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From the Vice Chancellor's Desk

Dear Readers,

It is a matter of immense pleasure for me to be a part of Dr. Y.S. Parmar University of Horticulture and Forestry family as its Vice-Chancellor.

I take this opportunity of welcoming students in different undergraduate as well as postgraduate programs offered by our university and extend my best wishes to the extremely talented graduates who have passed out from this institution and are offering their expertise in various public institutions and corporate sector in the country and abroad.

In terms of credentials, the university has a long history of achievements and in the first half of this year, a new page was added to this rich heritage. The Foundation stone of the beautiful building complex of the College of Horticulture and Forestry, Thunag was laid.

The university had the privilege of hosting the prestigious XII Biennial Krishi Vigyan Kendra (KVK) Conference which was attended by over 1200 senior agricultural scientists, policymakers, industry professionals and progressive farmers from across the country. The main theme of this conference was natural farming that allowed us to showcase the several benefits of this environment-friendly farming technique to the country and pave the way for its popularization and

implementation in country through the 731 KVKs of India.

We also had the honour to host several dignitaries like; Shri Rajendra Vishwanath Arlekarji, Governor of Himachal Pradesh; Acharya Devvratji, Governor of Gujarat; Shri Narendra Tomarji, Union Minister of Agriculture and Farmers' Welfare, Shri Kailash Chaudhary ji, Union Minister of State Agriculture and Shri Krishan Pal Gurjarji, Union Minister of State for Power and Heavy Industries at the university campus and show the facilities and the work being done by us in our ultimate goal of increasing the livelihood avenues of the farmers.

As we move ahead, the university is in the process of developing meaningful collaborations which will enable our students and faculty to engage with other renowned institutions. These partnerships will help to showcase our strengths and learn from other organizations. Developing flexible short-term certificate courses with our partner institutions will be a major focus in the coming months about which you will get to read in future editions of this publication.

I congratulate all the staff who have been involved in the publication of this newsletter.

Prof. Rajeshwar Singh Chandel

TRAININGS/SEMINARS/WORKSHOPS/ CONFERENCES ORGANIZED

Department of Forest Products organized Brain Storming Session on Value Addition of Forest Crops for new Research Agendas on 2nd January, 2022 by virtual mode. Around 60 persons including scientists from the university, experts from forest department, Government of Himachal Pradesh and progressive farmers participated in the brainstorming session. Dr. Ravinder Sharma, Director of Research, UHF Nauni was the Chief Guest. The Chief Guest emphasized that the research agendas should be based on issues related to immediate need of the farmers. Dr. Meenu Sood, Professor and Head, Department of Forest Products was the Chairperson of the brain storming session. She highlighted the importance of value addition of forest crops and welcomed all the participants for their valuable inputs. The experts from line department highlighted the importance of cultivation, processing and value addition of medicinal plants along with standardization of package of practices of important crops and readily availability of quality planting material and better linkages with the university. Progressive farmers also shared their experiences on benefits from cultivating medicinal and aromatic plants.

Department of Soil Science and Water Management organized skill development training on “Micro Irrigation” w.e.f. 14 January to 12 February, 2022. A total of 30 participants attended the training in which trainees were made aware of micro irrigation technology and latest advances in horticultural crops production.

Department of Plant Pathology organized seven days skill development training programmes on “Commercial Cultivation of Mushrooms” w.e.f. 29 January to 4 February, 2022, 22-28 February, 2022 and 23-29 March,

2022 in which 60 farmers from 10 districts of Himachal Pradesh participated.

RHRTS, Jachh organized 5 days training on cultivation and nursery production techniques of guava, sweet orange and pomegranate during 3-7 January, 2022 sponsored by Deputy Director of Horticulture, Hamirpur; 5 days training on training and pruning of subtropical fruits in high density during 7-11 and 14-18 March, 2022 sponsored by Deputy Director of Horticulture, Kangra; 7 days training on skill development in commercial beekeeping during 21-27 March, 2022 sponsored by Himachal Pradesh Kaushal Vikas Nigam; RAWE training for 2 groups of B.Sc. (Hort) students w.e.f. 12 April - 6 May 2022; One month training for 28 students of B Sc (Agr.) from Sukhjindra Group of Colleges, Dunera (PB) at LMRS Nagrota Bagwan w.e.f. 7 March - 6 April, 2022; 21 days training for 5 students of B Sc (Agr.) from DAV University, Jalandhar from 7-27 February, 2022.

Regional Horticultural Research and Training station, Dhaulakuan organized seven days training programme on 'Commercial floriculture and value addition' under skill development programme in which 20 farmers of Sirmaur participated. The farmers were apprised about nursery production and maintenance of annual and perennial plants in open, sunken bed and polytunnels; commercial cut and loose flower production of gerbera, rose, marigold, dahlia, tuberose, gladiolus and chrysanthemum, plant protection, ornamental landscaping techniques like hedging and topiary making and lawn making.

RHR&TS, Mashobra organized seven days basic skill development training on “Canopy management of temperate fruit crops” and “Pushap utpadan” in collaboration with Himachal Pradesh Kaushal Vikas Nigam (HPKVN) and Dr YSP UHF, Nauni, Solan during 22-28 February, 2022 and 8-14 March,

2022, respectively.

The Department of Environmental Science organized one day farmers awareness programme on “Weather Forecast and Agriculture” funded by IMD, Ministry of Earth Science on 24th February, 2022. A total of 30 farmers from different districts of Himachal Pradesh viz., Shimla, Sirmour, Kullu and five blocks of Solan (Dharampur, Kandaghat, Kunihar, Nalagarh and Solan) participated in the programme. The department also organized training on 'Eco-literacy for the wellbeing of the earth from 7-11 March, 2022 in which 20 students from various colleges of Himachal Pradesh participated.

RHRS, Dhaulakuan organized two skill development trainings on commercial floriculture and value addition w.e.f 21-27 February, 2022 and 10-16 March, 2022 for 40 farmers, which was sponsored by Himachal Pradesh Kaushal Vikas Nigam, Shimla. A training on skill development in propagation and nursery management of sub tropical fruits was also organized w.e.f 21-27 March, 2022 in which 20 farmers participated. A Vocational trainings for school students (about 600 of 10th and 10+2) of Sirmour (Govt. Sr Sec Schools Nageeta, Sataun, Kafota, Millah, Shivpur, Kualawalan Bhood) under HP Govt schools NSQF project during 17 Feb to 30 March, 2022 was also organized.



Department of Fruit Science organized Training Programme on plant propagation and nursery management of fruit crops for B.Sc. Horticulture final year students of Dolphin (PG) Institute of Biomedical and Natural Science, Dehradun during 15 - 29 March, 2022.

Department of Seed Science and Technology organized one day farmers training camp on “Production of spice crops in Himachal Pradesh” under centrally sponsored scheme-MIDH at *Gram Panchyat* Lutkri, Tehsil Kupvi, District Shimla on 22 March, 2022 in which 87 farmers participated.



Department of Floriculture and Landscape Architecture organized One day training programme under HIMCOSTE funded project entitled “Dissemination of technology for year round production of elite planting material of laddu gainda for mid hills of Himachal Pradesh” for the farmers of Solan and Sirmour districts of Himachal Pradesh on 29 and 30 March, 2022.

Department of Plant Pathology organized a National Symposium on “Novel strategies in plant stress diagnosis and management” w.e.f. 6-7 May 2022 in which around 200 scientists and researchers from 15 Universities and ICAR Institutes participated.

RHR&TS, Mashobra organized Three days

Department of Business Management conducted seven trainings during May-July, 2022 on Entrepreneurship Development Programme for SC and ST farmers (30 in each training) of Solan, Kangra, Chamba, Kullu, Sirmaur and Una districts. The farmers were told about various schemes, policies and plans of the centre and state governments especially for the SC and tribal communities, Subhash Palekar Natural Farming. Field visits were also conducted and interactions were held with successful agriculture entrepreneurs in Solan District.

Department of Forest Products organized seven days training on “Production and processing of medicinal and aromatic plants” during 4-10 June, 2022 sponsored by Himachal Pradesh Kaushal Vikas Nigam, Shimla which was attended by 20 farmers from Shimla district. The training Programme was coordinated by Dr Meenu Sood, Prof. & Head, department of Forest Products. During the training lectures on Role of Dr. YS Parmar University in the development of medicinal and aromatic plants, propagation and cultivation techniques of commercially important medicinal plants, conservation of medicinal plants of western Himalayas, processing and value addition of medicinal plants, marketing of MAP's were delivered by the scientists of the department along with practical exercises in the laboratory and field. The exposure visits to Herbal Pharmaceutical Industry Nahan & Paonta Sahib, Centre for aromatic plants, Uttarakhand and Resin and Turpentine Industry Nahan were also conducted.

Department of Fruit Science organized three days farmer's training programme for 22 farmers on “Summer pruning and other summer cultural operations for fruit quality improvement in high density plantation of apple” during 7-9 June, 2022 under World Bank Funded Himachal Pradesh-Horticulture

Development Project (HP-HDP). A seven days skill development training programme on “Propagation and nursery management of temperate fruit crops” was also organized during 13-19 June, 2022 in which 16 farmers were trained.

Department of Environment Science organized One day workshop on 'Evaluation of Sirsa river rejuvenation plan under eco-restoration project of Balad river (tributary) and Sirsa river' on 10 and 25 June, 2022 in which 20 experts from the State Forest Department, ICAR-Indian Institute of Soil & Water Conservation, Chandigarh and various departments of university participated.

30th Annual Review Workshop of All India Network Project on Pesticide Residues was organized at Dr Y S Parmar University of Horticulture and Forestry, Nauni, Solan, HP during 20-21 June, 2022 in hybrid mode (online and offline) which was attended by about 100 delegates from ICAR, different state agricultural universities and from different insecticide companies. The workshop was inaugurated by the Hon'ble Vice Chancellor Prof. Rajeshwar Singh Chandel.

Department of Soil Science and Water Management organized one day Awareness Programme on balanced use of fertilizers as National Campaign under *Azadi ka Amrit Mahotsav* on 21 June, 2022. A total of 40 participants attended the programme and learned about balanced use of fertilizers, their management, maintenance of soil productivity and conservation of resources.

The Directorate of Extension Education organized four training camps for farmers in collaboration with Satluj Jal Vidyut Nigam (SJVN) at Jhakri and Bayal in Kullu district, at Bithal in Nirmand Block and Sunni in Shimla district. Over 1000 farmers took part in these trainings. The University scientists addressed

the region-specific problems of the farmers pertaining to production and protection of fruits and vegetables during these camps and the queries of the farmers were also addressed.

KVK Tabo organized 16 one day farmers training programmes through hybrid mode (Online and offline) on different thematic areas viz. training and pruning, layout and management of orchards, cultivation of fruits, soil fertility management, soil and water conservation, integrated pest management, processing and value addition and design and development of low/minimum cost diet in different villages of Spiti Valley in which 80 farmers/ farm women participated.

Three numbers of skill development programme (> 16 hours) on “Food processing and value addition”, “Household food products by kitchen gardening and nutrition” and “Processing and value addition in barley” were conducted in which 80 farmers/farm women participated.

WEBINAR ORGANIZED

The university organized a webinar on “Development of horticulture and forestry in Himachal in the past 50 years- Role of Dr. Yashwant Singh Parmar University of Horticulture and Forestry, Nauni” under NAHEP Institutional Development Plan (IDP) as part of the Himachal Statehood celebrations. Over 345 final year students of B.Sc. (Hons) Horticulture, Forestry and Biotechnology from three colleges of the university attended the webinar. The Guest speaker, Director of Research, Dr. Ravinder Sharma, gave a detailed presentation on the history of the university and its role in the development of horticulture and forestry in the state. He also urged the students to assume the role of university brand ambassadors and help in the dissemination of the latest technologies to the farming community. He also stressed on the

need to adopt modern tools like robotics and AI etc. in agriculture to achieve success.

NEW DEVELOPMENTS / ACHIEVEMENTS/RECOGNITIONS

Dept of Entomology: On the basis of morphological and molecular characterization of insect pollinators in high density apple plantation at different locations of Nauni, Solan, Himachal Pradesh identified different species as *Apis cerana*, *A. mellifera*, *Eristalis tenax*, *Episyrphus balteatus* and *Sphareophoria Indiana*.

Bumble bee (*Bombus tunicatus*) queens collected from the apple orchards at Nankheri, Rampur (Shimla) were attempted and successfully reared under laboratory conditions. The average development period from egg (wax secretion) to adult (emergence of worker) in *B. tunicatus* was 31-33 days.

The oral and contact toxicity of fipronil to *A. mellifera* adults was 0.052 and 0.005 µg/bee, respectively to kill 50 % of honeybee population after 24 hours exposure period under laboratory conditions.

Melissopalynological studies of pollen grains in 36 honey samples from different regions of Himachal Pradesh indicated that 11 samples found as unifloral while rest were multifloral honeys. The occurrence of different type of pollens, belonging to approx. 19 families. The high diversity and variability of pollen grains indicated that honey samples were of different botanical and geographical origins. The microbial load, pH, EC, Moisture content, TSS, Sugars, Acidity, vitamin C, phenols, Amino Acids, Enzymes, Antioxidants values varied in different samples, but within the standard limits of FSSAI 2020-21. Except one honey sample all others tested negative for Fiehe's test.

RHR&TS Bajaura introduced 21 new varieties of apple; 12 new varieties of pear; 2 new varieties of plum and a new variety of apricot. A new block of high density plantation of different temperate fruits was developed at BKHRS, Katrain.

RHR&TS, Mashobra tried manipulation of branching by using the growth regulator GA_{4+7} + BA, BA and nursery techniques in nursery plants of apple. The spray solution of different growth regulators were applied when plant height was 50-60 cm from ground level and second application was given two weeks after first application. Pinching of apical portion and leaf removal of top 3-4 leaves was done when the plant height was 50-60 cm from ground level and it was done only once. Two applications of GA_{4+7} +BA @1000 ppm and pinching significantly affected the days taken for initiation of feathers, number of feathers, length of feathers and number of leaves. Treatment consisting BA @ 600 ppm and pinching also produced satisfactory results as obtained from GA_{4+7} +BA @1000 ppm and pinching.

RHR&TS, Mashobra also conducted a field trial with Horticultural Mineral Oils i.e. Mak all season, Servo orchard spray oil, Arbofine, Petro star, Bal spray, Orchol-13, HP-HMO and Neem oil against overwintering eggs of *P. ulmi*. The studies indicated that Servo spray oil emerged as the most effective HMO followed by Mak all season.

NEW INITIATIVES

Sample Processing Laboratory was renovated and a new modular laboratory is now in the section for processing of samples. The Pesticide Residue Laboratory is equipped with one new micro weighing balance in the department of Entomology. An old Gas chromatograph which was having electron capture detector has been upgraded to

GCMSMS triple Quadrupole.

An advisory service for the management of apple diseases has been started by the department of Plant Pathology which is disseminated through university website and Whatsapp Group of farmers and Officers of State Department of Horticulture.

Department of Seed Science has introduced two new varieties i.e. Ajmer Coriander-1 and Ajmer Fenugreek-1 in seed production chain.

Department of Tree Improvement has initiated work on domestication and cultivation of wild fruits.

RHRTS Jachh took initiative to identify the available strains of *Dioscorea spp.* from the natural habitat. It is used as a vegetable in the lower hill region of Himachal Pradesh and its roots are used as a delicacy in hill cuisine in winter, but the proper identification of all the strains available and their botanical description is not clear. Three strains namely Taradi-1, Taradi-2 and Tardi-3 were identified from the Nurpur subdivision.

Student Welfare Organization installed cameras in the hostels to trace out the untoward incidents in the hostels during off/odd hours. Purchased four high capacity washing machines, installed solar street lights in the hostels premises/surroundings areas, made pavers blocks between Vasundhara and Nandini Hostels.

VISITORS TO THE UNIVERSITY CAMPUS/STATIONS/KVKS

- ❖ Dr Dayed Tariq, Project Coordinator, Research Forest Division, State Forest Research Institute, Jammu & Kashmir visited department of Tree Improvement and Genetic Resources. w.e.f. 15 to 19 January, 2022.
- ❖ Dr Palaniswami Ramasundaram, National

Coordinator, NAHEP New Delhi visited Post project sustainability model of apple cultivation in Ultra High Density apple orchard, department of Fruit Science on 9th March, 2022.

- ❖ Dr. R.C. Agrawal, DDG (Education), ICAR, New Delhi visited Agri Incubation centre on Processing of Medicinal & Aromatic plants of department of Forest Products and Post project sustainability model of Apple cultivation (IDP) in ultra high-density apple orchard, department of Fruit Science on 15th March, 2022.
- ❖ Prof. Adinpunya Mitra, Co-Coordinator of DST project on M & AP, I.I.T Kharagpur (West Bengal) visited department of Forest Products on 28th March, 2022.
- ❖ Dr Yogender Sharma (Dy. Director. HPFA) along with 50 Forest Range Officers from Sundernagar (HP) visited department of Forest Products on 11th April, 2022.
- ❖ Director of National Bee Board (NBB) Dr. Naveen Kumar Patle visited department of Entomology on 16th April, 2022.
- ❖ Sh Abhishek Verma, IAS (ADC Kaza), Sh. Rajinder Bodh (Member TAC) visited KVK Tabo farm and polyhouses during the Kisan Mela held on 26th April, 2022.
- ❖ Dr Gaurav Sharma, MP from Hamilton West, New Zealand along with Louis O'Brien Second Secretary New Zealand High Commission, New Delhi visited high density plantation of apple experiments of World Bank Funded Project at Regional Horticultural Research & Training Station, Mashobra, Shimla on 29th April, 2022.
- ❖ Hon'ble Governor of Himachal Pradesh, Sh. Rajendra Vishwanath Arlekar along with lady Governor Smt Anagha Arlekar visited RHR&TS, Mashobra on 4th May, 2022.
- ❖ Mr H.K. Singh, Retired IFS, Dehradun and Mrs Neeru Kothari, Stanstead Manor, London visited Floral Craft Lab on 11th May, 2022.

- ❖ An Indo-Israel team (Mr. Yair Eshel Agriculture Attache MASHAV, Embassy of Israel) two Israel experts (Prof. Rafael Avraham Stern and Prof. Yeshayahu Stern) along with Team of IBDC, Ram Nagar, Haryana visited university on 3rd February, 2022 and 23 - 24 May, 2022 to support the bumble bee rearing programme from Israel.



- ❖ Justice R.M. Lodha, retired Judge of Supreme Court of India visited RHR&TS, Mashobra, Shimla on 27th May, 2022.
- ❖ Sh Abhishek Verma, IAS (ADC Kaza) and Sh. Rajinder Bodh (Member TAC) visited KVK Tabo farm during the Hon'ble Prime Minister Live Telecast on 31st May, 2022
- ❖ Dr R. Chandra Babu, Vice Chancellor, Kerala Agricultural University, Thrissur and Dr S. Katagor, Director of Extension Education, UAS, Dharwad visited HDP apple orchard of the Department of Fruit Science on 1st June, 2022.
- ❖ Sh Kailash Chaudhry, Hon'ble Union Minister of Agriculture, GoI, Dr Trilochan Mahapatra, Secretary DARE and Director General, ICAR, New Delhi visited Post project sustainability model of ultra high density apple orchard, department of Fruit Science, on 2nd June, 2022.
- ❖ Mr C.L Joshi (Joint Director-HPFA) along with 50 Forest Range Officers from Sundernagar (HP) visited department of Forest Products on 13th June, 2022.
- ❖ Dr Rashmi Kant, Sr. Consultant, World Bank Project from Plant and Food

Research, New Zealand visited HDP apple orchard of the Department on 8th June, 2022.

- ❖ Shri Krishan Pal Gurjar (Union Minister of State of Power and Heavy Industries, GoI), Dr Inderjeet Singh (VC, GADRASU, Ludhiana), Dr. J V Prasad (Director, ATARI, Hyderabad), Dr. V P Chahal (ADG, Agriculture Extension, ICAR), Dr. Rajbir Singh (Director, ATARI, Zone-I) and Dr. R C Aggarwal (DDG Education), ICAR, NAHEP. Dr. B R Premi (GM NABARD, Shimla), Heads of KVKs visited KVK, Kandaghat on 10th June, 2022.
- ❖ Shri Krishan Singh Gujjar (Minister of State for Power and Industries) visited the Agri-Incubation centre on processing of medicinal & aromatic plants of department of Forest Products, HDP apple orchard and kiwifruit orchard of the department of Fruit Science and floral craft laboratory of department of Floriculture Landscaping and Architecture on 11th June, 2022.

EXHIBITIONS

Directorate of Extension Education installed Exhibition during “Biennial National KVK Conference-2022” from 1-2 June, 2022 and during State Level Shoolini Fair w.e.f. 24-26 June, 2022. The exhibits of various departments (fruits, vegetables, flowers, medicinal and aromatic plants, food science, plant protection, soil, forestry etc.) were displayed to showcase the activities of the university



RHRTS, Dhaulakuan installed Exhibition in Kisan Utsav at DDA, Sirmour on capacity building programme for farmers and stakeholders to strengthen export oriented agriculture supply chain on 23rd May, 2022.



Department of Floriculture Landscaping and Architecture installed exhibition of dry flowers in the SAGES Flower Show at Shimla on 4th June, 2022.

HRTS & KVK, Solan organized three exhibitions during Kisan mela, SAC meeting. In these exhibitions, natural products from farmers growing SPNF from Solan district were displayed along with farm produce of this station.

KVK, Tabo organized four exhibitions at Kaza during Janmanch on 3rd April, 2022; 26th April, 2022, 12th May, 2022 and 31st May, 2022.

MOU SIGNED

1.	Dayalbagh Educational Institute, Dayalbagh, Agra, UP (hereinafter referred to as DEI).	16.3.2022
2.	Madhav Shristi Bahuaayam Shikshan Sansthan, Gan K-ki-Ser (Ashwanikhad), Salogra (Solan)	21.3.2022
3.	Agreement for establishment of Incubation Centre for processing of mushroom fruits, vegetables, spices and herbs between the Government of Himachal Pradesh through Director of Industry, Govt of Himachal Pradesh Udyog Bhawan, Bemloe, Shimla HP	9.5.2022
4.	Indira Gandhi Rashtriya Uran Akademi (IGRUA) for Drone Flying Training of Students	10.6.2022
5.	Chitkara University, Atal Siksha Kunj, Atal Nagar, Barotiwala, HP	6.6.2022

AWARDS/HONOURS/RECOGNITIONS

- Dr Rajnish Sharma got Best oral presentation award with cash prize in the international conference “Bio sangam 2022: Emerging Trends in Biotechnology”

held at MNIIT Pryagraj, Allahabad w.e.f. 10-12 March, 2022.

- Dr Pankaj Kumar has been appointed Assistant Editor in the Journal Vegetos- An International Journal of Plant Research and Biotechnology and Review Editor on the Editorial Board of Computational Genomics, specialty section of Frontiers in Genetics, Frontiers in Bioengineering and Biotechnology, and Frontiers in Plant Science.
- Dr Rohit Sharma awarded with SERB-SIRE Fellowship-2022 to carry out Advanced Research in University of Bordeaux, France.
- Dr Pramod Kumar, Senior Scientist conferred with Fellowship of National Academy of Biological Sciences, Chennai, Tamil Nadu.
- Regional Horticultural Research & Training Station, Mashobra received **2nd prize** in large Garden Competition in the category of Govt. institutions on 5th June, 2022 at Bachat Bhawan Shimla, organized by Shimla Amateur Garden and Environment Society (SAGES).

MEETINGS

- ❖ Dr Meenu Sood, Dr Y.P. Sharma, Dr Reena Sharma and Dr Sunil Marpa attended Quaterly Review Meeting of All India Coordinated Research Project on Medicinal, Aromatic Plants & Betelvine and presented the work of Solan Centre. It was organized by Directorate of Medicinal & Aromatic Plants & betelvine, Boriavi, Anand, Gujarat (Online) on 31st January, 2022.
- ❖ Dr Manish Kumar, Professor and Head, department of Seed Science attended the meeting on module operandi for development of seed traceability portal, Ministry of Agriculture and Farmers Welfare, Government of India on 4th February, 2022 and Review Meeting of NAHEP, IDP project on 15th March, 2022.
- ❖ Dr A.K. Joshi attended meeting of scientific advisory committee (SAC) under the chairmanship of Dr H.K. Chaudhary, Hon'ble Vice Chancellor, CSKHPKV, Palampur on 26th March, 2022
- ❖ Dr H.P. Sankhayan attended 2nd and 7th meeting of general body of society for improvement of forest ecosystems management and livelihoods in HP registered for implementation of JICA scheme of State Forest Department, H.P. on 7th and 28th April, 2022.
- ❖ Dr Rajender Sharma, Sr. Scientist department of Seed Science attended the meeting of stakeholders under RKVY Scheme for the finalization of project proposals for 2022-23 and gave presentation on the project proposal “Establishment of processing plant for improvement and upgradation of seed quality” in the Directorate of Agriculture, Shimla-5 on 19th May, 2022.
- ❖ Dr Harish Kumar Sharma, Dr Kiran Rana and Dr Meena Thakur attended virtual meeting on 25th May 2021 to discuss matters relating to production of High altitude Honey organized by National Bee Board Department of Agriculture, Cooperation & Farmers Welfare, Ministry of Agriculture & Farmers Welfare, Government of India.
- ❖ Project Monitoring and Review Committee (PMRC) meeting was held on 7th June, 2022 in the department of Floriculture and Landscape Architecture with the objective to review the progress and monitor the work done under the project “Popularization of Technology on value addition in Dry flowers and linking farmers to the market”. Dr Bharati Kashyap and Dr S.R. Dhiman had attended this meeting with NABARD authorities.
- ❖ Dr Meenu Sood and Dr Reena Sharma attended National level women Leadership Role in India organized by DDG Education, ICAR, New Delhi on 20th June, 2022.

- ❖ Dr H.P. Sankhayan attended one day webinar on “Exchange on varieties/crops developed through Genome Editing (regulatory framework, technologies, experience)” Under Indo-German Cooperation on Seed Sector Development on 24th May, 2022

PATENTS PUBLISHED

Sr. No.	Title of the invention	Inventors	Application No.	Publication Date	Patent Office Journal No. and date
1	A Herbal formulation in lollipop form for pediatric use and method of preparing the same	Devina Vaidya, S K Tyagi, Manisha Kaushal, Anil Gupta	202011028518	7.1.2022	01/2022 Page No.:452
2	Aloe-vera fortified low-calorie eggless muffin and method thereof	Rakesh Sharma and Monika Thakur	202211022926	6.5.2022	18/2022 Page No.:27818
3	Low Calorie Apple-Aloe vera Spread and the method thereof	Rakesh Sharma and Tamanna Sharma	202011055182	24.6.2022	25/2022 Page No.:39236
4	Protein Enriched Aloe vera-Mango Fruit Energy Bar and the Method Thereof	Rakesh Sharma and Anupama Anand	202111015756	24.6.2022	25/2022 Dated; Page No 38863

Scientific Advisory Committee (SAC) Meetings

- Directorate of Extension Education organized 17th Scientific Advisory Committee (SAC) meeting of Krishi Vigyan Kendra, Kandaghat on 27th April, 2022 which was Chaired by the Hon'ble Vice Chancellor
- KVK Lahaul and Spiti II organized its 3rd Scientific Advisory Committee Meeting on 12th May, 2022 which was chaired by Dr Ravinder Sharma, Director of Research, UHF, Nauni. Dr Divender Gupta, Director of Extension Education, UHF Nauni; Sh. G S Cheema, Sub Divisional Magistrate (Kaza) were

present along with other committee members. The annual report for 2021-22 and the Action Plan for 2022-23 was presented in the meeting.



KISAN MELA/KISAN GOSHTHIS/FARMERS MEET

Regional Horticultural Research and Training station, Dhaulakuan in collaboration with Centre for Skill Development in Agricultural and Allied Sciences, UHF, Nauni sponsored by Himachal Pradesh Kaushal Vikas Nigam, Shimla organized Skill development training on commercial floriculture and value addition' w.e.f 21 February, 2022 to 27 February, 2022 and 10 March, 2022 to 16 March, 2022. A Skill Development in propagation and nursery management of sub tropical fruits'w.e.f. 21-27 March, 2022 was also organized.

The Department of Plant Pathology organized a Kisan mela on 26th March 2022 at Mahog, Teh. Karsog, Distt. Mandi in which more than 300 farmers participated.

Agromet field unit, department of Environmental Science, College of Forestry organized one day farmers awareness programme entitled “Weather smart agriculture” on 27 March, 2022 at Nalagarh, Solan in which 30 farmers participated.

Krishi Vigyan Kendra, Tabo organized Kisan Mela on “Kisan Bhagidari Prathmikta Hamari” on 26th April, 2022 at KVK L&S-II at

Tabo in which Ex ADC, Kaza Sh Abhishek Verma, Minister Sh Phunchok Rai, TAC Member Sh Rajinder Bodh and representatives of Zila Parishad and panchayat participated alongwith 239 farmers/farm women. An exhibition was also organised during the programme and vegetable nursery distributed to the farmers.

DAYS ORGANIZED

National Youth Day

Students Welfare Organization celebrated National Youth Day on the occasion of “Swami Vivekanand Jayanti” in a virtual mode among the students of university on 12th January, 2022 in which 45 students participated in the slogan writing competition and 25 students in sketch making competition.

Republic Day

The 73rd Republic Day was celebrated with enthusiasm in the University campus on 26th January, 2022. The Vice-Chancellor, Dr Parvinder Kaushal unfurled the National Flag at the campus. In his address, Dr Kaushal paid rich tributes to the freedom fighters for their selfless sacrifice and struggle for the independence of the country and Dr Bhim Rao Ambedkar, the main architect of the Indian Constitution. He urged the students and staff to be dutiful and responsible citizens in order to take the nation to greater heights and appealed to imbibe and carry forward the ideals of our rich cultural heritage.

National Science Day

The National Science Day was celebrated in the university campus on 28th February, 2022 by Department of Basic Science in collaboration with HIMCOSTE and the National Council for Science and Technology Communication (NCSTC). Dr Parvinder Kaushal, Hon'ble Vice-Chancellor of the university was the Chief Guest on the occasion. The students from



Government Senior Secondary School Shamrod, Dharja, Gaura and Kotho participated in various competitions organized on this occasion. Addressing the students, Dr. Kaushal credited science for the development and improvement in the quality of human life. He urged students to bring scientific thinking into their everyday lives and also use it to find sustainable solutions to problems faced by the world. Dr K Kumar, Ex Prof., Department of Fruit Science was the Guest Speaker and Dr D.D. Sharma, Dean COHF, Thunag was Guest of Honour on this occasion.

International Women Day

International Women's Day was organized by Women Grievance Redressal cell (WGRC) of the university on 8th March, 2022 on the theme, “Gender equality today for a sustainable tomorrow”. Dr. Parvinder Kaushal, Hon'ble Vice-Chancellor of the university was the Chief Guest on the occasion while, Smt. Masooma Singha, Principal of MRA DAV School, Solan was the Guest of Honour. She gave a special talk on 'Gender equality in society' in which she spoke about the role of education in realizing the goal of gender equality. Dr. Kaushal lauded the role of women and spoke about their growing achievements in every field. He urged students to become gender champions and play an active role in providing equal opportunities to everyone so that the country can realize its full potential. The university honoured women achievers-

Smt. Masooma Singha, Lady constable Smt. Anuradha, Bimla Devi and Sarita Devi for excelling in different fields on the occasion. An e-magazine on gender equality under the Gender Champion Programme of the UGC was also launched.

World Water Day

The Department of Environmental Science in collaboration with IDP organised World Water Day-2022 on 22nd March, 2022 with the theme 'Groundwater- making invisible, visible'. Over 150 UG and PG students of both the colleges, members of the SPACE club and IDP participated in the event. The objective was to create awareness on critical issues of groundwater and actions for its management and support the achievement of Sustainable Development Goal 6: Water and Sanitation for All by 2030. On this occasion, Chief Guest, Shri Sandeep Negi, Registrar of the university said that groundwater is very critical for life and there is an urgent need to protect it from over exploitation in order to meet the need of the present as well as future population. Competitions like slogan writing, painting, skit and declamation were also organized on the occasion.



World Environment Day

The department of Environmental Science organized World Environment Day on 5th June, 2022 on the theme “Our common future”. To celebrate the day events like plantation, parthenium eradication, campus cleanliness,

short skit competition, declamation, slogan writing competition were organized which was attended by about 150 UG and PG students.

International Yoga Day

International Yoga Day-2022 was celebrated in the main campus, Nauni as well as at its constituent colleges situated at Neri, Distt. Hamirpur and Thunag, Distt. Mandi on 21st June 2022, with a thematic message of “Be with yoga and pranayam”. The employees, students and campus dwellers participated in the event. Sh. Shrinivas Murthy, Sansthapak Yog Bharti, Himachal Pradesh, Madhav Shrishti Bahuayami Shikshak Sansthan, Gan-ki-Ser taught the yoga and pranayam to the participants. The Yoga camp was also organized in the university campus w.e.f. 2- 21 June, 2022 to the students, faculty, staff, residents of the University.

Ornamental planting day celebrated on 27th June, 2022 by planting of *Justicia gendarussa* (100 No.), *Duranta repens* (20No.), *Dr. ascena rubra* (50 No.), *Syngonium variegata* (05 No.), *Torenia sp* (100 No.), *Aechmea sp.* (100 No.), *Ophiopogon intermedius* (100 No.) at RHRTS campus

KVK Tabo has organized seven Field Days in which 60 farmers/ farm women participated.

RELEASE OF KISAN HANDBOOK-2022 AND THE NEW YEAR CALENDER

The Directorate of Extension Education published the Kisan Handbook-2022 containing detailed monthly operations to be carried out by the farmers in horticultural and forestry crops. A New Year Calander-2022 was also published. The Governor of Himachal Pradesh cum Chancellor of this university Sh. Rajendra Vishwanath Arlekar released the above publication of the university on

January, 2022 in the presence of Chief Secretary, Himachal Pradesh, Secretary to Governor, Dr Parvinder Kaushal, Hon'ble Vice Chancellor. These publications were also presented to the Hon'ble Chief Minister of Himachal Pradesh, Shri Jai Ram Thakur who appreciated the efforts made by the university to showcase the green initiatives taken by the university.

INAUGURATIONS

Inauguration of Agri-incubation centre on Production and Processing of Medicinal and Aromatic Plants:

The said Agri-incubation centre was inaugurated by Dr. R.C. Agrawal, DDG (Education), ICAR and National Director of National Agricultural Higher Education Project (NAHEP) in the presence of Vice-Chancellor, Dr. Parvinder Kaushal, statutory officers, Prof. and Head, Department of Forest Products, Dr Meenu Sood and faculty of the department and the core IDP team of the university.

The centre has been established at a cost of ₹ 60 lakh with the aim to impart training on skill and entrepreneurship development to students and help develop value-added herbal products based on medicinal and aromatic plants. New startups will be able to utilize the resources and infrastructure available at this centre.



Inauguration of Language Laboratory, smart classrooms, IDP Secretariat

Dr. R.C. Agrawal, DDG (Education) ICAR,

New Delhi also inaugurated a language lab for French, German, Spanish, Hindi, English and Sanskrit languages constructed with a cost of ₹ 50 lakh. Besides four smart classrooms and two virtual classrooms costing ₹ 48 lakh and ₹ 38 lakhs, respectively were also dedicated to the students. Dr. Aggarwal also inaugurated the IDP Secretariat which houses the procurement cell, social equity cell, virtual counselling cell, planning and monitoring cell and also has seating space for the IDP team. The Secretariat has been established with a cost of around ₹ 1.0 crore by refurnishing a section of the College of Forestry. Dr. Agrawal also inspected the various initiatives taken by the university under the IDP project and the research activities being undertaken by the university under other projects. Dr. Agrawal also interacted with the student beneficiaries of the project. He also appreciated the sustainable model of high-density apple and wild pomegranate plantations established under the project at Nauni and Kandaghat. Field visits were also undertaken to show the university's research activities. He lauded the university for swift and quality implementation of various



activities under different projects.

Foundation Stone of COH&F, Thunag

Hon'ble Chief Minister, Himachal Pradesh Shri Jai Ram Thakur laid the foundation stone of College of Horticulture and Forestry Complex at Thunag, Mandi. The college complex would be constructed in 52,000 m² area with a budget

of about ₹ 240 crores and would have Administrative Block, Library Building, Playground, Gymnasium, Auditorium, Shopping Centre and Health Centre, eight Academic Blocks, four each for College of Horticulture and College of Forestry and other related infrastructure and separate Girls and boys Hostels as well as a PG Hostel. Speaking on the occasion, the Chief Minister said that it will cater to the needs of farmers of the area to get hands on knowledge on horticulture and forestry and will also help them to increase their income. A Coffee Table Book on the university activities was presented to him by Vice Chancellor, Dr Parvinder Kaushal on the occasion.

DEGREES COMPLETED

S. N.	Programme	No. of students
College of Horticulture, Nauni, Solan		
1.	B.Sc. (Horticulture)	Nil
2.	M.Sc.	06
3.	Ph.D.	07
4.	MBA	54
5.	Diploma	09
Total		76
College of Forestry, Nauni, Solan		
1.	B.Sc.(Forestry)	03
2.	M.Sc.	13
3.	Ph.D.	09
Total		25
College of Horticulture & Forestry Neri, Hamirpur		
1.	B.Sc. (Horticulture)	01
	B.Sc. (Forestry)	Nil
	B.Sc. (B.Tech Biotechnology)	01
2.	M.Sc. (Horticulture)	05
	M.Sc. (Forestry)	06
Total		13

NEW VICE CHANCELLOR

Prof. Rajeshwar Singh Chandel joined as Vice Chancellor of the university on 9th May, 2022. Before joining this university Prof. R.S. Chandel was Executive Director (Prakritik Kheti Khushal Kisan – PK3Y Yojna) in the department of Agriculture, Government of Himachal Pradesh w.e.f. 6 May, 2018 to 8 May, 2022.



NEW PROJECTS SANCTIONED

Sr. No.	Title of Project	Principal Investigator	Funding Agency	Amount (₹ in Lakhs)
Horticulture				
1.	Biotechnological interventions to develop basal rot resistant germplasm of garlic for cultivation in hilly regions	Dr Anupama Singh	DEST	5.87
2.	Entrepreneurial skill development for production of quality planting material of sub-tropical horticulture medicinal and vegetable crops for enhancing livelihood	Dr Dharminder Kumar	RKVY	51.46
3.	Development of cost effective micro-propagation technique for commercial rootstock Rangpur lime (<i>Citrus limonia</i> Osbeck)	Dr Sneha Sharma	RKVY	55.00
4.	Bioefficacy evaluation of herbal preparations against scab disease in Apple	Dr Shalini Verma	Pvt.	5.50
5.	Exploration of gut microbiome for sustainable beekeeping to be implemented at AICRP centre on Honeybees and Pollinators Solan	Meena Thakur	ICAR	9.00
6.	Validation of Bayer disease prediction system for apple	Dr HR Sharma	Bayer Crop Science Ltd.	27.14
7.	Development of multiplex-PCR based method for detection of important soil borne fungal pathogens of sandalwood and their management	Dr Monica Sharma	DBT	34.67
8.	Evaluation of Potassium Nutrition in combination with ICL unique K grades in low & High- Density Apple Orchards	Dr Parmod Sharma	ICL Management & Trading Indai Private Ltd. Gurugram Haryana	27.51
Forestry				
9.	Utilization of soil and plant microbial resources for enhancing the productivity of cropping systems and soil health under jhum and terrace/valley agrosystems of Eastern and North-Western Indian Himalayas	Dr Anjali Chauhan	DBT	31.72
10.	Bioconversion of waste chicken feathers into N-rich organic fertilizers by keratinolytic bacteria for effective waste management in HP	Dr Sunita Thakur	DEST	6.16
11.	Evaluation of Amino Plus on growth, yield and quality of chilli/capsicum	Dr Anjali Sharma	Ms Fertis India Private Limited, Hyderabad	4.74
12.	Assessment of Impacts Climate Variability/Change on Apple crop Productivity and quality in Himachal Pradesh	Dr SK Bhardwaj	Director of Horticulture	4.00
13.	Evaluation of Sirsa River Rejuvenation Plan Under Eco-restoration project of Balad River (Tributary) and Sirsa River prepared by	Pratima Vaidya	Shivalik Solid Waste Management	1.30

STUDENTS ACTIVITIES

NCC Activities

- 46 NCC Cadets appeared in CEE certificate examination on 27th February, 2022 and 30 cadets in BEE certificate examination on 20th Feb., 2022.
- NCC cadets and other university students participated in the Blood Donation-cum-Awareness Camp organized by District Legal Services Authority, Solan (HP) in the Court Complex, Solan on 17th March, 2022.
- Mr Suraj Jaswal (F-2020-101-BIV), B.Sc.2nd year (Forestry) student attended 7 days NIC at Chitkara University,

PROM Rajpura, Distt. Patiala, w.e.f. 20-26 May, 2022.

- NCC Cadets carried out the cleanliness drive of Dr YS Parmar Statue on 19th March, 2022.

NSS Activities

- NSS volunteers of the university solemnized the Shadeedi Diwas and participated in the slogan writing as well as in Oath ceremony at the main campus and also in its constituent colleges on 23rd March, 2022.
- Organized Webinar, “Impact of our food choices on our planet and our health” in collaboration with M/S VEGAN OUTREACH for the NSS Volunteers of the University on 29th January, 2022.

Vaccination camps

University Health Centre in collaboration with Zonal hospital, Solan organized five vaccination camps in which 5229 persons (students, employees and persons from surrounding areas) were vaccinated against COVID-19. Besides this, about 1200 RAPID and RTPC tests were conducted in the University Health Centre.

Miscellaneous Activities

- University students participated in the North Zone Kabaddi (women) championship w.e.f. 2-6 January, 2022 organized by the H.P. University, Shimla at Vallabh Bhai Govt. Degree College, Mandi (HP).
- Organized “Rangoutsav-2022” in collaboration with “Agrivision H.P.” in the main campus of the University on 18th March, 2022.

UHF Farmers' Helpline: 01792-252426
Kisan Call Centre (Toll Free): 1800 180 1551
University website: www.yspuniversity.ac.in