



## Happenings at NRC for Sorghum, and AICSIP news

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### International training programme on sorghum Hybrids R&D

NRCS and ICRISAT jointly organized "International learning program on sorghum hybrids parents and hybrids research and development" during 6-17 February



Visitors keenly listening to the intricacies of seed production of sorghum

2007. There were 18 participants from public and private sectors including two international participants, one each from Philippines and Sudan. Resource persons were chosen from both NRCS and ICRISAT, and training was carried out at the both the places. The course dealt with different aspect of sorghum breeding including development of varieties, parents for hybrid development, resistance to pests and diseases, marketing, IPR and Plant variety protection. This programme encompassed theory, practical and field visits. This programme was coordinated by Dr. BV Subba Reddy from ICRISAT and Dr. C Aruna Reddy, A Umakanth and Vilas A Tonapi from NRCS.

### Seed day at breeder seed production plot in farmers' field

A seed day was organized on 14 February 2007 at BSP plot of 2077A on a farmers' field in Ippalalpal village

### समाचार सरांश

**ज्वार संकर - अनुसंधान एवं विकास पर अंतर्राष्ट्रीय प्रशिक्षण कार्यक्रम** : राष्ट्रीय ज्वार अनुसंधान केंद्र तथा इक्रिसेट के संयुक्त तत्वावधान में 6-7 फरवरी 2007 के दौरान ज्वार पैतृकों एवं ज्वार संकरों के अनुसंधान एवं विकास पर एक अंतर्राष्ट्रीय प्रशिक्षण कार्यक्रम का आयोजन किया गया। जिसमें कुल 18 सहभागियों (दो अंतर्राष्ट्रीय सहभागी - एक फिलिपिंस से तथा दूसरा सुडान से) ने भाग लिया।

**कृषक खेतों के प्रजनक बीज उत्पादन क्षेत्रों में बीज दिवस** : ए.एन.जी.आर.ए.यू. तथा कृषि स्कूल, पालेम के डिप्लोमा अंतिम वर्ष के छात्रों एवं स्थानीय कृषकों के लिए शादनगर के समीप इम्पलपल्ली ग्राम में कृषक खेतों के प्रजनक बीज उत्पादन क्षेत्रों में 14 फरवरी 2007 को बीज दिवस मनाया गया।

**निगरानी दल द्वारा शादनगर स्थित प्रजनक बीज उत्पादन क्षेत्रों का निरीक्षण** : निगरानी दल ने 1 फरवरी 2007 को शादनगर के समीप इम्पलपल्ली ग्राम में 2077A तथा 2077B के प्रजनक बीज उत्पादन क्षेत्रों का निरीक्षण किया तथा बीज की फसल को आनुवंशिकतः शुद्ध बताया।

**अ.भा.स.ज्वा.उ.प.परि. समाचार**

**निगरानी दल द्वारा एम.पी.के.वी. राहुरी में डस लक्षण घरीक्षण का निरीक्षण** : निगरानी दल ने 6 फरवरी 2007 को राहुरी स्थित डस क्षेत्रों का निरीक्षण किया।

**उदयपुर गैर-मौसमी पौधशाला (ओ.एस.एन.) का निरीक्षण** : अखिल भारतीय समन्वित ज्वार उन्नयन परियोजना, उदयपुर से डॉ. टी. हुसेन (ज्वार कीटविज्ञानी) ने 15-17 फरवरी, 2007 के दौरान राष्ट्रीय ज्वार अनुसंधान केंद्र, हैदराबाद में स्थित उदयपुर गैर-मौसमी पौधशाला (ओ.एस.एन.) का निरीक्षण किया।

**निगरानी दल द्वारा रबी 2006-07 प्रयोगों का निरीक्षण** : निगरानी दल ने सोलापुर तथा बीजापुर में रबी 2006-07 प्रयोगों का निरीक्षण किया।

### अतिथि

#### मीठी ज्वार की सुवास का आकर्षण

• टाटा कैमिकल्स लि. मुंबई से श्री एस. श्रीराम (जैव ईंधन परियोजना के प्रमुख) तथा संजीव सिंग (सह-प्रबंधक- व्यवसाय) अपने ज्ञान संवर्धन हेतु 17 फरवरी 2007 को राष्ट्रीय ज्वार अनुसंधान केंद्र आए तथा उन्होंने मीठी ज्वार से एल्कोहल उत्पादन तथा डिस्टिलरी स्थापनाार्थ अपनी रुची दिखाई।

• यू.ए. आधारित अनन्त एनर्जी प्रा.लि. कंपनी ने अब मीठी ज्वार से जैव ईंधन बनाने की योजना बनाई है। इसी संबंध में चर्चा हेतु कंपनी के प्रतिनिधि श्री गणेश कृष्ण व श्री भर्माव ने केंद्र का दौरा किया।

• श्री एल. के. जग, कृषि विकास अधिकारी की अगुआई में 21 फरवरी, 2007 को 30 महिला कृषक केंद्र में आईं।

हिंदी संपादक : डॉ. भर्माव कुमार

near Shadnagar for the final year diploma students of ANGRAU, Agricultural school, Palem and the local farmers. Dr. Kannababu narrated all aspects related to hybrid sorghum research, coordinated program including various stages from testing to release of cultivars, classes of seeds, national breeder seed program, features of 'A' line, 'B' line and 'R' line. Dr. Ravikumar explained the students on the practical aspects of

maintaining the seed production plots, management practices, rouging, certification practices, etc. Further he discussed the role of public vs. private institutions and how seed production can be taken up as a commercial activity. The students were given an assignment of designing a 'Questionnaire' and capture the aspects viz., Basic requirements for an entrepreneur (knowledge,



*Students show keen interest in knowing about various aspects of seed production*

land, labor, capital); various costs (land leasing, labor, inputs, energy etc.) involved in the 'seed production activity'; the returns from sale of the produce (female line seed, male line seed, stover). Drs. S Ravikumar and N Kannababu of NRCS organized this seed day.

#### **Monitoring team visit to BSP plot at Shadnagar**

The monitoring team comprising Mr. Venkata Reddy (nominees of APSSCA), Mr. Ramachandra Reddy and Mrs. Vijayalakshmi (nominees of APSSDC), Mr. P Easwarudu (nominee of NSC), Drs. N Kannababu, VA Tonapi and SL Kaul (Scientists from NRCS) visited the breeder seed production plot of 2077A & 2077B at Ippalapalle village near Shadnagar on 1 February 2007. The monitoring team declared the seed crop as genetically pure. NRCS organized the seed production through APSSDC.

#### **AICSIP News**

#### **Monitoring team visit to DUS characterization trial at MPKV, Rahuri**

The team comprising of Drs. N Kannababu, S Audilakshmi, S Indira, Prabhakar and BD Biradar visited the DUS plot at Rahuri on 6 February. In general the crop condition was good and uniform, but was affected by shootfly in case of Paiyur 2, BSR 1, & NTJ 4 varieties. Drying shed for seed or panicles, and rodent-proof godown were constructed with DUS funds. RHS colour chart was procured during December 2006.

#### **Visit to Udaipur centre's off-season nursery**

Dr T. Hussein (Entomologist) from AICSIP, Udaipur visited NRCS during 15 -17 February. He interacted with NRCS scientists, and visited the Udaipur centre's off season nursery at GTC block. The objective behind growing OSN trial is to multiply and maintain the pure seeds for supplying to AICSIP trials during Kharif 2007. He further interacted with NRCS scientists on 17 February on matters related to collaborative research.

#### **Monitoring team visits Rabi 2006-07 experiments**

**Solapur:** A well-distributed rainfall of 684.2 mm during 2006 resulted in vigorous crop growth by the end of September 2006. It was a good rabi sorghum season for sorghum production. However, this year more lodging of sorghum crop was observed due to excessive growth of stem and heavy weight of panicles. The deadhearts percentage of shoot fly was moderate in test entries. Recommended treatments of IPM were selected from AICSIP program and a location-specific IPM module was tested at different centers. The objective of the study was to evaluate different IPM systems for economic benefit. Rabi sorghum genotypes were tested on shallow soils, and separately under irrigated conditions. Other experiments included following: INM for soybean-sorghum double cropping system, sorghum-based production technology, intercropping sorghum with safflower and chickpea, mulching and nutrient management. Demonstrations of improved rabi sorghum genotypes CSV 18, CSV 216R, Maulee and SPV 1626 were planted in seven farmer's field. The selected sorghum genotypes were evaluated for its biomass, earliness, leaf-area index at flowering and physiological maturity and for drought response at CRS, Solapur on shallow soil (to ensure drought). CRS 11, PVR 617, and RSE 472 were the promising genotypes under drought treatment.

**Bijapur:** Total rainfall 759 mm was recorded till 31st October. The condition of crop in general was good. Severe attack of shoot fly was noticed. The dead-hearts percentage of shoot fly was moderate in test entries. Stem borer infestation was negligible. Plant damage was recorded before senescence of leaves to account for drying symptoms. Infestation of shoot bug was observed moderate to heavy (80-150 bugs per plant). It was interesting to note that the shoot bug incidence was severe on border plots than in center plots. The probable reason was thought that the shoot bug attack starts from alternate hosts from bunds where grasses are grown and then it migrates towards nearest plots of sorghum. Secondly, the shoot bug attack confines mostly to whorls, and it moves relatively slow from one whorl to another. No attack of army worms and midge was noticed. The monitoring team has suggested evaluating AVHT entries for each key pest separately at selected locations.

#### **Recognition to Dr. Prabhakar**



Dr. Prabhakar got recognition as a Post-Graduate Teacher of Solapur University, Solapur in the subject of Botany, and he can guide Ph.D. students.  
*Congratulations!*

#### **Visitors**

#### **Sweet sorghum smell spreads**

**Mr. S Sriram** (Head Biofuels project), and Sanjeev Singh, (Asst. Manage – Business) from **Tata chemicals Ltd**, Mumbai visited NRCS on 17 February, 07 with new plans to diversify and expand their horizons to biofuel production. In particular they are interested in growing

sweet sorghum to produce alcohol and setting up a



*Discussions on possible collaborations under progress*

distillery. The team had a detailed discussion with the Director, and the scientists SS Rao, CV Ratnavathi, and B Dayakar Rao. Director apprised the group about the new developments in ICAR pertaining to collaborative projects with private sector. The team expressed their keen interest in executing a MoU with NRCS for Scientific and technical support for R&D on sweet sorghum.

**Anantha Energy Pvt. Ltd**, a US based company, has now plans to diversify to bio fuel production from sweet



*Team from M/s Anantha Energy Pvt. Ltd in dialog with Director*

sorghum. Mr. Ganesh Krishna and Mr. Bhargav representatives of the company visited NRCS on 14

February 2007. They interacted with the Director, and other scientists viz. Drs. SS Rao B Dayakar Rao and CV Ratnavathi. It has been decided that a MoU will be signed soon on the promotion and technology transfer of sweet sorghum for biofuel production.

### **Women farmer from Chattisgarh wants to select sorghum cultivars for them**

**Thirty women farmers** led by Mr. LK Nag, Agricultural Development Officer from Chattisgarh state visited NRCS on 21 February 2007. The purpose of the visit was to expose them to new technological innovations,



*VR Bhagwat explaining about the production technologies to women farmers*

farm management, and other issues in agriculture. The group also visited demonstration plots. Dr. VR Bhagwat, Sr. Scientist briefed the ongoing research activities, package and practice of production and protection technologies.

### **Family News**

#### **Award for Krithika**



Ms. Krithika Tonapi, daughter of Dr. Vilas Tonapi was awarded the "C Subramaniam Award" carrying a gold medal and cash prize of Rs. 1000/- for being the best outgoing student for the year 2006-07 of Bharatiya Vidya Bhavan's Vidyashram located at NIRD campus, Rajendranagar, Hyderabad. *Congratulations Krithika!*

### **Official tours**

S. No	Name of the Official	Place visited	Dates	Purpose
1	VR Bhagwat, S Indira & S Audilakshmi	Solapur, and Bijapur	1-3 Feb,07	Monitoring team visit of Rabi trials
2	S Indira N Kannababu & S Audilakshmi	Rahuri	5-7 Feb, 07	Monitoring team visit of Rabi trials
3	N Kannababu	MPKV, Rahuri	5 – 7 Feb, 07	DUS monitoring visit.
4	S Indira & S Audilakshmi, VR Bhagwat & Prabhakar	Parbhani	13-15 Feb, 07	To monitor AICSIP Rabi trials at SRS, MAU, Parbhani
5	N Seetharama	CRS, Solapur and UAS, Dharwad	22 -23 Feb, 07	Visit of Rabi trials at Solapur and to participate DBT Review meeting at Dharwad

## Meeting (M)/ Workshop (W)/ Training (T) attended

S. No	Name of the official	Participated in	Type	Venue	Date
1	N Seetharama & B Dayakar Rao	International conference on "Bio-fuels" organized by Winrock International India (WII).	C	Hotel Le Meridian, New Delhi	1-2 Feb, 07
2	N Seetharama & B Dayakar Rao	Meeting on "Indo-Canadian collaborative research planning" sponsored by DBT and BSP meeting chaired by the DDG.	M	TERI, New Delhi	3 Feb, 07
3	V Ravi Kumar	3 <sup>rd</sup> International Groundwater Conference (IGC-2007)	C	TNAU, Coimbatore	6-13 Feb, 07
4	KBRS Visarada, R Srinivas, K Nagaraju, Kanti Meena & B Krishnarjuna	8 <sup>th</sup> Agricultural Science Congress	C	TNAU, Coimbatore	15 -17 Feb, 07
5	Chari Appaji	Workshop on "Data warehousing and Data mining"	W	ASCI, Hyderabad	19-23 Feb, 07
6	N Kannababu	Meeting on "Launching of the plant variety registration"	M	NASC complex, New Delhi	21, Feb 07
7	N Kannababu	Meeting of Nodal officers of "DUS testing for 12 crops"	M	PPV&FRA office, New Delhi	21, Feb 07
8	KBRS Visarada	Review meeting of "Network project on Transgenics"	M	New Delhi	23 - 24 Feb 07
9	N Seetharama & BV Bhat	Review meeting on "Inter-disciplinary projects of DBT" (NS) and to present a research project on forage (VB)	M	New Delhi	26 Feb, 07
10	TGN Rao, S Ravi Kumar, P Mukesh, OV Ramana	Workshop on "Data Analysis and Data mining"	W	NAARM, Hyderabad	26 Feb, 07

### Thought for the month

The roots of true achievement lie in the will to become the best that you can become.

**Harold Taylor**

**Printed Matter / Book Post**

To



#### Compilation & lay-out by:

Dr. KV Raghavendra Rao  
Sh. K Sanath Kumar & Sh. HS Gawali

#### Edited and published by:

Dr. N Seetharama, Director,  
National Research Centre for Sorghum

**From:**

**National Research Centre for Sorghum (NRCS), ICAR**

Hq. Rajendranagar, Hyderabad, 500 030 (AP)  
Tel: 040-24015349, 24018651  
Fax: 040-24016378  
Email: nrchyd@ap.nic.in  
Website: www.nrcjowar.res.in

Centre on Rabi Sorghum (NRCS), NH 9,  
Bypass, Shelgi, Solapur - 413 006 (Mah.)  
Tel: 0217-2373456  
Telefax: 0217-2373456  
E mail: raut\_nrcss@nrсорghum.res.in

Off-season Nursery (NRCS), ARS Farm,  
Mulugu Road, Warangal - 506 007 (AP)  
Tel: 0870-2530963 Telefax: 0870-2530963  
E mail:  
ashok\_reddy\_nrcsw@nrсорghum.res.in