



ICAR-NRCSS E-NEWS LETTER



Vol 14 (4)

Seed Spices E-News Letter

Sept - Oct - 2021

From Director's Desk



It gives me immense pleasure to bring out this issue of E-News Letter for seed spice stakeholders. In post COVID scenario awareness about seed spice health benefits rose as a result market price of nigella has crossed to new heights. To promote ajwain cultivation in the country, Ajmer Ajwain-73 (AA-73), a new variety of Ajwain, has been developed by the institute. IPM module for the management of aphid on cumin (*Cuminum cyminum* L.) and Organic based IPM module for thrips management on fennel was standardized. MoU made for fenugreek variety (AFg-3) for mass multiplication of seeds. Different activities/events under Hindi awareness month were organized. In transfer of technologies seed distribution programme under MIDH organized whereas, various programmes/training/events organized for popularization of ICAR-NRCSS varieties by FLDs in TSP and SCSP. Under the main theme "Azadi ka Amrit Mahotsav" 3 webinars/seminars have been organized on different important topics, aspect and issues. XXI Institute Research Council (IRC) meeting of ICAR- NRCSS, Ajmer was held to review the ongoing research programmers at ICAR-NRCSS, Ajmer. Other virtual programmes such as Dedication to the nation of 35 crop varieties, International Year of Millets 2023 a Campaign on Nutri-Garden and Tree Plantation, Rashtriya Ekta Diwas was organized. In addition to this one research paper and one book published during the period. Institute is continue serving the seed spice stakeholders in best of its capability by maintaining and following Covid-19 guidelines.

CONTENTS

CONTENTS	
Director's Desk	
Dignitary Visit	1
Prospect / Research Highlights	2-3
Commercialization of technologies	5
Hindi Chetna Maas	6
Transfer of technologies	7
HRD	11
Scientific meetings/MoUs	12
Events/days/programmes etc.	13
New Joining/Publications	17

Published by: Dr. S.N. Saxena, Director
ICAR-NRC on Seed Spices, Tabiji, Ajmer-305 206

Phone: 0145-268401, Fax: 01452684417 Email: nrcss.director@gmail.com Website: www.nrcss.res.in NRCSS App: seed spices info

Dr. A. K. Singh, DDG (Horticultural Science) and patron Indian Society of Seed Spices, Ajmer visited ICAR-NRCSS, Ajmer

To mark the ongoing celebration of Azadi Ka Amrit Mahotsav, World Food Day-2021 was organized on 16th October 2021 at ICAR-NRCSS, Ajmer. On this occasion Honorable Deputy Director General (Horticultural Science), Dr. Anand Kumar Singh was the Chief Guest. Before the start of the programme Honourable DDG made a visit of experimental fields and laboratories. Dr. Singh has informal interaction with scientists and other staff of NRCSS during the visit. He appreciated farm maintenance and emphasised on cleanliness and proper hygiene in field, office premises and laboratories. He

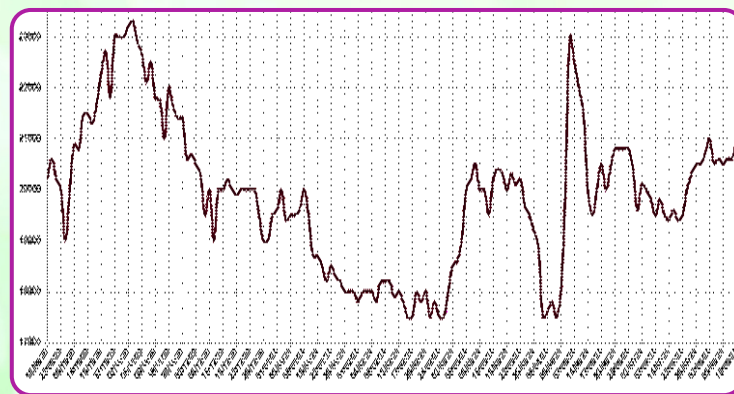


stresses upon efficient utilization of available equipment and laboratory instruments at Institute. In his speech on the occasion of World Food Day, he lauded the role played by horticulture sector in achieving nutritional and livelihood security in the country. He urged all the seed spice stakeholders to work in collaborations so that seed spices sector benefitted as a whole. The programme was organized at the Padma Bhushan Dr R.S. Paroda Auditorium, ICAR-NRCSS, Ajmer, Rajasthan. A total of 130 dignitaries, scientists and other staff from ICAR-NRCSS KVKs, students and farm workers were attended the programme.

Prospect

Nigella: A high remunerative seed spice

Nigella (*Nigella sativa* L.) is commercially cultivated for its dried black seeds and oil. It is in high demand by food, pharmaceutical and perfumery industry due to their nutraceutical values. Since COVID 19 pandemic medicinal values accredited to nigella resulted in increasing consumption demand owing to growing usage in nutraceutical as dietary or functional supplement. As a result in post COVID period the market price of nigella has crossed a new height of more than 23000 rupee per quintal.



Market price of nigella from September, 2020 to August, 2021 in Ramganjmandi Market
Source: <https://www.khetiwadi.com>

At above market prices nigella cultivation has proved highly remunerative venture to the farmers and acted as income booster to earn more returns from their limited resources. At recommended package of practices variable and total cost of nigella cultivation is estimated at 33108 and 52608 Rsha-1, respectively. The average yield is 1000 Kgha⁻¹ multiplied with average market prices of 18000 Rs per quintal made up gross value of produce to 180000 Rsha-1. Farmers could earn the profit of 146892 and 127392 Rsha-1 over variable and total cost, respectively. A return of 5.44 rupee per unit variable cost is possible in nigella cultivation. Such a high returns is generally not possible in other traditional crop. Therefore it is highly recommended seed spice crop to increase the farmers income.

Estimated cost and return in nigella cultivation during 2020-21

Particulars	Unit	Cost (Rsha ⁻¹)	Particulars	Unit	Cost (Rsha ⁻¹)
Land preparation	2 to 3 operations	2900	Interest on working capital	@3%pa	1273.4
Seed	8 Kgha ⁻¹	1600	Variable cost (VC)	(Rsha ⁻¹)	33108
Sowing	(Rsha ⁻¹)	1350	Fixed cost	(Rsha ⁻¹)	19500
FYM	10 tonha ⁻¹	2500	Total cost (TC)	(Rsha ⁻¹)	52608
Urea	70 Kgha ⁻¹	450	Estimated Yield	(Kg ha ⁻¹)	1000
DAP	44 Kgha ⁻¹	1150	Market Price	(RsKg ⁻¹)	180
Sulphur/Micronutrients	25 Kgha ⁻¹	885	Gross Value of Produce (GVP)	(Rsha ⁻¹)	180000
Irrigation	3 to 5 irrigation	6000	GVP -VC	(Rsha ⁻¹)	146892
Intercultural	1 operations	3000	GVP -TC	(Rsha ⁻¹)	127392
PPC	1 spray	3500	Return per rupee of variable cost	Ratio	5.44
Harvesting	20-22 lbrha ⁻¹	4500	Return per rupee of total cost	Ratio	3.42
Threshing	3-4 hrs ha ⁻¹	2500	Cost of production	(RsKg ⁻¹)	52.61
Transportation	(Rsha ⁻¹)	1500			

M.D. Meena, S.S. Meena and S. Lal

Research highlights

Ajmer Ajwain-73(AA-73) : New High Yielding Variety of Ajwain

The Ajmer Ajwain-73 (AA-73), a new variety of Ajwain, has been developed of ICAR-NRC on Seed Spices, Ajmer. It is medium maturing (165-170 days) and high yielding variety. It shows high tolerance to *Root rot* and *Sclerotium rot*. AA-73 gave 1500-1600 kg/ha seed yield. Fully mature seeds of AA-73 contain 9.15% total oil and 6.38% essential oil. This variety was identified during XXX Workshop of AICRP on Spices which was held at Tamil Nadu Agricultural University during 14-16 November, 2019 for national release. The variety has been notified in the Gazette of India- Extraordinary, CG-DL-E-08042021-226407 no. 1369 published by Ministry of Agriculture and Farmers Welfare (Department of Agriculture, Cooperation and Farmers Welfare), New Delhi dated 1st April, 2021. It is recommended for all ajwain growing area of India viz. Rajasthan, Gujarat, Uttar Pradesh, Madhya Pradesh, Haryana, Chhattisgarh and Andhra Pradesh. This variety is very much desirable for cultivating ajwain under irrigated and limited rainfed conditions with appreciable yield and quality attributes.



Seeds of Ajmer Ajwain-73 (AA-73)



Flowering in Ajmer Ajwain-73 (AA-73)



Umbels of Ajmer Ajwain-73 (AA-73)

S. S. Meena, M.D. Meena and G.Lal

IPM module for the management of aphid on cumin (*Cuminum cyminum* L.)

The technology of IPM module developed during 2020 through the combination of botanical product, bio-pesticides and chemical molecule under specified formulation and mode of application which provide an effective control of aphids with less harmful effect on natural enemies, pollinators and the environment. The IPM module consisted with seed treatment of imidacloprid 600FS 3ml/kg seed + foliar application of *Capparis decidua* plant extract @ 10ml/litre at 40 days after seed germination + foliar application of *Verticillium lecani* (1x10⁸cfu/g) @ 6g/litre at 70 days after germination and at last foliar application of fipronil 5% SC@ 0.035% at 85 days after germination. To prepare kareel plant extract, one year old fresh *Kareel* plant material (10 kg) was collected from the nearby fields. The samples were brought to the laboratory within 2 hrs. Plants were chopped into small pieces and then washed thoroughly with running water in order to get rid of dirt, insects and planktons. After that, took 1 kg *Kareel* pieces and added 200 ml distilled water and ground in an electric mixture to obtained plant extract by adding 1 litre of water. Then the extract was filtered through muslin cloth to obtained aqueous extract assuming 100% and preserved under 20°C temperature in well cleaned laboratory glass bottles. The stocked *Kareel* extract @10ml/lit., was used for the management of aphid on cumin

under field conditions. The other treatments were applied as recommended for field application as above. This aphid management technology gave effective management of aphids on cumin (more than 94% population reduction) under field conditions and also provided highest yield (976 kg/ha) and benefit cost ratio 28:1 (cost effective). This technology is a cost effective, comparatively safe to natural enemies, pollinators and the environment. The total cost of technology for the management of aphids in 1 hectare area is Rs. 3450. This technology is eco-friendly and cost effective for aphid management in cumin. It is easy in preparation and scheduled application in a complete module form. The technology validated at farmers field in two locations at Ajmer district and provided effective management of aphid with higher quality yield (187.5 kg/ha higher yield than farmers local practices) also given a net profit of Rs. 30000 per hectare in monetary term.

*N.K. Meena, R. Singh
and M.D. Meena*

Organic based IPM module for thrips management on fennel under AI-NPOF

Organic module based IPM technology was developed and thrips were successfully managed in fennel under organic production system using an organic based IPM module consisted with garlic extract, azadirachtin and tumba fruit extract at 15 days intervals. It is pesticide residue free and relatively safer to natural enemies, pollinators and

the environment. The methodology adopted to prepare organic product with formulation, garlic extract prepared manually by grinding of 100 g chopped garlic cloves in 500 ml water and added 10 ml liquid soap and 100% of garlic extract was obtained after filtering through muslin cloth which applied by taking of 10 ml solution and dilute in 1 litre of water for spraying on fennel crop. Similarly, a required quantity of tumba fruits extract was obtained by grinding of 100 g tumba fruit pulp with 30 ml and then again added 100 ml water to filter the extract in the muslin cloth and finally get the 100% of tumba fruit extract which preserved in well cleaned laboratory glass bottles. For use, well shaken the bottle, took 10 ml solution and dilute in 1 litre of water for spraying on fennel crop. The treatments of IPM module were applied as foliar spray at sufficient buildup of thrips population on fennel with garlic extract @10 ml/litre followed by azadirachtin 0.03EC @ 5ml/lit and tumba fruit extract @ 10ml/lit at 15 days interval. Based on four years pooled data of experimental trials were

recorded from 2016-17 to 2019-20 for the management of thrips under organic production system. It is concluded from the study that this technology gave effective management of thrips on fennel reduced 66.24% thrips population under field conditions and also provided highest yield (2593 kg/ha) under organic production system. This technology is a cost effective, comparatively safe to natural enemies, pollinators and the environment. The total cost of technology for the management of thrips in 1 hectare area is Rs. 4450. The technology is easy in preparation at farmer's level and its application and also eco-friendly and cost effective for the management of thrips in fennel under organic production system. The technology spread among farming community through farmers training and FLDs and provided effective management of thrips with higher yield (565 kg/ha higher yield over control) also given a net profit of Rs. 33900 per hectare in monetary term.

N.K. Meena, G. Lal, R.D. Meena, N Choudhary, S. Lal and S.N. Saxena

Commercialization of Technologies:

S. No.	Name of Technology/ Know-How	Name of Contracting Party	Mode of Partnership**	Date	Revenue Earned (Rs.)
1	Fenugreek variety (AFg - 3) for mass multiplication of seeds	KDM seeds Khandwa (M.P.)	MoA	25/10/2021	30000/-
2	Citronella oil profiling on GCMS	Center for Agri-Horticulture development, Manar Gujarat	Service	29/10/2021	10000/-

राष्ट्रीय बीजीय मसाला अनुसंधान केंद्र, अजमेर में हिन्दी चेतना मास का आयोजन

भारतीय कृषि अनुसंधान परिषद् -बीजीय मसाला अनुसंधान केंद्र, अजमेर में इस वर्ष हिन्दी चेतना मास का आयोजन दिनांक 1-30 सितम्बर, 2021 के दौरान किया गया। इस कार्यक्रम में संस्थान में आप सभी लोगो ने कोविड-19 महामारी के रोकथाम हेतु आवश्यक निर्देशों का पालन करते हुए विभिन्न प्रतियोगिताओं में भाग लिया। इस अवधि में डा. शैलेन्द्र नाथ सक्सेना, निदेशक, रा. बी. मा. अनु. केंद्र, अजमेर ने सभी अधिकारियों एवं कर्मचारियों द्वारा राजभाषा हिन्दी में कार्य को प्रोत्साहित किया गया। डा. बृजेश कुमार मिश्र, प्रभारी राजभाषा अधिकारी, द्वारा कार्यालय सम्बन्धी सभी कार्य हिन्दी में करने के लिए राजभाषा विभाग, भारत सरकार के वार्षिक कार्यक्रम-2021-22 के अनुसार कार्यालय कार्यों का निष्पादन विषय पर आवश्यक जानकारी दी गई। इसी हिन्दी चेतना मास के दौरान विभिन्न अनुभागों एवं सभी अधिकारियों के नाम-पट्टिका को एकसार में एवं द्विभाषीय रूप में लगाया गया। निदेशक महोदय की अध्यक्षता में विभिन्न अनुभागों का निरीक्षण भी किया गया जिसमें हिन्दी के प्रगामी प्रयोग एवं राजभाषा अधिनियम के अनुरूप कार्य करने पर विशेष बल दिया गया। इस अवधि में राजभाषा हिन्दी के प्रचार-प्रसार हेतु विभिन्न प्रतियोगिताओं का भी आयोजन किया गया जिसमें इस केंद्र के सभी वर्ग के कार्मिकों ने

हिस्सा लिया। इसी कड़ी में 14 सितम्बर 2021 को हिन्दी दिवस के अवसर पर “राजभाषा हिन्दी पर एक परिचर्चा” कार्यक्रम का आयोजित किया गया जिसमें डॉ. शैलेन्द्र नाथ सक्सेना, निदेशक, रा. बी. मा. अनु. केंद्र, अजमेर द्वारा कृषिविज्ञान एवं बीजीय मसाला फसलों के तकनीकीकरण को सरल एवं सामान्यतया प्रयोग में आनेवाले शब्दों के द्वारा किसानोपयोगी प्रसार सामग्री के प्रकाशन पर ध्यान देने की आवश्यकता को रेखांकित किया गया। इस परिचर्चा कार्यक्रम में प्रतिभागी वैज्ञानिकों तथा कार्मिकों द्वारा सोशल मीडिया, समाचार पत्रों तथा इन्टरनेट के योगदान पर विचार प्रस्तुत किये। राजभाषा हिन्दी चेतना मास के अंतर्गत एक वाद-विवाद प्रतियोगिता “क्या अनुबंध खेती किसानो के हित में है?” विषय पर 28-09-2021 को आयोजन किया गया जिसमें विभिन्न सभी वर्ग के कार्मिकों ने बह-चढ़ कर भाग लिया। इस हिन्दी चेतना मास का समापन एवं पुरस्कार वितरण कार्यक्रम 30 सितम्बर 2021 को निदेशक महोदय की अध्यक्षता में किया गया जिसमें सभी विजेता प्रतिभागियों को नकद पुरस्कार राशि प्रदान की गयी। इस हिन्दी चेतना मास -2021 के विभिन्न कार्यक्रमों एवं प्रतियोगिताओं का समन्वयन डा. बृजेश कुमार मिश्र, प्रधान वैज्ञानिक एवं प्रभारी राजभाषा अधिकारी, रा. बी. मा. अनु. केंद्र, अजमेर ने किया। विभिन्न प्रतियोगिताओं के विजेता प्रतिभागियों की सूची निम्नलिखित तालिका में प्रस्तुत है।

क्र. स.	प्रतियोगिता कार्यक्रम	पुरस्कार	विजेता प्रतिभागी का नाम
1.	वाद-विवाद प्रतियोगितारू - पक्ष एवं विपक्ष (सभी वर्गों के लिए)	प्रथम (एक) द्वितीय (एक) तृतीय (एक): प्रोत्साहन (दो)	श्री भीम सिंह श्री सिया राम मीना डा.आर. डी. मीना डा.मुरली धर मीना एवं श्री जी. के. त्रिपाठी
2.	तत्काल/आशु भाषण प्रतियोगिता (सभी वर्गों के लिए)	प्रथम (एक) द्वितीय (एक) तृतीय (एक) प्रोत्साहन (दो)	डा.शारदा चौधरी श्री सुनील कुमार अग्रवाल डा.अरविन्द कुमार वर्मा डा.शिव लाल एवं श्री संजीव शर्मा
3.	प्रारूप/टिप्पणी-लेखन प्रतियोगिता	प्रथम (एक) द्वितीय (एक) तृतीय (एक) प्रोत्साहन (दो)	श्री राज कुमार कांवरिया श्रीराम बलाई श्री प्रमोद कुमार अग्रवाल श्रीमती सरला देवी एवं श्री पुखराज परोदा
4.	बीजीय मसालों पर एक अथवा दो पंक्ति में स्वरचित तुकबंदी /प्रचार वाक्य / टैग लाइन (सभी वर्गों के लिए)	प्रथम (एक) द्वितीय (एक) तृतीय (एक) प्रोत्साहन (दो)	श्री अमित कुमार गुप्ता डा.रवीन्द्र सिंह श्री सुनील कुमार अग्रवाल श्री संजीव शर्मा एवं श्री सिया राम मीना



Transfer of technologies

Seed distribution programme

ICAR- NRCSS Ajmer organized one day seed distribution programme on 26 December 2021 for sale of cumin seed & other seed spices at ICAR-KVK (Sure) Danta, Barmer. KVK Scientists & other staff made necessary arrangements on



short notice to facilitate the growers. Farmers from Barmer district were reached early morning to purchase cumin seed along with bio-agent . Sh. S.R. Meena, ACTO & Sh.PK Agarawal T.A were distributed 4500 kg cumin seed on cost basis @Rs. 300 per kg among the farmers.

MIDH

One day training on “Quality Seed Production of Seed Spices” organized

ICAR-NRCSS has organized one day training on “Quality Seed Production of Seed Spices” for seed production farmers under farmer's participatory seed production programme which was sponsored by MIDH. In the training programme 14 different selected farmers were participated and programme was inaugurated by Member of Parliament from Ajmer constituency Sh. Bhagirath Choudhary. In the training, major emphasis was given for disease management, pest management, agronomical practices and maintenance of genetic purity during seed production of seed spices. At the end of training, MoU was also signed in between seed growers and ICAR-NRCSS, Ajmer for quality seed production of seed spices. This training chaired by Dr. S. N. Saxena and coordinated by Dr. Sanjay Kumar, Dr. Shyam S. Meena & Dr. R S Meena Conducted virtual training programme on “Advanced production technology of nigella” for farmer beneficiaries of Telangana State under MIDH FLDs programme on 9 November 2021 at

2:30 PM. Presentation was delivered by Dr. Narendra Chaudhary, Scientist, ICAR-NRCSS, Ajmer. Coriander seed (ACr-2) were distributed to 10 farmers and nigella seed distributed to KVK, Jhalawar for Front Line Demonstration under MIDH FLDs-2021-22.



SCSP programme of ICAR- NRCSS

Popularization of ICAR-NRCSS Fenugreek and Nigella varieties by FLDs

Seeds of improved varieties (fenugreek- AFg-2, AFg-4 & AFg-5 and Nigella, AN-1) of ICAR-NRCSS, Ajmer were distributed among the SC beneficiaries of Bhilwara District for FLDs on 07/10/2021. In addition to this sprayer, vermin-bed, *Rhizobium* culture, bio-agents (*T. viridae*, *T. harzanium*), bio-decomposer, NPK consortia, bael plants and training kits were also distributed. In this programme 56 farmers have been participated and officials of Agriculture department and ICAR-NRCSS delivered subject specific lectures. The event was coordinated by Dr. Shiv Lal, Dr. N. Chaudhary, and Dr. C.K. Jangid from ICAR-NRCSS, Ajmer and local coordinator Sh. Shati Lal, A.A.O and Aruna Jinger, Agriculture supervisor from Agriculture Department, Sambhugarh, Th. Asind, dist. Bhilwara, Rajasthan. During the training programme a farmers were also briefed about package for fenugreek production, protection and preparation of vermin-compost at farm level.



Popularization of ICAR-NRCSS Fenugreek (AFg-3 & AFg-5) by FLDs

To promote and popularize ICAR-NRCSS new improved varieties (fenugreek- AFg-3 & AFg-5) of ICAR-NRCSS, Ajmer were distributed among all the SC beneficiaries of Rajasmand district for FLDs on 18/10/2021. In addition to that sprayer, solar torch, vermin-bed, *rhizobium* culture, bio-agenets (*T. viridae*, *T. harzanium*), bio-decomposer, NPK consortia and training kits were also distributed. In this programme 50 farmers have been participated and officials of KVKs and ICAR-NRCSS were delivered subject specific lectures during the programme. The event was coordinated by Dr. Shiv Lal, Dr. M.D. Meena, and Dr. C.K. Jangid from ICAR-NRCSS, Ajmer and local coordinator Dr. P.C. Regar, Head & I/C KVK, Rajasmand. During the training programme a farmers were also briefed about package for fenugreek production, protection and preparation of compost, application of rhizobium, bio-agents and NPK consortia etc. As far as possible safety measures (mask) and appropriate social distancing were followed during the programme.



To promote and popularize ICAR-NRCSS promising technologies one day training cum input distribution programme was organized at KVK, Jhalawar on 12/10/2021. In this programme training was imparted to 30 farmers of SC community followed by distribution of vermibeds, registration kit and solar torch to SC beneficiaries.



TSP programme of ICAR- NRCSS

Farmers training at Dunderpur

At KVK, Dunderpur on 12 October 2021 one day training programme was organized in which seventy farmers including women belonged to Scheduled Tribe (ST) community were participated. All the participants provided vermin-compost making pit as well as registration kit. Fenugreek seed (variety AFG-2) along with bio-agent were also distributed to the twenty farmers for FLD's. During the training programme certain issues and discussions were made between farmers and ICAR-NRCSS, Ajmer

staff. The farmers were also briefed on the subject of package of practices of fenugreek cultivation. This programme coordinated by Dr. R.D. Meena, , Dr. Sanjay kumar (and Dr. Chetan kumar Jangir



Farmers training cum FLDs at Pratapgarh

At KVK, Pratapgarh on 23 December 2021 one day training programme was organized in which seventy three farmers belonged to Scheduled Tribe (ST) community were participated. All the participants successfully provided vermin-compost kit as well as registration kit and earthworms. Fenugreek seed along with bio-agent for seed treatment were also distributed to the twenty farmers for FLD's. The farmers were also briefed on the subject regarding package of practices of fenugreek cultivation and use of compost/vermin pit. This programme coordinated by Dr. R.D. Meena, Dr. Shyam Sunder Meena and Dr. Sanjay Kumar



HRD activities

Azadi Ka Amrit Mahostav

Under the main theme “Azadi ka Amrit Mahotsav’ 3 webinars/seminars have been organised during the September to October by the different eminent speakers. First lecture was delivered by Dr Shiv Lal, Senior Scientist, ICAR-NRCSS, Ajmer on “Temperate Horticultural Crops: An overview”. He highlighted the importance of temperate fruit crops and its importance in Indian economy and human health. Second lecture was given by Dr. Madhu Sharma, Director, Institute of Agri-Business management, SKRAU, Bikaner on “Role of Women in Agricultural Development: on the occasion of Mahila Kisan Diwas. She highlighted

the importance of women's in agriculture and some success story made by Indian women in agriculture. Third lecture was delivered by Dr A.K. Verma, Scientist on the occasion of World Food Day. In the programme Honourable Deputy Director General (Horticultural Science) Dr. Anand Kumar Singh also share his view on research and development made in India and abroad for the elevation of the poverty. The convenors of webinars were Dr. A.K. Verma, Dr. Sharda Choudhary and Dr. M.D. Meena. The following lectures have been delivered during September to October, 2021.

Date	Lecture topic	Speakers
03.09.2021	Temperate Horticultural Crops: An overview	Dr. Shiv Lal
15.10.2021	Role of Women in Agricultural Development	Dr. Madhu Sharma, Director, Institute of Agri-Business management, SKRAU, Bikaner
16.10.2021	Safe Food for a Healthy Tomorrow	Dr. A.K. Verma

Mahila Kisan Diwas Celebration at ICAR-NRCS, Ajmer

ICAR-NRCSS, Ajmer has organized a programme on the occasion of Mahila Kisan Diwas on 15 October 2021. On this occasion, a one day seminar was organised by the institute on “**Role of Women in Agricultural Development**”. The

Chief Guest and lead speaker of the seminar was Dr. Madhu Sharma, Director, Institute of Agri-Business management, SKRAU, Bikaner, Rajasthan. In the power point presentation, Dr Sharma has given the several example of women

who created the history in the Indian agriculture specially Smt. Kamala Pujari a farmer from Odisha. Dr. S.N. Saxena, Director, ICAR-NRCCS highlighted the significant role of women in Indian agriculture, agri-business management, agri-education and research. He also focused on the work going on the centre for the women empowerment. The Guest of Honour, Dr. D.D. Bhati, Head KVI, Ajmer highlighted the work going on at the KVK for the empowerment of the women engage in the agriculture. He has given the example of women who started business in agriculture after consultation with KVK, Ajmer. About 50 participants including women farmers, scientists, technical and administrative staffs and farm workers virtually attended the programme. The conveners of the seminar were Dr. A.K. Verma, Dr. S. Choudhary and Dr. M.D. Meena from NRCCS, Ajmer, Rajasthan.

Scientific Meetings

XXI IRC Meeting held during 18th & 20th -21st September, 2021

The XXI Institute Research Council (IRC) meeting of ICAR- NRCCS, Ajmer was to review the progress of ongoing Institutional Research Projects at ICAR-NRCCS, Ajmer. In the meeting, new project proposals were also discussed thoroughly and were formally approved by the house. All scientists and technical Officers of ICAR-NRCCS attended the meeting.



Events/Days/Programmes etc.

One online programme was organized at ICAR-National Research Centre in Seed Spices, Ajmer on the occasion of “Dedication to the nation of 35 crop varieties and ICAR-National Institute of Biotic Stress Management, Raipur on 28th September, 2021.

Online program organized by the Ministry of Agriculture and Farmers Welfare, Government of India in which 35 climate resilient varieties and ICAR-National Institute of Biotic Stress Management, Raipur were dedicated to the country. Live telecast of this program was organized by National Center for Research on Seed Spices, Tabiji Ajmer. The programme was attended by many farmers from five different districts of Rajasthan. During the program, the Prime Minister also interacted directly with five progressive farmers of the country. In the institute programme Ajmer, MP Mr. Bhagirath Choudhary, Ajmer (South) MLA Mrs. Anita Badhel were present as chief guests and Dr. Dinesh Arora, in-charge ARS, Ajmer and Shri Gangaram Sepat, a progressive farmer of Jobner (Jaipur) were present as a special guests. During the programme guests shared their view on protected cultivation and organic farming under changing environmental conditions. Institute Director, Dr. S N Saxena motivated the farmers about adoption of newly developed climate resilient varieties of different crops for higher production and doubling the farmer's income. This event coordinated by Dr. Sanjay Kumar and Dr. Shiv Lal.



On the curtain raiser of “International Year of Millets 2023 a Campaign on Nutri-Garden and Tree Plantation Programme was organized at ICAR-NRCSS, Ajmer on 17th September,

In the context of curtain riser occasion of International Year of Millets 2023, a program on Nutrition Garden and Plantation was organized by National Research Centre on Seed Spices, Tabiji, Ajmer. The program was organized under the aegis of the Ministry of Agriculture and Farmers Welfare, which was telecast live by the Indian Institute of Millets Research, Hyderabad. Apart from the online telecast of this program, a



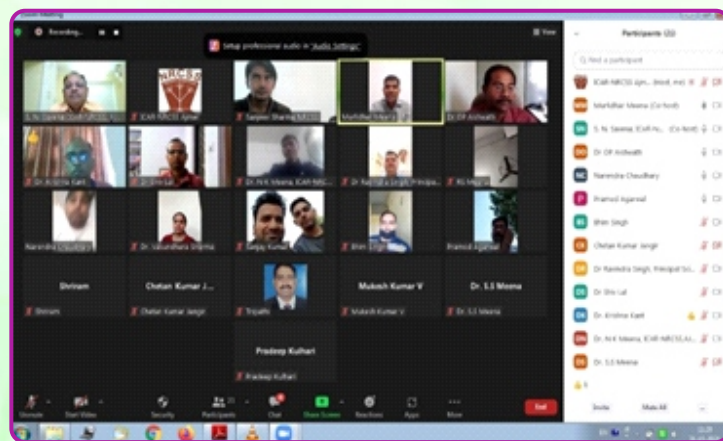
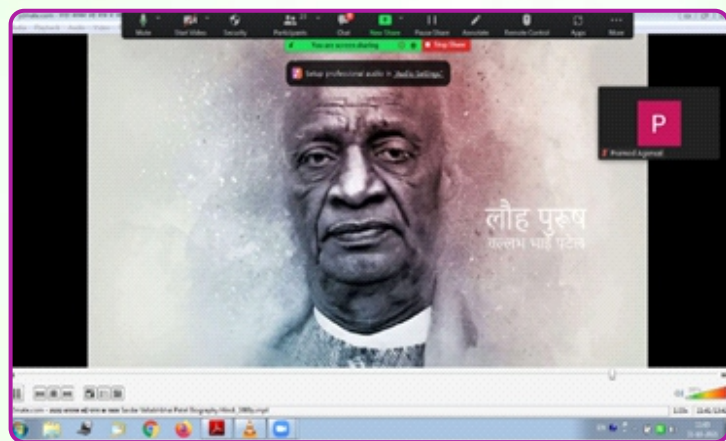
millets and traditional food on human health was discussed and emphasized to change the food habit so that we can boost our immunity and remain healthy under changing environmental conditions. During the program, Dr. Sanjay Kumar, Scientist, has delivered a lecture on the topic “Nutrition Cereals and its Impact on Human Health”. At the end of programme refreshments of products made from nutritious cereals were also given to all. This event was coordinated by Dr. Sanjay Kumar, Dr. Narendra Choudhary & Dr. Chetan Kumar Jangid)



program was also organized in the institute. Principal of DAV College Ajmer, Dr. LK Sharma was the chief guest, Professor GN Mathur (former in-charge, Krishi Vigyan Kendra, Ajmer) and Shri Gajendra Singh Shaktawat (Deputy Director Agriculture, Ajmer) were the special guests in the program. Farmers, school girls, scientists and other employees of the institute and DAV College have been participated in this program. During the programme. Importance of nutricereals

Observance of Rashtriya Ekta Diwas or National Unity Day

During Vigilance Awareness Week, National Unity Day (Rashtriya Ekta Diwas) was observed on 31.10.2021 to commemorate the birth anniversary of Sardar Vallabhbhai Patel, the architect of national integration of independent India. For celebrating the National Unity Day, a Pledge taking ceremony was organized to mark the occasion on 31 October, 2020 at 10.30 A.M. The programme was organized by ARIS Cell in online mode through Video Conferencing. Dr S.N. Saxena, Director briefed about the



celebration of Rashtriya Ekta Diwas and administered the Rashtriya Ekta Diwas Pledge to all officials and staff members of ICAR-NRCSS through video conferencing. He also expressed his views about Rashtriya Ekta Diwas, its importance and words about the Iron Man Sardar Vallabhbhai Patel.

Training/workshop/seminar etc.) Organized

S.No	Name of Programme (Training/Workshop/Seminar etc.) organized	Date of Programme	Participant (No.)
1.	Five days farmers training on “Production and protection technologies of seed spice crops”	20-24 September, 2021	A total of 60 participants attended the program.
2	One day training on “Quality seed production of seed spices”	29 September, 2021	14 farmers were participated.
3	Interaction meeting "Seed Spices growers and Scientist /stakeholders Interaction Meeting" with Dr. G.R. Chintala, Chairman, NABARD on 29-09-2021.	29 September, 2021	A total of 150 participants including farmers, entrepreneurs, students, scientists attended the programme.
4	One day workshop on “Campaign on Nutri-Garden and Tree Plantation” was organized on occasion of “curtain raiser of “International Year of Millets 2023	17 September, 2021	All the Scientists and other staff of NRCSS
5	Organized XXI IRC of ICAR-NRC on Seed Spices, Ajmer	18, 20 & 21 September 2021	All the Scientists and Technical person involve in research

6	Organize and deliver lecture in Kisan Mela on Nagauri Paan Methi at Nagour under DBT project (GAP)	12 October, 2021	A total of 200 farmers/participants attended the program.
7	Distributed of FLD's of Cumin and Nagauri Paan Methi under DBT project at Medta and Mundwa block of Nagaur district of Rajasthan by Dr. S.S. Meena.	25-26 October, 2021	A total of 20 farmers/participants attended the program.
8	Organized Scientists -Farmers Interaction on Cumin Production and Value Chain System	28 October, 2021	A total of 100 farmers/participants attended the program.
9	World Food Day	16 October, 2021	A total of 130 dignitaries, scientists & staff from NRCSS and KVK, students and farm workers from farming community attended the program.

Training/Workshop/Seminar/Virtual Meet/Webinar etc.) attended

S. No.	Name of Programme (Training/Workshop/Seminar etc.) attended	Organized By (Name of Institute)	Date of Programme	Participant (Name)
1	Attended International Webinar Conference on "Alternate Cropping Systems for Climate Change and Resource Conservation"	ICAR-IIFR, Modipuram, UP	29 Sept to 01 Oct, 2021	Dr. Shiv Lal
2	Attended International Webinar Conference on "Alternate Cropping Systems for Climate Change and Resource Conservation"	ICAR-IIFR, Modipuram, UP	29 Sept to 01 Oct, 2021	Dr. N. Chaudhary
3	Participated and presented the ongoing activities related to ITMU of ICAR-NRCSS, Ajmer in a meeting/workshop on "Review and sensitization workshop of ZTMUs/ITMUs/PMEs under NAIF Scheme"	ZTMUs/ITMUs/PMEs under NAIF Scheme	6 th October, 2021	Dr. O.P. Aishwath
4	Attended SAC meeting at Krishi Vigyan Kendra (Agricultural University, Kota), Anta, Baran.	KVK, Anta (Agriculture University, Kota).	6 th October, 2021	Dr. N. K. Meena

New Joining

Dr. M.K. Mahatma, Principal Scientist, Plant Biochemistry after relieving from ICAR-DGR, Junagarh Joined ICAR-NRCSS, Ajmer on 11.10.2021 .



Publications

Meena M., Rani, R., Lal, G., Meena, R.S. and Meena, N.K. 2021. Economic assesment of ICAR-NRCSS Coriander variety ACr-1 using Economic Surplus model in *Indian Journal of Economics and Development*: 17(3):653-658.

Jangir, C.K., Rani, K., Parashar, A. 2021. Crop Management under stress conditions, AkiNik Publications, ISBN: 978-93-91216-22-1, Publication Year: 2021, Pages: 274, Book **DOI:** <https://doi.org/10.22271/ed.book.1235>. **(Book)**

EDITORIAL BOARD

Chief Editor	:	Dr. Shiv Lal
Editor	:	Dr. O. P. Aishwath
Editor	:	Dr. B. K. Mishra
Editor	:	Dr. A. K. Verma



हर कदम, हर डगर
किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

*Agr*search with a human touch