



Happenings at NRC for Sorghum

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In this Issue

1. National level workshop-cum-seminar on kharif sorghum production technology	1
2. Sorghum farmers' day at Lingareddyguda	1
3. Prospects of ethanol from sweet sorghum	2
4. Review of APNL-Biotechnology project by Dr. MV Rao	2
5. Interaction with the seed & sugar industry	2
6. Support to AICSIP / SAUs	3
7. Linkages and collaborations developed	3
8. Awards received	3
9. Dr. VA Tonapi delivers guest lectures	3
10. Scientists' field day	3
11. Hindi week celebrations	3
12. Free eye-camp at NRCS for all	4
13. Sh. KJ Mathai joins as AD	4
14. Dr. M Elangovan's work appreciated by the DG, ICAR	4
15. Sad demise of Mr. K Vittal Reddy	4
16. Economy and safety measures	4

National level workshop-cum-seminar on kharif sorghum production technology

The Centre for Excellence on Training for Sorghum at NRCS conducted a National Level Workshop-cum-Seminar on "Kharif Sorghum Production Technology" from 9 to 11 September, 2003 at NRCS. Dr. N. Seetharama, Director, NRCS inaugurated the Workshop and presented an overview of sorghum research and development in the country.



Eleven senior level Agricultural Officers (including one lady) representing five sorghum growing states (Maharashtra, Karnataka, Andhra Pradesh, Madhya Pradesh and Tamil Nadu) and two senior sorghum breeders from the State Agricultural Universities (ANGRAU, Palem and PDKV, Akola) attended this workshop. Technical know-how on sorghum production technologies developed at NRCS and AICSIP were

narrated in the above workshop.

A total of 12 resource persons delivered varied lectures on diverse topics on sorghum production. Ready-made lecture notes and a CD on all presentations were prepared and distributed to all the trainees for ready reference. Visit to all NRCS fields, cold storage facility, seed production and demonstration plots were also arranged. At the end, a questionnaire on the evaluation of speakers and trainees attended the above workshop was filled by each participant. The feedback was good and the suggestions by trainees were noted for future conduct of training courses. The Director thanked Dr. Shashidhar Reddy and his team for making excellent preparations for this workshop.

Sorghum Farmers' Day at Lingareddyguda near Shadnagar, AP

The Scientists of NRCS under the leadership of Drs. A Audilakshmi and C Aruna Reddy, organized Sorghum Farmers' Day at Lingareddyguda near Shadnagar, Ranga Reddy District, Andhra Pradesh, on 23 September, 2003. Dr. A Padmaraju, Director of Research, ANGRAU was the chief guest. The Director of NRCS inaugurated the proceedings and also initiated the production of a film on sorghum.



CSH 16 and CSV 15 grown in the farmers fields were in excellent conditions. Superior cultivars, seed drying technology and plant protection protocols developed by NRCS were demonstrated to farmers of a cluster of villages of Shadnagar in Ranga Reddy District. Few hundred 100 farmers actively participated in the programme, including many women. Many queries about the sorghum production technology were attended to by the NRCS Scientists. Some farmers expressed doubts about the food quality of hybrids and they were told about the example of Maharashtra farmers who are us-

ing hybrids for food purposes since few decades. Farmers requested the officials to conduct this type of farmer's day regularly and also requested to identify at least one farmer per village for popularization of sorghum hybrids and varieties. The chief guest in his speech advised farmers to go for sorghum based cropping system in the district and move away from risky crops such as hybrid maize or cotton.

Prospects of ethanol from sweet sorghum

At the national conference on "Prospects of Ethanol - A sustainable bio-fuel" organized by APITCO, Hyderabad on 26 September, 2003, NRCS was represented by Drs. N Seetharama, CV Ratnavathi and B Dayakar Rao. Sh. B Gopala Krishna Reddy, Hon'ble Minister for employment generation and small scale industries, Govt. of AP, Sh. PM Kuria Kose, IAS, Secretary, APCCB and many entrepreneurs from ethanol industry, petroleum industry and other high ranking government officials took part in this national conference.

A presentation on the competitiveness of sorghum with sugarcane and uses of sorghum as a future bio-fuel crop was presented by the NRCS team. Sweet sorghum and its alternate uses was the talk of the conference for its low requirement of inputs and close relationship to sugarcane in many aspects. Baidynath Distilleries, Maharashtra have volunteered to operate solely on sweet sorghum cane from February, 2004. NRCS also published a booklet on sweet sorghums which is in much demand by farmers as well as technologists.

Review of APNL-Biotechnology projects by Dr. MV Rao

Reviewers from Institute of Public Enterprise (IPE),



Hyderabad including Drs. MV Rao, Chairman, Pakki Reddy, Coordinator and MLN Rao, Subject-matter-specialist, visited NRCS field and laboratory experiments and reviewed the progress made under APNL-Biotechnology Program on 25 September, 2003.

Drs. SV Rao, KBRS Visarada, PG Padmaja and Mr.D Balakrishna appraised the team of the achievements made and explained about various activities being carried out at NRCS under two projects sponsored by the APNL program "Evaluation of tissue culture mutants for resistance to charcoal rot and drought" and "Evolving transgenic sorghum resistant to stem borer with suitable *Bt* gene constructs".

Interaction with the seed & sugar industry

Mr. Nandkishor Kagliwal - Chairman, Mr. SU Baig - Director (Tech.) and Dr. Hakim, Breeder from Nath Seeds Ltd. visited NRCS on 30 August, 2003 and discussed the following aspects with the Director and the AICSIP Coordination team and the AICSIP team of Principal Investigators:

- Testing of sorghum in different zones, new product ranges and their scope in market
- Promotion of CSH 16: NRCS could provide them with assistance to popularize CSH 16
- Research on seed longevity was suggested by visitors
- Fee-structure for testing was discussed
- Other opportunities for collaborative research including research on biotechnology, strategic services and public awareness and education were also discussed

Mr. K Narayana Rao - MD, Mr. KSR Murthy - AGM (Distillery), Mr. VCN Reddy - Sr. Manager (Cane) and Mr. Chenna Keshava Reddy, I/C-Hyd. Branch of GMR Tech. & Ind. Ltd., Sankili, Srikakulam visited NRCS on 1 September, 2003 discussed following aspects with the Director:

- The GMR group is interested in trying out sweet sorghum on farmers field on a large scale during both rainy and non-rainy seasons and producing fuel alcohol
- Various backward and forward integration in sorghum industry were discussed, and the technology for sweet sorghum was presented
- The meeting concluded with the immediate decision of NRCS team visiting the factory area sometime this month itself to recommend further course of action

Mr. Aristotle, Dy. General Manager, Mohan Breweries & Distilleries, Chennai visited NRCS on 3 September, 2003 and discussed the following aspects with Dr. CV Ratnavathi, Senior Scientist, Alternate Uses Unit:

- Expressed keen interest in collaborating with NRCS for production of ethanol from sweet sorghum stalk and using the sweet sorghum grain for adjunct in their brewery
- They are also working on the sugar-beet and Jatropha along with sweet sorghum for large scale plantings in Chittoor district of Andhra Pradesh
- They are establishing a distillery at Chittoor and it would

start producing ethanol (absolute) in the month of October, 2004. (sugarcane lean period - July to January)

- Mentioned his interest to grow sweet sorghum in next kharif season on a large scale

Support to AICSIP / SAUs

Dr. Pooran Chand, Sr. Sorghum Breeder, RARS, ANGRAU, Palem visited NRCS on 2 September, 2003 and discussed the following aspects with Dr. (Mrs.) CV Ratnavathi, Senior Scientist, Alternate Uses Unit:

- Since Palem has become one of the test locations under AICSIP sweet sorghum program and is not having lab facilities, he was advised to get the sweet sorghum samples and analyzed at NRCS

Linkages and collaborations developed

Dept. of Animal Husbandry & Dairying: Dr. N Seetharama, and HS Ghaywan, visited Dept. of Animal Husbandry & Dairying, Regional Station for Forage Production and Demonstration, Pahadisharif, Near Keshavagiri, Hyderabad on 2 September, 2003 and had interactions with Mr. RG Gawai, Director In-charge and the following aspects were discussed:

- Urged FPD to give due importance to sorghum as forage, especially in southern region. Explored opportunities to multiply and sell seeds of legume forage at NRCS for revenue generation. Agreed for further interaction and for joint training or to arrange visits of farmers

GMR Sugar Industries, Srikakulam: Drs. CV Ratnavathi and B Dayakar Rao, Senior Scientists visited GMR Sugar Industries, Sankili, Srikakulam on 29 September, 2003. They appraised themselves with a visit to their factory and fields of sweet sorghum and held detailed discussions with officials on the prospects of growing sweet sorghum and its alternate uses. The above team also visited farmers fields at Boorja village and explained them about the benefits of growing sweet sorghum, marketability and alternate uses. Brochures in Telugu on alternate uses of sorghum were also distributed. The GMR officials have promised that they have plans to grow sweet sorghum crop in 3000 acres in the kharif season next year.

The District Collector Mr. Vijay Anand was also briefed the benefits of sweet sorghum and its supplementation to sugarcane for ethanol production. He showed keen interest and readily agreed to advise the local farmers to grow sweet sorghum instead of Mestha crop, which is not at all remunerative there at present.

Awards received

Dr. N Seetharama, Director was felicitated and was presented with an Award during a programme organized by Seedmens' Association of Andhra Pradesh, Hyderabad on 27 September, 2003. He also took part in

the deliberations. While addressing the gathering he expressed that the credit for this award goes to all AICSIP and NRCS staff who have tirelessly endeavored to elevate the status of sorghum crop in the country.

Dr. VA Tonapi delivers guest lectures

Dr. Vilas A Tonapi, Senior Scientist (Seed Technology) delivered two invited guest lectures in ongoing winter school on hybrid rice at the Directorate of Rice Research, Hyderabad on 24th September, 2003 on the subjects "Seed Legislation and Quality Control of Seeds in India" and "Quality Control of Hybrid Rice Seeds".

Scientists' Field Day at NRCS

All Scientists of NRCS actively participated in the Field day and demonstrations organized by Dr. S Ravi Kumar on 25 September, 2003 involving Seed Technology, Physiology, Germplasm and Agronomy research.



Director and all colleagues reviewed the progress made by each discipline, and suggested measures to improve research and data analysis. Director was very particular about accurate recording of all farm operations and the cost involved in each experiment. He advised scientists to formulate technology for cheaper inputs keeping in view the poor farming community who are the main cultivators of sorghum. Each experiment was scored by individual scientist and score-sheets were given to concerned scientist for her/his improvement in future.

Hindi week celebrations

The *Rajbhasha Saptah* (Hindi week) was celebrated at NRCS from 15 September to 20 September 2003, by conducting competitions in various curricular activities



like essay writing, translation, dictation, quiz competition and other cultural activities. Many officials actively took part in the competitions.

Free eye-camp at NRCS for all

M/s Jai Matha Seva Samithi, a non-governmental organization, Hyderabad, has conducted a free eye camp on 18 September, 2003. All the officials actively took



part in the free eye check-up camp. Some of the officials have volunteered to donate their eyes for the noble cause of reducing blindness in India.

Mr. KJ Mathai joins as AO



Mr. KJ Mathai joined NRCS in the capacity of Administrative Officer on 29 September, 2003. He was transferred on promotion from Assistant Administrative Officer, Project Directorate of Poultry, Hyderabad. He was formally introduced to all the staff members by the Director and wished him good luck for future endeavors at NRCS.

Dr. M Elangovan's work appreciated by the DG, ICAR

The Secretary, DARE & Director General, ICAR Dr. Mangala Rai, has sent an appreciation letter to Dr. M Elangovan, Scientist (Germplasm) for his outstanding work done during the last six months period ending June, 2003. The line of appreciation is reproduced below:

"It is heartening to note that progress of your project for the period under report has been rated as "Outstanding". I appreciate your efforts and expect that you will continue to perform with same zeal, devotion and enthusiasm."

Sad demise of Mr. K. Vittal Reddy



Sh. K. Vittal Reddy, Technical Officer (Mechanic) passed away on 18 September, 2003. He was detected of acute *Leukemia*. Director and all the staff members paid their last tributes and passed on their heart felt condolences to the bereaved family.

Economy and safety measures

1. Switch off all the lights and electrical appliances (if not in use) before leaving your workplace.
2. Close the water taps, gas cylinders and other containers of liquids / gases / chemicals before leaving your workplace. Any leakages, please complain to the Officer I/c. Works promptly.
3. Drive carefully and slowly in the campus because speed kills you and an innocent for whom you will be liable for your life. Park only at designated places.
4. When you leave the campus and move on to the main road, be careful of the speedily moving vehicles.

Thought for the month

All power is within you; you can do anything and everything. Believe in that; do not believe that you are weak. Stand up and express the divinity within you.

Swami Vivekananda

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