



Jaf News

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FROM THE DIRECTOR'S DESK



Dr. S. Satpathy, Director (Acting), CRIJAF

The Central Research Institute for Jute and Allied Fibres (CRIJAF) has the mandate to develop technologies to improve yield and quality of jute and allied fibres. It gives me immense pride to inform the readers of *JafNews* that four varieties of jute and allied fibre crops, namely, JROM 1 (*tossa* jute), JRCM 2 (white jute), SUIN 037 (sunhemp) and JBM 81 (kenaf) were recommended during the 10th Annual Group Meeting of AINP on Jute and Allied Fibres held at OUAT, Bhubaneswar on 11th & 12th February, 2012 for release by the Central Variety Release Committee (CVRC). Since its inception, CRIJAF is devoted for developing improved varieties of jute and allied fibre crops by applying various technologies. Mutation is one of the most established methods for creation of new



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FROM THE DIRECTOR'S DESK

genetic variations for economically important traits of crop plants. The seeds of two *tossa* jute varieties (JRO 204, JRO 8432) were irradiated with gamma radiation for creation of variability. A series of trait specific mutants were identified. Most of which were chlorophyll mutants. Soil testing and targeted yield equations facilitate judicious application of fertilizers to maintain soil health and ensure sustainable productivity under intensive cropping system. Soil Test Crop Response (STCR) correlation studies has developed targeted yield equations for jute (JRO 204) and ready reckoner to get desired yield of crops which are being adopted by the farmers.

There was an outbreak of a phytoplasma like disease on *H. sabdariffa* in two districts Srikakulam and Vijayanagaram during August 2011 cropping season. The infected plants showed characteristic symptoms such as phyllody and reddening of leaves. The disease was also noticed in CRIJAF research farm, Barrackpore. PCR with P1/P7 universal primer pair of 16 S rDNA and with nested primer pair R16F2n/R2 confirmed presence of phytoplasma in the infected samples.

Among eight popular jute based cropping sequences; viz. jute-paddy-mustard, jute-paddy-rajmash, jute-paddy-tomato and jute-paddy-pea, jute-paddy-wheat, jute-paddy-onion, jute-paddy-lentil and jute-cauliflower-wheat, preliminary trend based on benefit cost ratio revealed that jute-cauliflower-wheat followed by jute-paddy-rapeseed were the most profitable crop sequence. CRIJAF produced large quantity of certified jute seeds in its research farms during the non-fibre season to popularize the newly released high yielding varieties among the farmers. The processed seeds were sold in the trade name 'CRIJAF Seeds' from the CRIJAF seed sale counter at the institute and also from the extension centres situated in the jute producing districts of the state of West Bengal.

CRIJAF has undertaken a project under RKVY to produce larger quantity of jute seeds of new varieties in the drier districts of Bankura and Purulia in West Bengal. An interactive meeting between CRIJAF scientists and State Govt. officials (West Bengal) under the chairmanship of Dr. Atanu Purkayastha, Joint Secretary, Department of Agriculture and Cooperation, was held at CRIJAF on 1st February 2012 to prepare plan of jute seed production. CRIJAF successfully organized the ICAR Inter Zonal Sports

Meet during 16th-19th January, 2012. About 390 participants representing 37 ICAR institutes from different zones participated in the meet. CRIJAF won 2 gold medals in individual events.

During 2012, CRIJAF received some distinguished dignitaries as visitors. Dr. Charan Das Mahant, Hon'ble Minister of State for Agriculture and Food Processing Industries, Govt. of India visited CRIJAF, Barrackpore on 20th January. Hon'ble Minister expressed satisfaction about the functioning and achievements of the institute for the cause of small and marginal jute farmers. Sri Rabindranath Bhattacharya, Hon'ble Minister-in-charge for Agriculture, Govt. of West Bengal graced the occasion of Farmers' Day held on 30th June, 2012 at CRIJAF, Barrackpore, as chief guest. The Hon'ble minister urged the jute farmers to adopt new jute production technologies developed by CRIJAF for higher profitability.

The newly formed QRT of the institute under chairmanship of Padmashree Dr. M. Mahadevappa convened the preliminary meeting and visit to different AINP on JAF centres for assessment of performance of institute and AINPJ on AF during 2007-12. Dissemination of jute and allied fibres production technologies is another important priority of CRIJAF. In this direction, various national level training programmes, Farmers Days, Seed Days, Field Days, etc. were organized to disseminate jute and allied fibres production technologies, seed production technologies among the various stake holders.

As an important publication of the institute, *JafNews* plays a major role in disseminating the recent technologies developed at CRIJAF and elsewhere in India, besides crating awareness about the ongoing research activities of CRIJAF. I congratulate the editorial team of *JafNews* for their hard work in nice compilation and editing of the newsletter.

I gratefully acknowledge the efforts of the Prof. B. S. Mahapatra whose leadership materialised many important events and achievements for the institute during this period.



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Date : 24.02.2014
Place : Barackpore

MEETINGS/WORKSHOPS/TRAININGS etc.

New Year Celebration

Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore celebrated the New Year 2012 on 1st January. Prof. B. S. Mahapatra, Director cut the cake on the occasion and conveyed the wishes for happy new year to all staffs of the institute and appealed them to carry over the good performance in the new year also. Director urged the staffs to start the new year with fresh enthusiasm, devotion and efforts to bring the institute to new heights of success.



Dr. Arvind Kumar, Hon'ble DDG (Education), ICAR Visits CRIJAF

Dr. Arvind Kumar, Hon'ble DDG (Education), ICAR, New Delhi, visited CRIJAF on 5th January, 2012. Prof. B. S. Mahapatra, Director, CRIJAF, extended warm welcome to Dr. Kumar and briefed him about various ongoing activities in the institute. Dr. Kumar visited different laboratories and the library of the institute and expressed satisfaction on the research work of the institute.



ICAR Inter Zonal Sports Meet Organized by CRIJAF

'ICAR Inter Zonal Sports Meet' was organized by Central Research Institute for Jute and Allied Fibres (CRIJAF) at Kalyani Municipal ground from 16th-19th, January 2012. Dr. C.S. Chakraborty, Vice-Chancellor, WBUAHF, Kolkata, was the chief guest in the opening ceremony and Dr. A. P. Sharma, Director, CIFRI, Barrackpore; Dr. K. K. Satapathy, Director, NIRJAFT, Kolkata; Dr. P. K. Sur, Chairman, Kalyani, Municipality; Prof. B. S. Mahapatra, Director, CRIJAF, were the other dignitaries on dais during the occasion.



Prof. B. S. Mahapatra, Director, CRIJAF addressing during opening ceremony

About 390 participants representing 37 ICAR institutes from different zones participated in the meet.

Total 12 events were organized in the meet. In the closing ceremony, Dr. P. K. Sur, Chairman, Kalyani Municipality, was the chief guest and distributed medals to the winning teams and players. Central Rice Research Institute, Cuttack, was declared overall champion. CRIJAF won 2 gold medals for high jump and long jump.



Mr. U. S. Das receiving gold medal from Director, CRIJAF

MEETINGS/WORKSHOPS/TRAININGS etc.

Dr. Charan Das Mahant, Hon'ble Minister of State for Agriculture and Food Processing Industries, Visits CRIJAF

Dr. Charan Das Mahant, Hon'ble Minister of State for Agriculture and Food Processing Industries, Govt. of India visited CRIJAF, Barrackpore on 20th January, 2012. Prof. B.S. Mahapatra, Director, CRIJAF, welcomed Hon'ble Minister to the institute and appraised him about the activities and achievements of the institute.

He also elaborated the vision and thrust areas of research in XII Five Year Plan on Jute & Allied Fibre crops. Hon'ble Minister expressed satisfaction about the functioning and achievements of the institute for the cause of small and marginal jute farmers. He conveyed his best wishes for the future excellence of the institute. A formal vote of thanks was proposed by Dr. S. Satpathy, HOD, Crop Protection, CRIJAF. Dr. Mahant also visited the laboratories and research farm of the institute.



Dr. Charan Das Mahant, Hon'ble Minister of State for Agriculture and Food Processing Industries, during his interaction with the scientists of CRIJAF



Dr. A. K. Ghorai, Pr. Scientist, CRIJAF, explaining the nail weeder operation to the Hon'able Minister in the laboratory and the field



Republic Day Celebrated

The 63rd Republic Day was celebrated at CRIJAF with great enthusiasm on 26th January, 2012. All the CRIJAF staffs participated in the function. The national flag was hoisted by Prof. B. S. Mahapatra, Director, CRIJAF. In his Republic Day message, Prof. Mahapatra outlined the salient achievements of the institute in last one year and thanked all the staffs for the hard work done. He also wished that CRIJAF staffs should strive hard for further excellence of the institute. With a view to encourage the outstanding staff members (non-scientific) of CRIJAF, 'Best Worker Award' were given to Sri Santosh Meena (T₃), Sri Sanjiv Ghosh (T₁) and Sri Gopal Chandra Das (TSCL) on this occasion.



Prof. B. S. Mahapatra, Director, CRIJAF hoisting the national flag in the Republic Day

MEETINGS/WORKSHOPS/TRAININGS etc.

Interactive Meeting on Jute Seed Production Plan in West Bengal under RKVY

Interactive meeting between CRIJAF scientists and State Govt. Officials (West Bengal) under the chairmanship of Dr. Atanu Purkayastha, IAS, Joint Secretary, Department of Agriculture and Cooperation, Gol, was held at CRIJAF on 1st February, 2012 to prepare plan for jute seed production in Purulia and Bankura districts of West Bengal under Rastriya Krishi Vikas Yojana (RKVY).

Prof. B. S. Mahapatra, Director, CRIJAF welcomed



Dr. Atanu Purkayastha, Joint Secretary (DAC) making remarks on seed production plan

Dr. Purkayastha to the institute and appraised the house about the seed production activities in the institute and outlined CRIJAF's work plan for seed production in Bankura and Purulia districts. Discussions were held threadbare on the work plan. Dr. Purkayastha made valuable advices for further improvement on the plan. Dr. S. K. Biswas, Director, DJD was also present in the meeting.



CRIJAF scientists and state officials interacting to formulate jute seed production plan

CRIJAF Foundation Day Celebrated

Jute Agricultural Research Institute (JARI) was established in 1953 at Barrackpore, Kolkata, West Bengal. Dr. Rafi Ahmed Kidwai, the then Agricultural Minister, Govt. of India, laid the foundation stone of JARI on 9th February, 1953 and Dr. B.C. Kundu became the founder director of JARI. The institute functioned under Indian Central Jute Committee (ICJC) from 1953 to 1965 with major emphasis on breeding of high yielding varieties and development of appropriate production technologies. ICJC was

abolished in 1966 and as a consequence, JARI came under the administrative control of Indian Council of Agricultural Research (ICAR) in 1966. In 1990, JARI was renamed as Central Research Institute for Jute and Allied Fibres (CRIJAF) with additional mandate for research on allied fibre crops. The institute has been serving for the nation since its inception in 1953. The foundation Day of CRIJAF was celebrated on 9th February, 2012 in a grand manner.



Dr. A. P Sharma, Director, CIFRI, Barrackpore cutting the cake on CRIJAF foundation day



Foundation day address by Prof. B. S. Mahapatra, Director, CRIJAF

MEETINGS/WORKSHOPS/TRAININGS etc.

The 10th Annual Group Meeting of All India Network Project on Jute & Allied Fibres

The 10th Annual Group Meeting of AINP on Jute and Allied Fibres was held at OUAT, Bhubaneswar during 11th&12thFebruary, 2012. The Meeting was inaugurated by Dr. N. Gopalakrishnan, ADG (CC), ICAR. He emphasized on ever increasing cost of cultivation in jute, importance of breeding of varieties of finer quality to meet the specific demand of industry for diversified use and also on



Dr. N. Gopalakrishnan, ADG (CC), ICAR, lighting the lamps during inauguration of 10th Annual Group Meeting of AINP (JAF) in presence of Dr. D. P. Ray, VC, OUAT and Prof. B.S. Mahapatra, Director, CRIJAF

varieties having resistance to biotic and abiotic stresses. He also mentioned the need to developing integrated modules of production and protection technologies aiming at specific problems in a time targeted manner so that precise technologies can be delivered to the stakeholders. Prof. B.S. Mahapatara, Director, CRIJAF provided a comprehensive overview of research activities under the network project. He also informed the house about the significant breakthroughs achieved in the

institute. Dr. Satpathy, Scientist in-charge, AINP on JAF and Head, Crop Protection Division, CRIJAF presented research achievements of the network project during 2011-12. Prof. D. P. Ray, Vice Chancellor, OUAT in his address, reiterated the environmental advantage of the natural fibres and the vital role of raw jute in the economy of the farmers of Eastern India. Dr. Santosh Biswas, Director, Directorate of Jute Development emphasized the need to bridge the regional disparity in the productivity of jute.



Address by Prof. B. S. Mahapatra, Director, CRIJAF

Four varieties of jute and allied fibre crops, namely, JROM 1 (*tossa* jute), JRSM2 (white jute), SUIN 037 (sunnhemp) and JBM 81 (kenaf) were recommended during the meeting for release by the CVRC. Valuable recommendations were made in the meeting for further refinement in the research programmes.

Farmers' Awareness Camp at SRS, Bamra

'Farmers' Awareness Camp' was organized on 29th February, 2012 at Sisal Research Station, Bamra to popularise and area expansion of sisal crop in Odisha under Tribal Sub plan (TSP). Prof. B. S. Mahapatra, Director CRIJAF in his opening remarks urged the farmers go for sisal plantation for better livelihood. Sri Gangadhar Pradhan, former Minister (Tribal and Rural Development), Govt. of Odisha; Director and Head of Divisions from CRIJAF, Barrackpore; officers from Odisha State Department of Agriculture and Forestry; representative



Prof. B.S. Mahapatra, Director, CRIJAF, visiting the field of tribal farmers

MEETINGS/WORKSHOPS/TRAININGS etc.



Prof. B.S. Mahapatra, Director, CRIJAF, addressing the tribal farmers

of Central Silk Board, Managers of the state owned lead banks, other dignitaries from related departments, and about 200 tribal farmers attended the awareness camp. Dignitaries present in the camp felt the need for closer ties among the relevant departments to encourage tribal farmers of the area in sisal plantation. Tribal farmers were exposed to different aspect of sisal plantation, fibre extraction and marketing etc. for better price during awareness camp. Farmers were enthusiastic and expressed eagerness to go for sisal plantation as one of their livelihood activities.

Training-cum-Awareness Programme on PPV & FRA

Training-cum-awareness programme on 'Protection of Plant Varieties & Farmers' Rights' was organized on 1st March, 2012 at CRIJAF, Barrackpore to generate awareness among famers about intellectual property rights, protection of jute varieties and farmers rights as per the guidelines of the Protection of Plant Varieties & Farmers' Rights Authority (PPV & FRA).

Dr. Tejbir Singh, Registrar, PPV & FRA described the role of farmers as conserver and reservoir of genetic diversity; their importance as breeder of new and improved varieties with biotic and abiotic stress resistance. Prof. M. Hossain, former jute breeder, B.C.K.V.; Dr. A.K. Basu, Professor, Dept. of Seed Science & Tech., B.C.K.V.; Dr. Sukanta Das Gupta, Assistant Director of Agriculture, Govt. of West Bengal



Farmer participants listening the technical lectures by the resource person

were present as invited guests and advised the farmers about the features of protection, procedure for registration of plant varieties. In welcome address, Prof. B.S. Mahapatra, Director, CRIJAF, narrated the importance of the training and necessity of the plant variety protection. Dr. J. Mitra (Nodal Officer, DUS) enlightened the importance of different rights and acts pertaining IPR. About 52 farmers from jute growing districts of the state participated in the programme.

In Technical Session, five lectures covering different aspects of PPV & FRA were delivered by the resource persons. In valedictory session, certificates were distributed by the Director, CRIJAF, to the farmers.



Inaugural address by Dr. Tejbir Singh, Registrar, PPV & FRA, New Delhi

MEETINGS/WORKSHOPS/TRAININGS etc.

Hindi Workshop Organized

CRIJAF organized 'Hindi Workshop' on 16th March, 2012 to generate awareness about Hindi as official language. Among the staff members in Mrs. Manjushree, Asst. Director Hindi (Official Language), Ministry of Home affairs, Nizam Palce, Kolkata was invited to deliver lecture in the workshop. Prof. B. S. Mahapatra, Director, CRIJAF, in his opening remarks highlighted the importance of Hindi as

official language. He confided that in India, in spite of many regional languages, Hindi as official language has the capacity to unite the nation. Mrs. Manjushree discussed in details the official languages laws and clarified doubts related to Hindi official language. She elaborated the letter drafting skill in Hindi and encouraged staffs of CRIJAF to use more Hindi in office work.



Dr. S. K. Pandey, in-charge Hindi cell briefing about importance of workshop



Mrs. Manjushree, Assistant Director, Hindi, delivering lecture

Research Advisory Committee Meeting of CRIJAF

Research Advisory Committee (RAC) Meeting of CRIJAF was held during 19-20th March, 2012 under the chairmanship of Dr. P. Raghava Reddy, former Vice-Chancellor, ANG Ranga Agricultural University, Hyderabad. Dr. Sisir Mukhopadhyaya, former Vice-Chancellor Viswa Bharati, Shantiniketan; Dr. D. P. Singh, Ex Director of Research, G. B. Pant University of Agriculture and Technology; Dr. B. N. Singh, Director of Research, Birsa Agricultural University, Ranchi; Dr. K. P. Pandey, Professor, Indian Institute of Technology, Kharagpur; Dr. P. K. Sur, Chairman, Kalyani Municipality, Kalyani and Prof. B. S. Mahapatra, Director, CRIJAF were members of the RAC.

Dr. D. K. Kundu, Principal Scientist & Head, Crop Production Division, as member Secretary of RAC, presented the action taken report on previous year's recommendation. After a thorough discussion on the ongoing research programmes at CRIJAF headquarters and its regional stations, the committee made several recommendations for further refinement in the research activities of the institute. The chairman and members of the RAC appreciated the Director and scientists of CRIJAF for their commendable research work to uplift the livelihoods of small and marginal farmers.



Opening remarks by Dr. P. Raghava Reddy, RAC Chairman, CRIJAF



Dr. A. K. Ghorai, explaining the use of jute fabrics in rice field to RAC members

MEETINGS/WORKSHOPS/TRAININGS etc.

Seed Sale Counter at CRIJAF



Dr. P. Raghava Reddy, RAC Chairman, CRIJAF distributing seeds to the farmers

CRIJAF produces large quantity of certified jute seeds in its research farms during the non-fibre crops season to popularize the newly released high yielding varieties among the farmers. The processed seeds are sold in the trade name 'CRIJAF Seeds' from the CRIJAF seed sale counter at the institute and also from the extension centres situated at the jute producing districts of the state of West Bengal. These seed sale counters usually open in the month of March. The RAC members visited the seed sale counter at CRIJAF and distributed seeds to the farmers.

Seed Day Organized at SRS, Bamra

'Seed Day' was organized on 24th March, 2012 at Sisal Research Station, Bamra, Sambalpur, Odisha, to generate awareness among the farmers about the need of quality seeds and planting materials and their production techniques suitable for the agro-climatic situation of the western Odisha districts. About 125 farmers from Jharsuguda, Sambalpur and Sundargarh districts participated in the programme. The participating farmers, local dignitaries and CRIJAF scientists interacted during field visit on different aspects of seed production and sisal plantation. Visitors were given exposure to sisal nurseries, research and revenue generation fields of the research station.



Dr. S. Sarkar, Scientist-in-charge SRS Bamra addressing the farmers

Training on Improved Production Technology of Sisal

Training Programme on 'Improved production technology of sisal' was organized under Tribal Sub Plan (TSP) on 28-30th March, 2012 at Sisal Research Station, Bamra to train the farmers on improved production technology of sisal. About 30 tribal farmers from different near by villages participated in the programme.

Both, lectures and on farm training on sisal cultivation from nursery management to the harvesting and extraction of fibre from leaf were arranged for the farmers. The trainees showed eagerness to learn and actively participated in the learning process by practicing the field operations by their own hands and applying their knowledge.



Women farmers learning the sisal leaf harvesting operation

MEETINGS/WORKSHOPS/TRAININGS etc.

Institute Research Council Meeting of CRIJAF

Institute Research Council (IRC) meeting of CRIJAF was held during 3rd-4th April, 2012 under the chairmanship of Prof. B. S. Mahapatra, Director, CRIJAF to review the ongoing research projects of the institute. Dr. G. Basu, Director (Actg), NIRJAFT, co-chairman and Dr. A. K. Jena, Ex-Principal scientist and PMC member were also present in the meeting. In the opening remark, Prof. Mahapatra congratulated CRIJAF scientists for bringing in three externally funded projects. He emphasized on strengthening of research programmes on allied fibre crops in concerned sub stations and their area expansion in PPP mode. Head of the Divisions, in-charge of Agricultural Extension Section and KVK made brief

presentation on the ongoing research activities of respective divisions/ section and subsequently, individual scientists of all the divisions/ section and substations presented their research results in detail. On successful completion, 13 research projects were concluded with specific recommendations. Further, 11 new research proposals were discussed and necessary modifications were recommended. Eleven new research projects on jute and allied fibres under TMJ were thoroughly discussed and approved by the committee. Dr. S. K. Sarkar, Sr. Scientist, in-charge, PME cell took major responsibility in organizing the IRC meeting.



Opening remarks by Prof. B. S. Mahapatra, Chairman, IRC



Prof. B. S. Mahapatra, Chairman, IRC and Dr. S. K. Sarkar, in-charge PME Cell critically reviewing the progress of research projects

Quinquennial Review Team (QRT) Meeting

The Indian Council of Agricultural Research constituted the Quinquennial Review Team (QRT) to review the functioning and progress of research and other relevant activities undertaken by the CRIJAF and the AINP on J & AF centres during the five year duration from 2007 to 2012. The QRT consisted of Padmashree Dr. M. Mahadevappa Ex-Chairman, ASRB and Former Vice Chancellor, UAS, Dharwad as Chairman, Dr. B. Senapati, Ex-Vice Chancellor, OUAT, Bhubaneswar, Prof. M. Hossain, Former Jute Breeder, BCKV, Kalyani, Dr. B. K. Mandal, Ex. Head, Department of Agronomy, BCKV, Kalyani and Dr. A. K. Gogoi, Zonal Project Director (Zone-III) as Member and Dr. Subrata Satpathy, Head, Division of Crop Protection, & In-charge, AINP on J & AF as the Member Secretary. The first meeting of the QRT was held at CRIJAF



Inter-face between QRT members with RAC chairman during the first meeting of QRT

MEETINGS/WORKSHOPS/TRAININGS etc.

on 25th April, 2012. Dr. P. Raghava Reddy former VC, ANGRAU & Chairman, RAC graced the meeting to interact with the team and deliberated his view on the current research programmes of the institute. Dr. B. S. Mahapatra, Director, CRIJAF in his welcome address informed the house about salient achievements in research and development made by the institute in last five years. He also elaborated CRIJAF's effort on area expansion of ramie and sisal, jute seed production programme and various outside funded projects e.g. jute genomics, transgenic and hybrid development in jute. Dr. S. Satpathy, Member Secretary, QRT presented in detail the action taken report on the recommendations of the previous QRT. Subsequently, the detail presentation of CRIJAF (division-wise and regional station wise) and the AINP on JAF was made. The Sr. AO and FAO of CRIJAF deliberated about the manpower, IMCs, DPCs, financial allocation & achievements, resource generation and other financial and administrative matters. The QRT expressed satisfaction over the achievements made by the institute. The QRT

visited CRIJAF, Barrackpore, and its regional stations at Budbud, Bamra, Sorbhog and Pratapgarh and reviewed the progress, present activities and infrastructure facilities. The members also visited most of the centres of AINP on jute and allied fibres and had interactive meetings with the scientists to review the progress.

Visits schedule of QRT

Date	Station /centre reviewed
25.04.12	CRIJAF, Barrackpore
26.04.12	CSRSJAF, Budbud
27.04.12	BCKV, Kalyani
13.05.12	SRS, Bamra
14.05.12	JRS, Kendrapara
15.05.12	ARS, Amadalavalasa
21.05.12	RARS, Nagaon
22.05.12	RRS, Sorbhog
04.06.12	ShRS, Pratapgarh
05.06.12	CRS, Bahaich



QRT meeting at RRS, Sarbhog, Assam



QRT team visited ShRS, Pratapgarh, Uttar Pradesh



QRT team interacting with farmers at Bamra, Odisha



Dr. A. Bera explaining the jute seed processing to QRT members at CSRSJAF, Budbud

MEETINGS/WORKSHOPS/TRAININGS etc.

Institute Management Committee Meeting

The 29th Institute Management Committee (IMC) meeting of CRIJAF was held on 29th May, 2012 under the chairmanship of Prof. B. S. Mahapatra, Director, CRIJAF. Other members present in the meeting were Dr. K. K. Satapathy, Director, NIRJAFT; and Prof. P.K. Sur, Chairman, Kalyani Municipality. Mr. M. K. Pachuri, SAO, CRIJAF as member secretary, organized the meeting. Heads of the Divisions/ Section, in-charge, AINP on JAF, Scientists in-charge of Regional Stations, Programme Coordinator, KVK-Bud Bud, in-charge PME Cell and the FAO, CRIJAF, were also present in the meeting as co-opted members. The achievements made in research and development during 2011-12 were presented to the members of the IMC. The IMC expressed satisfaction over the progress made by the institute over last one year.



IMC meeting is in progress

Farmers' Day at CRIJAF

'Farmers' Day' was organized at Central Research Institute for Jute and Allied Fibres (CRIJAF), Barrackpore, Kolkata on 30th June, 2012 to disseminate the improved jute production technologies among the farmers. More than 250 delegates including 200 farmers from major jute growing districts of West Bengal *i.e.* Nadia, Hooghly, Malda, Murshidabad and North-24 Parganas, participated in this programme. Representatives from NGOs and jute industry also participated in the programme.

Sri Rabindranath Bhattacharya, Hon'ble Minister-in-charge for Agriculture, Govt. of West Bengal graced the occasion as chief guest. He appreciated the institute's efforts in developing technologies for jute and allied fibres crops and the ambitious project on jute seed production at Bankura and Purulia districts. The Hon'ble Minister urged upon the farmers to adopt the technologies developed

by CRIJAF to make jute farming more profitable. Dr. K. K. Satapathy, Director, NIRJAFT, Kolkata; Dr. S.K. Biswas, Director, DJD, Govt. of India, Kolkata; and Swami Vishwamoyananda, Ramkrishna Mission, Sargachi, Murshidabad, were also present in the programme as the invited guests. Prof. B.S. Mahapatra, Director, CRIJAF elaborated the improved technologies available at CRIJAF for the betterment of jute cultivation.

During field visit, farmers were given exposure to various improved jute production technologies. A video show on improved technologies of jute production was organized for the farmers. During the Scientist-Farmers interaction session, CRIJAF scientists and the State Govt. officials replied the queries of the farmers. On the occasion, "Best Farmer Award" was given to five best performing jute farmers in the last cropping season.



Sri Rabindra Nath Bhattacharya Hon'ble Minister-in-charge for Agriculture, Govt. of West Bengal visiting the jute field



Dr. A. K. Ghorai explaining the *in-situ* micro pond jute retting technique

Scientific Advisory Committee Meeting of CRIJAF-KVK, Burdwan

The ninth Scientific Advisory Committee (SAC) meeting for CRIJAF-KVK, Burdwan was held at Bud Bud, Burdwan on 10th April, 2012 under the chairmanship of Prof. B. S. Mahapatra, Director, CRIJAF. Other dignitaries Dr. A. B. Mondal, former Director, DSR & Pr. Scientist, Crop Improvement, CRIJAF; Dr. S. Ghatak, DPPO, Burdwan; Dr. B. Maity Dy. Director (Microbiology), Animal Resource Department Burdwan, Assistant General Manager NABARD Burdwan; Sh. Jagannath Chatterjee, Sub-Div. Agri Officer Durgapur, State govt. officials from line departments, and representatives of farmers and farm women were also present. Dr. F. H. Rahman, Programme Coordinator, KVK welcomed all the delegates and

presented the action taken report of the previous SAC. Prof. B. S. Mahapatra, Director, CRIJAF remarked that the 2nd Green Revolution in India has to be centered upon West Bengal and other eastern states. He reiterated the need for concerted effort between KVK and line departments towards a holistic development of Burdwan. He also pointed out the fact that since land holding is becoming smaller day by day, diversification in production should be the order of the hour for economic upliftment of the farmers of the region. He also urged upon the KVK to train the farmers depending on the basic needs. Dr. D. Ghorai, SMS, KVK, offered vote of thanks to dignitaries and participants.



SAC meeting is in progress



Dignitaries releasing KVK Publications

RESEARCH NOTES

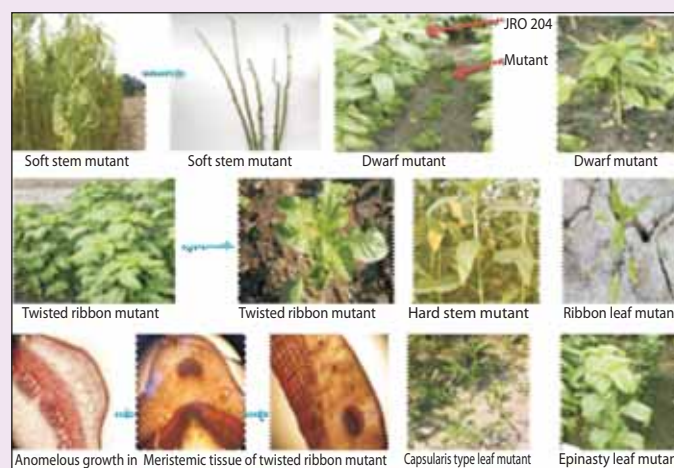
Novel *Tossa* Jute Mutants Developed through Gamma Radiation

The M₂ and M₃ generations of two *tossa* jute varieties (JRO 204 & JRO 8432) were screened for morpho-reproductive traits. A series of trait specific mutants were identified. Most of the mutants identified were chlorophyll mutants since the chloroplast is the most abundant organelle in the plant cell. Some of the mutants were characterized by specific traits as (1) Soft stem Mutant: The mutant was characterised with undulated growth of stem having lesser fibre and strength than control. Mean plant height of the mutant was lesser than control and retting duration was merely 7-9 days under optimum conditions. (2) Hard stem mutant: Plant having hard but brittle stem with stunted growth and delayed onset of flowering. (3) Twisted ribbon mutant: It was characterized with development of twisted bark around the stem. Its leaves were crinkled, leathery and broad which gave

luxuriant growth to the plant. It showed anomalous vascular bundle growth which caused the twisted growth of bark around the stem. (4) Dwarf mutant: Large number of dwarf mutant with stunted growth was identified. They were early flowering with profuse flowers. But, viable seeds/ pods were very less. (5) Ribbon leaf mutant: It was characterized by ribbon like leaves (6) Epinasty leaf mutant: Leaves had downward curling. (7) *Capsularis* type mutant: This mutant had plant type similar to *C. capsularis*.

Mutants developed through gamma radiation in *tossa* jute

Trait	Type of mutant
Chlorophyll mutant	Alboviridis, Chlorina, Virescent
Leaf shape mutant	Lanceolate, cordate, crinkled, palmate
Stem length	Dwarf, long
Bark	Twisted bark
Stem hardiness	Soft, hard
Floral mutant	Scaly sepals
Pod	Smooth ridge, oval pod, small



Different types *tossa* jute mutants in M₂ and M₃ generations of

Courtesy: **S.B. Choudhary, H.K. Sharma, A. Anil Kumar and P.G. Karmakar**
Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata

Dry Transplanting of Rice during *Kharif* in Jute-Rice-Pulse Cropping System under Deficit Rainfall

Insufficient rainfall during transplanting in *Kharif* season after jute harvest has become a bottleneck in puddled rice cultivation in West Bengal and in some rice growing states of the country. In recent years, rainfall deficit of 25-55% over last 25 years long term average of these states has been recorded. Therefore, attempts were made to grow transplanted rice at field capacity following jute harvest in *Kharif* season during 2009-2011 under deficit rainfall condition in the experimental fields at CRIJAF, Barrackpore, West Bengal in sandy clay loam and sandy loam soils having N:P:K content of 347 kg/ha, 32.25 kg/ha and 189 kg/ha, respectively.

In 2009, rice seedlings (Ananda) were transplanted in field

capacity pulverized soil (30 days old seedling) on July 7th which established with 73.6 mm of rainfall from 7th - 30th July. In 2010, the soil was pulverized by rotavator and 25-35 days old rice seedlings (Satabdi, Annda, Kshitish) were manually transplanted during 11th-18th August randomly or in rows (furrows) developed by cultivator. Six to seven seedlings were placed in furrows and the basal region was covered with soil for firm anchorage. The rice crop received 63 mm rain within 7 days after transplanting. In 2011, 40 days old rice seedlings (Ananda) were transplanted in field capacity soil with N:P:K::40::40:40 as basal and 60 Kg N as top dressing in two splits. The crop received 55.5 mm rain within 7 days following its

Comparative performances of rice establishment methods under deficit rainfall

Date sowing/transplanting	Cultivars	Fertiliser dose (N:P:K)	Total rainfall from sowing/transplanting to maturity (mm)	Total irrigation (mm)	Jute fibre yield (q/ha)	Rice yield (q/ha)	Days to mature (seed to seed)	Water productivity (lit/kg of raw rice)	Rainfed pulse yield (q/ha)
A. Dry seeding of rice in lines @ 100 kg/ha									
—	Annada	100:40:40	450	75	28	42.8	100	1250	—
B. Dry rice transplanting in field capacity soil (@ 80 kg seed /ha)									
21st July, 2009	Annada	80:40:40	—	—	—	42	110	—	17 (Pant mung 5)
13 th August, 2010	Satabdi	100:40:40	450	75	30	29	—	1810	7-8 (lentil, Ranjan)
23 rd , June, 2011	Himsagar Minikit	100:40:40	500	75	—	33	121	1742	—
13 th August, 2011	Satabdi	100:40:40	519	75	—	45	121	1320	—

transplanting in FC soil and got established. In another system, rice seedlings (Satabdi) were transplanted in sticky soil in shallow furrows developed by wheel hoes (minimal tillage) in between harvested jute rows and received 77 cm rain within 7 days of its transplanting.

Rice crops were primarily grown under rainfed condition and one irrigation was given during PI stage. Following rice transplanting, butachlor was applied @ 1 kg a.i/ha at 6-7 DAT for grass weed control. Immediately after rice seedling establishment, the soil in between rows were loosened by “CRIJAF Nail Weeder” and the rest of the weeds were removed either manually or by 2,4 D @ 0.8 kg/ha at 25 DAT. Required plant protection measures were taken to save the crop from pests and diseases. For

comparison, direct seeded rice was also grown following jute harvest (9th August, 2010) and good yield was obtained from coarse rice (Annada).

Under deficit rainfall, jute fibre yield of 28-38 q/ha (JRO 204) was harvested. There was no problem of rice panicle emergence and the rice crop matured well with available rainfall and one irrigation at PI stage. A rainfall of 45-52 cm and 7.5 cm irrigation at PI could produce 29-45 q/ha fine rice (Satabdi) (Table 1) and 42.5 q/ha coarse rice (Annada). The water productivity of rice ranged from 1250-1810 lit/kg of raw rice in different years. The rainfed green gram (Pant Mung 5) and lentil yields were 17q/ha and 7-8 q/ha, respectively.



Different methods of dry transplanting of paddy

Courtesy: **A. K. Ghorai, P. Hembram, H. Chowdhury, M. Kumar and D. K. Kundu**
Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata

RESEARCH NOTES

Soil Test and Targeted Yield-Based Nutrient Management Technology for Higher Productivity of Jute

Soil testing and targeted yield equations facilitate judicious application of fertilizers to maintain soil health and ensure sustainable productivity under intensive cropping system. Soil Test Crop Response (STCR) correlation studies conducted at CRIJAF, Barrackpore, West Bengal has developed targeted yield equations for jute (JRO 204) and ready reckoner to get desired yield of crops which are being adopted by the farmers. The study

has generated large volume of data base on varying soil and agro-climatic conditions suitable for sustainable crop production. The nutrient requirement to produce 100 kg of jute fibre was found to be 2.86, 0.88 and 5.80 kg N, P, K, respectively. The maximum contribution of N, P and K for production of jute fibre was observed from applied fertilizers followed by soil and organic manure.

Basic data and targeted yield equations of high yielding variety of jute (JRO 204)

Basic Data	Jute			Targeted yield equations
	N	P	K	
Nutrient requirement (kg/q)	2.86	0.83	5.80	FN = 6.82 T - 0.50 SN - 0.21 ON FP ₂ O ₅ = 1.89 T - 0.46 SP - 0.25 OP FK ₂ O = 3.32 T - 0.44 SK - 0.11 OK
Nutrient use efficiency from soil (%)	21.09	20.34	76.60	
Nutrient use efficiency from fertilizers (%)	42.00	43.83	174.9	
Nutrient use efficiency organic manure (%)	8.82	10.97	19.29	

Where T = Yield target (q/ha), FN, FP₂O₅ and FK₂O are fertilizer N, P₂O₅ and K₂O dose (kg/ha), SN, SP and SK are available soil test values (kg/ha), NR= Nutrient requirement in kg/q of fibre production, CS% = Per cent contribution from soil available nutrient, CF% = Per cent contribution from fertilizer nutrient without FYM, CO% = Percent contribution of nutrients from FYM or any other organic resources and STV = Soil test values.

A ready reckoner for different yield targets of high-yielding variety of jute (JRO 204) was developed for judicious use of fertilizers.

For example, if a farmer wants to produce 35 q/ha of jute fibre and if the soil test values for nitrogen, phosphorus and potassium are 300, 50 and 180 kg/ha, the requirement of urea, SSP and MOP may be calculated directly from the ready reckoner table as 174, 246 and 55 kg/ha,

respectively. Same pattern may also be used for obtaining dose of urea, SSP and MOP for other target yields of jute fibre. If the soil test values are 475, 120 and 320 kg available N, P and K/ha, no fertilizer application is required when the target yield is 30 q/ha jute fibre. Thus, ready reckoner may serve as a useful guide to the resource-poor jute farmers of India for judicious application of costly chemical fertilizers.

Ready reckoner for fertilizer requirement to achieve the targeted yield of jute (JRO 204)

Soil test values (kg/ha)			Targeted jute fibre yield (q/ha)								
			30			35			40		
STVN	STVP	STVK	Urea	SSP	MOP	Urea	SSP	MOP	Urea	SSP	MOP
200	10	100	210	303	86	284	361	114	358	421	142
225	20	120	182	274	72	256	333	99	330	392	127
250	30	140	154	245	57	230	304	85	304	363	112
275	40	160	128	216	42	202	275	70	276	334	980
300	50	180	100	188	28	174	246	55	247	306	83
325	60	200	72	159	13	145	218	41	219	277	68
350	70	220	46	130	0.0	119	189	26	193	248	54
375	80	240	17	101	0.0	91	160	11	165	219	39
400	90	260	0.0	73	0.0	63	131	0.0	137	191	24
425	100	280	0.0	44	0.0	37	103	0.0	111	162	10
450	110	300	0.0	14	0.0	9.0	74	0.0	82	133	0.0
475	120	320	0.0	0.0	0.0	0.0	45	0.0	54	104	0.0
500	130	340	0.0	0.0	0.0	0.0	16	0.0	28	76	0.0

Courtesy: **S. R. Singh, D. N. Maitra, B. Majumdar, M.K. Tripathi*** and **D. K. Kundu**

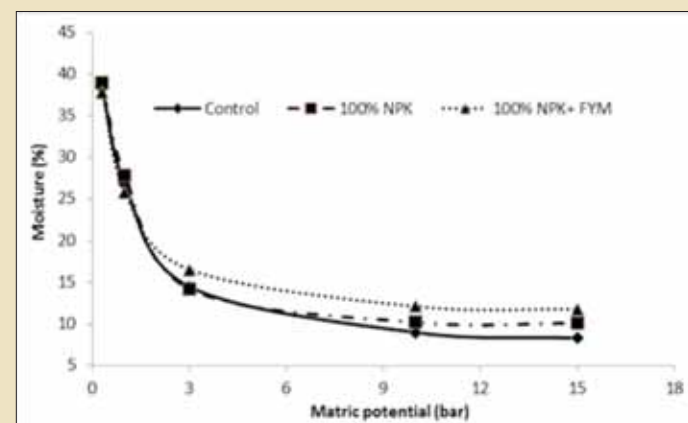
Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata * Sunnhemp Research Station, Pratapgarh (CRIJAF), Uttar Pradesh

Influence of Long-term Use of Fertilizers and Manures on Moisture Retention Characteristics of Alluvial Soil under Jute Based Cropping System

The soil-moisture retention curve (SMRC) defines the relationship between matric suction and moisture content. The factors which influence the SMRC of soils include texture, structure, clay mineralogy, compaction energy and stress state. Unlike other factors, the soil structure is mainly affected by soil organic matter. To characterize the influence of soil structure on the shape of SMRC, considering the other factors remained static, the SMRCs of silty-clay-loam soils under three long term (43 years) soil fertility treatments, viz. 100% NPK+FYM (@10t/ha), 100% NPK and control (without NPK and FYM) were developed in the laboratory condition by using pressure plate apparatus.

Scrutiny of revealed that at -300kPa (-3bar), -1000 kPa (-10bar) and -1500 kPa (-15 bar) tension, 100% NPK+FYM treated plot retained 15%, 35% and 42% more moisture than control plot (without NPK+FYM application), respectively. Similarly, 100% NPK treated plot retained 19% and 17% more moisture corresponding to -10 bar and -15 bar matric potential than the same control plot. In general, FYM treated plot showed comparatively higher water holding capacity at higher tension or lower matric potential, particularly from -2 to -15 bar which can be attributed to the higher organic matter content in the FYM treated plot consisting of favourable soil structure for cultivation. However, higher moisture content retained

in 100% NPK treated soils than the soils of control plot was probably due to comparatively enhanced production and incorporation of root exudates in the soils under former treatment than the latter during jute-rice-wheat cropping system. This analysis construed that the application of organic matter (FYM) can enhance the water holding capacity of soils to sustain crop production under water stress situation.



Soil-moisture retention curves under long term soil fertility treatments

Courtesy: **D. Barman** and **D.K. Kundu**

Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata

First Report of a Phytoplasma Causing Phyllody and Reddening of Leaves in Roselle

There was an outbreak of a phytoplasma like disease on *H. sabdariffa* in different villages of North coastal mesta growing region of Andhra Pradesh, India covering mainly two districts Srikakulam and Vijayanagaram during August 2011 cropping season. The infected plants showed characteristic symptoms such as phyllody and reddening of leaves. The disease was also noticed in CRIJAF research farm, Barrackpore. PCR with P1/P7 universal primer pair of 16 S rDNA and with nested primer pair R16F2n/R2 confirmed presence of phytoplasma in the infected samples. The 1023 bp nucleotide sequence of *uvrB* and *DegV* gene of the phytoplasma was deposited in the GenBank (NCBI) with the accession no. JX975061. NCBI BLASTn analysis of the 1023 bp products showed that the phytoplasma strain belonged to the group 16SrV-D. This is the first report that *H. sabdariffa* is infected by a phytoplasma and it has been named as mesta-phyllody disease (MPD).



Phytoplasma infected mesta plants showing phyllody symptom

Courtesy: **C. Biswas**, **Piyali Dey**, **P. Satya** and **S. Satpathy**

Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata

RESEARCH NOTES

Profitability of Jute Based Cropping System

Field demonstrations were laid out to find out the most profitable jute based cropping systems at farmers field in West Bengal. Total 60 farmers from 5 CRIJAF extension centres located in the districts of North-24 Parganas, Hooghly, Nadia, Murshidabad and Malda were selected. In first year (2009-10), four popular jute based cropping sequences; viz. jute-paddy-mustard, jute-paddy-rajmash, jute-paddy-tomato and jute-paddy-pea were taken up for the study. In 2nd year (2010-11), four more popular jute based cropping sequences i.e. jute-paddy-wheat, jute-paddy-onion, jute-paddy-lentil and jute-cauliflower-wheat were added.

Farmer's feedback revealed that majority of them (87%) had agreement with the fact that inclusion of rice in the rotation was major cause of declining water table in the state. They were interested to learn water management practices to tackle the situation. Majority of the respondents (79%) following jute-paddy-lentil and jute-paddy-pea rotation observed that medium to lowland soil is prone to water logging and not fit for cultivation of legume and vegetable. Most of the farmers following

jute-cauliflower-wheat viewed that delayed onset of monsoon disrupts timely planting of cauliflower and wheat. Despite the average socio-economic conditions of the farmers, climatic limitations and involvement of high risk, they preferred non-food grains in place of food grain crops in the crop rotation for better return. Among the non-food grain crops, oilseed and vegetable emerged as major preferences. However; it is subjected to price fluctuation and other factors.

Preliminary trend of benefit cost ratio of field data revealed that jute-cauliflower-wheat followed by jute-paddy-rapeseed was the most profitable crop sequence at farmer's field. Based on economic consideration, jute-cauliflower-wheat can be recommended as cropping system for resource rich farmers and jute-paddy-rapeseed for resource poor farmers of similar agro-climatic condition.

Courtesy: **Shailesh Kumar, S. K. Jha, A. Shamna and S. Sarkar**
Central Research Institute for Jute and Allied Fibres, Barrackpore, Kolkata

Distinguished visitors

Name of the visitor	Affiliation	Date
CRIJAF, Barrackpore		
Dr S.K. Biswas	Director, Directorate of Jute Development, Govt. of India, Kolkata	02.04.2012 30.06.2012
Padmashree Dr. M. Mahadevappa	Ex-Chairman, ASRB, New Delhi and Chairman, QRT, CRIJAF	25.04.2012
Dr. B. Senapati	Former Vice Chancellor, OUAT, Bhubaneswar and QRT member, CRIJAF	25.04.2012
Dr. P. Raghava Reddy	Former Vice Chancellor, ANGRAU, Hyderabad and RAC Chairman, CRIJAF	25.04.2012
Dr. K. K. Satapathy	Director, NIRJAFT, Kolkata, West Bengal	29.05.2012
Sri Rabindranath Bhattacharya	Hon'ble Minister-In-Charge for Agriculture, Govt. of West Bengal	30.06.2012
Swami Vishwamoyananda	Ramkrishna Mission, Sargachi, Murshidabad	30.06.2012
Sunn hemp Research Station, Pradapgarh, Uttar Pradesh		
Padmashree Dr. M. Mahadevappa	Ex-Chairman, ASRB, New Delhi and Chairman, QRT, CRIJAF	04.06.2012
Dr. B. Senapati	Former Vice Chancellor, OUAT, Bhubaneswar and QRT member, CRIJAF	04.06.2012

DISTINGUISHED VISITORS

Name of the visitor	Affiliation	Date
Sisal Research Station, Bamra, Odisha		
Dr. B. Senapati	Former Vice Chancellor, OUAT, Bhubaneswar and QRT member, CRIJAF	13.05.2012
Ramie Research Station, Sorbhog, Assam		
Padmashree Dr. M. Mahadevappa	Ex-Chairman, ASRB, New Delhi and Chairman, QRT, CRIJAF	22.05.2012
Dr. B. Senapati	Former Vice Chancellor, OUAT, Bhubaneswar and QRT member, CRIJAF	22.05.2012
Dr. A.K. Gogoi	Zonal Project Director, Zone III, ICAR for NEH, Barapani and QRT member, CRIJAF	22.05.2012
Central Seed Research Station for Jute and Allied Fibres, BudBud, West Bengal		
Padmashree Dr. M. Mahadevappa	Ex-Chairman, ASRB, New Delhi and Chairman, QRT, CRIJAF	26.04.2012
Dr. B. Senapati	Former Vice Chancellor, OUAT, Bhubaneswar and QRT member, CRIJAF	26.04.2012

HRD

Training undergone by the scientist and staff members

Name of the training	Place and date	Name of the participant/s
Winter School on Molecular Approaches for Allele Mining and Crop Improvement	IARI, New Delhi 05-25 January, 2012	H. K. Sharma, Scientist
NAIP Sponsored Training Programme on SAS Software	BCKV, Kalyani 13-18 February, 2012	S. K. Pandey, Sr. Scientist J. H. Meshram, Scientist B. S. Gotyal, Scientist D. Barman, Scientist
FOCARS Mandatory Professional Attachment Training	NBPGR, New Delhi 3 March-3 June, 2012	A. N. Tripathi, Scientist
FOCARS Mandatory Professional Attachment Training	NBAII, Bangalore 3 March-5 June, 2012	V. Ramesh Babu, Scientist
FOCARS Mandatory Professional Attachment Training	DRR, Hyderabad 6 March-13 June, 2012	A. Anil Kumar, Scientist
FOCARS Mandatory Professional Attachment Training	IARI, New Delhi 26 March-26 June, 26, 2012	Amarpreet Singh, Scientist
Refresher Course of Directly Recruited Principal and Senior Scientists on Agricultural Research Management	NAARM, Hyderabad 5-18 June, 2012	A. K. Sharma, Sr. Scientist

Participation of scientists in seminar/symposia/conference/meetings etc.

Name of the seminar/symposia/conference/meetings	Place and date	Name of the participant/s
Meeting of in-charges of co-opting centres of AICRP on LTFE & STCR	IISS, Bhopal 5-6 January, 2012	A. R. Saha, Sr. Scientist S. R. Singh, Sr. Scientist
International symposium on "100 Years of Rice Science and Looking Beyond"	TNAU, Coimbatore 9-12 January, 2012	K. Selvaraj, Scientist
National Symposium on "Frontier of Microbiological Research: Concepts and Applications"	Indian Mycological Society, Kolkata 2-4 February, 2012	S. K. Sarkar, Sr. Scientist R. K. De, Sr. Scientist
Global conference on "Women in Agriculture"	NASC complex, New Delhi 13-15 March 2012	A. N. Tripathi, Scientist
Seminar on "Protective Agro-Textile-Advantage and Future Prospects"	IJIRA, Kolkata 22 March, 2012	D. Barman, Scientist
National Seminar on "Indian Agriculture"	NASC complex, New Delhi 24-25 March 2012	A. N. Tripathi, Scientist
National Conference on "Livelihood and Environmental Security through Resource Conservation in Eastern Region of India"	OUAT, Bhubaneswar 5-7 April, 2012	D. Barman, Scientist
XX Biennial Workshop of AICRP on Weed Control and Biennial Conference of Indian Society of Weed Science on "Weed Threat to Agriculture, Biodiversity and Environment"	KAU, Thrissur, Kerala 17-20 April, 2012	A. K. Ghorai, Pr. Scientist Mukesh Kumar, Scientist
National Seminar on "Information Technology Mediated and Technology Driven Agricultural Development"	BAU, Ranchi 20-21 June, 2012	S. K. Jha, Sr. Scientist

Awards and Recognitions

Dr. Sitangshu Sarkar, Senior Scientist (Agronomy) and Scientist-in-charge, Sisal Research Station was Awarded "Crop and Weed Science Society (CWSS) Fellow" for the

Year 2012 by CWSS, BCKV on 29th June 2012 in the 8th Annual Conference of the Society for his contribution in the field of Agronomy.

Superannuation

Name of the Employee	Designation	Date of superannuation
Madan Mohan Ghosh	AAO, A&A Section	31.01.2012
Dileep Kumar Dey	Technical Assistant (T-4)	31.01.2012
Shyamapada Kundu	Technical officer (T-5)	31.01.2012
Ashok Kumar Das	AAO, Farm section	29.02.2012
Sukumar Das	Technical Assistant (T-4)	31.03.2012
Dipti Das	AAO, Projects	30.04.2012
Amal Krishna Bhadra	AAO, A&A Section	30.06.2012