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APNL Project Reviewed

A seven member team from Andhra Pradesh Netherlands (APNL) Biotechnology Program, Institute of Public Enterprise (IPE) visited NRCS in the afternoon on 3 December, 2004 to evaluate the annual progress under the project entitled "Evaluation of transgenic sorghum with suitable Bt gene constructs for resistance against stem borer". The team consisted of Drs CR Bhatia, RP Sharma, NP Sarma, PK Gupta, Balasubrahmaniam, G Pakki Reddy, and MLN Rao. NRCS team members - Drs N Seetharama, KBRs Visarada, PG Padmaja and SV Rao and others working in the project participated in the deliberations.

Dr. Visarada, Principal Investigator presented the progress of the project to the team members. The team also visited the stem-borer lab, glass house, transgenic glass-house and biotechnology laboratory and expressed their satisfaction based on the progress brought to their notice.

Rabi sorghum meeting at Solapur

As an annual feature, all sorghum scientists working for rabi met at Centre on Rabi Sorghum, Solapur, a centre



Sorghum group discussion in progress during the meeting at CRS



Dr. MS Raut, Officer I/c. explaining the progress on rabi sorghum research at CRS, Solapur

of NRCS. This year the meeting was held between 9-10, December 2004 at Solapur. The progress under NATP-MM project was reviewed and the future needs of rabi sorghum improvement, especially on germplasm enhancement, varietal /hybrid breeding, seed production and distribution, agronomy and extension, crop utilization and market research were prioritized. Other issues such as development of rabi hybrids on collaborative basis for target traits, strengthening of coordination of rabi research from Solapur and exploring the possibility for a public private sector consortium for rabi sorghum improvement were also discussed.

About 40 members participated in the meeting including scientists from AICSIP centers, private sectors and agricultural university. Dr. ST Borikar was the special invitee from MAU, Parbhani.

The participants drew definite action plans for developing new and diverse parental lines for the target traits such as resistance to shoot fly, shoot bug, stripe and leaf diseases, charcoal rot, drought and cold tolerance. Improving grain and fodder quality was also a major thematic area. Unlike in the past, various centers were assigned specific responsibility as per the target traits. All the breeders were asked to utilize the new exotic lines-when everybody tried everything but rarely stored anything significant. Greater emphasis was given to popularize the already developed improved agronomic technologies. It was felt necessary to initiate studies on fodder quality, insect and pest reactions in rabi under irrigated conditions and breeding for physiological efficiencies. All the centers were requested to supply A, B and R lines with full-designated morphological characters and agronomic traits along with full pedigrees. For a detailed report please visit our website: www.nrctorsorghum.res.in.

Review of research on needs for utilization of sweet sorghum

One day meeting on “The review of progress and future research needs for utilization of sweet sorghum” was



Delegates deliberating during the meeting

organized at NRCS, Hyderabad on 29th December, 2004. Dr. YS Ramakrishna, Director, CRIDA and Dr. A Padma Raju, Director of Research, ANGRAU chaired the session. Dr. B Venkateswarlu, Principal Production System Scientist, CRIDA addressed the gathering. Thirty-two scientists, both from public and private sectors including the cooperating centers of the project participated in the meeting. Future research needs for sweet sorghum utilization were discussed in the first session and the annual progress of the NATP project (RNPS 24) was reviewed in the afternoon session. For details visit our website: www.nrctorsorghum.res.in.

Dr. Shukla administers new year resolutions at NRCS

Dr SN Shukla, ADG, ICAR has visited NRC for Sorghum on the afternoon of 31-12-04 and addressed the scientists. He suggested, and the scientists agreed to take following new resolutions for 2005.



Dr. SN Shukla, ADG (FFC), ICAR (inset) addressing the NRC Sorghum

- ◆ The pedigree of all the material should be provided. A pedigree register may be maintained to enter the crosses made each year and the selections made.
- ◆ The genotypes to be entered into the AICSIP trials should be decided based on their performance in a

common station trial.

- ◆ Collect all the germplasm lines available elsewhere and deposit with NBRGR.
- ◆ Observe a high degree of transparency and honesty in conducting the AICSIP trials, and on research.

All the scientists need to apply for special projects. Agronomist should develop the best package of practices for the released genotypes and should work economizing the use of inputs and reducing the cost of production. Spraying of microflora on the panicles to control grain mould should be dealt with carefully as the grain is used for food purpose. The biotechnologists should construct our own genes and utilize them rather than depending on cry 1AC/ cry 1B in transgenic production. The priority should be developing the mapping populations, identifying QTLs etc.

Seed day at breeder seed plots

The Seed Day was organized on 18th December 2004 at the breeder seed plots of CS 3541 and C 43 restorer



Dr. N Kannababu explaining the salient features of CS 3541 to scientists of NRCS

lines at NRCS by Dr. N Kannababu, Seed Scientist. The scientists from NRCS from different disciplines participated and discussed on various issues of sorghum seed crop management and seed quality maintenance. The participants appreciated the efforts of Dr. Kannababu for best maintenance of genetic purity, ensuring seed - set and good crop expression.

Doreen Mashler Award

Dr N Seetharama, Director, NRCS is one of the four representative team members, who jointly received the “Doreen Mashler Award” from ICRISAT. The award was conferred on them, in recognition of their valued contributions to global sorghum research. This was awarded by His Excellency Mr. Yasukuni Enoki, the Ambassador of Japan in India on 15 December 2004, during the celebrations of the ICRISAT Annual day. The other three Award recipients are Dr. ST Boriker, Head, Department of Agricultural Botany, MAU, Parbhani, Dr. P Satish Kumar, Director of Research, M/s. Prabhat Agri-Biotech (P) Ltd, Hyderabad, and Dr. Belum V Subba Reddy, Sr. Sorghum Breeder, ICRISAT, Patancheru, Hyderabad.

Progress of sowings at OSN

Following centres completed sowings at OSN, Warangal: Pantnagar (29, Nov); Akola (30, Nov) Parbhani (3, Dec); Biotechnology (4, Dec) Udaipur (7, Dec); Indore (8 Dec); IARI (14, Dec); Dual-purpose sorghum (18, Dec). Germination is good so far in plots of Akola, Pantnagar, Indore Parbhani, and Indore - nurseries.

Visitors

About 40 farmers representing Latur District visited Centre on Rabi Sorghum (NRCS), Solapur on 23rd December 2004. Dr. MS Raut, Officer In-charge and Shri DM Bahadure explained the activities of the centre. The farmers were also appraised about the recently developed rabi sorghum cultivars and the relevant production technology.

AICSIP News

- ◆ A new rabi hybrid BRJH 111, which is high yielding and also resistant to shootfly is in the final stage of release for Karnataka state.
- ◆ New dual purpose high grain and fodder yielding rabi hybrid DSR 6R from Dharwad is accepted for trial on farmers fields in Karnataka state for rabi season, 2004-05.
- ◆ A variety, AKSV-13 R (PKV Kranti) has been released for Maharashtra state during 2004 for rainfed and irrigated conditions. It has high grain and fodder yield coupled with multiple tolerance to shootfly, stemborer, aphids and leaf blight. It has exhibited superior performance over the local check M35-1 and CSV 14R.

Meetings / Symposia/ Conference/ Training attended

S. No	Name of the official	Participated in	Venue	Date
1	Dr. IK Das	Training on 'Bio-control strategies for management of plant pathogen'	Division of Plant Pathology, IARI, New Delhi.	16 Nov – 6 Dec, 2004
2	Drs. N. Seetharama, Vilas Tonapi, Prabhakar and M Elangovan	"Indian agriculture - in post WTO era" organized by Indian Science congress association-Hyderabad chapter; ANGRAU; Farm and rural science foundation and NAARM	NAARM, Hyderabad	21 Dec 2004
3	Drs. S Indira and TG Nageshwara Rao	National conference on "Emerging trends in mycology, plant pathology and microbial biotechnology"	Dept. of Botany, Osmania University, Hyderabad	29-31 Dec, 2004

Tours of NRCS scientists

S. No	Name of the Scientist	Place visited	Dates	Purpose
1	Drs. S Audilakshmi & C Aruna	Lingareddyguda	6 Dec 2004	Monitoring of CSH 16 seed multiplication plots
2	Dr. N Seetharama	New Delhi	6 Dec 2004	Meeting on germplasm conservation in the context of IPR at NBPGR, New Delhi
3	Dr. N Seetharama	Dharwad	16 Dec 2004	AICSIP monitoring and participation in the Biotech meeting with farmers
4	Dr. N Seetharama	New Delhi	26-27 Dec 2004	Directors meeting with the DDG, and meeting at DBT.

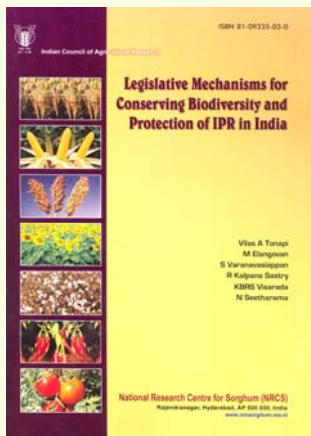
Forthcoming events

A Training on Sorghum DUS testing under PVP legislation will be held at NRCS, Hyderabad, from February 8-10, 2005.

Fee: Rs. 4000/- per candidate for private company representatives. Boarding and lodging will be arranged free of cost at NAARM.

Last date: 25 January, 2005

Recent publications from NRCS



Legislative mechanisms for conserving biodiversity and protection of IPR in India (ISBN: 81-09335-03-0)

There is a well-established statutory, administrative and judicial framework to safeguard intellectual property rights in India, whether they relate to patents, trademarks, copyright or industrial designs. This publication is a compilation of all the Intellectual Property laws and legislative mechanisms in India. The objective of this publication is to make the reader aware about the legislative mechanisms for conserving biodiversity and protection of intellectual property rights in India.

Authors: Vilas A Tonapi, M Elangovan, S Varanavasiappan, R Kalpana Sastry, KBRS Visarada and N Seetharama (No. of Pages: 649; Price: 500 + postage Rs. 50/-)

For ordering the above book a DD drawn in favour of "**ICAR unit NRCS**", payable at **Hyderabad**, may be sent.

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