SEED SPICES
E - Newsletter
ICAR-National Research Centre on Seed Spices

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Important Events

एक दिवसीय राजभाषा हिन्दी तकनीकी संगोष्ठी

राजभाषा हिन्दी पखवाड़ा 2014 के अंतर्गत एक दिवसीय हिन्दी तकनीकी संगोष्ठी का आयोजन दिनांक 15 सितम्बर, 2014 को किया गया जिसमें डॉ. बलराज सिंह, निदेशक, राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, तबीजी, अजमेर ने ''मृदा उर्वरता प्रबंधनः एक समसामयिक आवश्यकता'' पर पॉवर पाइंट प्रस्तुतिकरण किया। इस एक दिवसीय हिन्दी तकनीकी संगोष्ठी में संस्थान के सभी वैज्ञानिकों एवं अधिकारियों एवं कर्मचारियों ने भाग लेकर मृदा उर्वरता प्रबंधन जैसे महत्वपूर्ण विषय पर हिन्दी में व्याख्यान एवं राजभाषा संगोष्ठी कायक्रम को सफल बनाया। मृदा उर्वरता प्रबंधन जैसे जटिल विषय को बहुत विस्तृत रूप में सहज एवं शुद्ध हिन्दी के वैज्ञानिक एवं तकनीकी शब्दों के प्रयोग के माध्यम से प्रस्तुत किया गया। डॉ. बलराज सिंह ने वैज्ञानिकों द्वारा हिन्दी में किय जा रहे कृषि प्रसार के कार्यों की सराहना की और कार्यालय सम्बंधी कार्यों में राजभाषा हिन्दी के अधिकाधिक उपयोग पर विशेष महत्व एवं बल देने की बात कही। राजभाषा प्रभारी डॉ. बृजेश कुमार मिश्र ने वैज्ञानिक एवं तकनीकी लेखों में मानक हिन्दी के प्रयोग पर बल दिया तथा कायक्रम की सफलता के लिए सभी लोगों का आभार व्यक्त किया ।



राजभाषा हिन्दी पखवाडा

Important Events

राजभाषा हिन्दी पखवाड़ा–2014 सफलता पूर्वक मनाया गया



राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र तबीजी, अजमेर में हिन्दी दिवस के उपलक्ष्य में दिनांक 15 सितम्बर, 2014 से 30 सितम्बर, 2014 तक राजभाषा हिन्दी पखवाड़ा मनाया गया। इस क्रम में दिनांक 15 सितम्बर, 2014 को एक दिवसीय हिन्दी तकनीकी संगोष्ठी कायक्रम किया गया। राजभाषा हिन्दी पखवाड़ा कायक्रम 2014 के दौरान संस्था के निदेशक, डॉ. बलराज सिंह द्वारा हिन्दी भाषा के महत्व को ध्यान में रखकर कार्यालय के सभी आवश्यक काय एवं पत्र–पत्रावलियों का हिन्दी में प्रकाशन करने पर ध्यान आकृष्ट किया। इसी क्रम में संस्था के सभी वैज्ञानिकों एवं कर्मचारियों के लिए विभिन्न प्रतियोगिताऐं आयोजित की गयो। जिनमें वाद–विवाद एवं तत्काल भाषण प्रतियोगिताऐं दिनांक 17 सितम्बर को आयोजित की गयो। दिनांक 24 सितम्ब्र, 2014 को प्रेस विज्ञप्ति लेखन प्रतियोगिता, निबन्ध लेखन एवं सहायक कर्मचारी वर्ग हेतु हिन्दी में प्रार्थना पत्र लेखन प्रतियोगिता की गयो। इन विभिन्न प्रतियोगिताओं में सभी वैज्ञानिकों, अधिकारियों एवं कर्मचारियों ने भाग लेकर प्रतियोगिताओं को सफल बनाया। इन विभिन्न प्रतियोगिताओं के प्रतिभागियों के मूल्यांकन हेतु निर्णायक मण्डल के सदस्यों डॉ. बलराज सिंह, डॉ. एस.एन. सक्सेना, डॉ. वाई. के. शर्मा एवं डॉ. बी.के. मिश्र ने अपना अमूल्य योगदान दिया। हिन्दी पखवाड़ा कायक्रम–2014 विजेता प्रतिभागियों को केन्द्र के निदेशक, डॉ. बलराज सिंह ने पुरूस्कार प्रदान कर उन्हें इसी तरह की प्रतियोगिताओं में भाग लेने के लिए प्रोत्साहित किया। हिन्दी पखवाड़ा के अन्तर्गत कायक्रमों का आयोजन डॉ. बृजेश कुमार मिश्र ने संस्थान के सभी अधिकारियों एवं कर्मचारियों की सहभागिता स किया।









Important Events

प्रधानमंत्री के ''स्वच्छभारत''–एक जन आदोलन के आह्वान् के अन्तर्गत स्वच्छता अभियान का शुभारंभ

राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, तबीजी, अजमेर के वैज्ञानिकों, तकनीकी कर्मचारियों एव प्रशासनिक कर्मचारियों द्वारा देश के माननीय प्रधानमंत्री श्री नरेन्द्र मोदी के स्वच्छ भारत: एक जन आदोलंन के आहवान् के तहत दिनांक 25 सितम्बर, 2014 को दोपहर बाद राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, तबीजी से शुरू होकर कृषि विज्ञान केन्द्र, तबीजी, अजमेर से ब्यावर को जाने वाली मुख्य सड़क के दोनों तरफ बड़े पैमाने पर उग रहें खरपतवारों जिसमें प्रमुख तौरपर गाजर घास जैसें खरपतवार को लक्ष्य मानकर स्वच्छ भारत अभियान का शुभारंम्भ किया। समस्त कर्मचारियों ने कठिन परिश्रम का परिचय देते हुय लगभग दो घण्टे के समय का श्रमदान किया तथा इस अभियान के तहत सड़क के दोनो तरफ भारी संख्या में खड़े गाजर घास जैसे घातक खरपतवारों को उखाड कर किया । इस अभियान के शुभारंम्भ से पूर्व निदेशक महोदय ने गाजर घास, कटहली एवं अन्य घातक नुकसान करने वाले खरपतवारों के विषय में समस्त कर्मचारियों को जानकारी दी। उन्होंने बताया कि आज गाजर घास जैसें खरपतवार पूर देश में विभिन्न प्रकार की जलवाय् होते हुय बड़े पैमाने पर पैर पसार रहे हैं। उन्होनें बताया कि गाजर घास जो कि 1960 व 1970 के दशक के बीच में बाहर से आया हुआ एक बहुत घातक खरपतवार है, जिसनें देश के विभिन्न क्षेत्रों में बड़ें पैमाने पर उगना प्रारंभ किया है। इस खरपतवार के कारण चर्म रोग तथा इसमें आने वाले फूलों में उपलब्ध परागकणों के कारण बच्चों में अस्थमा जैसी गंभीर समस्यायं पैदा हो रही हैं तथा देश की आम जनता को इस खरपतवार की सम्पूर्ण जानकारी का अभाव है। खासकर ग्रामीण क्षेत्रों में इस खरपतवार ने बड़े पैमाने पर पैर पसार लिय हैं। अतः यह अत्यन्त आवश्यक है कि हमारे शहरों में रहने वाले आम नागरिक तथा ग्रामीण क्षेत्रों में रहने वाले किसान गाजर घास जैसे खरपतवारों से होने वाले नुकसान को समझं तथा एसे खरपतवारों को माननीय प्रधानमंत्री की स्वच्छ भारत: एक जन आदोंलन के आहवान् के अन्तर्गत उन्मूलन का संकल्प करें। इसके अतिरिक्त उन्होंने बताया कि आम जीवन में स्वच्छता रखने के क्या–क्या लाभ होते हैं तथा जिन स्थानों पर गंदगी होती हैं उसके कारण कितनी समस्यायं पैदा होती है। केन्द्र के समस्त कर्मचारियों ने संकल्प लिया कि आने वाले तीन महीनों के अर्न्तगत संस्थान के ईद–गिर्द स्थित विभिन्न गांवों में इस तरीके का स्वच्छता अभियान चलायंगे। ज्ञात रहे कि पिछले वर्ष 1 जनवरी से राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, तबीजी का पूरा परिसर पूर्णतः गाजर घास, कटहली एवं अन्य घातक खरपतवार मुक्त क्षेत्र घोषित किया गया हैं तथा सरकारी संस्थानो में यह केन्द्र अधिकतम स्वच्छता रखने का एक उदाहरण है।





प्रधानमंत्री के ''स्वच्छभारत''– आह्वान् के अन्तर्गत स्वच्छता अभियान का शुभारंभ

Important Events

Rashtriya Beej Vitran Kisan Mela Karya Shala, Avom Krishak Sangosthi-2014

Rastrya BeejVitran Kisan Mela Karya Sala Ayom Krishak Sangosthi-2014 was organized during 29-30, September, 2014 at National Research Centre on Seed Spices, Ajmer (Rajasthan). The mela and exhibition was inaugurated by the Chief Guest Dr. J. S. Samra Chief Executive Officer, National Rainfed Area Authority Planning Commission, Government of India on 29th September, 2014 at 11.00 AM. Dr. G. N. Mathur, Programme Coordinator, KVK was the Guest of Honour. Dr. Balraj Singh, Director, NRCSS, Ajmer welcomed all the guests on the dias, other delegates and farmer participants. During the event 15 exhibition stalls of different agricultural products and inputs were displayed for the benefit of the farmers'. Nearly 700 farmers from different parts of Rajasthan and adjoining states participated. In the *Kisan gosthi* Scientists-Farmers interaction was held for addressing the farmer's problems with respect to seed spices and other crops' cultivation. Dr. Balraj Singh suggested to the farmers for inclusion of seed spices in their cropping system for realizing higher profit. In this address Dr. J. S. Samra appraised about the importance and role of soil and water conservation for the benefit of forthcoming generations. In the Valedictory function of the Mela Dr Ram Chandra Choudhary Chairman, Ajmer Dairy, was Chief Guest, he advised farmers to rear good breed of livestock for enhancing the income of farmers with farming. Dr. R. S. Mehta, Principal Scientist and Convener of the mela placed his best efforts to materialize the whole event and proposed vote of thanks in the end.





Dr. J. S. Samra inaugurated Rashtriya Beej Vitran Kisan Mela-2014 and Dr. Balraj Singh, Director addressing farmers, scientists and students

Release of a Technical bulletin



Important Events

Rashtriya Ekta Diwas (National Unity Day)



Pledge taking by staff members with Director, NRCSS on Rashtriya Ekta Diwas

The Birth day of honorable Late Sardar Vallabh Bhai Patel, Ex-Home Minister of our country was celebrated as National Unity Day (*Rashtrrya Ekta Diwas) on* 31st October, 2014 at NRCSS, Ajmer. On this occasion pledge taking ceremony was organized at 11.00 AM . Dr. Balraj Singh, Director, NRCSS, Ajmer highlighted about the main contribution of Late Sardar Vallabh Bhai Patel in the integration of our country and also motivated to follow the path of Hon'able Sardar Patel for Unity and Prosperity.

Celebration of Vigilance Awareness Week-2014

In accordance to the instruction of Central Vigilance Commission, Vigilance Awareness Week-2014 was observed during 28th October to 1st November, 2014. The main focus of Vigilance Awareness Week was "**Combating Corruption: Technology as an Enabler".** During the week different activities like taking oath, easy writing, debate competition, and paragraph writing were organized. The various themes showcased were, for Debate competition-Combating corruption-Technology as an Enabler, for Essay writing-Role of vigilance awareness on combating corruption, and for Paragraph writing-Eradicating corruption: A personal responsibility. All the officials of NRCSS participated in these events and prizes were also given to winners in different activities. During the week, posters at important places were also displayed for creating awareness against corruption. On 31st October, 2014 a seminar on **Combating Corruption: "Technology as an Enabler"** was also organized . In the Seminar Dr. Balraj Singh, Director, NRCSS, Ajmer presented very meaningful information on different facet of corruption and also told for creating awareness against corruption in the country. He highlighted the magnitude of corruption in India and World and compared the position of corruption in India with respect to other developing and developed countries of the world.





RESEARCH HIGHLIGHTS

Cumin yellowing: A new viral disease reported

*RD Meena, *YK Sharma, **BK Baranwal, *Balraj Singh, *NK Meena,,
(*Scientist, NRC on Seed Spices, Ajmer and ** Scientist, IARI, New Delhi)

Cumin, commonly known as Jeera, (***Cuminum cyminum***) belongs to family '**Apiacea'**, widely cultivated in India, Egypt, Syria, Iran, China and Mexico. In India it is grown as rabi crop and the major cumin growing states are Gujarat, Rajasthan, Madhya Pradesh and Uttar Pradesh**.** Cumin is primarily used as flavoring foods and in some extent it is also used in Ayurvedic medicines. The productivity of cumin is lower because of the cumin crop is vulnerable to certain pests. Among diseases fungal, nematode and viral cause the great yield loss. Since few years a new problem "cumin yellowing" (figure 1) was emerged and spreaded rapidly in all the cumin growing areas.

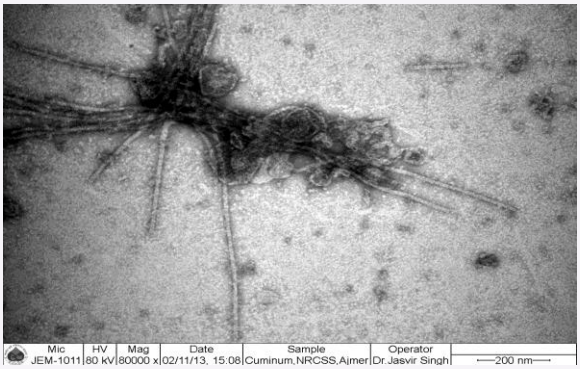
For the solution of the said problem detailed study on the problem started. Affected plants of cumin were thoroughly examined for detection and identification of their causal agents at NRC on Seed Spices, Ajmer under in ex-situ and in-situ conditions. Further selected samples in sufficient numbers were sent to Plant Pathology Division, IARI, New Delhi for proper and correct identification. The samples were analyzed through electron microscopy (Figure 2, RT-PCR and sequencing at Indian Agricultural Research Institute, New Delhi, the virus associated with cumin yellowing was identified as "***Vanilla distortion mosaic virus***" (Figure 3 & 4) a member under the family Potyviridae.



1. Cumin yellowing disease in a field



Fig 2. Electron microscopy of cumin yellowing



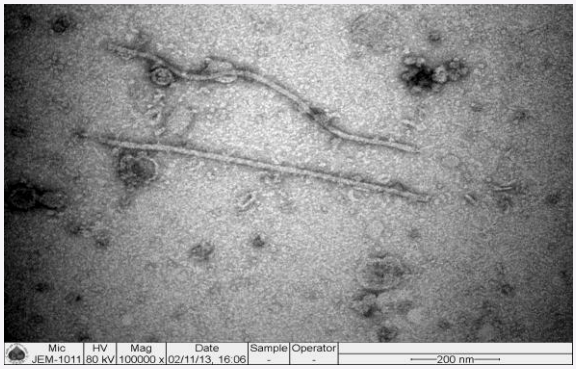


Fig 3&4. Electron Microscopy of cumin yellowing plants

RESEARCH HIGHLIGHTS

Hydro-matrix seed priming in cumin (*Cuminum cyminum* L.) for hastening germination

S. N. Saxena, R. K. Kakani, S. S. Rathore, L.K. Sharma and Balraj Singh
National Research Centre on Seed Spices, Tabiji, Ajmer-305206

Cumin is one of the major seed spices crop of India mainly grown in Rajasthan, Gujarat and some part of Madhya Pradesh and Haryana. Seed germination and poor seedling establishment is a major problem in cumin cultivation. It requires 10 to 15 days in seedling emergence and one pre germination irrigation is a pre-requisite for successful seedling establishment. Moist soil condition during seedling establishment is congenial for wilt disease caused by *Fusarium oxysporum f. sp. cumini*. This disease is sometimes so severe up to the level of destroying the whole crop stand. To address this problem seed priming experiments have been conducted at NRCSS, Ajmer during 2011-12, 2012-13 and 2013-14. Cumin growers are advised to follow the developed protocol for early germination in cumin.

The protocol:

- Take the quality seeds from reliable source (Popular varieties are GC 4 and RZ 209).
- Soak the seeds in either running tap water provide periodic shaking. Replace the water with fresh water every time. Water should be either distilled or with low TDS.
- After 6 hrs remove the seeds from water. Dry the seeds using blotting paper/News paper without rubbing them (rubbing may cause loss of viability).
- Treat the seeds with Bavistin @ 2 g/kg and *Tricoderma* culture
- Sow the seeds in prescribed row distance (30 cm)
- Irrigate the beds with sufficient water
- Seeds will germinate after 7 days of sowing. In normal procedure it takes 12-14 days.
- There is no need to apply second pre germination irrigation. If soils are very light then 2nd shallow irrigation may be applied.
- In case of late sown crop this technology can compensate the delay by early germination.
- This method of seed priming is not only hastening the germination but cost effective also and can be performed by farmer himself.
- It does not include any chemical treatment thus may be used in organic cumin production.

Transfer of Technology

Training

Farmers- Scientist interaction Workshop for farmer under Tribal Sub Plan of NRCSS, Ajmer.

During the *Rashtriya Beej Vitran Kisan Mela*-2014, Scientist farmers interaction workshop was also organized on 29-30 September, 2014 in the Auditorium of NRCSS, Ajmer (Rajasthan). In the workshop Dr. Ram Chandra Chairman, Ajmer, Dairy, advised TSP farmers for adoption of dairy enterprises along with cultivating crops so that existing system becomes an integrated farming model for benefit of small and marginal farmers of tribal region. In the workshop scientists of NRCSS, KVK, Ajmer, and officers of Department of Agriculture, Ajmer also participated and various issues of seed spice production in tribal region were discussed. Farmers raised very important and pertinent issues of agriculture and specifically seed spices. In the workshop 157 tribal farmers from Dungarpur, Banswara and Pratapgarh districts participated. In the opening session of workshop Dr. Balraj Singh Director, NRCSS, welcomed all the guest, delegates and farmer's participant and farmers and advised to include seed spices for crop diversification in the tribal area. Dr. G. Lal, Principal Scientist appraised about the different activities undertaken by NRCSS in the tribal region for last two years.



Participants of farmer's workshop of TSP area



Dr. Balraj Singh delivering lecture in workshop

Human Resource Development

3rd International Conference on Agriculture & Horticulture attended

Dr. Balraj Singh, Director, Dr. Ravindra Singh, Senior Scientist, Agronomy, Dr. S.S. Meena, Senior Scientist, Horticulture and Dr. Sharda Choudhary, Scientist, Biotechnology attended 3rd International Conference on Agriculture & Horticulture from 27 to 29 October 2014 at Hyderabad International Convention Centre, Hyderabad, India. Dr. Balraj Singh was invited in the conference as a keynote speaker on "**Protected cultivation of horticultural crops in India: Challenges and opportunities**" He also delivered a lecture on "**Status of research and development in seed spices in India**". Dr. Ravindra Singh presented his paper on "**Yield and water productivity of cumin as influenced by irrigation techniques and land configuration**". Dr. Meena presented "**Growth and seed yield of fenugreek (*Trigonella foenum-graceum* L.) as influenced by plant growth regulators and bio-fertilizers**" and Dr. Sharda Choudhary presented her research work entitled "**Molecular studies of cumin (*Cuminum cyminum* L.) for diversity and modeling.**

ICAR short course on "Advances in nutrient dynamics in soil-plant atmosphere system for improving nutrient use efficiency" attended

Dr O.P. Aishwath undergone the above course held at IISS, Bhopal during September 2-11, 2014. There were 38 lectures scheduled during the programme. These lectures were on concept and basics of nutrient use efficiency (NUE) and their dynamics in soil plant continuum under various situations. Soil physical, chemical, biological and agronomic management for improving NUE in module-II. In the module-III, lectures were on plant physiology, genetics and molecular biological basis for improving nutrient uptake and use efficiency. The aspects on climate change and its relation to soil and plant system for improving NUE were covered in Module IV. Besides the lectures, there were some laboratory visits having advanced analytical facilities within IISS and outside the institute. In this course, Dr O.P. Aishwath had been selected as one of the outstanding participants and for him, Director-NRCSS, Ajmer had received a letters of commendation from the organizers.



ommittee on Policy and Bye-laws' and 'Councils meeting' of Indian Society of Soil Science held at Division of

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Workshop of "Micronutrient Management in Horticultural Crops" held at IIHR, Bengaluru on 10.09.2014

The launching programme and workshop to finalise the technical programme of the network project on "Micronutrient management in horticultural crops for enhancing yield and quality" was held on 10th September 2014 at IIHR, Bengaluru. Dr. K. Krishnakumar, DDG (HS) had launched network projects after inaugural address of the programme. In the afternoon, centre wise presentations were made in concurrent sessions of workshop. Fourteen network centres participated in this programme PIs of the centres presented their technical programme in this workshop to give it a final shape. Dr O.P. Aishwath PI from NRCSS presented the technical programme based on the nutritional requirement of seed spice crops for its implementation.





Dr. O.P. Aishwath participated in Indian Society of Soil Science Zonal Award and Best Doctoral Research Presentation Award contest

A judging committee meeting was held on 27th September, 2014 at MPUAT, Udaipur, Rajasthan for adjudicating the contestant of ISSS Zonal Award and Best Doctoral Research Presentation Awards. During opening remark of this contest, Dr. O.P. Gill, Vice Chancelar of the University extended his best wishes to the contestants and welcomed the members of the Jury. For both the post Graduate and Doctoral Degree holders Awards, Dr O.P. Aishwath act as member of the judging committee and adjudged the Best Zonal Award. For the best Doctoral Presentation Award, he put his



suggestive remark to improve their presentations for final round to be held during 79th Annual Convention of Indian Society of Soil Science at Hyderabad.

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Honours and Awards

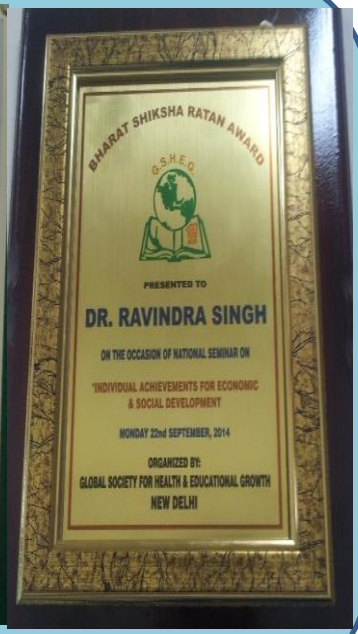
Dr. Narottam Kumar Meena, Scientist (Sr. Scale) received a highly prestigious award "Indira Gandhi Raj Bhasha Puraskar" from Hon'ble President of India Sh. Pranab Mukharjee in Rashtrapati Bhavan in the presence of Home Minister Sh. Rajnath Singh and Dr. S. Ayyappan, Director General ICAR, New Delhi. This award was given on 14th September, 2014 on the eve of writing a book in Hindi on "Orchids" in the field of agriculture.





Dr. Ravindra Singh, Senior Scientist received a highly prestigious "Bharat Shiksha Ratan Award" by Global Society for Health & Educational Growth at a National Seminar "Individual Achievements for Economic & Social Development" on 22nd September, 2014 for contributing in the field of Research and Education.





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Publications

❖Sharma Y. K., K. Kant, S Sriram, and B Ramanujam. 2014. Efficacy of indigenous *Trichoderma* isolates for the management of cumin wilt (*Fusariumoxysporum* f. sp. *cumini*) in Rajasthan. Journal of Spices and Aromatic Crops 23 (2): 268–271.

❖Khare, M. N., S.P. Tiwari and Y.K. Sharma. 2014. Disease problems in fennel (*Foeniculumvulgare* Mill) and fenugreek (*Trigonellafoenumgraceum* L.) cultivation and their management for production of quality pathogen free seeds. International Journal of Seed Spices 4 (2): 11-17.

❖Alka Panwar, Y. K. Sharma, M Sharma, R. S. Meena and O. P. Aishwath (2014) Study of legume-symbiosis bacteria (Rhizobia) away from host plant zone. *International Journal Seed Spices 4*(2):81-84.

Symposia/seminars attended

▪Dr. O. P. Aishwath attended ICAR short course on "Advances in nutrient dynamics in soil-plant atmosphere system for improving nutrient use efficiency" held at ICAR-IISS, Bhopal during September 2-11, 2014 and also attended and presented technical programme in Launching workshop of "Micronutrient management in horticultural crops for enhancing yield and quality" held on September 10, 2014 at IIHR Bangalore.

▪Dr O.P. Aishwath act as member of the judging committee and adjudged the Best Zonal Award in Indian Society of Soil Science Zonal Award and Best Doctoral Research Presentation Award contest which was held on 27th September, 2014 at MPUAT, Udaipur, Rajasthan.

▪Dr. P. N. Dubey attended International Training on "Pest Risk Analysis" during September 1-5, 2014 at National Institute for Plant Health Management, Hyderabad.

▪Dr. Balraj Singh, Director, attended VIII Leadership Summit at Delhi on September 27, 2014.

▪Dr. Balraj Singh, Director, attended a meeting of Haryana Kisan Ayog at Gurgaon, Haryana on October 13, 2014.

▪ Dr. Balraj Singh, Director, delivered a Lead Lecture on Precision Farming, protected cultivation and organic horticulture in the International symposium on "Innovations in horticulture for Nutritional Security, Conserving Biodiversity and poverty alleviation" organized by BB Ambadkar University, at Luknow on October 16, 2014.

▪Dr. G. Lal, Pr. Scientists delivered a Lead Lecture on "Seed Spices: Rich Neutraceutical crops" in International Symposium on "Innovations in horticulture for Nutritional Security, Conserving Biodiversity and poverty alleviation" organized by BB Ambadkar University, Luknow during 16-18 October, 2014.

▪Dr. G. Lal, Principal Scientists (Hort.) and Dr. R. K. Kakani, Principal Scientist (Pl. Breeding) attended XXV AICRP Spices Group Meeting at UBKVV, Pundibri, Cooch Behar, West Bengal from 25-27 September, 2014.

▪Dr. R. K. Solanki, Scientist (SS) completed 21 days summer school at GBPUAT, Pantnagar on "New paradigms in heterosis breeding" during Sept. 10-30, 2014.

From the Director's Desk



This newsletter highlights some of the salient research and training achievements made and other significant activities performed during the period under report

The *Rabi* season of the year 2014-15 has reached at the edge of field preparation and sowing. In the entire campus there are so many activities going on for field preparation and layout the different trials and experiments for research purpose.

During this period Hindi Pakhwada was organised by the centre. Cleanliness is very essential part of our daily life so on this occasion Swachch Bharat Abhiyan was initiated and all staff members actively participated in cleaning the campus premises and adjoining area out side of our campus.

In the important events we have organized two days "Beej Vitran Kisan Mela" at the centre and sowed the importance of timely sowing of crops and arranged seed for sale and fungicides to the farmers and one seminars was also conducted for the farmers to know the Seed spices scientific cultivation technology which will be beneficial and informative for our stakeholders especially farmers.

Scientists of the institute also received various awards and recognition during the period reflecting the dedication with which the team of NRCSS is performing for the well being of Indian farming community. I wish that the contents of this document would be informative and useful to all concerned persons of the farming community and researchers. Any suggestion for improving the content of the E-newsletter would be highly appreciated..

Balraj Singh