



Vol 11 (3)

Seed Spices E-News Letter

May-June, 2018

From Director's Desk



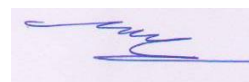
Dear Readers,

India is known as land of spices since ancient period. Farming is still considered as a way of life in rural India. Now a days farming has become a very challenging task because of changing climate and fluctuating market prices. Scientific interventions backed by policy regime is utmost necessary to support our farming community. NRCSS mobile app "Seed Spice Info" is a small step towards this direction. This is right time for farmers to be more pro-active towards government interventions for doubling farmers income and judiciously using the precious natural resources for diversification of crop basket. Seed spices need less water and nutrients in comparison to other field crops. Their net price realization is high than other conventional crops. The response of fenugreek variety AFG-5 is very promising to nutrient and water management practices at different dates of sowing. The off-season cultivation of AFG-5 as leafy vegetable may pave ways for economic gain to farmers during peak summer of North India.

Live telecast of Hon'ble Prime Minister's direct dialogue with farmers was displayed on 20th June, 2018 at NRCSS Auditorium for benefit of farmers, scientists and other stakeholders.

Training and capacity building of farmers particularly for rural youths is going to make a crucial difference in agriculture. In this endeavour ICAR-NRCSS, Ajmer has organized two off campus scientist-farmers interface meeting at Dungarpur and Udaipur under TSP area during 18-19 June, 2018.

International Yoga Day was organized with staff members at NRCSS campus on 21st June, 2018. NRCSS staff is actively involved in cleaning programme under Swachh Bharat Abhiyan and special drives were conducted on 9th and 18th June, 2018 in the area around the State Highway in front of the NRCSS Main and a tract of about 1000 meter was cleaned. I convey my best wishes to all the scientists, technical officers and administrative personnels for upcoming rainy season. I express my gratitude and give special thanks to Hon'ble Dr. T. Mohapatra, Secretary (DARE) and Director General ICAR and Dr. A.K. Singh Deputy Director General (H.S.), ICAR for their valuable guidance and continuous support to ICAR-NRCSS. I welcome suggestions for further improvement of our R&D programme for the benefit of seed spices growers of the country.



(Gopal Lal)

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RESEARCH HIGHLIGHTS

POP developed for new fenugreek variety AFG-5

Gopal Lal, RS Mehta, Ravindra Singh, RK Kakani, SS Rathore, NK Meena & SP Maheria

In fenugreek varietal trial, among all the lines tested, performance of AFG-5 for average of three year was recorded the best with the green leaf yield 2599.18kg/ha.

The crop geometry and fertilizer application experiment revealed that the performance of crop was the best if sown at 15.0 x 5 cm and with 30:20:20 kg/ha of NPK application. In pooled analysis green leaf yield obtained from this treatment was 550kg/ha and 552.57kg/ha, respectively.

The date of sowing experiment in off



season, variety AFG-5 was sown on five different dates 9 April, 16 April, 23 April, 30 April and 07 May. The best leaf yield (593.70kg/ha) was recorded in the crop sown on first two dates as compared to other sowing dates.

Other date of sowing experiment, variety AFG-5 was sown at five different dates 13 October, 23 October, 02 November, 12 November and 22 November, results revealed that crop sown on 23 October, 2015-16 and 2016-17 which is suitable for winter season was recorded average seed yield 2158.96kg/ha.

Response of fenugreek (AFG-5) to three different irrigation methods (Micro

sprinkler, Drip and Surface irrigation) with four water regimes based on IW/CPE ratio



(ET/IW Ratio: 0.4, 0.6, 0.8 and 1.0) was recorded. The performance of crop with respect to almost all the characters were recorded best seed yield 2049.80kg/ha in M₂ (Drip irrigation,) and 1950.36kg/ha yield obtained in W₂ (ET/IW Ratio: 0.6) treatments.

EVENTS/MEETINGS/FIELD DAYS/ TRAININGS ORGANIZED

Events

Live telecast of Hon'ble Prime Minister's direct dialogue with farmers at ICAR-NRC on Seed Spices Ajmer

The live telecast of Hon'ble Prime Minister's direct dialogue with farmers across the country held on Wednesday, June 20, 2018, at 9:30 am was arranged at the institute Auditorium on big screen.

The introductory speech about the programme was made by Dr. Murlidhar Meena with welcome of the audience. The programme was attended by more than 150 persons who include 75 farmers and all the scientific, technical, administration staff along with contractual staff of this institute. Farmers from nearby villages viewed the programme and appreciated the experience shared by the farmers from different states of the country. Audience farmers would like to adopt suitable practices in their own farming practices for more income from their existing resources.

The programme made scientists proud to see the success made by farmers in different parts of the country with help of

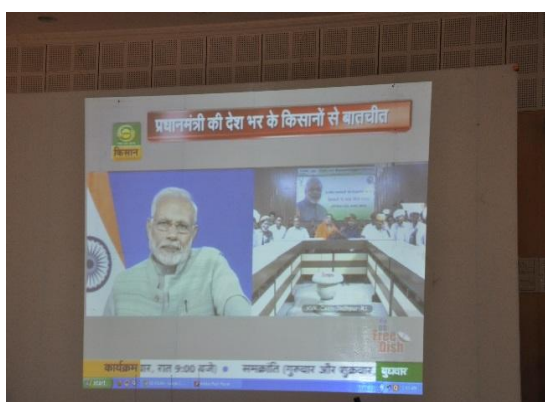


Photo: Live telecast of Hon'ble Prime Minister's direct dialogue with farmers

modern techniques developed by researcher across the nation. At the end of the programme Dr. Gopal Lal, Director shared his views. He said this is the first time he has witnessed such direct interaction of the farmers with Hon'ble Prime Minister of the country. It is energy giving boost for the scientist and farming community for hard work and more progress in future. It will help to achieve farmer's income doubling goal by 2022.

Yoga Day Celebrated

International Day of Yoga June 21, 2018 was celebrated at ICAR-NRCSS Ajmer. Prior to that one day's training session was organized for rehearsing of Common Yoga Protocol for Mass Yoga Performance by

NRCSS Staff and their family members along with the researchers and workers at 6.30 am – 8.00 am on June 20, 2018 at octagonal lawn in front of our main



laboratory building at ICAR-NRCSS Ajmer. All the ICAR-NRCSS Staff members with their interested family members attended the celebration of International Day of Yoga



function and performed on Mass Yoga Protocol comprising of warm up, breathing exercises, Yoga postures and Pranayama at 6.45 AM – 8.00 AM on June 21, 2018.

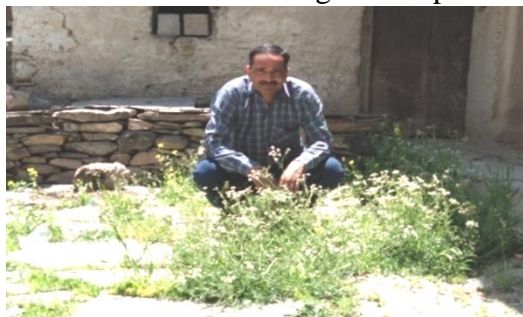
An on the spot deliberation by Sh. Ankur Prajapati, an eminent scholar and Yoga performer, in-charge Ajmer region



activities of Vivekananda Kendra Kanyakumari Branch: Ajmer was made on the topic "Yoga for Health and Happiness" immediately after Common Yoga Protocol Mass Yoga Performance On June 21, 2018.

Exploration trip to high altitude areas of Chamoli district of Uttarakhand

An exploration trip was conducted in the high altitude regions of Chamoli district, Uttarakhand from May 16th, 2018 to May 27th, 2018 by Dr Sundeep Kumar, Principal Scientist, ICAR-NBPGR, New Delhi; Dr R.S. Meena, Senior Scientist, ICAR-NRCSS, Ajmer and Dr Mamta Arya, Scientist, ICAR-NBPGR Regional Station Bhowali. During the exploration,



19 villages were explored and seeds of 15 crops viz., wheat, barley, coriander, fenugreek, cumin, brassica, horse gram, barnyard millet, amaranthus, buckwheat, soybean, French bean, fennel, chilli and proso millet were collected. As per the best of our knowledge and experience, we tried



to make sure that only landraces should be collected and duplications were avoided. Further, we also avoided closely located villages so that maximum diversity could be captured. During the exploration, border areas and remote areas which were not connected by road were also visited so that unique material could be collected, eg. multicut amaranth. The area explored varied from an altitude of 1400 m to 3500 m above mean sea level. Two FLDs were conducted on 21st and 23rd May at Surraithota and Malari respectively. Due to climate change, crops are losing diversity



at an alarming rate and spread of developed varieties further adding to the concern. Hence explorations need to be conducted regularly and vigorously in such areas.

Extension/TOT and HRD Scientist-Farmers interface meeting under TSP

(i) KVK, Dungarpur

A Scientists-Farmers Interface Meeting was organized by ICAR-NRC on Seed



Spices at Krishi Vigyan Kendra (MPUA&T), Dungarpur (Rajasthan) on 18st June, 2018. In the meeting, Dr. Gopal Lal, Director, NRCSS, Ajmer, Dr. S.N. Ojha, Sr. Scientist & Head, KVK, Dungarpur, Dr. N.K. Meena, Sr. Scientist (Ag. Entomology) and Dr. Murlidhar Meena, Scientist (Ag. Economics), Dr. B.L. Roat, Scientist (Plant Pathology) presented in the meeting and interacted with the tribal farmers of Dungarpur district on various issues related to agriculture particularly seed spices. Dr. Lal discussed with farmers about the package of practices following in *Kharif* season for different crops. He suggested farmers for green manuring and use of FYM in field to enrich the soil structure and health. He also advised farmers to adopt improved varieties for

sowing, asked to SMS for applying any kind of plant protection measures. Dr. S.N. Ojha, suggested the farmers to adopt seed spices cultivation particularly fennel and



Ajwain in the region. Dr. N.K. Meena also interacted with farmers and given knowledge about the insect-pests and disease problems prevailed in that area during Kharif season. He also suggested the control measures to these problems. In the meeting, Dr. Lal, also distributed 50 numbers of Knapsack spray machines (plastic make) to 50 beneficiaries as FLD input under TSP programme of ICAR-NRCSS.

(ii) Agriculture Department Phalasia, Udaipur

A Scientists-Farmers Interface Meeting



was also organized by ICAR-NRC on Seed Spices at Department of Agriculture, Phalasia, Udaipur (Rajasthan) on 19th June, 2018. In the meeting, Dr. Gopal Lal, Director, NRCSS, Ajmer, Dr. N.K. Meena, Sr. Scientist and Dr. Murlidhar Meena, Scientist, Sh. Shiv Dayal Meena, AAO,

Department of Agriculture, Govt. of Rajasthan, Phalasia, Udaipur presented in the meeting and interacted with the tribal farmers of Phalasia Tehsil of Udaipur district on different aspects related to agriculture particularly seed spices cultivation. Dr. Lal discussed with farmers about the existing farmers practices following by the farmers suggested them to improve their practices as per the requirement of crop. He suggested farmers



for making one vermy compost unit at their farm and apply in field for organic cultivation of vegetables. Green manuring and use of FYM in field are also equally important to enrich the soil structure and health. He also advised farmers to adopt improved varieties for sowing, asked to SMS for applying any kind of plant protection measures. Dr. N. K. Meena also interacted with farmers given the knowledge about the insect-pests and disease problems privileged in that area during Kharif season. He also suggested the eco-friendly control measures to the farmers. Dr. Murlidhar Meena and Sh. Shiv Lal also interacted with farmers and shared the ideas related to seed spices cultivation in the region. In the meeting, Dr. Lal, also given 50 numbers of Knapsack spray machines (plastic make) to 50 beneficiaries of Phalasia Tehsil as FLD input under TSP programme of ICAR-NRCSS.

SWACHHCHATA ABHIYAN

Under the ambit of **Swachh Bharat Abhiyan** cleanliness program is continuously being organised on Friday of



every week wherein, cleaning work in and around the office premises is being carried out which involves eradication of weeds, plastic and other unwanted material was carried out. Special cleanliness drives were



conducted on 9th and 18th June, 2018 in the area around the state highway in front of the office and a tract of about one km was cleaned which included collecting of waste, uprooting of weeds, pruning of thorny trees and collection of these organic waste and transporting it to our compost pit. All the office staff and farm workers, approx. 80 persons in no. carried out this voluminous work.

MEETINGS/TRAININGS/ SEMINARS /SYMPOSIA/LECTURES/ CONFERENCES

Meetings attended

Participated in National Conference

- Dr. Gopal Lal, attended National conference on “Intensification and Diversification in Agriculture for Livelihood and Rural Development” at Samastipur, Bihar on 2nd June, 2018 and also conducted an exploration of seed spices germplasm at adjoining areas of Bihar and nearby states
- Dr. B. K. Mishra attended the national conference on “Strategies & challenges in doubling farmers’ income through horticultural technologies in subtropics” during 21-22

- On the occasion of Kisan Kalyan Diwas “Krishak Prashikshan Shivir” Dr. G. Lal, Director chaired the session and also visited farmer’s organic field at Kotputli on 2nd May, 2018.
- State level workshop attended by Dr. Gopal Lal, Director, for the purpose to decide contingency plan against drought for four vulnerable districts (Ajmer, Nagaur, Churu and Jhunjhunu) organized by Ministry of Agriculture and Farmer’s Welfare, GOI with the collaboration of CRIDA, Hyderabad on 13th May, 2018 at Sikar
- Dr. Gopal Lal, Director attended 36th group meeting of All India Coordinated Research Project on “Vegetable Crops” At RARI Durgapura, Jaipur during May 18-19, 2018.
- Dr. Gopal Lal, Director, attended Scientists Farmers Interface Meeting on “Agriculture practices during monsoon period for quality production of seed spices”. He also distributed spray machines to tribal farmers as FLDs input required for plant protection during kharif season on 19th June, 2018 at Dungarpur and Phalasio, Udaipur.
- Dr. Gopal Lal, Director attended 12th Annual Review Meeting for MIDH/NHM programme on 26th and 27th June, 2018 at College of Agriculture, IGVKK, Raipur, Chhattisgarh.
- Dr. Gopal Lal, Director, attended a meeting on “Use of nano-technology in agriculture” at Pant Krishi Bhawan, Jaipur on 25th June, 2018.

June, 2018 at ICAR-CISH, Rehman Khera, Lucknow and presented this oral paper in the conference.

- Dr. P.N. Dubey attended and presented a research paper on “Dynamics of enzymatic activities in cumin field soil under the influence of propiconazole” authored by P. N. Dubey, G. Lal and B. K. Mishra in the National Conference on “Strategies & Challenges in Doubling Farmer’s Income through Horticultural Technologies in Subtropics” during 21-22 June, 2018 at ICAR-CISH, Lucknow.
- Dr. O.P. Aishwath, delivered a lecture on ‘Carbon management in soils of arid and semi-arid regions with special reference to Indian subcontinent’ in Orientation Course ‘Agricultural Education, Research and Extension Management’ organised by Directorate of Education, Agriculture University, Mandor, Jodhpur during 11 June-01 July, 2018.



Oral Presentation

- Dr. A.K. Verma made a oral presentation of a paper on “Gamma rays lethal dose (LD) fixation and estimation of induced variability in fennel (*Foeniculum vulgare* Mill.)” authored by Verma, A.K., Choudhary, S., Meena, R.D. and Lal, G. (2018). In: National Conference on “Intensification and Diversification in Agriculture for Livelihood and Rural Development” at DRPCA, Pusa (Samastipur), Bihar from 28th to 31st May, 2018. pp. 66.

APPOINTMENT/PROMOTIONS/TRANSFER/RETIREMENTS/JOINING

Transfer

- Dr. Honnappa Asangi, Scientist transferred to ICAR-Indian Institute of Spices Research, Regional Station Appangla w.e.f. 23.06.2018.



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