SEED SPICES
E - Newsletter
National Research Centre on Seed Spices
An ISO 9001:2008 Certified Institute

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Photography by: M. A. Khan
G. K. Tripathi

Important Events

Annual report 2013-14 of NRCSS released:

Annual Report-2013-14 of NRCSS has been published on 27th June 2014 and released during IMCC meeting of NRCSS on 1st July 2014 by Dr. Balraj Singh, Director, NRCSS. Electronic version of the report has been uploaded on NRCSS website. The report is a compilation of all activities including research achievements; technology assessed and transferred, human resource development, infrastructure development and publications of NRCSS during 2013-14. On this occasion Dr. Balraj Singh congratulated and appreciated the editorial committee, scientists and administrative staff for their efforts in timely completion of the task with maintaining quality standards in terms of content, design and format. Chief Editor Dr. S.N. Saxena extended thanks to the members of editorial board Dr. R. K. Kakani, Dr. R. S. Mehta, Dr. B. K. Mishra, Dr. N. K. Meena, Dr. R. K. Solanki and Dr. Sharda Choudhary for their cooperation and sincere support during the entire process of publication.



Important Events

Inauguration of Seed Store at the centre



A seed store was inaugurated by Dr. Balraj Singh, Director, NRCSS with the staff members of the centre on May 20, 2014. This store was constructed by CPWD under Central Sector Scheme of NHM sponsored by Directorate of Arecanut and Spices Development (DASD), Calicut, with the cost of Rs. 10.0 lakh. The store will be useful for storing seeds of seed spices in coming years to distribute among the farmers. Fumigation and temperature of the seed store will be maintained to save seed from storage pests and keep high quality and germination percentage.

A new project approved under AMAAS

A Project on "Exploration of microbial diversity in seed spices (Cumin and Coriander) in arid and semi-arid regions of Rajasthan and Gujarat" under Application of Microorganisms in Agriculture and Allied Sectors (AMAAS) has been approved by National Bureau of Agriculturally Important Microorganisms, (ICAR), Mau Nath Bhanjan (U.P.) under 12th Plan SFC of NBAIM for three years (2014-15 to 2016-17) at the total cost of Rs. 38.16 lakh (Rupees thirty eight lakh sixteen thousand). The proposal was submitted by Dr. Sharda Choudhary, Scientist (Plant Biotechnology) as Principal Investigator (PI) of the project and Dr. B. K. Mishra, Scientist Microbiology as Co-Principal Investigator.



This project aims at identifying and analyzing microbial profiling of rhizospheric soil of cumin and coriander growing areas along with the molecular characterization of beneficial rhizobacteria. It will also emphasize on the screening of rhizospheric microbial isolates for their attributes for plant health management.

Important Events

Scientists-Farmers' interaction with respect to agricultural strategies in poor monsoon conditions

As IMD and other related agencies reported that this year the initiation of monsoon is late and very poor due to El-Nino effect in Indian continent, especially in North Western part of the country. It has been predicted that the rainfall will be less than 85 per cent to the normal monsoon or low. To mitigate with the conditions, different strategies and contingency plans are required to be implemented to save the farming community and livestock population.

Keeping these facts into consideration, National Research Centre on Seed Spices (ICAR), Ajmer has organized farmer's interaction programmes at Jhunjunu and Nagaur districts of Rajasthan on May 1, 2014. A team of Scientists [Dr. G. Lal, Pr. Scientist (Hort.); Dr. R. S. Meena, Scientists, SS (Plant Breeding); Dr. N. K. Meena, Scientist SS (Entomology); Mr. A.S. Godara, ARO (Agro.), Er. S.P. Maheria (CTO), Sh. G. K. Tripathi, STA] visited the villages Indali (Nagaur), Warishpura (Jhunjhunu) and KVK, Abusar (Jhunjhunu) and organized three interaction meets with farmers. The scientists while interacting with the farmers, suggested different farming strategies required to be adopted to mitigate the poor monsoon situations. The different relevant strategies suggested are: selection of low input loving crops, cultivation of short duration crops and varieties, summer deep ploughing for more water retention, water conservation (in situ and ex-situ), rain water harvesting and mulching for conservation and efficient use of moisture, protected cultivation, spray of anti-transpirants, mixed farming, cultivation of fodder crops in some area, reliable fodder stock, integrated pest and disease management in drought like situations as well as conserved agriculture (mustard/barley/coriander/cumin etc.) in the situation of very late and poor monsoon/ rainfall conditions. In all, about 80 farmers participated in the interaction programme.





RESEARCH HIGHLIGHTS

A new alternative host of Nysius bug: Ber (*Ziziphus mauritiana* Lamk.)

Nysius bug (***Nysius*** spp.) (Hemiptera: Lygaeidae) an important pest of many seed spice crops especially develops in large number on crop of ajwain, celery and anise. The bugs develop on crop during early flowering to seed development/maturity stage. About 5 to 8 adults and nymphs on each umbel can be seen. It is observed that bug population appears first on ajwain crop during February and later colonise on celery and anise crop which flower in early March. The bugs continue feed on crops till maturity of seed. They pierce many cells and suck the sap of developing seed during their feeding and reduce the health of seed including loss of seed weight, physical appearance and germination. The population of Nysius bug shift on ber crop after harvest of seed spice crops. Ber (*Ziziphus mauritiana* Lamk.) is cultivated commercially in arid/semi arid regions. Ber plant generally pruned during first fortnight of May and after pruning new buds appears within 10-15 days which serve as good source of food to the bug population. The bugs feed on newly sprouted leaves and twigs of ber plant. The population continued feeding and development on ber crop up to month of June.







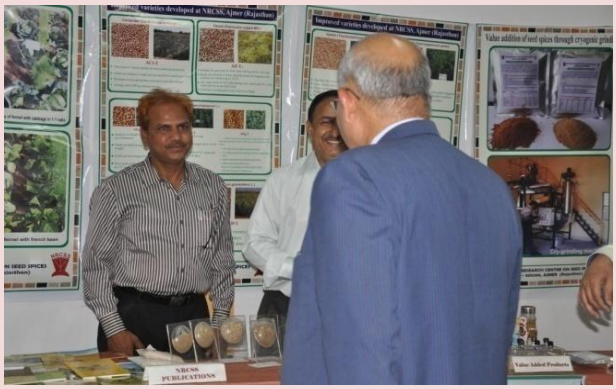
Krishna Kant and Siyaram Meena

Human Resource Development

Conference/symposia/seminars attended

2nd Rajasthan Science Congress Attended & Exhibited Stall of the centre

Dr. Balraj Singh, Director, Dr. R. S. Mehta, Principal Scientist (Agronomy) and Mr. M. A. Khan, Assistant Chief Technical Officer, attended 2nd Rajasthan Science Congress held during 1-3 May, 2014 at Dr. K. N. Modi University, Niwai, Tonk (Rajasthan). Dr. R. S. Paroda, Chairman, Haryana Farmers' Commission and Ex-Director General, ICAR and Ex-Secretary DARE, Ministry of Agriculture, GOI was the Chief Guest of the inaugural function. Director, NRCSS interacted with the stakeholders about the importance of seed spices and different varieties and technologies developed by the centre. On this occasion, an exhibition stall was also exhibited by NRCSS displaying improved varieties, production, protection and post harvest technologies of seed spices developed by the centre for the benefit of stakeholders.





Review meeting of the schemes on spices & aromatic plants under National Horticulture Mission

Dr. G. Lal, Principal Scientist, PI (NHM-TOT), Dr Y. K. Sharma, Principal Scientist & I/c CSS (NHM) and Dr. R. K. Solanki, Scientist (I/c Seed) participated in the Annual Review Meeting of the schemes on spices & aromatic plants under National Horticulture Mission implemented through Directorate of Arecanut and Spices Development held during 24-25 June 2014 at Kerala Agricultural University, Thrissur. The meeting was inaugurated by Dr. P. Rajendran, Vice Chancellor, Kerala Agricultural University. The deliberations and presentations for the review of the work implemented on spices and aromatic plants was presented by different scientists of various centres and also technical programme for the year 2014-15 were discussed and formulated. Dr. Y. K. Sharma, I/c CSS (NHM) presented the progress report of the scheme implemented during 2013-14 at NRCSS, Ajmer and the programme for the year 2014-15. Total budget of Rs. 13.50 lakh has been approved for the implementation of schemes for the year 2014-15 in different components i.e. Production of Quality Planting Material (seed spices), Technology Dissemination through FLDs, District level Seminar and Farmers Training Programmes. The scientists of NRCSS also took active part in the discussion for the development of programme of seed spices under NHM.

Human Resource Development

Conference/symposia/seminars attended

Attended the meeting of 'Standing Committee on Policy and Bye-laws' and 'Councillors meeting' of Indian Society of Soil Science held at New Delhi

Dr O.P. Aishwath, Senior Scientist (Soil Science), being a member and councillor, attended a meeting of 'Standing Committee on Policy and Bye-laws' held on 20.06.2014 and Councillors Meeting of Indian Society of Soil Science held at New Delhi on 21.06.2014, respectively. In the meetings decisions were taken for the development of theme for award, name of the award and modalities for conferring of newly instituted Memorial Awards 'Prof. Sant Singh Memorial Award for excellence in Education and Research in Soil Science'. Dr. Aishwath also taken part in the discussions and showed his views for different aspects with respect to Indian Society of Soil Science.



Recognition



Sh. G.K. Tripathi

➢Mr. G. K. Tripathi, Senior Technical Assistant elected as a member CJSC, representing the technical & administrative staff of NRCSS.

➢Mr. Sunil Kumar Agrawal, Assistant Finance & Account Officer elected as a Secretary, IJSC of NRCSS.



Sh. S. K. Agrawal

Human Resource Development

Videoconferencing facility developed at the centre

A videoconferencing facility has been created by Mr. M.K. Vishal (I/c ARIS CELL) at NRCSS for conferencing, teaching and information dissemination. It is installed in committee room of the centre. It has multi point HD video conferencing system which support IP and ISDN standards connectivity. It has HD VC camera with high optical zoom supporting various formats. This VC system supports all latest standards of video, audio and network protocols, especially in case of audio, has automatic gain control and audio error concealment. The system has full HD flat panel professional display in synchronization with projector. It has content sharing facility while doing conferencing. It is being operated through NKN internet connection of institute.

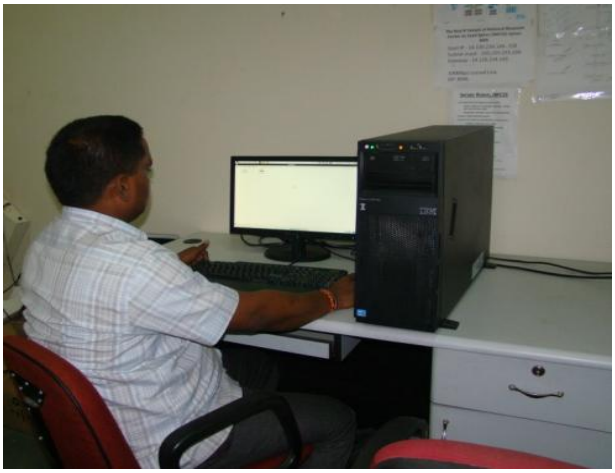


HD VC Camera





Touch Screen Panel





Human Resource Development

Conference/symposia/seminars attended

•Dr. Balraj Singh, Director, NRCSS participated in the II Meeting of DAC-ICAR & State Governments held during June 16-17, 2014 at Coconut Development Board, Kerala Bhawan, Cochin.

•Dr. Balraj Singh, Director attended two days workshop on "Project Formulation & Appraisal" at ISTM, New Delhi from June 12-13, 2014.

•Dr. Balraj Singh, Director attended Foundation day lecture on June 5, 2014 at NAAS, Pusa, New Delhi.

•Dr. Balraj Singh, Director participated in NAIP Capacity building meeting along with Dr. Ravindra Singh, Sr. Scientist during June 6-7, 2014, at NASC complex, Pusa, New Delhi.

Dr. Y. K. Sharma, Pr. Scientists attended International Workshop on "Seed and seedling borne diseases of vegetable crops" at NIPHM, Hyderabad during June 2-5, 2014.

Publications

Meena S.S., Mehta R.S., Meena R.D, Meena R.L. and Meena D.K. 2014. Economic feasibility of weed management practices in nigella (*Nigella sativa* L). *Journal of Spices and Aromatic Crops* 23(2) : 225-229.

From the Director's Desk



The *rabi* season of the year 2013-14 has reached the edge of harvesting and threshing, the entire NRCSS campus is blooming with the fragrance of seed spices aroma. But the aromatic fragrance is also coupled with the air of alarming signals of poor rain expected in the coming *kharif* season

The prediction made by IMD has raised issue to suggest farmers about adoption of technologies that can sustain drought conditions that may happen in the ensuing season. Low rains will also significantly affect the cultivation of seed spices in the rabi season. Farmers of the arid and semi arid regions are suggested to grow crops having low water requirement and should also adopt practice or methods that can help in conserving moisture in the field etc. I appreciate the steps taken by the scientific team of NRCSS who have visited the district of Jhunjhunu and Nagaur for making aware the farmers for fighting against the expected drought conditions.

Besides this, establishment of a video conferencing system and a new seed store at NRCSS campus has strengthened the infrastructural facility at the centre. Research and development activities will take up more pace in the coming times at the centre as it is expected that few more scientist may join the NRCSS team for brining out more and more of seed spice cultivation technologies in future.

I also wish that by the bless of the Almighty the coming kharif season receives ample rains for the betterment of the farmers of arid and semi arid regions of the country.

Balraj Singh





