

BI-MONTHLY SEED SPICES

E-Newsletter

ICAR-National Research Centre on Seed Spices

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Observance of Vigilance Awareness Week – 2017

ICAR-NRC on Seed Spices, Ajmer observed Vigilance Awareness Week from 30th October, 2017 to 4th November, 2017 at NRCSS campus. The theme of the Vigilance Awareness Week in this year was ‘My Vision- Corruption Free India’.

The programme began at ICAR-NRCSS, Ajmer on 30.10.2017 at 11 hrs by taking integrity pledge by all officials and staff followed by general discussion on Vigilance and observance of vigilance awareness week. Different activities were observed during this Week includes debate competition, essay writing, paragraph writing, and panel discussion.

Debate competition on e-procurement a tool to fight corruption was organized on 2nd November, 2017 that received good participation from the employees of ICAR-NRCSS. Two participants each from in favour and in opposition were awarded. Employees from ICAR-NRCSS participated in essay writing on “Role of DBT in reduction of corruption” and Paragraph writing on “Public perception towards corruption” organized on 3.11.2017.

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Dr. N.K. Meena	Editor
Sh. M.A. Khan	Editor

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

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In the closing ceremony on 6.11.2017 Vigilance Officer Dr. Y. K. Sharma briefed about the different activities conducted during the Week. Director, Dr. G. Lal awarded memento to the award winning participants in different competition viz. debate competition, essay writing and paragraph writing. He also addressed the gathering and expressed his views about Vigilance Awareness Week and on the theme ‘My Vision- Corruption Free India’.

Important Events

कृषि शिक्षा दिवस कार्यक्रम का भा.कृ.अनु.प.–राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, अजमेर पर आयोजन

राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, अजमेर पर डॉ आर एस परोदा सभागार में दिनांक 03 दिसंबर 2017 को कृषि शिक्षा दिवस कार्यक्रम का आयोजन किया गया। डॉ लक्ष्मीकान्त, प्रधानाचार्य, दयानन्द महाविद्यालय, अजमेर इस कार्यक्रम में मुख्य अतिथि के तौर पर उपस्थित रहे। विशिष्ट अतिथि के पद पर डॉ आर एस मेहता, प्रधान वैज्ञानिक, भाकृअनुप–केन्द्रीय शुष्क क्षेत्र अनुसंधान संस्थान, आर. आर. एस., पाली थे। कार्यक्रम की अध्यक्षता डॉ गोपाल लाल, निदेशक, भाकृअनुप–राष्ट्रीय बीजीय मसाला अनुसंधान केन्द्र, अजमेर द्वारा की गयी। संस्थान के निदेशक ने सभागार में उपस्थित गणमान्य अतिथियों, वैज्ञानिकों, किसानों, दयानन्द महाविद्यालय के स्नातक (कृषि) विद्यार्थियों का स्वागत करते हुए संस्थान द्वारा कृषि, विशेषतया: बीजीय मसाला फसलों पर किये जा रहे अनुसंधान कार्य तथा इनके विस्तार एवं प्रसार की जानकारी दी। देश में कृषि शिक्षा के महत्व पर प्रकाश डालते हुए देश में कृषि के विकास एवं उत्थान के इतिहास को भी प्रस्तुत किया जिसमें प्रथम कृषि महाविद्यालयों (1905) तथा भा.कृ.अनु.प. की स्थापना इत्यादि सम्मिलित थे। कृषक भाईयों एवं विद्यार्थियों को इसमें विशेष रूची एवं योगदान प्रदान करने का निवेदन किया।

मुख्य अतिथि डॉ लक्ष्मीकान्त जी ने अपने संबोधन में शिक्षा के उत्थान हेतु सरकार द्वारा अधिक प्रयास एवं विद्यार्थियों द्वारा मन से शिक्षा ग्रहण करने पर बल दिया। डॉ. एस. वी. पिलानिया प्राध्यापक, दयानंद महाविद्यालय, अजमेर ने कृषि के उत्थान में युवाओं के योगदान तथा वैज्ञानिकों के द्वारा तकनीकीयों के प्रसार पर बल दिया।

विशिष्ट अतिथि डॉ आर एस मेहता ने अपने अनुभव को साझा करते हुए कृषि शिक्षा के महत्व को प्रस्तुत किया एवं तकनीकी योगदान के द्वारा कृषि को अधिक लाभकारी बनाने के लिए अनुरोध किया। इस सभा में बड़ी संख्या में उपस्थित दयानंद महाविद्यालय, अजमेर के कृषि स्नातक छात्र-छात्राएँ विशेष आकर्षण के केन्द्र थे जिनका शिक्षा के प्रति उत्साह वर्धन किया गया एवं कृषि शिक्षा को चुनौती के रूप में अपनाकर अपने साथ-साथ कृषक समाज के उत्थान के लिए आवाहन किया गया। सभा में उपस्थित सभी गणमान्य अतिथियों एवं श्रोताओं को डॉ पी. एन. दुबे द्वारा धन्यवाद ज्ञापित किया गया।



Research Highlights

RF/225/37/10: A synchronous flowering and early maturing mutant of fennel (*Foeniculum vulgare* Mill.)

A.K. Verma, Sharda Choudhary, R.S. Meena and R.D. Meena

Fennel is an important aromatic and medicinal herb belonging to the family *Apiaceae* with basic chromosome number of $2n=22$. Narrow genetic variability exists in fennel for dwarf synchronous flowering and early maturing traits in the available gene pool. Induced mutations have been widely used in a number of crops and species to generate broad spectrum of genetic variability. Gamma irradiation has been used in mutation breeding primarily to induce mutation for setting desired traits in plants and to increase genetic variability in crops having low genetic base.



Mutant Fennel Plant

By using gamma rays, many high yielding mutant varieties have been developed world wide, which are resistant to biotic and abiotic stresses with improved quality. Looking to the need of farmers, an experiment was conducted to induce variability for short duration and dwarf/semi dwarf growth habit through mutation breeding.

In the experiment, dry seed of fennel cv. Rajasthan Fennel-125 were irradiated with different doses of gamma rays during 2014-15. The M1 generation was raised from these irradiated seeds and seeds were harvested from M1 generation. M2 generation was raised from M1 seeds and population were screened for phenotypic variations from germination to harvesting. Among the segregating populations, one mutant line RF/225/37/10 was identified, which was dwarf (about 65 cm height) and matured early (about 150-155 days) as compared to parent plants (185 days). The other characteristic of this mutant is that, it has synchronization in flowering and maturity, which is very unique and lacking traits in fennel crop so far. The confirmation of traits of mutant was done in M3 generation through phenotypic stability. In the M4 generation the mutant showing the same character for which it was selected in M2 generation. Further, the mutant line will be used in the fennel breeding programme to develop early and short duration varieties.

Transfer of Technology

Two five days training programmes on “Good Agricultural Practices for Seed Spices Cultivation” organized

Two five days training programmes on “Good Agricultural Practices for Seed Spice Cultivation” were organised at NRCSS, Ajmer during 9-13 October, 2017 and 13-17 October, 2017. In first training thirty farmers from Jothwara sub-district of Jaipur and in second training programme another batch of thirty farmers from sub-district Sanganer of Jaipur participated. First training was co-ordinated by Dr. Murlidhar Meena, Dr. N.K. Meena and Sh. Mukesh Vishal and second was coordinated by Dr. O.P. Aishwath, Dr. R.D. Meena and Dr. Murlidhar Meena. Lectures covering different aspects related to seed spice production, right from land preparation, selection of quality seed, seed treatments, good agronomic practices, weed management and intercultural operations, insect pests and disease management and post-harvest management including marketing and value addition in seed spices were delivered by the experts from this centre and also from outside. Participants were addressed by Dr. S.K. Singh, Director, ATARI, Jodhpur on the importance of seed spice cultivation to enhance farmers income. Dr. Gopal Lal, Director NRCSS, also delivered a talk to participants on the topic how to harvest good yields of seed spices. Open discussion between trainees and experts was held to answer their day to day problems related to seed spice cultivation. At the end of the trainings, quality seeds of spice crops were distributed to the farmer participants, botanical soap solution to promote organic management of pests and diseases and *Trichoderma* biocontrol agent for seed treatments. The trainings were concluded with the feedback of the participants on the importance and utility of the training programmes. The farmers shown their interest in training and learned the advance techniques of seed spice cultivation.



Transfer of Technology

Farmers Training at Piprali (Sikar) on 25 November, 2017

A one day training programme on “Improved Production Technology of Seed Spices” was organized under Mission for Development of Horticulture (MIDH) at Panchayat Samiti, Piprali Dist. Sikar (Rajasthan) on 25 November, 2017. The programme was graced and inaugurated by Shri. Sumedhan and Saraswatiji, Member of the Parliament from Sikar Lok Sabha constituency along with Director, NRCSS, BDO Sikar and officers from state departments. More than ninety farmers from different villages adjoin to Piprali Panchayat Samiti and nearby areas participated in the training programme. The training was started with the inaugural speech made by chief guest. He through the light on the initiative being taken by central government for enhancing the farmer’s income. Dr. Gopal Lal, Director NRCSS speaks the farmers to adopt good agriculture practices for better yield. The participants were imparted knowledge on high yielding varieties in seed spices, ongoing government schemes for agri. and horticulture, pest and disease management, mechanization, post-harvest management and marketing opportunities and value additions *etc.* This training programme was coordinated by Dr. R.S. Meena, Dr. N.K. Meena, Dr. RD. Meena and Dr. Murlidhar Meena.



Hon'ble chief guest Shri.Saraswatiji at inaugural session with Director, NRCSS Dr. Gopal Lal and other delegates.



Shri.Saraswatiji addressing the farmer participant in one day Krishak Training Programme.

Transfer of Technology

Participation of ICAR-National Research Centre on Seed Spices in National Sheep and Wool fair at Avikanagar

ICAR-Central Sheep & Wool Research Institute organised a "National Sheep and Wool Fair" on 8th Dec., 2017, at Avikanagar (Malpura), Rajasthan. Fair was inaugurated by Hon'ble Shri G.S. Shekhawat, Union Minister of State for Agriculture and Farmers Welfare. Member of Parliament Sh. S.S. Jaunapuria witnessed the occasion along with Hon'ble DDG (Animal Science), Dr. J.K. Jena and also other VIP's graced the occasion with their presence. More than 3500 farmers from Rajasthan, Haryana, Punjab, Karnataka and other states of the country participated in this national fair including 600 women farmers, artisans, sheep rearers, agriculture and veterinary students. In the fair, 45 stalls were displayed by different ICAR institutes, NGOs, agripreneurs and input suppliers. ICAR- NRCSS also arranged the stall in this fair. Dr. Murlidhar Meena and Sh. G.K. Tripathi exhibited the varieties and technologies by this centre in seed spices at the stall. Visiting Farmers took keen interest in varieties of coriander, nigella and fennel developed by this centre and also purchased seeds of these crops from the stall. VIP's and other visitors appreciated the value added products and oleoresins of seed spices.



Photo: Union Minister of State for Agriculture and Farmers Welfare Shri G.S. Shekhawat and farmers visiting ICAR-NRCSS stall in the fair.

HRD

Training/seminars/meetings Attended

- Dr. Gopal Lal, Director ICAR-NRCSS attended an International Seminar on Global Climate Change: Implications for Agriculture and Water Sectors on 14.12.2017 at Rukimini Auditorium, MGM College Campus, Aurangabad
- Dr. Gopal Lal, Director, ICAR-NRCSS attended Scientific Advisory Committee meeting at KVK Bhilwara on 18.12.2017
- Dr. Sharda Choudhary, attended the VI International Conference on "Recent Advances in Agriculture and Horticulture Sciences" at New Delhi from 16/12/2017 to 17/12/2017 and she also received the "Scientist of the Year-2017" award in the conference.
- Dr. B.K. Mishra and Dr. P.N. Dubey attended and presented their papers in International Conference on recent trends in Agriculture, Veterinary & Life Science-2017 during 28-30 Dec., 2017 at Carmel College for Woman. Nuvem, Goa.

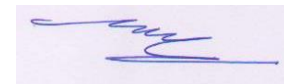
From the Director's Desk

The November & December months are very crucial especially particularly for seed spice cultivation and Indian Agriculture in general. All the winter season or *Rabi* crops mostly sown or in the process of late sowing. Delayed sowing is not desirable as it may lead to serious loss to yield as well as invites more incidence of disease and pests.



The scope of horizontal expansion of seed spices like coriander and dill in new areas and increased area under cumin cultivation is matter of encouragement for all seed spices stakeholders. ICAR-NRCSS, Ajmer observed vigilance awareness week during October, 30 to 4th November, 2017 and also organized many other activities. Two farmers training programme were also conducted on “Good Agricultural Practices” (GAP) for seed spices. Our endeavor to serve farming community particularly seed spices growers will be able to attain new heights in coming days. Science and technology play a pivotal role in today's agriculture. The current problems can not be solved by past age old methods. Continuous affords are needed and out of box thinking to tackle the to days agrarian crises especially degradation of natural resources and quality production.

I congratulate Dr. Sharda Choudhary for receiving “scientist of the year Award” in VI ICRAAHS-2017 at new Delhi.



(Gopal Lal)



Agriculture Education Day

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