



CISH NEWS

01 January - 30 June, 2019

Number - 01

FROM THE DIRECTOR'S DESK



The ICAR-FUSICONT technology applied in various farmers' fields resulted in success against the wilt (Panama) disease of banana on Grand Naine (G-9) variety in Uttar Pradesh and Bihar areas. This success has given abundance of hope to banana planters compelled to quit banana production on account of this disease. Efforts are being made to propagate this technology among banana growers in coordination with state agriculture and universities, KVKs and associations working for the betterment banana industry.

Success in container farming of fruit crops (guava cv. CISH-Lalit and pomegranate cvs. Arakta, Mridula and Super Bhagwa) has opened horticulture doors of fruit production in urban houses. Development of 250 homestead gardens in nutri-smart village named Habibpur at Malda is beginning towards our commitment to fight against malnutrition among tribal people. ICAR-CISH RRS, Malda also organized Adivasi Krishak Sammelan and

Krishi Shilp Mela for proliferation of suitable technologies to enhance farmers livelihood. Commitment for ecofriendly crop protection to care human health as well as our ecosystem. Success of reduviid predator against recently emerged scathing pests of mango, semi-looper and leaf webber create hope for their bio-management. Farmers' fair-cum-seminar on "Empowering scheduled castes farmers" was organized at ICAR-CISH, Rehmankhera, Lucknow to further create interest in adoption of technology by marginal farmers. Several programmes, 'Per Drop More Crop', workshop on 'Horticulture Entrepreneurship' and 'Mango Grower's Conclave' were organized for the benefit of farming community. The Institute celebrated 'National Productivity Week', 'International Women's Day', 'Peach Day', '36th Foundation Day of ICAR-CISH' and 'International Yoga Day'; besides organizing meetings on important issues like Buyer-seller meet, stakeholders' meeting on beekeeping and progressive farmers meet. Training programmes (15) were organized for 376 horticulture officers, students and farmers from Uttar Pradesh, Himachal Pradesh, Madhya Pradesh, West Bengal and Rajasthan. Groups of ATM/BTMs, students, input dealers and farmers from Uttar Pradesh, Andhra Pradesh, Madhya Pradesh, Bihar and Rajasthan visited ICAR-CISH, Rehmankhera to be familiar with improved cultivation technologies of subtropical fruits.

(SHAILENDRA RAJAN)

RESEARCH HIGHLIGHTS

ICAR-FUSICONT Technology demonstration

ICAR-CISH, Lucknow and ICAR-CSSRI Regional Research Station, Lucknow have jointly developed an ICAR-FUSICONT technology to control the devastating Panama wilt disease prevalent in banana. This technology has been successfully demonstrated in the Panama wilt affected areas of Uttar Pradesh and found good for the management of *Fusarium oxysporum* f. sp. *cubense* tropical race-4. The technology has been tested in Panama wilt disease affected areas of Katihar district of Bihar state involving more than 30 farmers. Institute is providing ICAR-FUSICONT to farmers from time to time

and even guide them as per their requirements. Nine months after the application of ICAR-FUSICONT in farmers' fields, the impact of technology on the disease was assessed. Significant reduction (95%) in Panama wilt incidence was recorded.



Container gardening of fruits in houses

Container farming is a micro model of farming where a household produces fruits and vegetables in containers in spaces available in front or on roof of his house for personal consumption. The institute has carried out experiments in UV stabilized 400 gauge containers of 60x60 cm, 45x60 cm, 45x45 cm, 30x45 cm and 30x30 cm for growing fruit crops like mango, guava, pomegranate and kagazi lime. Most of the plant of kagazi lime variety Shri Ganganagar Lime-1 came into fruiting and produced 25-52 fruits per plant within one year of planting. Guava cv. CISH-Lalit also started fruiting with 10-20 fruits per plant during the first year and pomegranate cvs. Arakta, Mridula and Super Bhagwa also came into bearing during the 2nd year.





Potential reduviid predator explored in mango ecosystem

Reduviid predators are the largest terrestrial bugs considered to be potential bio-control agents and an integral part of integrated pest management (IPM). Reduviid predator belonging to the genus *Sycanus* sp.

was observed potentially predating on the larvae of mango leaf webber and mango semiloopers in mango ecosystem at Rehmankhera and at several other locations. The laboratory studies were conducted and the single adult bug was found predating 2-3 rice moth larvae/hour. The



standardization of mass rearing methodology is initiated to utilize these predators as a potential biological control agent in mango ecosystem.

Soil nutrient index as a component of measuring sustainability in mango orchards ecosystem

Soil nutrient index (SNI) plays a pivotal role for estimating the sustainability in mango orchard ecosystem. Farmers can adopt the best management modules for keeping the soil normal for future generation fruit production. A sum of 200 soil samples were collected from 200 mango orchards of Gulabkhera, Mujasa, Mehmoodnagar, Sanyasibag, Allupur, Dugauli, Habibpur, Mandauli, Sahilamau and Naibasti villages

for developing SNI in mango orchard ecosystem of Malihabad block of Lucknow. The maximum SNI value recorded as 1.86 (Zn), 1.0 (Cu), 2.10 Mn and 2.10 (Fe). Soil fertility ratings were mostly low for Zn and Cu while for Mn and Fe, it was medium. Soil organic carbon, P and K had maximum value of 2.3, 1.29 and 1.40; of course rated as low fertility rating. Thus, SNI showed the need for precise resource management for sustaining the productivity level of current 8.0 t ha⁻¹ to atleast 20 t ha⁻¹.

Nutri-Smart Tribal Village developed

Nutritive food is predominantly looked for during the yesteryears by a gamut of people. Keeping in view the people's demand, ICAR-CISH RRS, Malda took initiatives in establishing nutri-smart tribal villages to address the issues by utilizing available vacant areas of homestead and cultivable land at adopted tribal villages of Habibpur block, Malda. A special package of programme has been chalked out to cultivate 10 different nutritious vegetables organically in each cropping season using homemade compost and bio-pesticides. Efforts were also made to promote 4-5 fruit crops by highlighting the dietary importance in meeting nutrient requirement and disease prevention. Other interventions like, backyard poultry and fish culture in homestead ponds and production of different type of pulses were also promoted to meet out protein requirements. The initiative were adopted by hundreds of tribal households as it is being helpful for their quality food and getting good additional income by selling the surplus produce. So far, 250 homestead gardens were established with active participation of jagriti members.

IN FOCUS

Public awareness programmes for the management of Banana wilt

One-day public awareness programme on "Control of Panama wilt in Banana" was organized at Narendra Dev University of Agriculture and Technology, Ayodhya on January 24, 2019. Stakeholders from 42 Krishi Vigyan Kendras of Uttar Pradesh, representatives from the state horticulture department, scientists and professors of the university participated in the programme. On this occasion, Dr. S. Rajan, Director, ICAR-CISH dealt with participatory approach initiated by ICAR-CISH and RRS-CSSRI, Lucknow with collaborative effort of Banana Growers Association, Lucknow to assest the spread of fatal epidemic of Panama wilt disease (especially in the G-9 variety) caused by Fusarium oxysporum f.sp. cubense tropical race-4. While working in this direction, a team of scientists formulated a unique combination of fungus and bacteria and also developed the process suitable for its application. To augment the spread of this successful technology and control of disease in the state, a memorandum of understanding was signed with Uttar Pradesh Banana Association. Dr. T. Damodaran,



Principal Scientist, RRS-CSSRI, briefed about Panama wilt symptoms and its identification. After the lectures, all participants visited the Panama wilt affected Katarauli and Manalasi villages of Sohawal block of Ayodhya. Participants also interacted with farmers who were benefited. Another programme was organized at Sant Kabir Nagar on May 18, 2019.

Adibasi Krishak Sammelan-Krishi Shilp Mela-2019

The ICAR-CISH RRS, Malda in collaboration with Sri Gyanananda Saraswati Ashram, Dallpur Chhatna, Bankura, West Bengal organized Adivasi Krishak Sammelan-Krishi Shilp Mela-2019 on February 11-13, 2019. Showcasing of the seeds of different rice germplasms, pulses (black gram, chickpea, green gram, pigeon pea) and vegetables (pea, cucumber, pumpkin, ageti pakal, carrot, raddish, bottle gourd) was done on this occasion. Different popular technologies of ICAR-CISH, Lucknow *viz.* high density planting in mango and guava, mango rejuvenation, insect-pests and disease management in mango were demonstrated through posters.

Farmers' Fair-cum-Seminar on Empowering Scheduled Castes Farmers

Farmers' fair-cum-seminar on "Empowering scheduled castes farmers" was organized at ICAR-CISH, Rehmankhera, Lucknow on February 28, 2019. The fair was inaugurated by Mrs. Jai Devi Kaushal, Hon'ble MLA Malihabad with Dr. Shailendra Rajan, Director, ICAR-

CISH, Rehmankhera, Lucknow. In farmers' fair, various government and non-government organizations showcased their products and technologies. It was visited by more than 600 farmers. The farmers engaged with Farmers-First project also displayed their agricultural products such as vegetables, fruits, plants, flowers, hens, eggs, etc. The best exhibition award in different categories were also given to farmers of both scheduled castes and general category. The relavent agricultural techniques were discussed to improve the income of small and marginal scheduled caste farmers. In the seminar, lectures were given on suitable farming for marginal farmers, nutritionist, mushroom production, vermi-compost and low cost protected farming.





Seminar on "Per Drop More Crop"

A two-day seminar on 'Per Drop More Crop' (Microirrigation) was organized at ICAR-Central Institute for Subtropical Horticulture, Rehmankhera, Lucknow during March 5-6, 2019 under Prime Minister Krishi Sichai Yojna.





Workshop on Horticulture Entrepreneurship

A one-day workshop on Horticulture Entrepreneurship under the auspices of Agriculture and Rural Development Centre (CARD), New Delhi in collaboration with ICAR-CISH, Lucknow and Horticulture and Food Processing Department, Uttar Pradesh, was organized at Udyan Bhawan, Lucknow on March 7, 2019. The principal objective of this workshop was to improve farmers' income by creating awareness amongst them regarding better market place for their crops. More than 200 farmers and government officials from different districts of Uttar Pradesh participated in this workshop.



Mango growers' conclave-2019

ICAR-CISH RRS, Malda and Crop Life India Ltd, New Delhi jointly organized Mango Growers' Conclave on June 26, 2019 with an objective to promote good agricultural practices (GAP) for the production of quality mangoes with higher yield. More than 300 mango growers and 100 tribal women farmers participated in the

programme. For the production of quality mango with higher yield, experts delivered their lectures on efficient pollination in mango through stingless bees, proper use of paclobutrazol, effective use of bio-resources in harvesting and marketing.



Hindi workshop

A Hindi workshop was organized on June 28, 2019 at ICAR-CISH, Rahmankhera, Lucknow. Dr. Som Nath Chandel, Additional Director General, Geological Survey of India and Chairman, NARAKAS II, Lucknow was the keynote speaker at the Hindi workshop. During his lecture, he emphasized the importance of the Hindi language, including rules, regulations and acts as official language and linked it with science. He also explained the working system of NARAKAS. The distinguished guest, Dr. Shambhu Nath, Senior Scientist and Secretary NARAKAS discussed the inter relationship between Official Language Hindi and Science. Dr. Vijay Narayan Tiwari, ex-Joint Director (Official Language), CSIR-Central Drug Research Institute, Lucknow delivered a lecture on Hindi as an official language: problems and solutions.





CELEBRATIONS

National Productivity Week

The ICAR-CISH, Rehmankhera, Lucknow organized the National Productivity Week from February 12 to 18, 2019. The theme of the week was 'Circular Economy for Productivity and Sustainability'. On this occasion, Institute organized debate, painting and slogan competitions for technical officers, research associates, senior research fellows, etc. on the titles such as germplasm, soil pollution and its continuous degradation, waste management and impact on crop production. Lectures on various topics were also organized to create awareness among the staff members.



International Women's Day

The International Women's day- 2019 was celebrated with great fanfare at the Institute on March 8, 2019. On this occasion, scientists, officers and staff assembled in the Institute's auditorium to interact with our Hon'ble Prime Minister, Shri Narendra Modi with Self Help Group (SHG) on women empowerment and wealth from

waste. The live telecast of Hon'ble Prime Minister also organized at Raibareli Road Campus for the benefit of trainees attending Agri-clinic and Agri-business Centre. A talk on the role of women in different walks of life with an emphasis on scientific innovation and women empowerment and leadership roles was delivered by the women scientists. Second phase of the programme was held at Mohammad Nagar village in Malihabad block. A team of scientists led by Dr. S. Rajan, Director, ICAR-CISH interacted with rural women. On this occasion scientists delivered lecture on health and nutrition security of rural women. Rural women were also sensitized on the ways and means to generate income through processing and value addition of mango. Mango Apps were also demonstrated to develop mango products developed by ICAR-CISH.



Peach Day

Peach day was organized at ICAR-CISH, Lucknow on April 29, 2019 with an objective to popularize peach cultivation in the northern plains besides doubling the farmers' income. Fifty five farmers from Lucknow participated in this programme.





36th Foundation day of ICAR-CISH

The ICAR-CISH, Lucknow celebrated its 36th foundation day on June 1, 2019. It was inaugurated by Dr. S. Rajan, Director, ICAR-CISH along with the chief guest Shri Rama Shankar Pandey, Director, Rajya Krishi Utapadan Mandi Parishad, Lucknow. Shri R.K. Srivastava, Deputy Director, Rajya Krishi Utapadan Mandi Parishad and Shri R.K. Yadav, AGM, NABARD were also present as special guests. More than 200 representatives including farmers, bankers, entrepreneur, horticulture officers, stakeholders etc. participated in the programme. On this occasion, a workshop was also organized on enabling mango farmers through GAP compliance and FPO for augmenting profit. Shri Rama Shankar Pandey, on this occasion briefed them about collective aggregation of produce by small farmers for better profit and bargaining. Shri R.K. Yadav underlined about establishment of Farmer-Producer Organization (FPO), especially for mango farmers. Dr. S. Rajan mentioned details about GAP guideline and the benefit of certified mango.



International Yoga Day

On the occasion of the International Yoga Day, scientists, officers and employees of ICAR-CISH, Lucknow performed Yoga at the Institute's premises on June 21, 2019 at Rehmankhera. As a Yoga instructor, Mr. Dhiraj Sharma, Assistant Director (OL) led all the officers and employees in the yoga practice. The yoga programme



started with the chanting of mantra 'Om'. After that Padamasana, Vajrasan, Sukhasan, Siddhasan, Kapalbharti, anulom-vilom pranayama, Mandook Aasana, etc. were also exercised. During the programme, Dr. Shailendra Rajan, Director of the Institute, highlighted the importance of yoga for healthy body and mind. The program ended with hasyasana.

MEETINGS

Scientist-farmers interactions meet on aonla production

An interaction meeting with the farmers in Chilbila block of Pratapgarh district was organized by DHO to discuss the issues related to propagation of aonla, proper pricing and marketing problems on February 2, 2019. During the interaction, suggestions were made on remedial measures to address the problems of the local farmers regarding aonla production and management of insects and diseases as well as options for facilitating proper marketing. Farmers were also exhorted diversify their aonla orchards with crops like appleber, guava, bael, legumes, pulses and oilseeds to enhance their profitability. Scientists also suggested them to form aonla growers association in their respective districts for getting higher price via linking it directly with e-markets.



ICAR-CISH bid to empowers scheduled caste farmers

ICAR-CISH, Lucknow invited 30 scheduled cast farmers of Malihabad block for Scientist-farmer interaction meet on February 5, 2019. The main aim of this meeting was to discuss perking up the livelihood of the poor and landless farmers of scheduled castes community through various horticulture-based ventures. Dr. S. Rajan, Director, ICAR-CISH interacted with invited farmers and told them that under the Scheduled Caste Sub Plan of the



Indian Council Agricultural Research, ICAR-CISH will help in the upliftment of living standard of landless, living below poverty line scheduled castes farmers through demonstration and training of advanced techniques of pig farming, vermi composting, mushroom production, nutrigarden, contract farming and on farm value addition of raw mango. The institute will also help to convert agricultural waste into pig fodder. During the meeting, farmers agreed to set up a self-help group of scheduled caste farmers.

Progressive mango growers meet

A one-day programme on "Progressive Mango Growers Meet" was jointly organized by Syngenta India Ltd. and ICAR-CISH RRS, Malda on February 12, 2019. Presence of more than 100 farmers made the event successful. It was inaugurated by Dr. P.K. Chakraborty (ADG Plant Protection) and Dr. S. Rajan (Director, ICAR-CISH). Farmers' quarries regarding post harvest handling of fruits, intercropping, fertilizers and micronutrient application, spray of insecticides and pesticides; market rate and how to improve the market channel by increasing their market intelligence were replied.

Scientist-farmers interactions meet

Awadh Aam Utpadak Evam Bagwani Samiti (AAUBS), a community based organization of farmers, who tried to double the income of farmers in Lucknow organized Scientist-farmers dialogue at ICAR-CISH, Lucknow on March 5, 2019. More than 200 farmers participated in this programme. On this occasion, Dr. R.P. Singh, Director, Horticulture and Food Processing and Shri Ramakant Pandey, Director, Uttar Pradesh State Agricultural Produce Markets Board were also present as the Chief guest and special Guest, respectively. Some Progressive local farmers engaged in farmer-first project also shared their experience and suggestion with the visitors.





Stakeholder meeting on beekeeping

ICAR-CISH, RRS, Malda, organized a stakeholder meeting on June 25, 2019. The principal purpose of stakeholder meeting was to discuss various issues of beekeeping industry of Malda district. A detail discussion on quality honey production, promotion of stingless bees, migration of bee colonies and the problems faced by beekeepers for selling of honey were held and a few resolution have been taken-up for boosting the beekeeping industry in Malda.



Buyer-Seller meet organized

ICAR-CISH organized buyer-seller meeting at Rehmankhera on June 27, 2019. The prime objective of this meeting was to promote the export of mangoes and mango products in the international markets from Uttar Pradesh. The buyers came under the International Export Promotion Programme organized by the Agriculture and Processed Food Products Export Development Authority (APEDA) in collaboration with Federation of Indian Chambers of Commerce and Industry (FICCI). The buyers from 16 countries- United States of America, Italy, China, Russia, Malaysia, Indonesia, Singapore, Hong Kong, Bangladesh, United Arab Emirates, Oman, Saudi Arabia, Bahrain, Iran and Vietnam along with Indian buyers participated in



meeting. Shri V.K. Vats, GM, APEDA and Dr. C.B. Singh, AGM, APEDA were also present in the meeting. During the meeting, foreign buyers, showed interest in GAP (Good Agricultural Practices) certified Malihabadi mangoes. In response to the needs of the buyers Dr. Shailendra Rajan, Director, ICAR-CISH notified that Institute has developed GAP certification guidelines for the mango and sought cooperation from APEDA for GAP certification of mango orchards of Malihabad so that at least 2000 farmers could get GAP certificates to produce mangoes through good agricultural practices.

MERA GAON MERA GAURAV

Scientist-farmers interaction

Under Mera Gaon Mera Gaurav Programme a scientist-farmers interaction was organized at Kanar village of Malihabad, Lucknow on January 1, 2019 for more than 25 farmers. Awareness was created among local peoples regarding cultivating high value vegetables like tomato, beans, cauliflower, carrot and garden pea by scientific method and flower crop like marigold for advance selling in the market. Moreover, the seedlings of tomato (var. NS 285) and brinjal (var. PusaUttam) were distributed to the participants.





Demonstration on mango mealy bug management

Under Mera Gaon Mera Gaurav Scheme, a team of scientists visited the Belgarha village of Malihabad block on January 10, 2019. The team demonstrated both chemical and eco-friendly methods for management of mealy bug (*Drosicha mangiferae*) that affect both production and quality of mango. Moreover, they also sensitized the local formers to eradicate the Bhatar shrub plant a natural habitat of mealy bug. The team demonstrated basin cleaning, polythene banding, chlorpyriphos dusting and also gave information to manage other insect pests that hampered the production and quality of fruits.



Trainings organized

S.N.	Title	Place	Date	Beneficiary
1.	Horticultural crop production under subtropics	ICAR-CISH, Lucknow	December 26, 2018 to January 3, 2019	15 B.Sc. (Ag.) students of BHU, Varanasi
2.	'Agri-entrepreneurship', Agri-Clinics and Agri-Business Centres scheme "funded by National Institute of Agricultural Extension Management (MANAGE), Hyderabad	ICAR-CISH, Lucknow	January 8 to March 6, 2019	32 trainees
3.	'Per Drop More Crop" (Microirrigation) under PMKSY	ICAR-CISH, Lucknow	January 9 & 10, 2019	50 Horticulture officers
4.	Scientific Bee-keeping for alternative livelihood and higher yield of crop plants through efficient pollination	ICAR-CISH RRS, Malda	February 1-8, 2019	18 farmers
5.	High density planting of subtropical fruits	ICAR-CISH, Lucknow	February 6-8, 2019	21 farmers
6.	Jute based handicrafts for empowering scheduled cast women	ICAR-CISH RRS, Malda and ICAR-NINFET, Kolkata	February 22 to March 6, 2019	55 SC women farmers
7.	Mushroom cultivation through ready to fruit bags	ICAR-CISH, Lucknow	March 13, 2019	26 SC farmers
8.	Integrated management of mango and guava orchards	ICAR-CISH, Lucknow	March 12-18, 2019	21 farmers of Mandi, Himachal Pradesh
9.	Ready to fruit bags mushroom cultivation	ICAR-CISH, Lucknow	March 20, 2019	36 trainees including retired government employee, women and young people
10.	Improved cultivation of subtropical fruits	ICAR-CISH, Lucknow	April 23-27, 2019	12 B.Sc.(Ag) Students from Rama University, Mandhana, Kanpur
11.	200 hours gardener training programme under PMKSY, Agriculture Skill Council of India	ICAR-CISH, Lucknow	April 5 to May 4, 2019	30 trainees from different districts of Uttar Pradesh
12.	Ready to fruit bags milky mushroom cultivation	ICAR-CISH, Lucknow	May 12, 2019	More than 45 trainees including retired government employee, women and young people
13.	Production, protection and post harvest technologies of guava	ICAR-CISH, Lucknow	May 27-29, 2019	26 trainees from Tikamgarh and Shivpuri districts of MP and Rajasthan
14.	Scientific fish culture in tribal villages	ICAR-CISH, RRS, Malda	June 19, 2019	24 tribal farmers
15.	Drip irrigation, plastic mulching and importance of protected cultivation	Krishi Vigyan Kendra, Kotwa, Azamgarh	June 20-21, 2019	65 farmers

Training-cum-exposure visit at ICAR-CISH for improved cultivation of subtropical fruits

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S.N.	Organizer	Date	Benificiary	
1.	Narendra Dev University of Agriculture and	January 3, 2019	53 B.Sc. (Ag.) students	
	Technology, Kumarganj, Faizabad			
2.	State Institute for Management of Agriculture,	January 3, 2019.	47 ATM/BTM	
	Rahmankhera, Lucknow			
3.	State Agricultural Management Institute, Rahmankhera,	January 4, 2019	44 farmers	
	Lucknow			
4.	Agricultural Technology Management Agency (ATMA)	January 4, 2019	54 farmers along with 2	
	scheme		officers from Rajasthan	
5.	Banda University of Agriculture and Technology, Banda	January8, 2019	47 B.Sc.(Ag) along with 2	
			Assistant Professor	
6.	Horticulture Department, Uttar Pradesh	January 11, 2019	60 farmers from Bakshi-ka-	
			Talab, Lucknow	

7.	Government High-school, Goshalalpur, Kakori	January 19, 2019	62 students	
8.	State Institute for Management of Agriculture, Rehmankhera	January 30, 2019	38 Trainees	
9.	Agricultural Technology Management Agency (ATMA)	February 12, 2019	25 farmers along with 2	
	scheme		officer from Begusarai, Bihar	
10.	Chandra Shekhar Azad University of Agriculture and	February 16, 2019	52 students	
	Technology, Kanpur			
11.	Krishi Vigyan Kendra, Dhaura under ASCI	February 20, 2019	40 farmers	
12.	Sugarcane Farmers Institute Training Center (SFITC)	February 21, 2019	45 farmers	
13.	Farmer Welfare and Agriculture Development	February 21, 2019	20 farmers of district Bhind,	
	(FWAD) scheme	MP		
14.	Bhind and Ashoknagar district of Madhya Pradesh	February 23, 2019	40 farmers	
15.	Zila Parishad Krishi Mahavidhyalaya, Banda	March 18, 2019	25 students (B.Sc.	
			Agriculture)	
16.	Department of Horticulture, Prakasham	March 25, 2019	30 farmers from Prakasham	
			district of Andhra Pradesh	
17.	Department of Botany, Lucknow University, Lucknow	April 08, 2019 66 students of M.Sc. (Botany)		
		_	along with faculty members	
18.	Under Diploma in Agricultural Extension Services for	May 20, 2019	32 Input dealers of	
	Input Dealers (DEASI) scheme State Institute for		Agriculture from Basti	
	Management of Agriculture, Rehmankhera		district	
	7. 8. 9. 10. 11. 12. 13. 14. 15. 16.	 State Institute for Management of Agriculture, Rehmankhera Agricultural Technology Management Agency (ATMA) scheme Chandra Shekhar Azad University of Agriculture and Technology, Kanpur Krishi Vigyan Kendra, Dhaura under ASCI Sugarcane Farmers Institute Training Center (SFITC) Farmer Welfare and Agriculture Development (FWAD) scheme Bhind and Ashoknagar district of Madhya Pradesh Zila Parishad Krishi Mahavidhyalaya, Banda Department of Horticulture, Prakasham Department of Botany, Lucknow University, Lucknow Under Diploma in Agricultural Extension Services for Input Dealers (DEASI) scheme State Institute for 	8. State Institute for Management of Agriculture, Rehmankhera January 30, 2019 9. Agricultural Technology Management Agency (ATMA) February 12, 2019 scheme 10. Chandra Shekhar Azad University of Agriculture and Technology, Kanpur 11. Krishi Vigyan Kendra, Dhaura under ASCI February 20, 2019 12. Sugarcane Farmers Institute Training Center (SFITC) February 21, 2019 13. Farmer Welfare and Agriculture Development (FWAD) scheme 14. Bhind and Ashoknagar district of Madhya Pradesh February 23, 2019 15. Zila Parishad Krishi Mahavidhyalaya, Banda March 18, 2019 16. Department of Horticulture, Prakasham March 25, 2019 17. Department of Botany, Lucknow University, Lucknow April 08, 2019 18. Under Diploma in Agricultural Extension Services for Input Dealers (DEASI) scheme State Institute for	

Institute Participation in Exhibitions/KisanMelas

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S.N	Event/Occasion	Place	Organizer	Date	
1.	National Horticultural Fair -2019	ICAR-IIHR, Hessarghatta, Bengaluru, Karnataka	ICAR-IIHR, Hessarghatta, Bengaluru, Karnataka	January 23-25, 2019	
2.	Kisan Mela	CSIR-CIMAP, Lucknow	CSIR-CIMAP, Picnic Spot Road, Kukrail, Lucknow	January 31, 2019	
3.	Krishi Kumbh	Gandhi Maidan, Motihari, Bihar	ICAR-RCER, Patna in collaboration with NHB & Ministry of Agriculture & Farmers Welfare, New Delhi	February 9-11, 2019	
4.	State Fruit, Flower & Vegetable Show	Rajbhawan, Lucknow	Directorate of Horticulture & Food Processing, Lucknow	February 16-17, 2019	
5.	9th Science Expo	RSC, Aliganj, Lucknow	RSC, Aliganj, Lucknow	February 18-20, 2019	
6.	Agro & Food Technology Industrial Exhibition	IIA Bhawan, Vibhuti- Khand, Gomti Nagar, Lucknow	Indian Industrial Association & supported by Deptt. of Horticulture, Govt. of U.P.	February 22-24, 2019	
7.	Pusa Krishi Vigyan Mela	ICAR-IARI, New Delhi	ICAR-IARI, New Delhi	March 05-07, 2019	
8.	U.P. Mango Festival 2019	Indira Gandhi Prathisthan, Gomti Nagar, Lucknow	Uttar Pradesh Tourism, Lucknow	June 22-23, 2019	

Visit of Japanese delegates to ICAR-CISH

For promoting the entrepreneurship in horticulture, a four member Japanese delegates visited the ICAR-CISH, Lucknow on 29 January, 2019 and discussed about advanced technology available in their country in order to find a market place in India for start-ups. The delegation explicated some advance agricultural technologies being currently used in Japan for enhancing the yield and quality of vegetables and fruits and also gave detail about eco-friendly, low-cost, soilless 'Imec' cultivation technology for production of nutritive rich vegetables. Moreover, they also briefed about sensor based automated precise nutrient application system in plants and cold chain management for preventing the early ripening of fruits and rancid in vegetables. The delegates wish to sign a pact for demonstrating and

spreading their technologies *via* ICAR-CISH wherein institute play as master training centre where entrepreneur can learn the technology at pilot scale and use it for large-scale production after attending the training.





APP DEVELOPMENT

App for guava processed product

ICAR-CISH, Lucknow has developed a mobile app on guava processed products. The app is freely available on google play store. This app provides information for making processed guava products *viz.* pulp, jelly, squash, juice, powder, cheese, toffee, bar, supari, ketchup etc. The app has been developed by Shri H.C. Verma (Scientist, SG) and Dr. Neelima Garg (Head, Division of Post Harvest Management). This app will help to popularize Indian-style processed guava products as well as help in reducing post harvest losses of guava.

Link for app: https://play.google.com/store/apps/details?id=appinventor.ai_harish70_patel.GuavaProces sedProducts_Hindi

Memorandum of understanding

Institute has signed 16 MoUs with Rama University, Kanpur; Bundelkhand University, Jhansi; National Institute of Agricultural Extension Management (MANAGE), Hyderabad for providing support in training programmes; MATEE Foundation, Parasurampur, Nathnagar, Sant Kabir Nagar, U.P. for technology transfer for control of *Fusarium* wilt in banana; Avadh Aam Utpadak Evam Bagwani Samiti, NabiPanah, Malihabad, Lucknow; three private firms and farmer-cum-entrepreneur (7) for technology adoption or experimentation in their orchards.

AWARDS

- 1. Institute's Rajbhasha Patrika 'Udyan Rashmi' has been selected for the prestigious Ganesh Shanker Vidyarthi Hindi Patrika Puraskar Plan 2017-18 by ICAR, New Delhi.
- 2. Dr. P.K. Shukla awarded Life Time Achievement Award by organizing committee of National Symposium on Sustainable Management of Pests and Diseases in Augmenting Food and Nutritional Security at Navsari Agricultural University, Navsari (Gujarat) on January 22, 2019 for hismeritorious contribution to the science of plant pathology.

- 3. Dr. S. Rajan was honoured with Lifetime Achievement award; and Dr. R.A. Ram, Dr. S.R. Singh, Dr. Maneesh Mishra, Dr. P.K. Shukla, Er. Anil Verma, Dr. Gundappa and Dr. P.S. Gurjar were honoured with best scientist award by Awadh Aam Utpadak Evam Bagwani Samiti (AAUBS), a community based organization of farmers on March 05, 2019.
- 4. Ms. Swati Verma bagged DST-AWSAR award on February 28, 2019 for her article, "Tailoring papaya for viral resistance".



PERSONALIA

JOINING

Scientist

 Dr. Raj Kumar, Scientist (Fruit Science) joined the Institute on March 01, 2019 after being transfersed from ICAR-CSSRI, Karnal.

Technical

• Km. Neetu Soni, joined the Institute on selection as Technical Assistant (T-1 Farm) on February 04, 2019.

Administrative

• Sh. Nitesh Kumar, Stenographer grade-III, joined ICAR-CISH on 16 April, 2019

RETIREMENT

Scientist

• Dr. V. K. Singh, Pr. Scientist retired from the Council's service after attaining the age of superannuation on March 31, 2019.

Technical

- Er. Ramendra Tiwari, Senior Technical Officer (T-6) retired from Council's service after attaining the age of superannuation on January 31, 2019.
- Smt. Rekha Chaurasia, Assistant Chief Technical Officer (T-7-8) retired from Council's service after attaining the age of superannuation on February 28, 2019.

 Shri Bahadur Singh, ACTO retired from Council's service after attaining the age of superannuation on 30 June, 2019.

Administrative

• Shri Vidyasagar, Assistant took voluntary retirement from the Institute w.e.f. February 18, 2019.

Skilled Support Staff

- Shri Raja Ram, S.S.S. retired on 31.01.2019.
- Shri Ashok Kumar, S.S.S. retired on 31.05.2019.
- Shri Govind Prasad, S.S.S. retired on 30.06.2019.
- Shri Raj Bahadur, S.S.S. retired on 30.06.2019.
- Shri Kalloo, S.S.S. retired on 30.06.2019.
- Shri Chandrika, S.S.S. retired on 30.06.2019.
- Shri Molhey Prasad, S.S.S. retired on 30.06.2019.

II. PROMOTION

Scientist

- Dr. Bharati Killadi granted next higher grade to the post of Senior Scientist (Hort.) w.e.f. July 12, 2014.
- Dr. Tarun Adak granted next higher grade to the post of Senior Scientist (Soil Science) w.e.f. February 26, 2017.

• Dr.Umesh Hudedamani, granted next higher grade to the next grade of Scientist (Plant Breeding) w.e.f December 12, 2015.

Technical

- 1. Shri D.K. Shukla, ACTO granted merit promotion to the next higher grade of CTO (T-9) w.e.f. 01.01.2018.
- 2. Shri Arvind Kumar, STO granted merit promotion to the next higher grade of ACTO (T-7/8) w.e.f. 26.12.2017.
- 3. Shri Brajendra Kumar, STO granted merit promotion to the next higher grade of ACTO (T-7/8) w.e.f. 01.01.2018.
- 4. Shri Santosh Kumar, CTO granted one advance increment w.e.f. 03.02.2017.

Administrative

- 1. Shri Vidya Sagar, Sr. Clerk promoted to the post of Assistant w.e.f. 21.01.2019.
- 2. Shri Vijendra Singh, Sr. Clerk promoted to the post of Assistant w.e.f. 21.01.2019.
- 3. Smt. Annapurna Gupta, Jr. Clerk promoted to the post of Sr. Clerk w.e.f.22.01.2019.
- 4. Shri Mahendra Kumar, Jr. Clerk promoted to the post of Sr. Clerk w.e.f. 22.01.2019.



Published by S. Rajan, Director



Compilation & Editing

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