinated the programme and proposed a vote of thanks at the end.



Dr. O.M. Bambawale addressing at National Consultation on Mealybug



Participants of National Consultation on Mealybug



Dr. B.M. Khadi Director CICR addressing the farmers

Training Programmes on Cotton Production Technology held at Sirsa

State Level Training Programmes of two days duration were organized on 'Cotton Production Technology & Mealy Bug Management' under implementation of Action Plan of ICDP Mini Mission-II for TMC. These were organized on Feb. 5-6, Feb. 12-13, Feb. 18-19, Feb. 25-26 and Feb. 27-28, 2008.

These training programmes were attended by officials of Haryana State Agriculture Department. A capsule of ten lectures i.e. four in Crop Improvement, one in Crop Production and five in Crop Protection technologies covering mealy bug management was prepared for these training programmes. The training programmes were coordinated by Dr. S.K.Verma, Sr. Scientist. In addition to this a Training Manual 'Cotton Production Technology & Mealy Bug Management-2008' was compiled and edited by Dr. S.K. Verma & Dr. D.Monga for the use of participants.

Insect Pest Resistance Management for Enhanced Productivity- Farmer Participatory Approach

Central Institute for Cotton Research (CICR),

Regional Station, Coimbatore has established a Plant clinic Centre under the project. Insect Pest Resistance Management (IPRM), at Vadugatham-patti village of Attur block of Salem District. The clinic was inaugurated by Shri. K. Janagar, Joint Director of Agriculture, Salem. The programme was followed by a farmers training cum group meeting, wherein Dr. B. Dharajothi, Senior Scientist and District Co-ordinator and Dr.T. Surulivelu Principal Scientist and State Co-ordinator of the project highlighted the activities of the project and significance of the plant clinic centre. The need for following the IPRM strategies to increase the cotton productivity was stressed. Shri. K. Janagar, Joint Director of Agriculture, Salem emphasized the importance of following the recent production technologies to improve the economic status of the farmers and sustainability of cotton production. Dr. Venkatesan, Professor and Head of Tapioca and Castor Research Station, Ethapur, TNAU addressed the farmers and highlighted the importance of following IPRM technologies in Bt cotton. Shri. Sekar Anandhan, Deputy Director of Agriculture, M. Madavan, Assistant Director of Agriculture and Dr. Raja Baskar, Assistant Professor, Ethapur., TNAU also addressed the farmers.

NAIP PROJECT DEMONSTRATION

Demonstration of Clean cotton picking under the NAIP project "Cotton Value Chain" was inaugurated at Udumalpet, Tamil Nadu by Dr N. Gopalakrishnan, Consortium Partner on March 5, 2008. During the demonstration, cotton farmers were trained on clean picking methods in the cotton field during harvest and storing the picked cotton under good condition. The necessary materials like head gear, gloves, cotton apron, Cotton cloth bags and floor spread for storage were also distributed to farmers. The meeting was attended by Dr Balasubramanya, Dr Mhadgut, CIRCOT Mumbai, Dr A. H. Prakash and Mr. M Sabesh, CICR, Coimbatore and Dr Karivaradaraju, SIMA-CDRA, Coimbatore.



Dr. N. Gopalakrishnan, PC & Head CICR RS Coimbatore addressing farmers

KVK ROUND-UP

Training Programmes

Twenty one short duration (1 to 3 days) *on campus* and *off campus* training courses were conducted in different disciplines for 240 farmers (F), 105 rural youths (RY) and 442 extension functionaries(EF). In all 787 participants benefited from the courses.

Discipline	No of courses	No of participants			Total
		F	RY	EF	
Crop Production	2	37	-	-	37
Horticulture	4	56	22	30	108
Plant Protection	3	13	26	28	67
Veterinary Science	4	-	33	45	78
Home Science	2	59	24	317	400
Extension	6	75	-	22	97
Total	21	240	105	442	787

Phool Gyan Divas Organized

Phool Gyan Divas was organized at KVK, CICR Nagpur on Jan.16, 2008. Dr. V. J. Golliwar (Asso. Prof.) College of Agriculture, Nagpur was the Chief Guest and 50 Farmers and Rural Youth participated in the programme. Shri Gulbir Singh coordinated the programme.



Assessment Of Technologies Under Front Line Demonstrations On Farmers Field.

Sr. No.	Crop	Villages	Technologies Demonstrated	No.of farmers	Area (ha)	Yield (Q/ha)		%Inc. Over FP
						Demo.	FP	
1	Pigeonpea	Mangli +Mandhav Ghorad	ICPL 87119 (Asha)	25	10	20.27	16.10	25.90
2	Chickpea	Mangli +Mandhav Ghorad	Saki 9516	25	10	13.10	10.25	27.80
3	Wheat (Timelysown)	Mangli +Mandhav Ghorad	AKW 3722 (Vimal)	9	2	32.10	24.30	32.99
4	Wheat (Latesown)	Mangli +Mandhav Ghorad	AKW 1071 (puma)	5	1	25.40	20.29	25.12

Diagnostic Field Visits Under Front Line Demonstration Programmes

Date	Name of village	Area (Ha)	No of farmers	Problem diagnosed
Jan.4,2008	Mangali	10.0	20	Identification of CRI stage and scheduling of first irrigation with top dressing of nitrogen
Feb.22,2008	Mangali	15	25	<i>Helicoverpa</i> incidence in chickpea

REGISTRATION OF COTTON GERmplasm LINES

Seven Cotton germplasm lines viz., CIR-8 (CMS restorer lines with red plant having bicolor flower), CIR:12 (CMS restorer line with green plant having yellow petal and anther), CIR-23 (CMS green plant with yellow petal and cream anther), CIR-26 (CMS with good fiber properties and agronomic attributes & restorer of fertility in *G. harkensii* based CMS), CIR-32 (CMS green plant with yellow petal and cream anther & bold seed), CIR-38 (CMS Okra type with yellow petal and anther) and CIR-47 (CMS green plant with yellow petal & anther with highest boll weight) have been registered by Germplasm

Registration Committee of NBPGR, New Delhi.. These have been provided with National Identities viz IC553921, IC553923, IC553924, IC553925 IC553926, IC553927, and IC553928, and Registration numbers, INGR No. 08031, 08032, 08033, 08034, 08035 08036 and 08037, respectively.

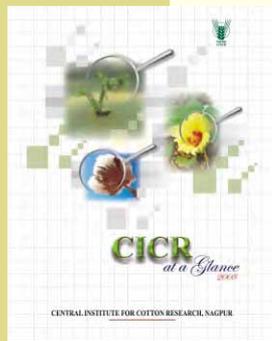
Raj 2006, a jassid tolerant genetic stock of upland cotton developed by Vennila S, R. K. Lokhande, Sheo Raj and B. M. Khadi, has also been registered with NBPGR, New Delhi (Registration number: INGR 08059).

PUBLICATIONS

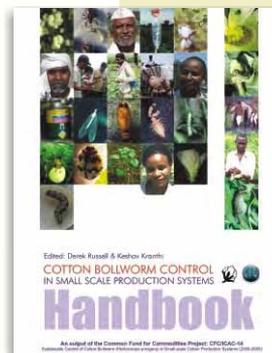
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Evaluation. *J. Cotton Res. & Dev.* **21**(1) 21-23.

- Dixit Swati and V.V.Katare (2007). Investigations in collaborative research trends among Indian Cotton Scientists (1996-2005). *IASLIC Bulletin V 52*(3), 137-144.
 - Dhara Jothi, B. and Usha K. Mehta.. (2007) Impact of different temperatures on the infectivity and productivity of entomopathogenic nematodes on *Galleria mellonella*. *International Journal of Nematology*, **17**(2) 158 -162
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 - Praharaj, C.S.; K. Sankaranarayanan and T.P. Rajendran (2006). Long term studies on the sustainability of the cotton based cropping systems and nutrient schedules on a calcareous clay loam soils of South India. Proc. Intern. Symp. on "Balanced Fertilization for Sustainability in Crop Productivity" Vol 2: 168-171 (PAU, Ludhiana, Punjab, India, 22-25th Nov., 2006) (Published in Feb., 2008).



Released during Regional Committee meeting held at Nagpur.



Released during Regional Committee meeting held at Nagpur.

MEETINGS/ WORKSHOPS ATTENDED

- Dr. B.M. Khadi Director, CICR, Nagpur participated in meeting for Trilateral Cooperation in the Agricultural Sector under India-Brazil-South Africa (IBSA) initiative convened by Secretary. (A&C), ICAR at Delhi on Jan. 2, 2008 and also participated in the 63rd RCGM meeting at New Delhi on March 7, 2008.
- Dr N. Gopalakrishnan PC and Head, CICR, Coimbatore and Dr Sankaranarayanan Sr. Scientist participated in NAIP Launching workshop of Project on Cotton Value Chain at CIRCOT, Mumbai on January 9, 2008.
- Dr N. Gopalakrishnan participated in ICAR Regional Committee No. VIII meeting held under the chairmanship of Hon'ble DG, ICAR at CTCRI, Trivandrum during January 10-11, 2008 and also participated in meeting on modalities for commercialization of ICAR technologies held at New Delhi on March, 2008.
- Dr. Nandini Gokte-Narkhedkar Principal Scientist participated in DBT Task Force Meeting on Biopesticides held at New Delhi on Jan. 10, 2008 and presented results of concluded DBT project on Genetic improvement of Entomopathogenic nematodes.
- Dr. S.Vennila Sr. Scientist participated in the NAIP stakeholders workshop at Project Directorate of Biological Control, Bangalore between January 24 and 25, 2008 for development of full project proposal titled "Research into Development of Decision Support Systems for major insect pests of rice and cotton based cropping systems".
- Dr. B.M. Khadi, Director attended meeting of Project entitled "Mining & cloning improvement of Cry genes from Indian *Bacillus thuringiensis* isolates active against major insect pests" under SBIRI scheme at Bangalore on Feb. 17, 2008.
- Dr. Vinita Gotmare Scientist (SS) attended Capacity Building Programme on Intellectual Property Protection and Technology Licensing in Agriculture under Indo- US Agricultural Knowledge Initiative at Kerala Agricultural University on February 18 - 20, 2008.
- Dr. Suman Bala Singh Principal Scientist, Dr. S.M.Palve Principal Scientist, Dr.S.Vennila, Dr. G.Balasubramani Senior Scientist and Dr. Vinita Gotmare participated in the "Regional workshop on management and monitoring of field trials of genetically modified crops" organized by DBT and MoEF held at CICR, Nagpur on March 28, 2008.
- Dr.Rishi Kumar, Sr. Scientist participated in meeting on "Monitoring and management of Mealy bug" held at NCIPM, N. Delhi on Jan. 5, 2008, National Consultation on Insect-pest Resistance Management strategies on Bt cotton held at NAAS, Complex New Delhi on Jan.21-22, 2008 and 2nd Congress on Insect Sciences held at PAU Ludhiana on Feb. 21-22, 2008.
- Shri M.K. Meshram Principal Scientist and Shri Gulbir Singh SMS attended and participated in Programme Coordinator's meeting held at P.D.K.V. Akola on Jan. 21, 2008 under the Chairmanship of Director of Extension P.D.K.V. Akola.
- Dr B. Dharajothi attended meeting for Technical programme formulation for South Zone under Mini-Mission -II of TMC for 2008-09 at Krishi Bhavan, New Delhi on March 28, 2008.

- Dr. P.Nalayini Sr. Scientist, Dr. K.K. Bandyopadhyay Sr. Scientist and Dr. Usha Rani, Scientist participated in a training programme on "Imparting Journalistic skills to Enhance the communication performance of extension workers in scientific conservation and management of land and water" sponsored by State planning Commission- Tamil Nadu State Land Use Board, organized at TNAU, Coimbatore on March 18-20, 2008.
- Dr. Arjun Tayade SMS (Agronomy) participated in training programme on "Weed Management and Farm Mechanization" organized by Directorate of Extension Education, Dr. PDKV Akola on March 3-4, 2008.
- Shri S.S.Patil SMS (Extension) participated in training programme on "Market-Led extension" organized by MANAGE Hyderabad during March 10-14, 2008.
- Shri M.K. Meshram Principal Scientist, Shri Gulbir Singh SMS (Horticulture) and Dr. U.V.Galkate SMS (Vet. Sci.) participated in training programme on "Entrepreneurship Development" organized by Directorate of Extension Education, Dr. PDKV Akola during March 17-18, 2008.

PERSONNEL



Dr P. Chidambaram

- Dr P. Chidambaram, Principal Scientist (Plant Pathology) superannuated from service on March 31, 2008, after distinguished service of more than three decades. He had served as Principal Investigator (Plant Pathology-AICCIP), and helped in compiling vital plant pathological data, besides serving as resource person for cotton varietal identification committee. He was also instrumental in infrastructure development at CICR, Regional Station Coimbatore. His contributions in epidemiology of fungal foliar diseases, identification of resistant sources and chemical control measures for cotton diseases are noteworthy.
- Dr. Suresh J. Gawande Scientist (Sr. Sc.) Plant Pathology joined CICR, Nagpur w.e.f. March 3, 2008, on transfer from CPRI Simla.



Dr. Suresh J. Gawande

PRESENTATIONS/ TALKS/ LECTURES

Following speakers from CICR delivered the talks on different topics in National Consultation on 'Mealy Bug Management' held at CICR, Nagpur on January 28-29, 2008.

- Dr. K.R.Kranthi, Head, Crop Protection Division- 'Introduction to the consultation'.
- Dr. Dhara Jothi, Senior Scientist- 'Status of mealy bug damage on cotton in various parts of India. Seasonal data of 2005, 2006 and 2007 from AICCIP'.
- Dr. Rishi Kumar, Senior Scientist- 'Biology and ecology of mealy bug species occurring on cotton in North India'.
- Dr. Vishlesh Nagrare, Senior Scientist- 'Taxonomy of the mealy bug species on cotton in India'.
- Dr. Sandhya Kranthi, Senior Scientist- 'Molecular analysis of mealy bug'.

Vinita Gotmare - Testing purity of GM cotton varieties and hybrids. In: National Training on "Seed *Quality Regulation and seed Health Testing*" organized by Seed Research and Training Centre, Varanasi on February 18 - 22, 2008.

Gopalakrishnan, N. and .Dharajothi, B. - Bt hybrids released in South India: Their properties and Features. In: Training cum Workshop on "*Sustainability of Bt Cotton, Detection and Quantification of Cry Toxins*" held during 24th to 26th March, 2008 at ANGRAU, Hyderabad.

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Produced & Published By : Dr. B. M. Khadi, Director

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