

# EWSLETTER



Vol. 20 No. 1

January 2013

## IISR: 60 years of devoted service to the nation



Indian Institute of Sugarcane Research completed its 60 years of service to the nation in 2012. Since its establishment in February 16, 1952, the institute has carried out pioneering research work on crop improvement, crop production, crop protection, mechanization, crop physiology and quality management. Over the years, IISR has carved out a niche for itself in the area of sugarcane agriculture. Today, the institute is well set to impart its role as a pioneer in sugarcane production and management. As a research institute, IISR has done its best to address the concerns and to meet expectations of Indian sugar industry. Be it varietal development or crop management, the institute has never left a stone unturned in this direction.

CoLk 94184 a high sugar early maturing variety with good ratoonability and tolerance to water logging and drought is under commercial cultivation in the states of Uttar Pradesh and Bihar, covering an area of approximately 11,000 ha and 5,000 ha, respectively. CoLk 9709

another high sugar early variety has been approved for cultivation in the state of Uttar Pradesh. Besides, the institute has been instrumental in getting many high sugar and high yielding varieties approved for cultivation in the state, which are already under cultivation in other states through Central Varietal Release Committee recommendations. Improved agro-techniques like, Spaced Transplanting Technique (STP), bud chip, cane node technology etc. have helped in reducing seed requirement and in faster multiplication of newly released varieties. Innovative planting methods like ring pit method, FIRB method, and better water use efficient irrigation practices have helped in increasing cane productivity in the subtropical belt. The development and adoption of technology package for intercropping with sugarcane have helped in ensuring economic and nutritional security for the farmers. Three tier seed program has become popular all over the country in providing disease free quality seed materials. "Moist-hot-air treatment" (MHAT) of seeds developed and advocated by the Institute has proved its worth in seed program by ensuring healthy seed material. Bio-intensive management of pest and diseases using various bio-agents is another area strongly advocated by the Institute. IISR has made its presence felt in the area of sugarcane mechanization, by designing and fine-tuning several machines. These have been helpful in reducing the drudgery and also in overcoming labour scarcity to some extent. Realizing the necessity for strong liaisoning and collaboration with sugar mills, state cane departments and other stakeholders, the Institute has been conducting many outreach programmes to disseminate its technologies through in-house trainings, demonstrations, kisan melas and other awareness programmes for sugarcane farmers and cane development officers. The Institute had hosted International delegations from countries like Indonesia, Ethiopia Srilanka and Brazil and the discussions have opened up possibilities for further collaborations with these countries.

The Institute, through its untiring efforts of six decades, has helped the sugar industry evolve into a leading sector of the nation. The future research activities of the Institute also have been formulated in such a way that the productivity and recovery is improved in the sub-tropics, while ensuring the sustainability of sugarcane cultivation and meeting the demands of the various stakeholders. From the "Year of Excellence 2012" during its Diamond Jubilee Year, the Institute has moved on to "The Year of Outreach 2013" keeping in mind the need for co-operation and collaborations with the different stakeholders, both at national and global level. The Institute envisages to march ahead with renewed vigour, to face the complex challenges and to harness the domestic and global opportunities for the welfare of cane growers and other stakeholders, for enhancing sugar production, productivity, profitability and sustainability.



#### SECTORAL NEWS: SUGARCANE AND SUGAR INDUSTRY

#### DG, ICAR lauded the efforts of IISR for sustainable development of sugar industry

Dr. S. Ayyappan, DG, ICAR and Secretary, Department of Agricultural Research & Education (DARE), Govt. of India visited IISR, Lucknow on August 11, 2012. While addressing the scientists of IISR Dr. Avyappan stressed upon the need to tackle the challenges faced by the sugar and energy sector of the country in a holistic manner. He also urged to evolve means to break the stagnating cane yield of about 68 t/ha in the country, with quick replacement of very old varieties with new promising cane varieties. He emphasized on "Farmers' First Approach" as a central theme for conceiving and implementing R&D programme in sugarcane and sugar sector. In a day long visit to the institute, Dr. Ayyappan closely visited experimental fields and laboratories and interacted in detail with the scientists and other staff. Dr. S. Solomon, Director, IISR presented a brief account of the Institute's achievements viz., high sugar early maturing variety CoLk 94184, improved agro-techniques like cane node technology, water use-efficient irrigation practices, mechanization in sugarcane, bio-intensive insect pest and disease management, integrated nutrient management in plant and ratoon crops, agro-techniques for tropicalized sugarbeet etc. While lauding the efforts of the scientists, Dr. Ayyappan urged them to work with more enthusiasm and to address the upcoming challenges of sugar industry. The concept of sugar mills becoming integrated complexes for sugar, bio-fuel and bio-energy, along with other by-products need to be realized. He emphasized interinstitutional and international collaboration in emerging areas of research viz., broadening genetic resource base, global varietal development program, application of modern research techniques like molecular marker identification for important economic traits and its application in Marker Assisted Selection (MAS), carbon sequestration modeling, crop modeling and simulation study for resource conservation.



# IISR - an important player in strengthening Cooperative Sector Sugar Industry

With approximately 50% of the installed sugar mills of the country being in the co-operative sector, strengthening of cooperatives in sugar sector is a must to achieve prosperity and sustained development of Indian sugar Industry. This was emphasized by Mr. Vinay Kumar, MD, National Federation of Cooperative Sugar Factories Limited, on his visit to IISR on



August 17, 2012. Mr. Kumar appreciated the efforts of the scientists in developing technologies, especially bio-intensive management of insect-pests, organic cultivation of sugarcane, sugarcane harvester, ratoon management device & other

sugarcane machinery. He stressed upon the role of IISR in strengthening the co-operative sugar industry, by extending technological and training support. Mr. Kumar opined that the success model of IISR in dissemination of sugarcane technology at national and international level must be followed in the cooperative sector. In times to come, Indian cooperative sector has to play vital role in development of sugarcane and sugar sector.

#### 29th Biennial Workshop of AICRP on Sugarcane

The 29th Biennial Workshop of All India Co-ordinated Research Project on Sugarcane (AICRP(S)) was organized at Tamil Nadu Agricultural University (TNAU), Coimbatore on October 19-20, 2012. The opening session was presided over by Dr. N. Gopalakrishnan, ADG (CC), ICAR, New Delhi. Dr. K. Ramasamy, Vice Chancellor, TNAU was the Chief Guest. About 150 participants from various AICRP centres, sugar industry and TNAU attended the session.

Dr. A. Chandrasekaran, Director of Research, TNAU welcomed the delegates and presented the research activities of TNAU. Dr. O.K. Sinha, Project Coordinator (Sugarcane) presented the annual progress report of the AICRP(S) on Sugarcane for the year 2011-12 and highlighted the achievements in Crop Improvement, Crop Production and Crop Protection disciplines. Dr. N. Vijayan Nair, Director, Sugarcane Breeding Institute, Coimbatore, in his introductory remarks, spelt out the technologies developed for sugarcane cultivation in Tamil Nadu State. He emphasized the need for

mechanization, study of climate change on sugarcane productivity and resistance breeding against emerging diseases like yellow leaf disease (YLD) in sugarcane.

Dr. N. Gopalakrishnan emphasized the need for fundamental and basic research in sugarcane improvement with an eye on current requirements and future challenges. He stressed upon the need to extend the successful technologies to the field and evaluation of a large number of bio-agents for control of pests and diseases. Dr. K. Ramasamy, in his inaugural address, congratulated the Sugarcane Breeding Institute, Coimbatore on completion of 100 years of its establishment. He urged for orienting the research programme on issues such as development of transgenics, biofeul production and use of microbes for resistance against biotic and abiotic stresses.

In the concurrent technical sessions that followed, technologies developed for management of binding weeds and for white fly management were recommended. Eight sugarcane varieties viz., Co 05009 and CoPant 05224 for North West Zone, CoSe 05451 for North Central Zone, CoBln 04174 for North Eastern Zone , Co 06022, Co 06027, CoN 05071 and Co 06030 for East Coast Zone were identified for release in the country.

#### Collaborative effort must to improve agriculture in UP

Under the dynamic leadership of Dr S. Ayyappan, Director General, Indian Council of Agricultural Research (ICAR), has envisaged annual conventions among the State Developmental Departments and the National Agricultural Research system (NARS), with a view to strengthen the inter-institutional and

ICAR Institutes-SAUs-State Department interactions. A two-days "Agricultural Research & Development Conclave for Uttar Pradesh & UP Kisan-Vigyan Sangam" organized at Indian Institute of Sugarcane Research, Lucknow on November 23-24, 2012 was an effort in this direction by the four ICAR Institutes at Lucknow, viz., IISR, CISH, NBFGR and CSSRI Regional Station, in collaboration with other such Institutions in the State, SAUs and KVKs, to showcase the technological advancements of NARS. This was aimed to facilitate a better dissemination of technologies among the beneficiaries including students.

In his inaugural remarks, Professor R. B. Lal, Vice Chancellor, SHIATS, Allahabad said that effective management at every level of agriculture and technology should reach the remotest of remote of the villages. With the huge yield gaps in the areas of agriculture and allied sectors there is immense scope for productivity enhancement by harnessing the potential of available technologies.

Demonstration of technologies developed by IISR and other partners of NARS and *Kisan Goshti* were the major highlights of the programme. The fresh cane juice and organic jaggery made available to the visitors were main attractions on the occasion. An Awareness Programme on PPV & FR Act 2001 and a brain storming on IPR Issues and Commercialization of Agricultural Technology" were also organized. About 500-1000 development officials/scientists, 2000 farmers and 150 students from all over the state participated in the conclave/sangam.



#### STEP FORWARD FOR WELL-BEING OF SUGARCANE & SUGAR SECTOR

# IISR Interventions for Sustainable Sugarcane Development in UP

Technologies developed by IISR, Lucknow should get better attention of administrators, sugar mill owners, cane managers and Indian Sugar Mill Association (ISMA) for overall development of sugar and sugarcane sector in UP. This was highlighted in a Workshop & ISMA Sub-Committee meeting on "Status of Sugarcane in UP" jointly organized by IISR and UP Sugar Mill Association at IISR, Lucknow on October 04, 2012. The guest of honour Dr. G. S. C. Rao, President, STAI & CEO, Shimbhaoli Sugars remarked that on technology front, Indian sugar industry is the best in the world. Mr. Murtaza, Additional Cane Commissioner (Development), Govt. of UP expressed his concern on increasing cane area under rejected sugarcane varieties, and emphasized the need for varietal replacement with improved varieties. Dr. S. Solomon, Director, IISR apprised the house about the varieties and



technologies developed by the Institute and pointed towards the need for large scale adoption of these at farmers' fields. Dr. Narendra Singh, Advisor (Cane), ISMA presented the package

of practices for new varietal trials so as to achieve average cane yield of 75-80 t/ha in UP. Mr. Deepak Guptara from UP Sugar Mills Association, Mr. B. K. Yadav and Mr. Virendra Singh from Directorate of Sugarcane Development, senior cane managers of Sugar mills and farmers also participated in the workshop. A panoramic presentation on "IISR-Journey Towards Excellence" by Mrs. Anita Sawnani impressed the delegates and conveyed the commitment of IISR for holistic development of the sugar industry in UP.

#### Jaggery as Health-Food for all

Jaggery (gur), the traditional sweetener in India will be launched and served as a complete health food with vitamins, minerals and protein, to suit health requirements of all age groups, especially pregnant women and children suffering from malnutrition and vitamin deficiency. This was stated by Dr. S. Solomon, Director IISR, in a group meeting of Jaggery

Centres of All India Co-ordinated Research Project on Post Harvest Technology (AICRP(PHT)) held at IISR on July 07, 2012. The meeting attended by Dr. S. K. Nanda, Project



Coordinator (PHT), Dr. Jaswant Singh, Sectoral PI and about 25-30 process engineers from all over the country, was inaugurated by Dr. K. K. Singh, ADG (Process Engg.), ICAR. Dr. K. K. Singh highlighted the importance of Jaggery & Khandsari sector in India. Director, IISR, in his remarks said that jaggery industry has taken a back seat due to poor hygienic conditions under which it is manufactured and stored. Semiautomated or fully automated jaggery manufacturing complexes to improve and achieve complete hygiene need to be established. IISR is putting in all efforts to revive this sector through value addition to improve its nutritional and medicinal properties, consumer friendly & attractive packaging and improvement in shelf life, color and texture. The revival of this sector may enhance its contribution in Indian economy through export of jaggery to countries like Pakistan, Sri Lanka, UAE, Malaysia & Yemen.

#### Bio-intensive sugarcane farming for better yield and income

The adoption of bio-intensive sugarcane production techniques developed by IISR, Lucknow will increase cane yield and income of farmers in Uttarakhand, said Dr. S. Solomon, Director, IISR, while inaugurating a three day Training-cum-Workshop on Red rot management (July 23-25, 2012) at IISR. The training was organized to address the

concern of stagnant cane yield (50-55 t/ha) in Haridwar and other districts of Uttarakhand since last few years. 25 progressive farmers of Haridwar district of Uttarakhand learned about the theoretical and practical aspects of biointensive management technique for sugarcane cultivation, with special reference to red-rot and insect-pests management. Techniques developed by IISR viz., application of *Trichoderma* multi culture at the time of planting, use of MHAT treated healthy seed material, package of practices for growing red-rot resistant varieties like CoLk 94184, use of Trichocard as per recommendation for management of borers, use of IISR Combo-trap for control of white grub, releases of *Epiricania melanoleuca* for control of *Pyrilla* etc. were demonstrated during the training, in addition to the other standard management practices.

#### A step forward for revival of sugarcane in Bihar

To revive and improve the status of sugarcane cultivation and sugar industry in Bihar State, IISR has initiated many programmes in collaboration with sugar mills and cane department of Bihar Government. A one day farmers' training and awareness programme on "Sugarcane Production and Management in Bihar" was organized by the Institute at IISR Regional Centre, Motipur (Bihar) on December 06, 2012, and at Hasanpur sugar mill. Samastipur (Bihar) on December 07. 2012. About 500 farmers and 100 cane development officials from sugar mills and state government participated. Dr. S. Solomon, Director, IISR and a team of scientists comprising Drs. A.D. Pathak, T.K. Srivastava, RamjiLal, A.K. Singh, S.N. Sushil, Radha Jain & A.K. Sah from IISR and Dr. M. Alam, Director, SRI, Pusa (Samastipur) interacted with the farmers and cane development staff. An urgent need for increasing cane area from present 2.5 lakh to 3.5-4.0 lakh hectare and for making operational, the 16 closed sugar mills was felt in order to strengthen sugarcane and rural economy in Bihar State. Dr. Solomon advocated the scientific cultivation of sugarcane with recommended package of practices. He urged farmers to avail the facilities like healthy seed material, advisory services, demonstration etc. from IISR Regional Centre, Motipur, to enhance the profit from cane cultivation. Farmers were enlightened on the various techniques of improved cane cultivation viz., high yielding high sugar varieties, improved agro-techniques, ratoon management, integrated pests and diseases management, mechanization in sugarcane cultivation etc. for increasing cane yield. Demonstration on sugarcane cutter planter and Raised Bed Seeder (RBS) was also conducted for the benefit of the farmers. Ouestion-answer session for participating farmers and a small exhibition for visitors were also organized.



#### Sugarcane seed supplied

Over 4000 quintals sugarcane seed of improved varieties has been distributed to the farmers through different sugar mills.

#### Technologies Developed and Recommended

- CoLk 9709, an early maturing sugarcane variety, has been identified by the State Varietal Release Committee during October 2012 and is under process of release for commercial cultivation in Uttar Pradesh.
- 04 early sugarcane genotypes (CoLk 12201, CoLk 12202, CoLk 12203 and CoLk 12204) and 02 midlate sugarcane genotypes (CoLk 12205 and CoLk 12206) were accepted for multilocation testing in North West Zone during AICRP(S) Workshop, 19-20 October, 2012 at TNAU,

- Coimbatore.
- 02 early sugarcane genotypes (CoLk 12207 and CoLk 12208) and 02 midlate sugarcane genotypes (CoLk 09204 and CoLk 12209) were accepted for multilocation testing in North Central Zone during AICRP(S) Workshop, 19-20 October, 2012 at TNAU, Coimbatore.
- 08 early high sugar genetic stocks (LG 07408, LG 07482, LG 07501, LG 07560, LG 08422, LG 02005, LG 05302, LG 05403), 02 genetic stocks tolerant to top borer (LG 06618 and LG 07615) and 02 genetic stocks for red rot resistance (LG 7671 and LG 7672) were sent to the National Hybridization Garden, Coimbatore.

#### **INSTITUTE HIGHLIGHTS**

#### **Model Training Organized**

A Model Training Course (MTC) on "Post-harvest management of sugarcane and value addition" approved by Directorate of Extension, Ministry of Agriculture & Cooperation, Govt. of India, New Delhi was organized from November 02-09, 2012. The training was attended by sugarcane development personnel from UP, Bihar, Punjab, Uttarakhand, Odisha and research personnel from UPCSR, Shahjahanpur, UP. Program was inaugurated by Dr. G.B. Singh, Ex DDG (NRM), ICAR & VC, JNKV, Jabalpur. Dr. Singh emphasized the need for fine-tuning of harvesting and crushing schedule of sugarcane to curtail the huge post harvest losses, which is of the tune of Rs 3000-5000 crores per year. The Course Director, Dr. A. Chandra, PS & Head, Plant Physiology and Biochemistry apprised the gathering about the training programme. Dr. S. Solomon, Director, IISR highlighted the technological options for reducing sugarcane post harvest losses in sub tropical India. Lectures and practical sessions on various aspects of post-harvest sucrose losses and value addition in sugarcane were organized. Participants were also exposed to field activities related to post-harvest and live demonstration of jaggery making, value addition packaging.



#### **Institutional Bio-safety Committee (IBSC)**

The first meeting of the reconstituted Institutional Bio-safety Committee of IISR (IBSC-IISR) was organized on August 30, 2012, under the Chairmanship of Dr. Solomon, Director, IISR. The meeting was attended by the DBT nominee, Dr (Mrs.) Neelam Sangwan, Senior Principal Scientist, CIMAP, External Expert, Dr. Nimisha Sharma, Scientist, IARI, New Delhi and other members of IBSC-IISR. The research activities at the Institute involving biotechnological aspects, future project activities and various biosafety issues were

discussed in the meeting. As a follow-up of this meeting, an awareness programme on "Sugarcane Biotechnology and Genetic Engineering: Bio-safety Issues" was held on September 05, 2012.

#### **IRC** Meeting

The meeting of the Institute Research Council (IRC) of IISR, Lucknow was held under the Chairmanship of Director, IISR, during September 5-7, 2012. The progress of all the on-going research projects was reviewed and a few new research projects to be initiated were discussed and finalized. A few high priority research programmes to address the problems of low cane/sugar productivity, declining soil health, impact of climate change & weather aberration on sugarcane, deterioration of sugarcane varieties due to red rot and high cost of sugarcane harvesting were suggested by the Chairman, IRC.

#### Hindi Fortnight

Hindi Fortnight was celebrated at the Institute during September 14-29, 2012. Various competitions like essay writing, slogan writing, presentation on Institute's achievements and activities, presentation of research papers in Hindi, Hindi translation, Hindi dictation, Hindi typing, drafting, Antakshari, Ashubhashan, etc., were organized for different categories of the staff. A *Kavi Sammelan* was also organized during this period. Two lectures were also delivered by eminent guests. A Hindi Workshop was organized on September 19, 2012. All the winners were awarded on September 29, 2012.



#### Project approved by DST

A research project entitled" Functional genomic analysis of differential accumulation of sucrose targeting genes of invertase, SS & SPS & their impact on source-sink relationship in sugarcane" was approved by DST to Dr. A. Chandra as PI of the project.

#### Rajbhasha Award

IISR, Lucknow received 2nd prize for *Rajbhasha* magazine "*Ikshu*", during the half yearly meeting of *Nagar Rajbhasha Karyanavan Samiti* held at HAL, Lucknow on January 29, 2013. Institute has also received shield for 4th position in the Lucknow for overall working and promoting Rajbhasha during the period of July to December 2012.



#### Photo Exhibition Organized: The Magic of Sugarcane

A Photography Capacity building programme-cum-Exhibition "The Magic of Sugarcane" was organized by IISR in collaboration with Lucknow Camera Club and Society for Sugar Research and Promotion on August 27, 2012. The exhibition was inaugurated by Mrs. Bhawana Singh, CEO, Lucknow Cantonment Board. In her inaugural address, Mrs. Singh appreciated this unique coordination of science and art with the remark that photography makes a dull subject alive. Shri. Anil Risal Singh, Chairman, Lucknow Camera Club gave a brief review about the history of photography and the importance and requirements of photography in the changing scenario. A photography competition was also organized during August 15-17, 2012 at IISR to mark the World Photography Day- August 19, 2012. More than 500 people from all walk of life visited the exhibition. The best entries under different categories were given awards. Under student category, Ms. Aishwarya Sawnani received first prize. Under professional category Mr. Amit PrakashVishwakarma received first prize.



## TRANSFER OF TECHNOLOGY

#### Training for cane development personnel

A 21 days training on Sugarcane Management and Development for cane development personnel of sugar mills was organized from July 1-21, 2012. A total of 17 cane managers/officers from sugar mills of U.P, Bihar and Haryana participated in this training. The major objective of this training was to groom & develop cane managers/officers of sugar mills and familiarize them with the latest sugarcane production and management practices, through lectures, live demonstration of materials in the field/labs, and 'hands-on' learning exercises. This was aimed at accelerating the adoption of sugarcane technologies in sugar mill zone areas.





#### Farmers' Training organized

Farmers' trainings sponsored by different agencies like Horticulture department, Datia (Madhya Pradesh), Hasanpur sugar mills, Samastipur (Bihar), NHRDF, Deoria (UP) and IRA, Deoghar (Jharkhand) was orgainsed at the institute in which a total of 131 farmers participated.

Knowledge in various aspects of sugarcane cultivation were provided to the farmers through theoretical and practical sessions. Imparting practical learning to the trainees through visits to technology park, workshop and jaggery processing unit was major highlights of trainings.

#### **Exhibitions Organized**

S. No.	Organizer	Event and Place	Duration
1	Lal Bahadur Shastri Foundation, New Delhi	KisanMela at Lal Bahadur Shastri Intermediate College, Manda, Allahabad, UP	31 Aug. to 2 Sept., 2012
2	IISR, Lucknow	UP Kisan-VigyanSangam 2012 at IISR, Lucknow	23-24 Nov. , 2012
3	DKMA, ICAR, New Delhi	IITF-2012 at Pragati Maidan, New Delhi	14-27 Nov., 2012

#### Farmers' Visit

A group of 33 farmers and army personnel from the state of Jammu & Kashmir visited IISR on September 17, 2012 on an exposure visit organized by 21 Rajput, 163 INF Battalion, Jammu. Besides, a number of farmers' groups sponsored by different State agencies, sugar mills and NGOs visited IISR to learn about sugarcane production technology.

#### **KVK Round Up**

Vocational training for farmers, rural youth, housewives & women on crop cultivation, home management, food & nutrition, kitchen gardening etc. were organized by the Krishi Vigyan Kendra (KVK). 650 participants were imparted training in 32 vocational trainings organized during July-December, 2012. A two-day training sponsored by NHM was organized in two batches of farmers during November 21-24, 2012. A total of 292 FLDs on sesamum, maize, pigeon pea, sweet sorghum, fodder grasses, mustard, berseem, field pea, vegetable pea, sugarbeet, potato, wheat was organized. New demonstration units on vermin-composting, bee keeping & mushroom production were established.

#### Students' Visit

About 300 UG & PG students from Academic institution of Madhya Pradesh, Amity University, Lucknow and SHIATS, Allahabad visited IISR laboratories and experimental fields.



## INTERNATIONAL COLLABORATIONS

#### Visit of Chinese delegation to IISR

A delegation of six scientists led by Dr. Yang-rui Li, President, Guangxi Academy of Agricultural Sciences (GXAAS), Guangxi (China) visited IISR on October 11, 2012. The delegation interacted with the scientists of the Institute and visited the various laboratories and fields. The team expressed their interest for further collaborations with the Institute.

#### Training for Sri Lankan Scientists

A two weeks Training-Cum-Familiarization Visit Programme on Sugarcane Production Management for three Sri Lankan officials of the Sugarcane Research Institute, Sri Lanka (SRISL) was held from December 17-29, 2012. Mr. L.M.J.R. Wijeyawardhana, Research Officer, Mrs. V.K.A.S.M. Wanasinghe, Research Officer and Mr. R.A.P.A. Ranatunga,

Development Officer, Sugarcane Research Institute, Sri Lanka participated in the training. The programme consisted of visit and familiarization at the different divisions and sections of the Institute along with field visits to sugar factories, jaggery manufacturing units and machinery manufacturers at different locations at Lucknow.

#### Post Doctoral programme at IISR

Under the programme for promotion of sugarcane research and development in Afro-Asian countries, Dr.N.F.Almubarak, Assistant Professor&Head of Field Crop Department, College of Agriculture, University of Diyala,Iraq is undergoing a Post Doctorate Research Programme in Crop Production Division at IISR, Lucknow, India.



#### HUMAN RESOURCE DEVELOPMENT

#### **Students Trained**

A total of 14 Graduate and Post Graduate students from different universities and institutes were registered under 45/90 days lab training at IISR and trained in frontier areas of research.

#### Health camps organised

Health Camps were organised at the Institute's Dispensary during this period. Two health camps viz., Nerve Camp and BMD camps on October 5, 2012 and two for HbA1C and Lipid profile testing on November 19 and 20, 2012 were organised.

#### Independence Day Celebrated at IISR

Independence Day was celebrated on August 15, 2012.

#### Diwali Fete Celebrated



A "Diwali Fete" was organized in the institute campus on November 17, 2012. Several programmes were organized in which, IISR staff with their families participated actively and enjoyed thoroughly.

#### Participation of IISR Scientists in the International Symposium

Twenty three Scientists of the Institute participated in the International Symposium on New Paradigms in Sugarcane Research (ISNPSR-2012) at Coimbatore on October 15-18, 2012 held in connection with the Centenary Celebrations of Sugarcane Breeding Institute, Coimbatore. There were lead lectures, oral presentations and poster presentations by the scientists of the Institute. The session on Resource Management was chaired by Dr. S. Solomon, Director, IISR. Dr O.K.Sinha, Project Co-ordinator (Sugarcane) chaired a

session on Disease and Pest Management. Dr. Amaresh Chandra, Head, Division of Plant Physiology and Biochemistry, Dr. P.R. Singh, Head, Division of Agricultural Engineering, Dr. T. K. Srivastava, Head, Division of Crop Production and Dr. R.K. Singh, Principal Scientist (Biotechnology) acted as Conveners in three different sessions. The posters presented by Dr. D.K. Pandey and Dr. S.K. Shukla were adjudged the best papers presented in their respective sessions of the Symposium.



#### **PERSONALIA**

#### Joining

Dr. Anoop Singh Sachan, T-6 joined on 03.09.2012 on transfer from IIPR, Kanpur.

#### Superannuation

Smt. U.K. Sharma, Assistant superannuated on 31.08.2012 Shri G.D. Dhariyal, T-(7-8) superannuated on 31.08.2012 Shri Mohd. Hanif, SSS superannuated on 31.08.2012 Shri R.K. Khanna, Assistant Administrative Officer superannuated on 31.10.2012

#### Necrology

**Dr. Kishan Singh:** Visionary of Sugarcane Research & Development departed to heavenly abode.

Born: July 10, 1931

Passed away: September 02, 2012

Dr. Kishan Singh joined IISR in the year 1958 as Mycologist. He was appointed as the



Director of the Institute on December 27, 1968 and continued till July, 1989. He was assigned to lead SARP at ICAR headquarter, New Delhi from August 1989 to July 1991. Many technologies like MHAT, three tier seed programme, management of sugarcane diseases etc. were developed under his dynamic leadership and were implemented in sugar mill zone areas, which contributed considerably in enhancing sugarcane production. He was instrumental in introducing a separate cane department in sugar mills for addressing problems related to cane management. He was conferred the CSIR Shanti Swarup Bhatnagar award in 1976, for his contributions to sugarcane pathology. He was elected Fellow of National Academy of Science. He also received A.P. Farmers' Award and B. K. Srivastava Memorial Award for his outstanding contributions.

Shri S.K. Savita T-5 Expired on 21.07.2012

Published by: Dr. S. Solomon, Director

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