#### 2019-20

# <u>ANNUAL</u>

REPORT

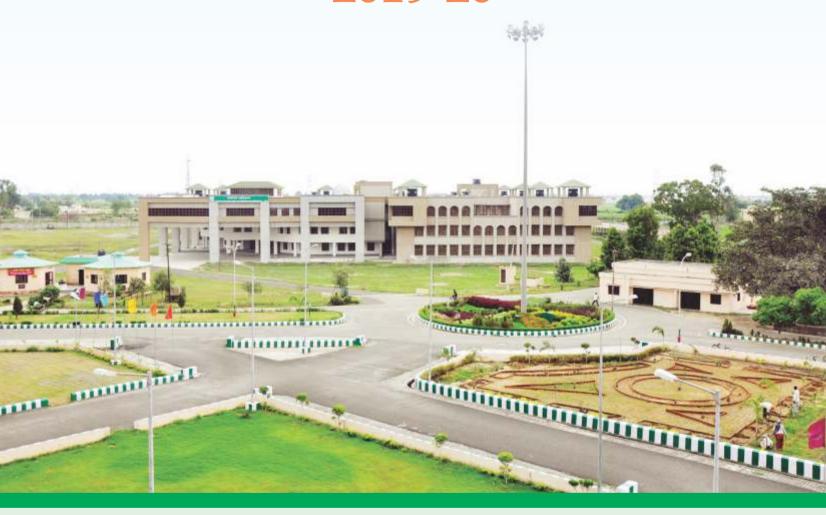
वार्षिक प्रतिवेदन 2019-20





Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut-250110 (U.P.) सरदार वल्लभाई पटेल कृषि एवं प्रौद्योगिक विश्वविद्यालय मेरठ – 250110 (उ०प्र०)

# ANNUAL REPORT 2019-20





SARDAR VALLABHBHAI PATEL UNIVERSITY OF AGRICULTURE & TECHNOLOGY Meerut-250110 (U.P.)

website: http://svbpmeerut.ac.in



#### **Annual Report 2019-20**

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### Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut

#### **PREFACE**

I feel proud and privileged to present the Annual Report of Sardar Vallabhbhai Patel University of Agriculture and Technology for the Session 2019-20. I am glad to affirm that our university is prominently concerned with the prime endeavor of education in terms of teaching, research and extension in the field of agriculture and allied sciences. The university is in right path with his mandate to upgrade agriculture, with its allied sectors because these sectors are unquestionably the largest livelihood provider in India, more so in the vast rural areas. They are also the significant contributers to the Gross Domestic Product (GDP) of country.



Since the inception of university in 2000, SVPUAT has been contributing to education and has a culture of hard work and innovations. Inspite of limited resources university has imparting the high-quality agricultural education, conducting hi-tech research and carry out transfer of technologies efficiently. Various research projects funded by ICAR, State Government, RKVY, CST & DBT, NHB/NIAM, Spice Board & Ministry of Earth Science, UGC and Private Companies were the assets for research in university. During the period university-maintained university developed nucleus seed of field crops varieties, Vallabh Basmati 21, Vallabh Basmati 22, Vallabh Basmati 23 and Vallabh Basmati 24 rice, Sadbhavna, Surya, Vallabh Kallar Chana-1, Vallabh Kabuli Chana-1 and WCG-10 chickpea, Vallabh Urd-1 of Urd. Field demonstrations were also organized in Technology Park of the university on newly released 08 varieties of lentil, 12 varieties of chickpea, 42 varieties of wheat, 12 varieties? 30 varieties of basmati rice, 10 varieties of Green gram and 09 varieties of Urd. Technology of BIPM Module for sugarcane was developed in the Bio-control Laboratory Unit.

Extension activities of the university were to ensure that the research outcome reach to the farmers, the real stakeholders through trainings of the farmers, farm women and farm youths. The higher level of academic activities in the university was due to enthusiastic involvements of our officers, scientists, faculty, supporting staff and students and deserves appreciation. I heartily congratulate the entire SVPUAT fraternity for their incessant efforts in bringing our University to this level. I am sure that this saga of success would continue for all time to come. I congratulate all team members for their untiring efforts to brining out the university progress in a form of annual report.

R.K. Mittal
Vice Chancellor



#### कार्यकारी सारांश

सरदार वल्लभभाई पटेल कृषि एवं प्रौद्योगिकी विश्वविद्यालय, पूर्ण विश्वविद्यालय के रूप में स्थापित ''तीसरी सहस्त्राब्दी और 21 वीं सदी का पहला कृषि विश्वविद्यालय'' है। यह शिक्षा, अनुसंधान और प्रसार को एकीकृत करने के एक अद्वितीय उद्देश्य के लिए प्रतिबद्ध है। वर्तमान में विश्वविद्यालय के अधीन छह घटक महाविद्यालय अर्थात कृषि, जैव प्रौद्योगिकी, पशु चिकित्सा और पशु विज्ञान, पोस्ट हार्वेस्ट और खाद्य प्रौद्योगिकी, प्रौद्योगिकी और बागवानी महाविद्यालय चल रहे हैं। विश्वविद्यालय में प्रबंधन परिषद (बीओएम) सर्वोच्च संस्था है जो पुन: प्रवर्तन और संशोधन अधिनियाम 1974 के अनुसार गठित की गई है। प्रबंधन परिषद विश्वविद्यालय के विकास और उत्थान से संबंधित नीतियों के मामलों पर विचार कर निर्णय करता है। विश्वविद्यालय की द्वितीय संस्था विद्धत परिषद है जो विश्वविद्यालय में संकाय और छात्रों संबंधित उच्च मानक गतिविधियों के रखरखाव के लिए विभिन्न महत्वपूर्ण निर्णय लेती है। शिक्षण, शिक्षा और भर्ती की गुणवत्ता को नियंत्रित और विनियमित करना विश्वविद्यालय में संकाय और कर्मचारीयों के लिए नियम बनाना भी इसका उत्तर दायित्व है।

विश्वविद्यालय स्नातक, परास्नातक एवं पीएच.डी. कार्यक्रम कृषि, जैव प्रौद्योगिकी और पशुचिकित्या एवं पशुविज्ञान महाविद्यालयों में चला रहा है तथा कटाई उपरान्त प्रौद्योगिकी एवं खाद्य प्रसंस्करण बागवानी एवं प्रौद्योगिकी महाविद्यालय में स्नातक कार्यक्रम चलारहा है। विभिन्न पाठ्यक्रमों में प्रवेश संयुक्त परीक्षा के माध्यम से होता है, जिसे राज्य स्तर पर 'संयुक्त कृषि और प्रौद्योगिकी प्रवेश परीक्षा (CATET) कहा जाता है और अखिल भारतीय परीक्षा (AIEE-UG & PG) जो कि भारतीय कृषि अनुसंधान परिषद (ICAR), नई दिल्ली द्वारा होता है जिसे राज्य कृषि विश्वविद्यालयों में प्रवेश के लिए आयोजित किया जाता है। विश्वविद्यालय के विभिन्न स्त्रोतकोत्तर कार्यक्रमों में अफगानिस्तान के छह छात्रों को भी प्रवेश दिया गया। रिपोर्ट की अविध के दौरान, स्नातक स्तर पर 425

छात्र परास्नातक स्तर पर 123 छात्र और पीएचडी में 62 छात्र अध्ययन कर रहे हैं। स्नातक के कुल 166 छात्र, परास्नातक के 83 छात्र और पीएचडी के 35 छात्रों ने इस अविध के दौरान अपने संबंधित पाठ्यक्रमों को सफलतापूर्वक पूरा किया है।

विश्वविद्यालय ने मुख्यालय पर इस समयाविध में निम्नलिखित आयोजन किये जैसे अभ्युक्ति-2019 (सांस्कृतिक कार्यक्रम और प्रतिभा प्रदर्शन), डाॅ0 बाबासादेब अम्बेडकर की 128 वीं जयंती, आतंकबाद विरोधी दिवस, विश्व पर्यावरण दिवस, अंतर्राष्ट्रीय योग दिवस, फेशर्स ओरिएंटेशन प्रोग्राम, स्वच्छ पखवाडा, 19 वीं स्थापना दिवस, सरदार वल्लभभाई पटेल जयंती एवं रन फॉर यूनिटी, रविदास जयंती, स्वतंत्रता दिवस, गणतंत्र दिवस, अंतर्राष्ट्रीय साक्षरता दिवस, 'राष्ट्रपिता के जन्म दिवस' की 150 वीं जयंती, विश्व महिला दिवस आदि। विश्वविद्यालय ने 16 सितंबर, 2019 को अपना बारहवां दीक्षांत समारोह विश्वविद्यालय के मुख्य परिसर में आयोजित किया। डाॅ0 पंजाब सिंह, कुलपति, रानी लक्ष्मी बाई केंद्रीय कृषि विश्वविद्यालय, झाँसी, उत्तर प्रदेश और अध्यक्ष, राष्ट्रीय कृषि विज्ञान अकादमी, नई दिल्ली मुख्य अतिथि और श्रीमती आनंदिबेन पटेल महामहिम राज्यपाल. उत्तर प्रदेश और इस विश्वविद्यालय की कुलाधिपति ने समारोह की अध्यक्षता की। विस्तार निदेशालय ने 8-10 नवंबर, 2019 को विश्वविद्यालय मुख्यालय में किसान मेले एवं कृषक गोष्ठी का आयोजन किया जिसमें लगभग 10000 किसानों ने भाग लिया। श्री सूर्य प्रताप साही माननीय कृषि मंत्री उत्तर प्रदेश ने किसान मेले का उद्घाटन किया। पशु मेला किसान मेले का मुख्य आकर्षण था। विश्वविद्यालय ने कृषि विज्ञान केन्द्रों की 27वीं वार्षिक जोनल कार्यशाला का भारतीय कृषि अनुसंधान परिषठ, अटारी, कानपुर जोन तृतीय और चन्द्रशेखर आजाद कृषि एवं प्रौद्योगिकी विश्वविद्याल, कानपुर द्वारा संयुक्त रूप से 25-27 जून 2020 को आयोजन किया। विश्वविद्यालय ने अपने अंतगत अन्तर्गत आने वाले 20 कृषि विज्ञान केन्द्रों



द्वारा कुल 2064 प्रशिक्षण पाठ्यक्रम का आयोजन किया। जिसमें पश्चिमी उत्तर प्रदेश के 33869 पुरुष और 4858 महिलाओं ने भाग लिया। तिलहन, दलहन, अनाज, सिब्जियों और संकर फसलों पर फ्रंटलाइन प्रदर्शन 1168 हेक्टेयर भूमि पर किए गए, जिसके माध्यम से 3356 किसान लाभान्वित हुए। पशुधन, मछली पालन और अन्य उद्यमों पर भी प्रदर्शन आयोजित किए गए, जिसमें 475 किसानों ने भाग लिया। कुल 93 फसलों, 15 पशुधन और 6 अन्य उद्यमों से संबंधित प्रौद्योगिकियों का आंकलन और परिष्करन कृषि विज्ञान केन्द्रों द्वारा किया गया। विस्तार निदेशालय के तत्वाधान में कुल 24736 विभिन्न विस्तार कार्यक्रम आयोजित किये गए जिसमें 244275 किसान लाभान्वित हुए। कोविड-19 के कठिन समय को ध्यान में रखते हुए किसानों को मोबाइल सलाहकार सेवा भी प्रदान की गई।

विश्वविद्यालय के फसल अनुसंधान केन्द्र ने विभिन्न फसलों अर्थात गेहुँ, जौ, भारतीय सरसों, चिकी, ओट, बरसीम, काऊपी, चावल, मटर, उरद, मूंग, सोरघम आदि पर 63 प्रयोग किए। विश्वविद्यालय द्वारा विकसित फील्ड क्रॉप वेरायटीज जैसे वल्लभ बासमती 21, वल्लभ बासमती 22, वल्लभ बासमती 23 और वल्लभ बासमती 24 चावल, सौभाग्य, सूर्या, वल्लभ कल्लर चना-1, वल्लभ काबुली चना-1 और डब्ल्यूसीजी-10 छोला, वल्लभ उरद-1 आदि का नुक्लियस बीज संरक्षित किया गया। वल्लभ बासमती-24 चावल किस्म का कुल 2.0 क्विटल ब्रीडर बीज का उत्पादन किया गया। बागवानी अनुसन्धान केंद्र द्वारा कुल 45 प्रयोग (सिब्जियां 20, फूल 09 और फल 16) किए गए। पशुधन अनुसंधान केंद्र, साहिवाल गाय और मुर्राह भैंस के उन्नयन और रखरखाव में लगा हुआ है। विश्वविद्यालय के बीज प्रसंस्करण संयंत्र में कुल 4.85 कुंतल अरहर, 517.61 कुंतल धान, 40.89 कुंतल सरसों, 1593 कुंतल गेहूं के बीज का प्रसंस्करण किया गया। विश्वविद्यालय के प्रौद्योगिकी पार्क में क्षेत्र प्रदर्शनों का आयोजन नवविकसित किस्मों पर किया गया था जिसमें रबी सीजन में मसूर की 08 किस्में, चिकपी की 12 किस्में,

गेहूँ की 42 किस्में, भारतीय सरसों की 12 किस्में और खरीफ फसल सीजन में बासमती चावल की 30 किस्में. हरी चना की 10 किस्म और उरद की 9 किस्मों का प्रदर्शन किया गया। बायो-एजेंट प्रोडक्शन सेंटर ने पैरासिटाॅइड (एग पैरासाइटोइड्स, ट्राइकोग्राम एसपीपी), प्रिडेटर (क्रिस्परोप्ला कार्निआ), पैथोजेन (बेवेरिज बैसियाना, ट्इकोडर्मा हर्जियानम, मेटहेरिजियम एनिसोप्लाएनी, एचएएनपीवी एन्टोमोपैथोजेनिक नेमाटोड्स) होस्ट इंसेक्ट्स का रखरखाव और उत्पादन किया। जैव नियंत्रण प्रयोगशाला इकाई में गन्ने के लिए बी०आई०पी०एम० मॉड्युल की तकनीक विकसित की। जोनल रिसर्च स्टेशन, नगीना ने 28 क्रोस्सेस किए, 302 प्रजनन सामग्री को संभाला, 681 चावल जर्मप्लाज्म को बनाए रखा। जोनल रिसर्च सेंटर, बुलंदशहर ने IIWBR, करनाल द्वारा आवंटित गेहूं जैसे NIVTA-1A, AVT-RI-TS-TAS, AVT-IR-TS-TAS, AVT-IR-1S-TAS और SPL-VLS-TAS पर समन्वित परीक्षणों का मूल्यांकन किया गया। जोनल रिसर्च स्टेशन, उझानी ने देर से सिंचित गेहूं, मटर की किस्म IPFD-10-12 की वृद्धि और पैदावार, दोमट बालू मिट्टी में बोरान के आवेदन की विधि, चिकपी की किस्म आरवीजी - 202 पर सफायर और बोरान पोषण का यूपी के मध्य पश्चिमी योजना क्षेत्र की कोर्स बनावट युक्त मिट्टी में प्रतिक्रिया के स्तर पर परीक्षण किया।

वर्ष 2019-20 के दौरान 2393.13 लाख रुपये की कुल 32 परियोजनाएँ कार्यत्मक थीं। इनमें से 4 परियोजनाओं को आरकेवीवाई, 1 राज्य सरकार, 8 आईसीएआर, 6 सीएटी और डीबीटी, 2 एनएचबी/एनआईएएम, 3 स्पाइस बोर्ड और पृथ्वी विज्ञान मंत्रालय, 1 यूजीसी और 7 द्वारा निजी कंपनियों द्वारा प्रायोजित किया गया था। कुल 47 नई परियोजनाओं को भी वित्तपोसण के लिए विभिन्न फंडिंग एजेंसीज को प्रस्तुत किया गया। उक्त अवधि के दौरान कुल 230 शोधपत्र, 30 तकनीकी पत्र विभिन्न राष्ट्रीय और अंतरराष्ट्रीय जर्नल्स एवं पत्रिकाओं में प्रकाशित किया गया। वित्त वर्ष के दौरान कुल प्राप्ति रु. 9956.69 लाख व व्यय रु. 8515.47 लाख रहा।



#### **EXECUTIVE SUMMARY**

Sardar Vallabhbhai Patel University of Agriculture and Technology established as a full-fledged University has unique honour of being called "First Agriculture University of the third millennium and the 21st century". It is committed to a unique mandate of integrating education, research and extension. At present six constituent collages i.e. College of Agriculture, Biotechnology, Veterinary and Animal Sciences, Post-Harvest Technology and Food Processing, Technology and Horticulture are running under the university. The University has a board of management (BOM) as per re-enactment and amendment act 1974. The Board of Management considers and decides matters of general policies relating to the development and upliftment of the University. Another decision-making body, Academic Council took various important decisions for the maintenance of high standard of activities related to faculty and students in the University by controlling and regulating the quality of teaching, education and recruitment rules for faculty and staff in the University.

University is running the Graduate; Post Graduate and Ph.D. programmes in College of Agriculture, Biotechnology and Veterinary and Animal Sciences and undergraduate programmes in college of Post-Harvest Technology & Food Processing, Horticulture and Technology. Admission in different courses is through joint examination is called as 'Combined Agriculture and Technology Entrance Test (CATET)' at State level and All India Examination (AIEE-UG & PG) conducted Indian Council of Agricultural research (ICAR), New Delhi for admission to SAUs of the country. Six students from Afghanistan were also admitted in different post graduate programmes of the university. During the period under report, 425 students at UG level, 123 students at PG level and 62 students at Ph.D. level were admitted in various courses at three

constituent colleges of the university viz. College of Agriculture, College of Biotechnology, College of Veterinary & Animal Sciences, College of Horticulture, College of Technology and College of Post-Harvest Technology & Food Processing. A total 166 students at UG level, 83 students at PG level and 35 students at Ph.D. level have successfully completed their respective courses during the period under report.

The university celebrated various functions at headquarter i.e Abhivyukti-2019 (Cultural Programme and Talent Show), 128th Birth Anniversary of Dr Babasaheb Ambedkar, Antiterrorism Day, World Environment Day, International Yoga Day, Freshers Orientation Programme, Swachhta Pakhwada, 19th Foundation Day, Sardar Vallabhbhai Patel Jayanti & Run for Unity, Ravi Das Jayanti, Independence day, Republic Day, International Literacy day, 150th Birth Anniversary of 'Father of Nation', International Women day, World Food day, etc. University organized its twelfth convocation on 16th September, 2019 at main campus of the university at Meerut. Dr. Panjab Singh, Vice Chancellor, Rani Lakshmi Bai Central Agricultural University, Jhansi, Uttar Pradesh and President, National Academy of Agricultural Sciences, New Delhi was the Chief Guest and Smt. Anandiben Patel her excellency Governor of Uttar Pradesh and Chancellor of this university preside over the function. Directorate of Extension organized Kisan Mela at university Headquarter on 08-10 November, 2019 alongwith KrishakGosthi in which approximately 10,000 farmers participated. Shri Surya Pratap Sahi Hon'ble Agriculture Minister Uttar Pradesh inaugurated the farmer fair. Animal shows were main attraction of farmer fair. The 27th Annual Zonal Workshop of KVKs was organized jointly by SVPUAT, Meerut, ICAR, ATARI, Kanpur Zone - III and CSUA&T, Kanpur on 25-27th June 2020. Total 1564



training courses were organized by the 20 KVKs working under the umbrella of university in western Uttar Pradesh in which 33,869 male and 4,858 females were participated. Frontline demonstrations on oilseeds, pulses, cereals, vegetables and hybrid crops were conducted at 1168-hectare land through which 3356 farmers were benefitted. Demonstrations were also organized on livestock, fisheries and other enterprises in which 475 farmers were participated. Total 93 crops, 15 livestock and 6 other enterprises related technologies were assessed and refined by the KVKs. Total 24,736 various extension programmes were conducted under the aegis of Directorate of Extension in which 24,4275 farmers were benefitted. In keeping the view of COVID-19 difficult time, Mobile advisory service was also provided to the farmers.

Crop Research Centre of the university planted 63 experiments on various crops i.e. Wheat, Barley, Indian Mustard, Chickpea, Oat, Barseem, Cowpea, Rice, Pigeon pea, Urd, Moong bean, Sorghum etc. Nucleus seed was maintained of field crops varieties developed by university such as Vallabh Basmati 21, Vallabh Basmati 22, Vallabh Basmati 23 and Vallabh Basmati 24 rice, Sadbhavna, Surya, Vallabh Kallar Chana-1, Vallabh Kabuli Chana-1 and WCG-10 chickpea, Vallabh Urd-1 of Urd. Total 2.0 quintal breeder seed of Vallabh Basmati -24 rice variety was produced. Total 45 experiments (vegetables 20, flowers 09 and fruits 16) were conducted by Horticulture Research Centre. Livestock Research Centre is engaged in upgradation and maintenance of Sahiwal cow and Murrah buffalo. Total 4.85 quintal Arhar, 517.61 quintal Paddy, 40.89 quintal Mustard, 1592 quintal Wheat seed was processed in Seed Processing Plant of the University. Field demonstrations in Technology Park of the university were organized on newly released varieties i.e. 08 varieties of lentil, 12 varieties of chickpea 42 varieties of wheat, 12 varieties of Indian mustard during Rabi 2019-20 crop season and 30 varieties of basmati rice, 10 varieties of Green gram and 09 varieties of Urd during Kharif 2019 crop season.Bio-Agent Production Centre maintained and produced Bio agents like Parasitoid (Egg parasitoids, Trichogramma spp.), Predator (Chrysoperlacarnea), Pathogens (Beauveriaitalie bassiana, Trichoderma harzianumitlci, Metarhiziumanisopliae, HaNPV Entomopathogenic Nematodes), Host insect (Corcyraitalic cephalonica) and developed the technology of BIPM Module for sugarcane in the Bio control Laboratory Unit. Zonal Research Station, Nagina made 28 crosses, handled 302 breeding materials, maintained 681 rice germplasm. Zonal Research Centre, Bulandsahar, evaluated coordinated trials on wheat allotted by IIWBR, Karnal i.e NIVTA- 1A, AVT-RI-TS-TAS, AVT-IR-TS-TAS, AVT-IR-IS-TAS and SPL-VLS-TAS-Trial. Zonal Research Station, Ujjhani conducted trials on late shown irrigated wheat, growth and yield response of Pea variety IPFD-10-12 to level and mode of application of boron in loamy sand soil, response of chickpea variety RVG-202 to sapphire and boron nutrition in course textured soils of mid-western plan zone of U.P.

Total 32 projects worth of Rs 2393.13 lakhs were functional during the year 2019-20. Out of these 04 projects were sponsored by RKVY, 01 state Government, 08 ICAR, 06 CST & DBT, 02 NHB/NIAM, 03 Spice Board & Ministry of Earth Science, 01 UGC and 07 by Private Companies. Apart from these total 47 new projects were submitted to various funding agencies for finance. During the said period total 230 research papers, 30 technical papers were published in various National and International Journals. During the financial year total receipt of Rs. 9956.69 Lac. an expenditure of Rs. 8515.47 Lac.



#### **UNIVERSITY AT A GLANCE**



The "Sardar Vallabhbhai Patel University of Agriculture and Technology" was established vide notification no. 3204-A/12-8-2000-400{96}99, Lucknow: Dated 27 September, 2000 by the Government of Uttar Pradesh under The UTTAR PRADESH (KRISHI EVAM PRODYOGIK VISHWAVIDYALAYA ADHINIYAM) 1958{U. P. Act XLV of 1958} to come in existence on October 02, 2000 for augmenting the opportunities for education, research and outreach activities in the field of Agriculture, Veterinary Sciences, Biotechnology and allied sciences and overall development of the rural people of Uttar Pradesh. The university is located at Modipuram on Delhi- Dehradun highway around 12 KM from Meerut city in the north. Initially twelve constituent colleges have been proposed in the University master plan. During the period of report, the university has six constituent colleges viz. College of Agriculture, College of Biotechnology, College of Veterinary & Animal Sciences, College of Horticulture, College of Technology and

College of Post-Harvest Technology & Food Processing off campus research stations and 20 KVKs spread over 18 districts viz., Badaun, Rampur, Bijnor, Muzzaffarnagar, Meerut, Saharanpur, Ghaziabad, Shahjahnpur, Pilibhit, Baghpat, G.B. Nagar, Moradabad, Bulandshahr, Hapur, Shamli, Sambhal, Amroha, and Bareilly. The main campus of University is spread over an area of 262 hectares and has different regional stations, research substations and KVKs located under different agro-climatic zones viz. Bhabhar, Tarai, Western plain and Mid-western plain zones of the State.

Sardar Vallabhbhai Patel University of Agriculture and Technology established as a full-fledged University has unique honour of being called "First Agriculture University of the third millennium and the 21st century". It is committed to a unique mandate of integrating education research and extension so as to serve the rural people with following vision and mission.



#### **VISION**

A sound, viable, vibrant and sustainable rural development.

#### **MISSION**

Enhancement of rural income, living and employment trough excellence in education, research and extension activities in agricultural and allied sciences

#### **MANDATE**

- Making provision for the education of the rural people of Uttar Pradesh in different branches in study, particularly agriculture, rural industry and business, and other allied subjects.
- Furthering the prosecution of research, particularly in agriculture and other allied sciences and undertaking field and extension programmes.

#### **TEACHING**

- ➤ To create human resource, trained in agricultural and allied sciences who may cater the need of 21st century.
- > To generate technically sound man power who can apply their acquired knowledge and skills to diversify and industrialize agriculture for socio economic transformation of the rural society.

#### **RESEARCH**

To generate innovative agriculture technology to make Indian agriculture

- globally competitive.
- ➤ To apply all possible sources of scientific interventions to the solution of the technical and practical problems of agriculture.
- To boost up basic research to accelerate the progress of agriculture with the input of fundamental knowledge.
- > To solve the specific agriculture related problem, being faced by farming community.
- To formulate specific strategies for optimization of farmer's income of different holding sizes viz. large, medium, small and marginal.

#### **EXTENSION**

- > To disseminate the innovative agriculture technologies among the farmers.
- To establish partnership with farmers, entrepreneurs and other stakeholders in agriculture for mutual benefit.
- > To make the agriculture technology more demand driven.





Hon'ble Vice-chancellor chairing the meeting of Board of Management

- To facilitate validation, demonstration and adoption of appropriate Agro-technologies.
- > To achieve economic and environmental sustainability through integrated management of productivity, production, marketing and end use of farm produce.
- To establish a linkage between agriculture producer and consumers in an interface mode

#### ICAR ranking status of the University

Based on the recommendations of the committee and approval by the competent authority of ICAR, Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut got 17th rank for year 2019 among all the Agricultural universities of the country.

#### **Organizational Setup**

Her Excellency Smt. Anandiben Patel the governor of Uttar Pradesh is the Chancellor of the university and by virtue of her office she is head of the university and presides over convocations of the university. The other powers as conferred on her by University acts and statutes are also exercised by her as and when required.

#### **Board of Management**

The University has a Board of Management (BOM) as per re-enactment and amendment act 1974. The Board of Management considers and decides matters of general policies relating to the development and upliftment of the University. The list of Hon'ble members of the

Board of Management is given in Annexure-I.

Two meetings of Board of Management were held during the period of report. These meetings were held on 17.09.2019 and 12.03.2020 under the chairmanship of Prof. R. K. Mittal Hon'ble Vice Chancellor. He put up different matters before the members to take decisions in the welfare of University and Staff.

#### **Academic Council**

During the period under report, Prof. R. K. Mittal Vice Chancellor was the Chairman and Dr. B.R. Singh being Registrar of the university was acted as Member Secretary of the Academic Council. The list of members of the Academic Council is given in Annexure-II. Five meetings of academic council of SVPUAT were held during the period of report. These meetings were held on 29.05.2019, 05.08.2019, 09.09.2019, 11.02.2020 and 15.02.2020.

#### Officers of the University:

The Chancellor, Vice Chancellor, Director of Research, Dean Post Graduate (PG) Studies, Director of Extension Education, Dean Faculty of Agriculture, Dean Faculty of Biotechnology, Dean Faculty of Veterinary & Animal Sciences, Registrar, Comptroller, Dean Students' Welfare, Librarian etc are Officers of the University. List of all the officers of the university is given in Annexure III.

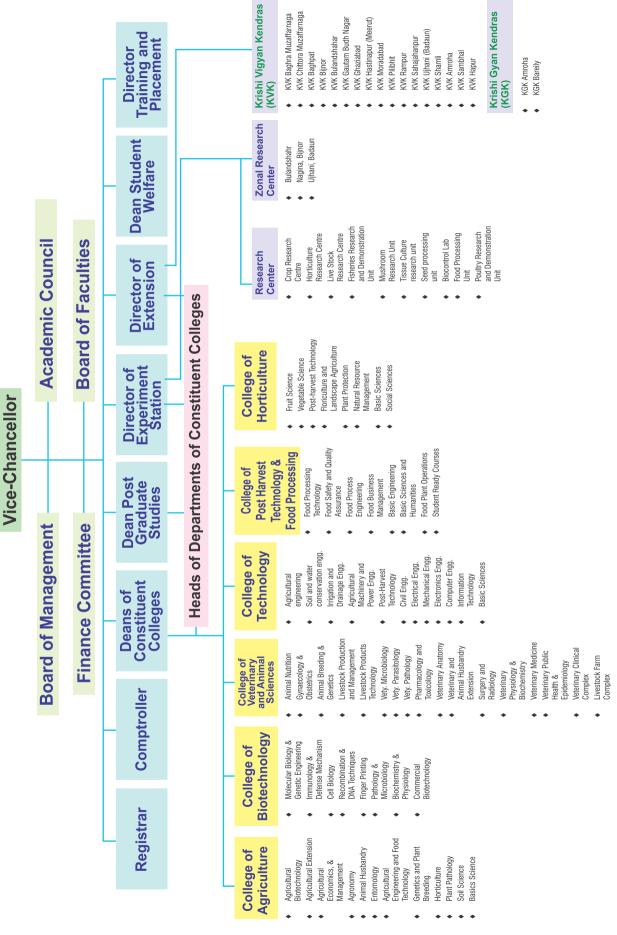
The detailed organizational set-up as well as administrative and functional aspects are given in following chart.



Hon'ble Vice-chancellor chairing the meeting of Academic Council



Chancellor



#### **EDUCATION**

The educational programme in the "Sardar Vallabhbhai Patel University of Agriculture and Technology" covers higher education in the field of Agriculture, Biotechnology, Veterinary Science, Animal Husbandry, Food Technology, Agriculture Technology and Horticulture in which Under Graduate (UG), Post Graduate (PG) and Ph.D. programmes are running in different colleges.

#### **Admissions Process**

In pursuance of the provisions of clause (3) of Article 384 of the Constitution of India, the Governor is pleased to order the publication of the following English translation of the Uttar Pradesh Krishi Evam Prodyogik Vishwavidyalaya (Dwitiya Sanshodhan) Adhiniyam, 2006 (Uttar Pradesh Adhiniyam Sankhya 16 of 2006) as passed by the Uttar Pradesh Legislature and assented to by the Governor on May 23, 2006. (3-a). According to this provision, the admission in all courses of study of the four State Agricultural Universities of Uttar Pradesh state will be taken by the joint Entrance Examination for admission. This joint examination is called as 'Combined Agriculture and Technology Entrance Test (CATET)' at State level. The Registrar shall be responsible for organizing by rotation, joint Entrance Examination for admission in all courses of study for the four State Agricultural Universities.

Applications for the admission to different courses were invited through the advertisement published in leading daily newspapers. The applications were processed and entrance tests were conducted through computer OMR system and merit list was prepared. Result was declared on website to call candidates for personal interview / counselling. During the period under report, 425 students at UG level, 123 students at PG level and 62 students at Ph.D. level were admitted in various courses at six constituent colleges of the university viz. College of Agriculture, College of Biotechnology, College of Veterinary & Animal Sciences, College of Horticulture, College of Technology and College of Post-Harvest Technology & Food Processing. A total 166 students at UG level, 83 students at PG level and 35 students at Ph.D. level have successfully completed their respective courses during the period under report (Table 1). Total strength of the students in the university is 1300 in which male students are 985 and female students are 315 (Table 2).















Table 1. Student status in university

S.N.		Parameters			Numbers		
	College		Bachelor's	Master's	Ph.D.	Other Including Diploma	Total
1	College of Agriculture	Intake Enrolled Passed Out	146 139 101	112 91 73	94 62 35	- - -	352 392 209
2	College of Biotechnology	Intake	149 83 65	27 6 10	- - -	- - -	176 89 75
3	College of Vet. & Animal Sciences	Intake Enrolled Passed Out	80 80	62 26	- -	- -	142 106
4	College of Horticulture	Intake Enrolled Passed Out	48 44 -	- - -	- - -	- - -	48 44 -
5	College of Post Harvest Technology & Food Processing	Intake Enrolled Passed Out	49 44 -	- - -	- - -	- - -	49 44 -
6	College of Technology	Intake Enrolled Passed Out	48 35 -	- - -	- - -	- - -	48 35 -

Table 2. Gender pattern amongst students enrolled in university

S.N.		Parameters		umbers (1 <sup>st</sup> , 2 <sup>nd</sup> , 3 <sup>rd</sup> ,		as)
	Conege		Bachelor's	Master's	Ph.D.	Total
1	College of Agriculture	Male Female Total	385 81 466	105 29 134	105 25 130	595 135 730
2	College of Biotechnology	Male Female Total	138 95 230	9 14 23	- - -	144 109 253
3	College of Veterinary & Animal Sciences	Male Female Total	130 44 174	22 4 26	- - -	152 48 200
4	College of Horticulture	Male Female Total	38 4 42	- - -	- - -	38 4 42
5	College of Post Harvest Technology & Food Processing	Male Female Total	28 15 43	- - -	- - -	28 15 43
6	College of Technology	Male Female Total	28 4 32	- - -	- - -	28 4 32



#### **University Convocation**

University organized its twelfth convocation on 16th September, 2019 at main campus of the university at Meerut. Dr. Panjab Singh, Chancellor, Rani Lakshmi Bai Central Agricultural University, Jhansi, Uttar Pradesh and President, National Academy of Agricultural Sciences, New Delhi was the Chief Guest and Smt. Anandiben Patel her excellency Governor of Uttar Pradesh and Chancellor of this university preside over the function. Vice Chancellor of the University welcome the Hon'ble Governor U.P. and Chief Guest. After the declaration Convocation open by Hon'ble Governor, Hon'ble Vice Chancellor Dr. R.K. Mittal presented progress report of the university and there after oath ceremony and degree distribution started.

On this occasion 101 students of B.Sc. (Hons.)

Agriculture, 65 B.Tech. (Biotechnology), 73 M.Sc. (Ag.)/M.Tech. (Agril. Process & Food Engg.), 10 M.Tech./M.Sc. (Biotechnology) and 35 students of Ph.D were awarded degree by Hon'ble Governor of Uttar Pradesh.

For the Academic Excellence three Students from College of Agriculture and three Students of College of Biotechnology were awarded. Mr. Kshitiz Saxena Id. No. 3150/15 Mr. Shripati Dwivedi Id. No. 3165/15 and Km Ritika Singh Id. 3148/15 of B.Sc. (Hons.) Agriculture batch 2015-16 were awarded Vice-chancellor Gold, Silver and Bronze Medal respectively. Km Neemisha Sharma Id. No. 3271/15, Km Aparna Goswami Id. No. 3286/15

and Km Supriya Shukla Id. No. 3263/15 of B.Tech (Biotechnology) batch 2015-16 were awarded Vice-chancellor Gold, Silver and Bronze Medal respectively.

#### **Glimpses of Convocation**









#### **COLLEGE OF AGRICULTURE**

The College of Agriculture, is the first constituent faculty of Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut was established in 2000 within the existing infrastructure and manpower as the western campus of GBPUA & T, Pantnagar consequent upon the division of the Uttar Pradesh. The college has been progressively gaining new dimensions in all the spheres be it building, faculty, supporting staff, class rooms, laboratories etc. The Post Graduate and Ph.D programmes in different departments of the College were started in 2003-04. The college occupied its new building at the main campus of University in 2004. Presently, college is offering the undergraduate degree of B.Sc. (Ag), Master degree of M.Sc. (Ag)/ M. Tech and doctoral degree in all the departments of agriculture. The college is having the defined objective of imparting quality education to acquire education and knowledge in the field of agricultural sciences.

#### **MANDATE**

> To impart teaching for the development of human resource who can apply their acquired knowledge and skills to diversify

- and industrialize agriculture for socioeconomic transformation of the rural society.
- > To develop strategies for optimum income of farmers and to make India agriculture globally competitive.
- > To support extension education programme for upliftment of rural masses.

The undergraduate course curriculum is running as per recommendations of Vth Dean's Committee of Indian Council of Agriculture Research. The emphasis of this newly course curriculum is to impart experiential learning and entrepreneurial development of students in the field of agriculture.

#### **INFRASTRUCTURE**

The College of agriculture is having a sound physical infrastructure. The undergraduate teaching is performed in modernized smart class rooms. The other class room and seminar rooms are equipped with LCD Projectors for interactive teaching.

#### **COMPUTER FACILITY**

The college is having a centralized computer lab with 30 computers, all connected with high-speed internet. Computer lab has been





established with collaborative arrangements for free training and award of certificate by IBM. The lab is providing the service to the teachers and students for their computer related problems. In the latest development to ensure quick and authentic way of communication in the university, mail server facility has been started and official email has been provided to each scientist/teacher and student to encourage paperless work.

#### **EXAMINATION CELL**

The College of Agriculture has an examination cell with all required facilities for conducting semester final examination of the college. During final examination all the activities related to the examination are performed in the examination cell only.

#### **MINI AUDITORIUM**

Organization of education, cultural and literary events is a key activity in education institutions. Looking into the needs, the college of agriculture has a well-equipped mini auditorium with sitting capacity of 200 persons. BOARD OF FACULTY OF AGRICULTURE (BOFA)

This is a statutory body to take decision on any academic issues related with college of agriculture, after a through discussion among its members. BOFA consists of all the academic staff, Secretory elected for one-year term by its members and Dean agriculture as its chairman. Secretary BOFA is authorized to convene the meeting of board on behalf of its chairman.



#### **COLLEGE OF BIOTECHNOLOGY**

The College of Biotechnology was started during 2004 and formally inaugurated on April 25, 2005 in the premises of Sardar Vallabhbhai Patel University of Agriculture & Technology. It was established after realizing the importance of availability of trained manpower in the area of Biotechnology in the country and pursue the goal of remaining one of the leading centres of teaching research and extension in Biotechnology with total commitment to excellence in every endeavor.

Researches on various biotechnological approaches like Recombinant DNA Technology, Cell Biology, Molecular Biology, Biochemistry, Microbiology and Biofertilizer, Tissue culture, Aerobic Rice, Bioinformatics etc. are in process in order to train the students and to help in the outreach of technology to farmers. The undergraduate course curriculum is running as per recommendations of Vth Dean's Committee of Indian Council of Agricultural Research. The emphasis of this newly course curriculum is to impart experiential learning and entrepreneurial development of students in the field of biotechnology.

#### **INFRASTRUCTURE**

The college has 17 class rooms with white/green boards and comfortable sitting arrangement. The major class rooms have facilities of Audio-Visual and presentation &

DVD's like LCD projection system enhance the instructional and teaching capabilities.

#### **LABORATORIES**

To provide sound practical knowledge about different courses all departments of the College of Biotechnology have been made equipped with undergraduate and post graduate laboratories for teaching as well as research.

#### **BIOINFORMATICS FACILITY**

The centre is specialized in the field of Biotechnology and has been catering to the need of teaching, research and training on use of bioinformatics tools for retrieval of biological information to the benefit of different departments of college of Biotechnology and other constituents' colleges.

#### CENTRE OF EXCELLENCE IN AGRI-BIOTECHNOLOGY

College of Biotechnology has got one centre of excellence in agri-biotechnology with a complete funding from U. P. Council of Science and Technology Govt. of U.P. Mandate of this centre is to impart high level training in molecular biology and genetic engineering in agriculture and allied sciences.

#### **EXAMINATION CELL**

The College of Biotechnology has an examination cell, mini auditorium and board of faculty is also present.





#### COLLEGE OF VETERINARY AND ANIMAL SCIENCES

The livestock area confers a huge commitment to the provincial rural livelihood and food security of the majority. It gives work to a huge number of millions of livestock farmers while going about as an advantageous kind of revenue to numerous agricultural farmers. It is likewise excessively benefits women being the essential animal cultivation activists in rural regions and subsequently, this sector serves an extraordinary commitment to financial and social prosperity of farmers. Further, the sector provides valuable nutritional sources to the growing children and working population in the form of milk, meat and eggs. College of Veterinary and Animal Sciences (COVAS) was set up as a constituent unit of the University in 2008, to scale up rural economy by guaranteeing animal health care and the executives through capable human asset. The College has made extensive contribution for the improvement of animal farming sector of the state. Notwithstanding improvement of HR for serving the animals farmers of the state, the college is additionally instrumental in different research, augmentation, consultancy and clinical administrations to the ranchers and

overall population, individually. College is recognized by Veterinary Council of India (VCI), New Delhi and has been included in the first schedule of the council.

The college is imparting quality of veterinary education, training and development of entrepreneurship skills of the students for employment of the livestock sector. The college has highly competent and experienced faculty members who have made significant contributions in research on animal health, production and various accolades of merit. The college of Veterinary & Animal Sciences offers the following programmes of study:

- 1. B.V.Sc. and A.H. duration 5½ years
- 2. M.V.Sc. duration 2 years

#### **MANDATES**

- Advancement of education in Veterinary & Animal Sciences for development of human resource who can apply their acquired knowledge and skills to diversify, Veterinary Sciences and other Allied sectors for socio-economic transformation of the rural society of Uttar Pradesh in particular and country in general.
- > Conduct basic, strategic and applied





- research in veterinary and animal sciences.
- Undertaking Field and Extension programmes aimed at elevating the socioeconomic status of local farmers.

#### BOARD OF FACULTY OF COLLEGE OF VETERINARY & ANIMAL SCIENCES

This is a statutory body to take decision on any academic issues related with College of Veterinary & Animal Sciences, after a through discussion among its members. Board of Faculty of Veterinary & Animal Sciences consists of all the academic staff faculty secretory elected for one year term by its members and Dean, COVAS as its chairman. Secretary Board of Faculty of COVAS is authorized to convene the meeting of board on behalf of its chairman.

#### **INFRASTRUCTURE**

The College of Veterinary & Animal Sciences having a sound physical infrastructure. The undergraduate teaching is performed in modernized smart class rooms. Besides, each department also has a postgraduate teaching cum seminar hall equipped with board, comfortable sitting arrangement and LCD projector system for interactive teaching.

#### **COMPUTER FACILITY**

The college is having a centralized computer lab with 05 computers, all connected with high-speed internet. The lab is providing the service to the teachers and students for their computer related problems.

#### VETERINARY CLINICAL COMPLEX (VCC)

Veterinary Clinical Complex came in to existence in year 2015. VCC is a coordinating unit between clinical, para-clinical and supporting departments for teaching, providing material for research, platform for treatment of seriously sick animals and instant diagnostic facilities. The department comprises of various sub units like-Treatment Section, Small Animal Examination Room, Dispensing Section, Computerized Registration Counter, Central Diagnostic Laboratory, Teaching Diagnostic Laboratory, Farmer's Rest Rooms, in door Wards and two additional sections viz. Radiology and Gynaecology which provides specialized diagnostic, surgical and obstetrical services for small and large animals. The building is equipped with latest instruments and technologies.



#### **COLLEGE OF TECHNOLOGY**

The College of Technology, was established during the year 2013-14 and inaugurated by Honorable Dr. A.P.J. Abdul Kalam, the then Hon'ble President of India, on 06.03.2014. The foundation stone of the college was laid down by Dr. P. Das, Deputy Director General, I.C.A.R., New Delhi on 26.08.2006. This college is an integral part of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, U.P. The College of Technology Building was Constructed by the government order No: 774/67- कृषि v- 06 -500 (14) 03 dated 31-03-2006 and an amount of Rs 1453.32 lacs had been sanction by the U. P. Govt. The construction of building was started in May 2006, then after government had revised the total cost building of from Rs 1453.32 lacs to Rs 2197.63 lacs by government order No: 267/67-कृषि v- 10 -500 (14) 03 Dated 08-11-2010. The College Building has Ground throu & two stories. The building construction was completed in year 2013 with the total plinth area of 14626.27 sq.m.

#### The provision of following departments has been made in the college of technology

- 1. Agricultural engineering
- 2. Soil and water conservation engg.
- 3. Irrigation and Drainage Engg.
- 4. Agricultural Machinery and Power Engg.
- 5. Post-Harvest Technology
- 6. Civil Engg.
- 7. Electrical Engg.

- 8. Mechanical Engg.
- 9. Electronics Engg.
- 10. Computer Engg.
- 11. Information Technology
- 12. Basic Sciences

The 07 post of Professors, 15 post of Associate Professors, 48 post of Assistant Professors and 1 Post of Dean, College of Technology have been sanctioned by the Government order No: 29/2018/1592/67- कृषि v- 18 -500 (03) /17, dated. 11-08-2018. The Post of the Dean is sanctioned with the condition that there will not be any appointment on this post but the senior most professor of this faculty will look after the responsibilities of Dean, College of Technology. In the academic session (2019-20), course of B. Tech. degree programme in Agricultural Engineering has been started with the admission of 32 student's. In future, six more streams mainly B.Tech. (Civil Engg.), B.Tech. (Mechanical Engg.), B.Tech.(Electronics Engg.), B.Tech. (Computer Science) and B.Tech. (Information Technology) are proposed to be started. At present, the latest syllabus recommended by fifth Dean's committee (ICAR) is being followed.

The main objective of the College of Technology is to make provision of education mainly for rural people of Uttar Pradesh to provide best facilities for research and extension in the field of Agricultural Engineering & Technology.





## COLLEGE OF POST-HARVEST TECHNOLOGY AND FOOD PROCESSING

The College of Post-Harvest Technology and Food Processing has established in 2019. The first batch of B.Tech. (Food Technology) has been started from the Academic Session 2019-2020 with the strength of 44 students. The college has presently 4 UG class rooms and 2 PG class rooms with white/green boards and comfortable sitting arrangement. A committee room is interactive having facilities of audiovisual teaching and presentation & DVD'S like LCD projection systems enhance the instructional and teaching capabilities. Many laboratories are equipped with various types of lab equipment's and machineries.

#### **MANDATE**

- To impart teaching for the development of human resources in the area of food processing and technology.
- > To undertake basic, applied, strategic and adaptive engineering and technology research in post-production sector of produce of plant origin, livestock and aquaculture produce including agriculture structures and environmental control, quality and food safety.
- > To promote professional skills and knowledge through meaningful Hands-on-

- Training for innovations of new processing technology.
- ➤ To expose the students to various aspects of entrepreneurship development programmes with industrial environment so as to understand the scope, functions and job responsibility in food industries.
- To acquaint students with ongoing extension activities and transfer of technology.
- To develop and strengthen linkages with the growers/farmers, private and public sector food processing enterprises in the mandated areas.

#### **INFRASTRUCTURE**

The College of Post-Harvest Technology and Food Processing is equipped with 08 lecture theatres furnished with comfortable sitting arrangement and quality green boards for instructions. The college has one seminar room equipped with LCD projector where faculty meeting and seminars are being organized.

#### **EXAMINATION CELL**

The College of Post-Harvest Technology and Food Processing has an examination cell with all required facilities for conducting examination of the college.





#### **COLLEGE OF HORTICULTURE**

The future of horticulture industry is considerably increasing and taking root in western region of UP. The cultivation of horticultural crops especially perishable fruits. European vegetables & Cut flowers in the region has been a very profitable venture not only because the region is a part of National Capital Region (NCR) but also very close to national capital. It is pertinent to mention that there was a proposal of 12 colleges in the original master plan of the university. Of these, the establishment of college of horticulture was one of the prime mandates of the university. The establishment of college of horticulture would not only be helpful in imparting education in horticulture but would also facilitate initiation of research work on the burning problems of horticulture and boosting up the quality production of major horticultural crops in the region. Such a highly specialized college will impart education and training to the rural and urban youth of different states of country in general and western UP in particular. This will strengthen the efforts to realize the basic objectives of balanced and rapid development of economy of the region. It hardly needs emphasis that without such an educational institution, the development programme in the field of Horticulture cannot be managed adequately.

Considering the significance of horticulture in the region, the Uttar Pradesh Government has approved the establishment of college of horticulture in the main campus of university. In order to commence the undergraduate programme successfully in Horticulture from the academic year 2019-20, the course curricula of B.Sc. (Hons.) Horticulture degree programme has been prepared as per the 5th Dean Committee recommendation.





#### **FACULTY OF POST GRADUATE STUDIES**

The mission of the Faculty for Postgraduate Studies is to promote excellence amongst postgraduate staff and students through responsive teaching, postgraduate studies research and supervision, scholarship and instructional pastoral support. The main objective of the Centre for Postgraduate Studies is to become a CPGS Centre of repute that effectively enables UNAM to fulfil its national Postgraduate education and training mandate. The Centre for Postgraduate Studies has the mandate to coordinate the uniform quality control regulations and procedures are strictly adhered to and high academic standards are maintained. In addition to providing postgraduate students with high quality academic, ICT, psychosocial and socialemotional support services. The Centre is mandated to build capacity for the expression of excellence in teaching, student research supervision and innovation amongst postgraduate staff.

#### Roles and responsibilities:

- Coordinate and monitor the running of University postgraduate programmes.
- > Coordinate the consideration and processing of postgraduate student research proposals, theses and dissertations.
- > Coordinate and administer viva voce examinations.
- Review all postgraduate programmes offered by the Colleges
- Provide academic support services to postgraduate students such as those of study programme information dissemination, supervision, academic counselling and pastoral care, enrolment, registration, examination, compensatory capacity enhancement, postgraduate level ICT empowerment and access to electronic resources for study purposes, postgraduate study resource mobilization and any other services germane to the optimal provision of

postgraduate studies.

- Provide postgraduate students with opportunities to interact and determine their own welfare through the envisaged postgraduate student's association and the postgraduate student's newsletter.
- > Operate administrative and academic structures for applying research ethics in postgraduate training and in the use of human and animal subjects in research conducted by postgraduate students.
- Empower academic staff, through short courses, workshops and seminars, to teach at the postgraduate level, conduct effective student supervision and lead viable collaborative staff/student research teams.
- Consider and assess the viability, quality and accreditation issues of new postgraduate programmes; Initiate, formulate, interpret, and review postgraduate studies regulations.

Our mission is to produce post-graduates who will be mentally resourceful, intellectually equipped, entrepreneurially self-dependent, futuristically visionary and responsibility sensitive. The University has a number of linkages with institutions and industry at National that offer opportunities for internship and exchange to faculty and students. Our faculty and students have continued to win grants and fellowships to carry out postgraduate and postdoctoral research work in specialized laboratories overseas. Masters and Doctorate thesis for the session 2019-20 is shown in Table 3.



# Table 3 List of Masters and Decorate Theses of Students

			College of Agriculture	
			Agricultural Economics	
⊣	Vikas Kr Sharma	3642	Study on costs and returns of major crops under different size of farms in Dr. F. Muzaffarnagar district of Western Uttar Pradesh	Dr. H.L. Singh
2	Gaurav Tomar	3953	Economic analysis of fish farming practices in Western Uttar Pradesh Dr. F	Dr. H.L. Singh
В	Rohit Chaudhary	3952	Economic analysis of rice-based farming system in Meerut district of Dr. F. Western Uttar Pradesh	Dr. H.L. Singh
4	PV Naga Sindhuja	3995	Study on production and marketing of papaya in Kadapa District of Dr. F. Andhra Pradesh	Dr. H.L. Singh
rv	Aobakwe Gabobolokwe	3997	Study on regional growth analysis of sugarcane production in Uttar Dr. Fradesh	Dr. H.L. Singh
		7	Agricultural Extension and Communication	
9	Anuj Pratap Singh	3916	Study on technological gap in adoption of improved cultivation practices among onion growers in Meerut district of Uttar Pradesh Dr. V	Dr. V.K. Singh
	Sumit Kumar Gupta	3917	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	Dr. Dan Singh
8	Shankar Dayal Bharti	3918	Study on adoption of improved guava cultivation practices among Dr.R orchardists of Muzaffarnagar district.	Dr.R.N.Yadav
6	Gargi Paliwal	3919	A study on utilization pattern and constraints of information and Dr. L technology among the students.	Dr. D.K. Singh
10	Unmesha Prajnshree	3920	A study on attitude and constraints face by girl students in state Dr. V agriculture universities of Uttar Pradesh	Dr. V.K. Singh
11	Abdul Mateen Noori	3921	A Study on awareness and opinion of graduate students towards online $\left  \begin{array}{c} D_{r.\ L} \end{array} \right $ banking.	Dr. Dan Singh
12	Guguloth Govind	3923		Dr. D.K. Singh





	Edwin Moitato,	3998	by students in Sardar Vallabhbhai echnology	Dr. V. K. Singh
			Animal Husbandry	
Deep	Deepak Singh	2449	Evaluation of egg quality traits, produced from different categories of farms in western UP	Dr. Nazim Ali
Vine	Vineet Kumar	3968	Effect of zinc yeast supplementation on growth performance, antioxidant status and immune status of sahiwal calves	Dr. D. S. Sahu
Karti	Kartik Tomar	3969	Effect of feeding organic acid on growth performance and carcass quality traits in broiler	Dr. Rajkumar
Divy Bhar	Divya Prakash Bhartiya	3970	Effect of probiotic supplementation on growth performance, blood biochemical of broiler	Dr. D. S. Sahu
Shiv	Shiv Pratap Singh	3971	Growth performance, antioxidant and immunological status of buffalo calves supplemented with copper sulphate and nano copper	Dr. S P Yadav
Dee	Deepak Kumar	3972	Effect of different sources of chromium supplementation on growth performance, blood metabolites and immune status of murrah buffalocalves	Dr. S P Yadav
Tae]	TaeloMangwai	3987	Study on the evaluation of the improved feeders on the perform ance and behavior of goat kids raised under stall fed conditions	Dr. Rajbir Singh
Ms.	Ms. Mpho Moilwa	3999	Feasibility of treated rumen digesta supplementation on growth performance, health status and carcass characteristics in broiler	Dr. Rajkumar
			Entomology	
Mis	Miss Megha G.	3938	Biology and evaluation of botanicals and plant extracts oil against maize weevil, Sitophilluszeamais (Motschulsky)	Dr. G.Singh
Mis	Miss Sucharu Singh	2456	Studies on population fluctuation of Helicoverpaarmigera (Hub.), and Erias vettella(Feb.) and eco-friendly management on Okara in Western Plane Zone of U.P.	Dr. Rajendra Singh
Aru	Arun Kumar	3937	Studies on population fluctuation of Mango hopper Amaritodusatkinsoni (Leth) and their management in Western Plane Zone of U.P.	Dr. Rajendra Singh

ar 3935		Bio- effi of Brow Efficac	Bio-efficacy of some newer insecticides and bio-pesticides for management of Brown Plant Hopper (NilaparvatalugensStal.) of Basmatirice  Efficacy of some bio-pesticide and newer insecticides for the	Dr Hem Singh
Mr. Ashish Umrao 3933 Erincacy managem chickpea		managen chickpea		Dr. Hem Singh
Mr. M. Sreedhar 3939 Studies ground		Studies ground	Studies on varietal preferences, physico-chemical pod characters of $\left  \Gamma \right $ groundnut against bruchid, Caryedon serratus (Oliver)	Dr. D.V.Singh
Mr. Mohd. Yameen 3934 Success Chilopa		Success Chilopa	Succession of insect pest in maize and management of maize stem borer $\left  { m I}  ight $	Dr. D.V. Singh
Mr. Vipan Kumar 3936 Studies Scirpop medina		Studies Scirpop medina	Studies on population by ramics and management of yellow stem borer, Scirpophaga incertulas (Walker) and leaf folders, Cnaphalocrocis medinalis (Guenee) using newer insecticides and biopesticides in rice	Dr. S.K. Sachan
)	)		Genetics and Plant Breeding	
Twinkle Bhagat3942MoleculWheat ("		Molecul Wheat (	Molecular Characterization and genetic Diversity Analysis in bread Wheat ( <i>Triticum aestivum</i> L.).	Dr. Pooran Chand
Anil Kumar S941 Genetic (Sorghun		Genetic (Sorghu1	Genetic variability, heritability and D² analysis in forage sorghum (Sorghum bicolor L. Moench)	Dr. S.K. Singh
Nirdesh Kumar Chaudhary Analys		Morph Analys	Morphological and Molecular Markers Based Genetic Diversity Analysis in Chickpea ( <i>Cicer aritinum</i> L.)	Dr. Mukesh Kumar
			Plant Pathology	
Mr. Anbazhagan 3967 Studies		Studies isolates	Studies on enhancing water stress tolerance in tomato by using different isolates of <i>Pseudomenas fluorescens</i> and <i>Trichoderma harzianum</i> .	Dr. Ramji Singh
Mr. Arjun Singh 3965 Studies French b		Studies French b	Studies on management of Anthracnose (Collectotrichumlindemuthianum) of French bean (Phaseolus vulgaris).	Dr. Ramesh Singh
Mr. Anil Kumar 3966 Compa		Compa	Comparative study of locally available <i>Tricoderma</i> spp. with commercial formulation of <i>Trichoderma</i> against collar rot ( <i>Sclerotium roffsii</i> ) of chick pea.	Dr. Ramesh Singh



36	Prashant Singh	3961	Studies on management of Dry root rot of chickpea caused by Rhizoctonia bataticola Butler.	Dr.Prashant Mishra
37	Miss. Dipanjali Bag	3962	Morphological and molecular characterization of Fusarium sp. causing I bakanae diseases of rice in western U.P	Dr. Kamal Khilari
38	Mr. Vinay Kumar	3963		Dr. Gopal Singh
			Soil Science and Agricultre Chemistry	
39	Pankaj Chaurasiya	3954	Effect of PSB inoculation with and without P and S application on physicochemical properties of soil, nodulation, nutrients uptake and productivity of mungbean (Vigna radiata L.) in western U.P.	Dr. Satendra Kumar
40	Drishti Katiyar	3958	Effect of Rhizobium and PSB inoculation on nodulation, yield and uptake of N and P by chickpea ( <i>Cicer aritinum</i> L.) in Inceptisol of Meerut.	Dr. Satendra Kumar
41	Shivakar Bhadauria	3955	Effect of tillage practices and fertilizer management on nutrient dynamics in wheat under rice-wheat cropping system.	Dr. Yogesh Kumar
42	Laxman Kumawat	3959	Effect of organic nutrient sources ant tillage on soil health and productivity of wheat under rice-wheat system.	Dr. Yogesh Kumar
43	Gouthu Naga Panchavathi	3960	Effect of nitrogen management in pigeonpea	Dr. B. P. Dhyani
44	Archana Verma	3956	Effect of Mode of Micronutrients Application on Micronutrient Availability, Growth, Yield and Chemical Composition of Pigeon pea (Cajanus cajanL.) in Sandy Loam Soil	Dr. U. P. Shahi
45	Akash Kumar	3957	Effect of Zincobensulf application on Zinc, Sulphur availability in soil and growth of Wheat ( <i>Triticum aestivum</i> L.).	Dr. S. P. Singh
46	Abhilasha Pathak	2448	Study of physico-chemical properties of soil under different rice based cropping system in light textured soil"	Dr. Ashok Kumar



			College of Agriculture	
			Agricultural Biotechnology	
47	Mr. Amit Kumar	3636/17	Optimization of Agrobacterium tumifaciensmediated gene transfer Dr. Mu. method in Tomato (Solanum lycopersicum)	Dr. Mukesh Kumar
48	Nand Lal Rai	3913	Effect of sodium azide to develop drought tolerant lines in wheat (Triticum aestivum L.) and its genomics evaluation using SSR markers Dr. MK	Dr. MK Yadav
			Agronomy	
49	Gajjela Indira	4819	Effect of planting method and bioinulation on performance of pigeonpea ( <i>C. cajan</i> L.) nutrient use efficiency and economics	Dr. R.B. Yadav
50	Vikash Singh	4817	Evaluation of different microbial inoculums on summarmungbean Dr. Ade (Vigna radiata L.)	Dr. Adesh Singh
51	Km. Mausmi Rastogi	4815	Effect of weed management practices on performance of transplanted Dr. Vivek rice (Oryza sativa L.) and associated weeds	Vivek
52	Anand Kumar	4814	Effect of establishment method and weed management practices on Br. K.G growth yield and qualities of rice (Oryza sativa L.)	Dr. K.G. Yadav
53	Durgesh Kr. Maurya	3174	Effect of planting method and seed priming on mungbean ( $Vigna\ radiata$ Dr. K.G.L.)	Dr. K.G. Yadav
54	Satya Prakash Gupta	4811	Effect of application of micronutrient on spring moong bean ( $Vigna$ Dr. P.K radiata L.) in western U.P.	Dr. P.K. Singh
55	Rahul Verma	4816	Effect of different nutrient sources on growth, yield and nutrient uptake Dr. P.K in rice (Oryza sativa L.) in western U.P.	Dr. P.K. Singh
56	Pradeep Kr. Singh	4818	Performance of rice under different planting techniques and organic fertilizers complemented with chemical N fertilizer on productivity, profitability and soil health in Inceptisol	Dr. R.K. Naresh



			College of Horticulture	
П	Deep Kumar	4219	Genetic diversity analysis by using morphological approaches in Bottle gourd [Laginaria siceraria (Molina) standl] germplasm in India.	Dr. Vipin Kumar
2	Sudhanshu Singh	4849	Effect of Nutrients Management Practices on Growth and Yield of Garlic (Allium sativum) cv. G-282	Dr. Vipin Kumar
33	Kefayatullah Wasiq	4220	Effect of different doses of cycocle and malelic hydrazide on groeth and flower yield of African marigold ( $Tagetes\ eraecta\ L$ .)	Dr. Satya Prakash
4	Rajat Rajput	4851	Study of Genetic Diversity in Pumpkin (Cucurbita moschata L.)	Dr. Satya Prakash
rv	Mohd. Almas Amiri	2732	Effect of Benching and disbudding on growth and yield of Chrysanthium	Dr. Satya Prakash
9	Vibhu Pandey	4218	Effect of time and intensity of shoot pruning on fruit size, yield and quality of Guava ( <i>Psidium guajava</i> L.) Under western U.P. conditions.	Dr. Arvind Kumar
^	Khursheed Alam	4215	Analysis of genetic diversity in Bottle Gourd [Laginaria siceraria (Molina) standl]	Dr. M.K.Singh
∞	Sidharth Kumar	4847	Effect of micronutrients application on growth, yield and quality of Onion (Allium cepa L.)	Dr. M.K.Singh
6	Satish Kumar	4855	Effect of pruning on growth, flowering, fruiting and quality of Guava (Psidium guajava L) varieties under high density conditions.	Dr. Arvind Kumar
10	Vikas Patel	4850	Assesment of Genetic Diversity in different accessions of Turmeric (Curcumalonga)	Dr. Bijendra Singh
11	Deepesh Keshri	4214	Studies on genetic divergence and molecular characterization in cucumber (Cucumis satious L.)	Dr. B.Singh
12	Prabhat Kumar Pandey	4216	Effect on plant growth regulators micro propagation of mulberry (Moras alba) through in vitro culture of shoot tip and nodal ex-plant	Dr. Yogesh Prasad



13	Vimal Chand Garge	4217	Effect of nutrient sources on growth, yield and quality of French marigold (Tagetes patula L.) in North-West plain zone of Uttar Pardesh	Dr. S. Malik
14	Khushboo Sharma	4370	Effect of integrated nutrients and foliar spray of Bio-regulators on growth, yield and quality of Okra [Abelmoschus esculentus (L.)] under western plain zone of Uttar Pradesh	Dr. Mukesh Kumar
15	Veersain	4852	Studies on heterosis and character association analysis in papaya ( $Caricapapaya$ L.)	Dr. Yogesh Prasad
16	Abhishek Chandra	4853	Effect of Bio-regulator on growth, flowering and bulb yield of double flowered Tuberrose (Polianthes tuberose L.)	Dr. S. Malik
17	Upendra Maurya	4848	In-Vitro micro propagation of poinsettia (Euphorbia pulcherrima)	Dr. Mukesh Kumar
18	Satyarath Sonkar	4854	Effect of rooting media on germination, shoot and root growth of lime acid (Citrus aurantifolia. Swingle)	Dr. Satendra Kumar
19	Sharifullah Rahmi	4857	Studies on genetic variability in Tomato	Dr. B.Singh
20	Toryalay Bajawari	4859	Impact of gibberellic acid on growth and flowering parameters of Arican marigold in western plain zone of Uttar Pradesh	Dr. S.Malik
21	Shivaji Pundir	4856	Genetic variability and Diversity Analysis in Chilli (Capsicum annum L.)	Dr. M.K.Singh
22	Mr. Rehan	3950	Analysis of genetic diversity in Bottle gourd [Lagenaria siceraria (Molina) Standl] germplasm	Dr. M.K.Singh



			College of Biotechnology	
1	Surender Upadhayay	4232	16s RNA based metagenomic analysis of uterine microbiota in cattle.	Dr. Ravindra Kumar
2	Gargi	2873	Impact of elevated temperature stress on aroma and its gene expression in photosensitive basmati rice.	Dr. Ravindra Kumar
3	Vedikaa Dhiman	2530	The Lens culinaris Zip gene family: Identification, characterization and gene expression.	Dr. Pankaj Kumar
4	Shalja Panwar	2528	Identification characterization and gene expression of zip gene in glycine max.	Dr. Pankaj Kumar
ιC	Malyaj R Prajapati	4233	De novo assembly and Transcriptome Analysis of Allium sativum by Illumina sequencing	Dr. Pankaj Kumar
9	Varun Saxena	-	Biochemical analysis of hydroponically grown <i>Phaseolus vulgaris</i> with different levels of zinc	Dr. Pankaj Kumar
7	Krishanu	2924	Estimation of Pesticide Residues in Rice Grains in Western UP	Dr. Rekha Dixit
$\infty$	Shailendra Pratap Singh	2860	Accumulation of Heavy metals in Rice grains in Western UP	Dr. Rekha Dixit
6	Ms. Pooja Sharma	3910	Epidemiological studies and molecular characterization of phytoplasma associated with sugarcane	Dr. Jitender Singh
10	Akansha Manav	4235	Molecular Characterization and Diagnosis of virus infecting Garlic (Allium sativum)	Dr. Jitender Singh
11	Anamika Bhordia	4238	Bacterial prevalence and its metagenomic studies in bovine mastitis	Dr. Amit Kumar
12	Ankit Gupta	4237	Investigation of Phytochemicals and antimicrobial activity of ocimumsantum	Dr. Pankaj Chauhan



13	Mansi Tyagi	4236	Studies on characterization of microorganisms for solubilization of phosphate, potassium and zinc.	Dr. Akash Tomar
14	Mr. Poornima Maurya	2882	Stability studies and steady state kinetics of α amylase from <i>Vignaradiata</i>	Dr. Sandeep Kumar
15	Preeti Rathi	2465	Genotoxicity assessment of some selected chemicals on Tomato (Solanumlycopersicum)	Dr. Shalani Gupta
16	Deependra Pratap Singh	ı	Evaluation of chemical induced DNA damage in tomato crop	Dr. Shalani Gupta
17	Tanushree	2482	Isolation and characterization of Xanthmonasspp from Brassicaceae	Dr.Purushottam
18	Komal Chauhan	4234	Prevalence of $\it E.~coli$ in commonly consumed food in and around Meerut	Dr. Purushottam
		College	College of Post-Harvest Technology and Food Processing	
	Puja	4228	Development of value-added products from carrot and assessment of their storability	Dr. Suresh Chandra
2	Deepali Mudgal	4229	Studies on drying characteristics of beet root (Beta vulgaris L.) and development of its chips with quality evaluation.	Dr. B.R. Singh
3	Pankaj Kumar	4230	Development and quality evaluation of value added mixed fruit RTS beverages.	Dr. Vivak Kumar

# Ph.D. Degree Programme

S.No.	Name of Student	ID	Title	Advisor Name
			College of Agriculture	
			Agricultural Biotechnology	
1	Ashish Kumar	3422	Molecular characterization and differential analysis of salt responsive genes in Lentil under salt stress	Dr. R.S. Sengar
2	Devender Kumar	3703	A study on in-vitroshoot multiplication and analysis of gene expression profiles under drought stress in sugarcane	Dr. R.S. Sengar
			Agronomy	
3	Dharmendra Kr. Singh	4909	Effect of weed management on weed dynamics and performance of wheat (Triticum aestivum L.) under late sown condition	Dr. Vivek
4	Miss Jakkannagari Chaithanya	4907	Effect of herbicides on weed dynamics, yield and monetary returns of rice ( <i>Oryza sativa</i> L.) under different nutrient options	Dr. Vivek
5	Mohd. Shahalam	2593	Soil water dynamics and water productivity of rice under rice-wheat cropping system in water regimes and establishment method	Dr. R.K. Naresh
9	Roop K. Pachauri	3648	Effect of nutrient sources and weed management options on weed dynamics and productivity of wheat ( $Triticum  aestivum  L$ .)	Dr. R.B. Yadav
7	Ashish Nath	4906	Effect of nutrient management and its scheduling on performance of newly released Indian mustard ( <i>Brassica juncea</i> L.) cultivars	Dr. R.B. Yadav
8	Gaurav Shukla	4902	Effect of moisture conservation practices and efficient zinc management on growth and productivity of kharif maize ( $Zea\ mays\ L.$ )	Dr. Adesh Singh
6	Sauhard Dubey	4905	Chemical weed control and Precission Nitrogen Maangement in late sown wheat ( <i>Triticum aestivum</i> L.) under western plain zone of U.P.	Dr. Mukesh Kumar

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		7	Agricultural Extension and Communication	
10	Ankit Singh Yadav	1384	Study on technological gap and economic performance of sugar cane growers in western Uttar Pradesh.	Dr. D.K. Singh
11	Amlendra Kr. Verma	2665	A study on knowledge and adoption of vegetable growers on safe plant protection measures in Western Uttar Pradesh	Dr. Dan Singh
12	Jagatpal	3719	Study on adoption of improved cultivation practices of tomato among vegetable growers of western Uttar Pradesh.	Dr. R.N. Yadav
			Animal Husbandry	
13	Raj Kumar	3718	Study on growth performance & biochemical parameter of broilers, fed diet supplemented with mushroom & probiotics	Dr. Nazim Ali
14	Rajeshwar Dayal	3016	Studies on lactation disorders and culling pattern in Haryana cattle	Dr. Rajbir Singh
			Entomology	
15	Mr. Arvind Singh	3708	Studies on biology and evaluation of botanicals and plant extracts oil against <i>Tribolium castaneum</i> on stored grains.	Dr. G. Singh
16	Mr. Rohit Malik	2648	Seasonal incidence and efficacy of bio-rational insecticides against major pests of potato crop.	Dr. D.V. Singh
17	Mr. Rajat Deshwal	3707	Evaluation of integrated pest management module against yellow stem borer, <i>Sciropophaga incertulas</i> (Walker) and leaf folders, <i>Cnaphalocrocis medinalis</i> (Guenee) of rice in western plan zone of Uttar Pardesh.	Dr. S. K.Sachan
			Genetics and Plant Breeding	
18	Prakrati Tomar	1518	Pyramiding of blast resistant genes into rice (Oryza sativa L.) cultivar Basmati 370	Dr. Pooran Chand
19	Mohit Sirohi	1532	Selection parameters and gene action for metric traits in forage sorghum (Sorghum bicolor).	Dr. S.K. Singh



20	Brijesh Kumar Maurya	3709	Studies on genetic architecture for yield and its contributing traits in rice   Dr	Dr. Pooran Chand
21	Rajendra Kumar	3710	Studies on genetic architecture and heterosis for yield components in forage sorghum (Sorghum bicolor L. Moench).	Dr. S.K. Singh
22	Ompal	2672	Diallel analysis for yield & some quality components in Indian mustard [Brassica juncea(L.) Czern and Coss]	Dr. S.A. Kerkhi
			Plant Pathology	
23	Mr. Jaskaran Singh	3027	Studies on role of <i>Trichochoderma</i> in management of rice root knot nematode ( <i>Meloidogyne graminicola</i> )	Dr. Kamal Khilari
24	Jay Prakash Kannaujia	2686	Studies on spawn quality and major fungal disease management of $\left. \begin{array}{c} D_{r} \end{array} \right.$ Oyster mushroom	Dr. Gopal Singh
25	Sandeep Kumar	3684	Effect of different substrate and oil cakes on production of oyster Dr mushroom	Dr. Gopal Singh
			College of Horticulture	
1	Amit Kumar	4919	Studies on combining ability and heterosis for yield and it components in Okra (Abelmoschus esculentus L. Moench)	Dr. Satya Prakash
2	Rajat Singh	4250	Studies on heterosis, combining ability and molecular screening of bottle gourd ( <i>Lagenaria siceraria</i> Sandl.) for biotic resistance.	Dr. B. Singh
3	Mujeev Ahmad	3947	Generation mean analysis for yield and its component traits in Bottle Dr gourd (Lagenaria siceraria Sandl.)	Dr. B. Singh
4	Sateesh Pratap Singh	4918	To studies on Heterosis and combining ability for growth, yield and quality traits of Cucumber	Dr. S. Malik
ιC	Devendra Pal	4921	In-vitro propagation of pomegranate and assessment of genetic diversity using RAPD, ISSR and SSR markers	Dr. Mukesh Kumar
9	Anuj Pal	1749	Effect of quantitative plant traits on the effencicy of in-vitro cloning of dragon fruit ( <i>Hylocereusundatus</i> )	Dr. Yogesh Prasad



	Rishabh Shukla	4920	Studies on morphology and bearing behavior of guava cultivars under western U.P. conditions	Dr. M.K. Singh
$\infty$	Kaushlendra Pratap Singh	3674	Effect of plant growth regulators on flower induction and genetic diversity analysis using molecular markers in Brinjal (Solanum melongana L.)	Dr. B. Singh
6	Archi Gupta	3400	Study of heterosis and screening of table pea for powdery mildew D. resistant using molecular marker	Dr. B. Singh
10	Gaurav Kumar Ahirwar	4248	Assessment of genetic parameters and phytochemical analysis D. Bougainvillea spp using morpho-agronomic traits, Molecular markers Kand GC-MS analysis	Dr. Mukesh Kumar
11	Shivanand Pandey	4247	Effect of different concentration, Shoot formation and root development in Pepino ( $Solanum\ muricatum\ L$ .) under In-vitro conditions	Dr. Yogesh Prasad
12	Manuj Awasthi	4249	Assessment of different IBA concentration, Rooting media and time for enhancing survivability and profitability of air profitability of air layered guava ( <i>Psidium guajava</i> L.)	Dr. S. Malik
13	Raunak Sharma	4347	Effect of integrated nutrients on growth, yield and quality of onion [Allium cepa (L.)] under western plain zone of Uttar Pradesh	Dr. M.K. Singh
14	Mohit Chaudhary	1565	Effect of organic fertilizers complemented with chemical fertilizers on vegetative, nutritional and productive parameters of gladiolus (Gladiolus grandiflorus L.)	Dr. S. Malik
15	Amit Kumar	3984	Effect of different sources of nutrients and mulching on sustainable Diproduction of cauliflower	Dr. Mukesh Kumar
16	Ajay Yadav	3983	Studies on effect of different gelling agents for micro propagation of D. banana. Variety Udhayam	Dr. Yogesh Prasad
17	Mr. Vivak Ujjwal	2990	Effect of Integrated Nutrient Management on broccoli ( <i>Brassica oleracea</i> D. var. <i>italic</i> L.) in Western Mediterranean area	Dr. M.K. Singh



		College of Po	of Post Harvest Technology and Food Processing	
П	Kavinder Singh	1462	Development, standardization and preservation of jaggery and its products from sugarcane juice using herbal clarifying agents.	Dr. Suresh Chandra
2	Ankur M Arya	2075	Assessment of engineering properties of jackfruit seed and its flour and osmotic dehydration of jackfruit pulp.	Dr. BR Singh
8	Vipul Chaudhary	3416	Study of drying kinetics and quality evaluation of beet root	Dr. Vivak Kumar
4	Vaishali	3991	Standardization of processing parameters for development of potato products and assessment of quality.	Prof. Samsher
rV	Sunil	3692	Development and quality evaluation of value added cookies with partial replacement of wheat flour by pumpkin and their seed flour during storage.	Dr. Neelesh Chauhan
9	Vikrant Kumar	3693	Development of mixed fruits wine and quality evaluation during storage.	Dr. Jaivir Singh
7	Ratnesh Kumar	3694	Studies on standardization of processing parameters for fibre rich cookies.	Prof. Samsher
∞	Ankur M Arya	2075	Assessment of engineering properties of jackfruit seed and its flour and osmotic dehydration of jackfruit pulp.	Dr. BR Singh
6	Vipul Chaudhary	3416	Study of drying kinetics and quality evaluation of beet root	Dr. Vivak Kumar
10	Vaishali	3991	Standardization of processing parameters for development of potato products and assessment of quality.	Prof. Samsher



### **DEAN STUDENTS' WELFARE**

After creation of Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut, the office of Dean Students' Welfare, was established. This office is looking after various students' activities/facilities including sports, cultural, fellowships, recreation, health etc. Moreover, dignitaries of different fields are invited to share their thoughts, experiences and views among staff and students.

### 1. STUDENTS AMENITIES

### **HOSTELS**

Good hostel facilities are provided to all the under-graduate and post-graduate students of the University with an attached mess. Hostel Wardens are appointed in each Hostel for maintenance of student facilities and solving the residential problems of the students. The girl boarders are housed in Shaheed Bhagat Singh Girls Hostel, Sarojani Bhawan Girls Hostel and New Girls Hostel. Male boarders are housed in twelve hostels namely Gandhi Bhawan, Subhash Bhawan, Tagore Bhawan, CV Raman Hostel, Nehru Bhawan, APJ Abdul Kalam Hostel, Khurana Hostel, Type-I A Block, Type-I, B Block, Type-I, C Block, Pt. Lal Bahadur Shastri and International Hostel with adequate furniture and fixture facility.

International Hostel with single room suites for foreign students with facility of kitchen and attached rest rooms. The other facilities for day-to-day requirements like laundry, canteen, provisional store, bank, ATM etc. are also available in the University premises.

### **HEALTH FACILITIES**

Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut has developed a University Hospital for providing better health facility to students and staff. Special facility of Physician for various specialties is made available in campus. University hospital has 24 hours ambulance facility for emergency.

### **ORIENTATION**

Mentoring is a particular form of relationship designed to provide personal and professional support to an individual. A student mentor's role may be perceived to be facilitative, supportive and developmental for the student community in general and the first year students in particular. Orientation programme was organised by the Dean of Student Welfare on August 29, 2019 at the Gandhi Hall, SVPUAT with the welcome of the students, dignitaries, faculty members. Prof. R. K. Mittal, Hon'ble Vice Chancellor was the chief guest who graced the occasion with his presence. The major objective of the programme was to make the students aware of the academic aspects of the course, the rules and regulations of the University. The programme was inaugurated with the lighting of the lamp accompanied by Saraswati Vandana by the Chief Guest and other dignitaries. Next, a brief description of the University, which included the motto, history and reputation of University along with recent achievements was given by the anchors.



Hon'ble Vice Chancellor Prof. R.K. Mittal Addressing the Newly Admitted Students

### 2. PHYSICAL EDUCATION PROGRAMME

Physical Education and Sports play vital role for development and maintenance of personality, physical fitness, health and body build-up of the students. Along with the development of academic career of the students this university also strives hard to take care of physical fitness and personality development of the students by involving them in physical education, sports, cultural events, adventurous activities etc. at college level under the direct guidance of Dean of Students Welfare.









### (A) SPORTS ACTIVITIES Sports Facilities Available in the University

The stadium, Volleyball Court, Basket Ball, Kabbadi, Table Tennis, Kho-Kho, Gymnasium, Mini Gymnasium at Girls Hostel, Badminton hall, Indoor games and sports equipment's and efforts are being made to further strengthen and develop sports infrastructure and facilities with modern sports amenities.

The students of the university are also trained for the development of skills and excellence in various sports activities. Inter-Hostel competitions for various games like Tabletennis, Badminton, Kabbadi, Volleyball, Basketball, Kho-khoetc. are organized. The selected students from Inter-Hostel competitions are nominated for Inter-University participation. During the year, the following Inter-collegas competitions were held:-

Annual Sports Meet (Spardha 2020)



With the purpose to instil sportsman spirit among students and to enhance their physical and social skills, a three-day Annual Sports Meet 2019-20 was planned from 19.03.2020 to 21.03.2020 at Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut. However, due to COVID-19 precautions and countrywide lockdown sports meet was postponed.

### 20th All India Inter Agricultural Universities Sports and Games meet 2019-20

20th All India Inter Agricultural Universities Sports and Games meet 2019-20 was organized by: S.V.V. University, Tirupati (Andhra Pradesh) during 01-05 March, 2020. In this event 40 students from SVPUAT, Meerut participated in various games and sports. All the teams performed well in the event.

### (B) CULTURAL ACTIVITIES

Abhivyakti 2019: Cultural programme and Talent Show







University 19th Foundation Day was celebrated on 2nd October, 2019. University 20th foundation day was celebrated as a series of many literary, fine arts and cultural events. The events were started from 22nd September, 2019 and end in the evening of 2ndOctober, 2019. In the morning Foundation day lecture was delivered by Dr.Pitam Chandra, Former Director of ICAR, Central Institute of Agricultural Engineering, Bhopal. In the evening a cultural programme was organized and all first, second and third winners were awarded by the Chief guest, Dr. Pitam Chandra Hon'ble Vice Chancellor, Dr. R. K. Mittal and Dean Student Welfare, Prof. Anil Sirohi.

### 20th All India Inter Agricultural University Youth Festival 'Agriunifest' 2019-20

Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut participated in 20th All India Inter Agricultural Universities Youth Festival 2019-20 was organized by Indira Gandhi Krishi Vishwavidhyalay, Raipur (Chhattisgarh), during 08-12 February, 2020. More than 1500 participants from 54 Agricultural universities across the country have participated in the

Agriunifest. There was total 18 events - 4 theatre events, 1 Dance event, 4 literary events, 3 Music events and 6 Fine Arts events. This annual mega cultural fair of ICAR has provided an excellent platform for the young students of various agricultural universities of the country to express their enormous hidden talent and creativity in the field of art, dance and culture and to unite, exchange ideas and showcase their inherent talents. A Cultural team of 22 participants from SVPUAT participated in all 18 events - Light Vocal, Patriotic Song, Group Song, Group Dance, Quiz, Elocution, Debate, Extempore, One Act Play, Skit, Mime, Mono Acting, On the Spot Painting, Collage, Poster Making, Clay Modelling, Cartooning, Rangoli participated in the event.Mr. Shreyash Mukherjee, ID No. 4054 from University secured 1st position in Debate and 4th position in Elocution contest.

### Participation in National Youth Conclave and National Inter University Debate Competition (Youth Awakening Festival, YUVA -2020)

A contingent of five students was sent to GBPUA&T, Pantnagar to participate in Inter University National debate competition on 22-23, February, 2020 organized as a part of one of the most prestigious functions of the University "Youth Awakening Festival, YUVA" on the occasion of Swami Vivekananda Jayanti. Mr. Shreyash Mukherjee, ID No. 4054 from University secured 1st position in Debate and awarded Best Advocacy Award.

### Scholarships/Fellowships

The University takes all efforts for finding out scholarships, different types of monetary channels so the needy students may not turn away from the main-stream of education. There are two major types of scholarships: University related and sponsored by Government. The institutional financial aids were available in time for all the students of the faculties. The details of various scholarships and financial aids are given below.



Sl.	Name of Scholarship/Fellowship			2019-20	
No.	1, 1		Student for Apply	Student for Received	Amount
1	Samaj Kalyan Scholarship Meerut	SC/ST	165	163	87,11,880.00
		OBC	408	401	1,78,04,220.00
		GEN	212	209	97,38,810.00
		MINORITY	34	34	17,08,390.00
			819	807	3,79,63,300.00
2	Ph.D. Scholarship from University			28	4,59,000.00
3	NTS From ICAR-UG			21	5,70,400.00
4	NTS From ICAR-PG			36	13,67,888.00
5	JRF FROM ICAR			01	1,94,240.00
6	SRF From ICAR			06	17,92,479.00
7	DST-Inspire Fellowship From UGC			07	24,49,664.00
8	Rajiv Gandhi National Fellowship f	rom UGC for	On line	04	14,88,000.00
9	PDF Women			01	3,72,000.00
10	Scholarship Ad to India Afghanista	n Batch 2018-1	.9	02	6,52,000.00
11	Scholarship Ad to India Africa (Bot	swana) Batch 2	2017-18	01	4,86,000.00
	Total			914	4,77,94,971



### National Cadet Corps (NCC)

The University has a well-established Liaison office NCC Unit under the supervision of Liason Officer Dr. Ahmad Famin.

- NCC: 8 UP Bn. NCC AMU / 1 UP Engrs. Coy. AMU / UP
- Girls AMU: NCC cadets undergo training for 40 evening parades each session and organizing camps every year and also participating in community outreach programmes like, tree plantation and blood donation etc.
- The participation of university students results overall development of students in discipline, health developing responsibility of social works and support to needy person.
- The interested students voluntarily join NSS/NCC through university system.

Training: All the cadets of NCC have to undergo training in a session for 40 days in the evening at their respective units. The NCC training is the part time course and is of two years duration. After two years of training and attending one camp, the cadet is eligible to appear in B certificate examination with 75 % parade attendance. After the 3rd year the cadet is eligible for C certificate examination, if he/she has passed the B-certificate exam and has attended two camps.

The NCC camps: Camps are generally held including:

- Combined Annual Training Camp
- Army Attachment Camp
- NIC Camp etc.





Swachta Abhiyan



**Tree Plantation** 



**National Voter's Day** 



### **National Service Scheme (NSS)**

National Service Scheme was launched in 2010 for all undergraduate students. It is being currently supervised by Dr. R. S. Sengar.

- Regular Activities:
- Celebration of various days from time to time viz., International Yoga day, Teacher?s day, World AIDS day, and NSS Foundation day, Independence Day, Republic day, International Women's day, etc.
- Every year the tree plantation programme is being organized.
- Every year the blood donation programme

- is being organized and volunteers donate blood enthusiastically.
- Undertaking Shramdaan/ Cleaning campaign from time to time under the "Swachh Bharat Mission" in which the college campus, hostel premises, lecture halls, roads, university hospital etc. are kept clean and tidy and the collected dried leaves and other biomass is used for composting.
- Collection of glass and plastics is done regularly and the collected plastic is being sent for recycling.



**NSS Day Celebration** 



Swachta Abhiyan



Fit India Plogging Run



Padhe Janpat Meerut Abhiyaan



### NSS: A Look



Blood Donation Camp Organized by Dean Student Welfare Dr. Anil Sirohi



**Student taking part in Blood Donation Camp** 



Students taking part in Ek Bharat Shreshth Bharat



**International Women's Day Celebration** 



### RESEARCH

Uttar Pradesh is one of the most populous and comparatively bigger States of the country. There are 9 agro-climatic zones in this state. Out of 9 agro-climatic zones three, namely - Bhabhar and Tarai, Western Plain and Mid-Western Plain Zones falls under the area jurisdiction of Sardar VallabhBhai Patel University of Agriculture and Technology, Meerut. The area

consists of four revenue divisions i.e. Meerut, Saharanpur, Moradabad and Bareilly comprising total 18 districts, namely - Meerut, Ghaziabad, Baghpat, G.B. Nagar, Bulandshahr, Saharanpur, Muzaffarnagar, Moradabad, Bijnore, Rampur, J.P. Nagar, Bareilly, Badaun, Pilibhit, Shamli, Hapur, Sambhal and Shahjahanpur.

### Area Jurisdiction of SVPUAT Meerut



# Agroclimatic Zone of U.P. 1. Bhabhar and Tarai Zone 5. Central Plain Zone 2. Western Plain Zone 6. Bundelkhand Zone 3. Mid Western Plain Zone 7. North Eastern Plain Zone 4. South Western Plain Zone 8. Eastern Plain Zone 9. Vidhva Zone

## University H.Q.KVKs13KGKs01Research Centre03New Sanctioned KVK07Total districts18





The livelihood of rural people mainly oscillates around crop cultivation and animal husbandry. Research activities in the field of agriculture and allied sector have been constantly contributing towards ensuring livelihood and income security. At the same time certain new challenges like declining water resources, soil health deterioration has become major constraints in achieving sustainable production. Such production limiting factors call for serious research efforts for ensuring food and fodder security in the State. Under such situations our research programmes centred on water saving farming, soil health improving practices, agrobiodiversity and conservation and integrated farming. The research proposals shown in Table 4.

### **RESEARCH MANDATES**

- To generate income and employment in the sector of agriculture and make Indian agriculture globally competitive.
- To achieve economic and environmental sustainability through integrated management of production, marketing and end-use of farm produce.
- > To develop separate research strategies for large, medium, small and marginal farmers.
- Transformation of Agriculture being a production unit towards a business unit of the global market.
- > Emphases on natural resources management and bio-agricultural system.

- > Increase in production through integrated farming system with minimum cost and ecofriendly technology.
- > Use of Biotechnology in different crop management.
- Women empowerment and farmers participatory approaches.

### **MAJOR THRUST AREAS**

- Developing precision irrigation systems requiring low volume of water.
- Developing technology for sustainable improvement of soil health and fertility with bias on organic components.
- Emphasizing organic farming technology in prevailing crop production systems.
- ➤ IPNM and IPM technology of combating soil health and pests' problems.
- > Strengthening fruits, vegetables, floricultural, herbal and spices research activities.
- Promoting entrepreneurship vocations trade like poultry, mushroom, sericulture, apiculture, fisheries, piggery, goatary and dairying for diversification-based agriculture.
- Post-harvest technology and value addition of the crop produce for export purposes.
- Promoting aromatic and medicinal plants and floriculture for developing entrepreneurship for export.
- > Development of programmes for improvement of buffalo, cattle and sheep.

### Research Units Headquarter

S. No.	Particulars
1.	Crop Research Center
2.	Horticulture Research Center
3.	Livestock Research Center
4.	Fisheries Research and Training Unit
5.	Poultry Research and Training Centre
6.	Instructional Livestock Farm Complex
7.	Seed Production Center Chirodi

S.No.	Particulars
8.	Seed Processing Plant
9.	Vermi Compost Unit
10.	Technology Park
11.	Mushroom Production Center
12.	Bio-agents Production Center
13.	Golden Jubilee Forage Garden
14.	Organic Research Block



# Table 4 Status of Running Research Projects funding by different agencies

A. RKVY

S.No.	Name of Project	Funding	Name of P.I.	Year	Status	Total (Rs. in Lakh)	Progress
П	Establishment of advance diagnostic laboratory for identification of livestock diseases in Western U.P.	RKVY	Dr. Aarti Bhatele	2017-18	2017-18 Continue	291.00	291.00 Renovation of lab no. 2. Approximate Rs 33.76 lakh utilized.
2	Establishment of goat unit for conservation and revitalization of superior germplasm of Barbari goat.	RKVY	Dr. Ahamad Fahim	2018-19	2018-19 Continue	141.00	Renovation and modernization works are under progress Approximate Rs 84.60 lakh utilized
С	Establishment of Agro- processingcentre	RKVY	Dr. Suresh Chandra 2019-20 Continue	2019-20	Continue	205.00	205.00 Funds have been released to Treasury by Govt. U.P. The process to draw the money to University is going on.
4	Establishment of Critical care unit for farm and companion animals at veterinary clinical complex	RKVY	Dr. Tarun Sarkar	2019-20	2019-20 Continue	351.00	351.00 Under Process
					Total	988.00	

B. State Govt.

J. 0.2	D. State Sovie						
S.No.	Name of Project	Funding	Funding Name of P.I.	Year Status	Status	Total (Rs. in Lakh)	Progress
₽	Establishment of Centre of excellence on Basmatirice.	S. Govt	Dr. Kamal Khilari	2018-19	Continue	515.25	S. Govt Dr. Kamal Khilari 2018-19 Continue 515.25 Amount was received on 30.03.2019. Therefore, money cannot be utilized.



S.No.	Name of Project	Funding	Name of P.I.	Year	Status	Total (Rs. in Lakh)	Progress
1	Mega Seed Project	ICAR	Dr.R.B.Yadav	2006-07	Continue	36.75	2 TPH seed processing plant, office, store, seed testing lab, lecture hall, threshing floor etc. have been established and seed production programme is being carried at chirodi farm continuously.
7	All India coordinated rice improvement project.	ICAR	Dr. Rajendra Singh	2009-10	Continue	24.24	Nagina Vallabh Basmati-1 identified/release. Nagina Vallabh Basmati-2 is under trial. Nagina Vallabh Dhan-6 undertrial.
3	AICRP on nematode in cropping system	ICAR	Dr. Kamal Khilari	2015-16	2015-16 Continue	27.36	Voluntary Center.
4	AICRP on Mushroom	ICAR	Dr. Gopal Singh	2015-16	Continue	2.20	Voluntary Center.
ഹ	Promotional of Agricultural Mechanization for In-situ Management of Crops Residue in the State of Uttar Pradesh.	ICAR	Dr. S.K. Sachan	2018-19	2018-19 Continue	340.00	Machineries have been procured at various KVKs <i>i.e</i> Happy seeder, paddy straw chopper, Zero till seed drill, Rotavaror etc. Demonstrations were conducted atfarmer's field.
9	Joint Demonstration project on efficacy of Fluensulfone (NIMITZ2GR) on different crops	ICAR	Dr. Kamal Khilari 2019-20 Continue	2019-20	Continue	10.50	Product (NIMITZ 2GR) has been tested in 2018-19. Second year it will also be tested and data as per technical programme will be submitted to organization.
					Total	441.05	

C. ICAR



D. CST/DBT

### Disease free plants are being developed of various varieties Isolated potent bio inoculants Progress Under Process Under Process **Under Process** of Papaya. Total Rs. in Lakh) 10.44 23.34 34.39 11.94 6.50 2015-16 | Continue | 2017-18 | Continue | Continue Dr. Pankaj Kumar | 2009-10 | Continue | 2006-07 | Continue | Status Year Dr. Ramesh Singh Dr. Jitendra Singh Name of P.I. Dr. R.S. Sengar Dr. R.S. Sengar Funding DBT CST DBT CST CST Characterization of Micropropagation of stable Production of disease free through Tissue culture Centre of Excellence in Agriagriculturally important locally their utilization as bioinoculants for the suppression of soil borne pathogens and growth promotion in Phaseolus vulgaris (French bean) and Lens Creation of Bioinformatics infrastructure facility for the promotion of Biology teaching promotion among the western Banana (Musa sapentium) plants Technique for establishment of available microorganisms and hermaphrodite papaya and through bioinformatics (BTBI) Name of Project scheme of BTISnet esculenta (lentil) Biotechnology S.No. 3 $\sim$ 4 $\Box$

nursery and distribution of cost

plantlets among farmers

S.No.	Name of Project	Funding	Name of P.I. Year Status	Year		Total (Rs. in Lakh)	Progress
9	Utilization of rumen digesta waste	DBT	Dr. Ajit Kumar	2017-18	2017-18   Continue   19.63		Under Process
	from slaughter house as alternative						
	local protein sources for economical						
	ration production and controlling						
	environmental pollution.						
					Total 106.24	106.24	

### E. NHB/ NIAM

S.No.	Name of Project	Funding	Name of P.I.   Year   Status	Year		Total (Rs. in Lakh)	Progress
⊣	Establishment of mother plant nurseries for high pedigree planting material for fruit crops	NHB	Dr. Arvind Kumar	2014-15	Continue	45.70	Dr. Arvind Kumar 2014-15 Continue 45.70 Mother Plant nurseries have been established at HRC i.e. Mango, Guava.
2	Wheat Business School	NIAM	Dr. Bijendra Singh	2018-19	Continue	10.00	Dr. Bijendra Singh 2018-19 Continue 10.00 Survey is being done by Dr. Bijendra Singh
					Total	55.70	

# F. Spice Board, Ministry of earth science

S.No.	Name of Project	Funding	Name of P.I.	Year Status	Status	Total (Rs. in Lakh)	Progress
1	Centrally Sponsored Scheme on spices under NHM	Spice Board	Dr. Manoj Kumar   2003-04   Continue   2.17	2003-04	Continue	2.17	Quality seeds produced and supplied to the farmers.
2	Forecasting agricultural output using space, Agrometerology and land based observation (FASAL).	Min. Earth	of Dr. Yogesh Kumar 2010-11 Continue 4.50 Sc.	2010-11	Continue	4.50	Weather related in formations are being broadcasting for the farmers.
3	Agromet advisory services project	Min. of Earth Sc.	Min. of Dr. U.P. Shahi Earth Sc.	2008-09	Continue	25.00	2008-09 Continue 25.00 Data on weather are recorded.
					Total	31.67	



G. UGC

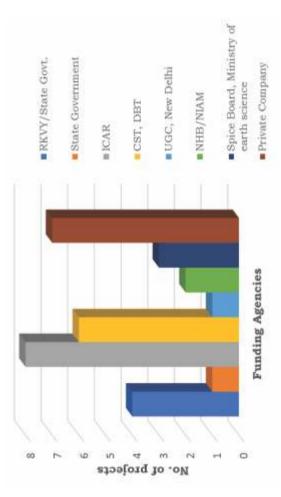
S.No.	Name of Project	Funding	Name of P.I.	Year	Status	Total (Rs. in Lakh)	Progress	100
1	Analysis of biomass hydrolysis and ethanol production by fungal crude enzymes	UGC	Dr. R.S. Sengar	1	Continue	33.00	Under Process	

H. Private Company

S.No.	Name of Project	Funding	Name of P.I.	Year	Status	Total (Rs. in Lakh)	Progress
1	Assessment of POLY-4 (polyhalite) for productivity, quality of potato an K, S use efficiency in soils of western plain zone of Uttar Pradesh.	Sirius Minerals Plc London.	Dr. U.P. Shahi	2017-18	2017-18 Continue	20.00	Product POLY-4 has been tested in 2018-19. Second year it will also be tested and data as per technical programme will be submitted to organization.
2	Evaluation of Chlorantraniliprole 0.4% G in sugarcane for one season Kharif 2018	FMC Private Itd.	Dr. Gaje Singh	2018-19	2018-19 Continue	2.60	Product Chlorantraniliprole 0.4%G has been tested in 2018-19 in sugar cane crop. The data as per technical programme will be submitted to organization.
က	Evaluation of corded Wheat Herbicide AP03 (5.1% EC) for the control of Phalaris minor (Canary Grass) and Avena Indoviciana (WildOat)	Natco Pharma Ltd.	Dr. Vivek Yadav	2018-19	2018-19 Continue	5.70	Product Herbicide AP03 (5.1% EC) has been tested in 2018-19 in wheat crop. Residual effect of chemical will be tested in succeeding crop. The data as per technical programme will be submitted to organization.
4	Validation of IPM for some selective Key paste in Mango and Guava.	NCIPM. New Delhi	Dr. D.V. Singh	2018-19	2018-19 Continue	2.50	Under Process



S.No.	Name of Project	Funding	Name of P.I. Year Status	Year		Total (Rs. in Lakh)	Progress
rv	Evaluation of bio efficacy of new fungicide product NF 171 against late bight of potato	ADAMA	Dr. Kamal Khiladi	2018-19	Continue		Under Process
9	Effects of aquasory on patoto production under drought stress conditions	SNF India pvt. ltd.	Dr. R.S. Sengar	2018-19	2018-19 Continue 4.00		Under Process
					Total	42.02	



Graphical representation of projects



### 1. Crop Research Centre (CRC)

University has 9.9 ha land at its Crop Research Centre (CRC) located at Chirodi which has been divided into 11 plots. Faculty Members and PG Students of various departments of University conducted their research experiments on field corps at Crop Research Centre.

Total 63 Experiments were planted during 2019-20 on various crops i.e. wheat, Barley, Indian Mustard, Chickpea, Oat, Barseem, Cowpea, Rice, Pigeon pea, Urd, Moong bean, Sorghum etc. by the PG, Ph.D students and

faculty members of soil science, Agronomy, entomology, pathology, genetics and plant breeding departments of College of Agriculture. Apart from this National Institute of Plant Genome Research (NIPGR), New Delhi also conduct the field trials on Chickpea, Mustard, Lentil, Foxtail, Rice, Groundnut etc for molecular studies.

Maintenance of Nucleus seed: Nucleus Seed was maintaining of field crops varieties developed by university. The details are given below

Crop Name	Variety
Rice	Vallabh Basmati 21
	Vallabh Basmati 22
	Vallabh Basmati 23
	Vallabh Basmati 24
Chickpea	Sadbhavna
	Surya
	Vallabh Kallar Chana-1
	Vallabh Kabuli Chana-1
	WCG-10
Urd	Vallabh Urd-1

Breeder seed: 2.0 Qt. Breeder seed was produced of Rice variety namely Vallabh Basmati -24.





A View of Breeder seed production field of Vallabh Basmati 22 at Crop Research Centre





General view of the experiments at Crop Research Center

### 2. Horticulture Research Center (HRC)

Horticulture Research Center (HRC) of the university divided into two blocks situated at old building and at main campus (Siwaya block). Both blocks are having the total area of

12.21 Ha. Out of these the total area under Siwaya block is 9.20 ha. Orchard is 5.78 ha. open area is 3.56 ha, area under building/road/irrigation channel is 1.64 ha and green/net house is 0.20 ha.





### Major crops under experimentation

Crops	Variety
Fruits	Mango, Guava, Litchi, Bael, Aonla, Jamun, Citrus, Papaya, Grapes, Pear, Peach, Custard apple, Loquat, Lemon, Sapota, Kinnow, Pomegranate, Malta, Litchi, Falsa, Ber, Karonda etc.
Vegetables	Cole crops, Cruciferae crops, Cucurbits, Potato, Onion, Garlic and Spices etc.
Flowers	Gladiolus, Marigold, Chrysanthemum etc.
Medicinal and Aromatic Plants	More than 40 types of Aromatic, medicinal, spices and plantation crops

### Experiments conducted at HRC during 2019-20

During that period 45 experiments on different aspects of horticulture have been conducted at HRC. The details given below:

S.No.	Vegetables
1	Analysis of genetic diversity in Bottle gourd [Lagenaria siceraria (Molina) Standl]
	germplasm
2	Analysis of genetic diversity in Bottle Gourd [Laginaria siceraria (Molina) standl]
3	Assessment of Genetic Diversity in different accessions of Turmeric (Curcuma longa)
4	Effect of integrated nutrients and foliar spray of Bio-regulators on growth, yield and
	quality of Okra [Abelmoschus esculentus (L.)] under western plain zone of Uttar Pradesh.
5	Effect of integrated nutrients on growth, yield and quality of onion [Allium cepa (L.)] under western plain zone of Uttar Pradesh
6	Effect of micronutrients application on growth, yield and quality of Onion (Allium cepa L.)
7	Effect of Nutrients Management Practices on Growth and Yield of Garlic (Allium sativum)
	cv. G-282
8	Effect of plant growth regulators on flower induction and genetic diversity analysis using
	molecular markers in Brinjal (Solanum melongana L.)
9	Generation mean analysis for yield and its component traits in Bottle gourd (Lagenaria
	siceraria Sandl.)
10	Genetic diversity analysis by using morphological approaches in Bottle gourd [Laginaria
	siceraria (Molina) standl] germplasm in India.
11	Genetic variability and Diversity Analysis in Chilli (Capsicum annum L.)
	Studies on combining ability and heterosis for yield and its components in Okra
	(Abelmoschus esculentus L. Muench)
12	Studies on genetic divergence and molecular characterization in cucumber (Cucumis
	sativus L.)
13	Studies on genetic variability in Tomato.



fect of different sources of nutrients and mulching on sustainable production of uliflower.  arietal trials on various Horticultural crops
uliflower.
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fect of different sources of nutrients and mulching on sustainable production of
ucumber.
studies on Heterosis and combining ability for growth, yield and quality traits of
olecular markers.
udy of heterosis and screening of table pea for powdery mildew resistant using
udy of Genetic Diversity in Pumpkin (Cucurbita moschata L.)
ceraria Sandl.) for biotic resistance.
udies on heterosis, combining ability and molecular screening of bottle gourd (Lagenaria

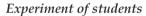
Flowers
Assessment of genetic parameters and phytochemical analysis Bougainvillea spp using
morpho-agronomic traits, Molecular markers and GC-MS analysis.
Effect of Benching and disbudding on growth and yield of Chrysanthium.
Effect of different doses of cycocle and malelic hydrazide on groeth and flower yield of
African marigold (Tagetes eraecta L.)
Effect of nutrient sources on growth, yield and quality of French marigold (Tagetes patula
L.) in North-West plain zone of Uttar Pradesh
Effect of organic fertilizers complemented with chemical fertilizers on vegetative,
nutritional and productive parameters of gladiolus (Gladiolus grandiflorus L.)
Impact of gibberellic acid on growth and flowering parameters of Arican marigold in
western plain zone of Uttar Pradesh
Effect of Bio-regulator on growth, flowering and bulb yield of double flowered Tuberrose
(Polianthes tuberose L.)

S.No.	Fruits
1	Assessment of different IBA concentration, rooting media and time for enhancing
	survivalist and profitability of air profitability of air layered guava (Psidium guajava L.)
2	Effect of different concentration, Shoot formation and root development in Pepino
	(Solanum muricatum L.) under <i>in-vitro</i> conditions
3	Effect of pruning on growth, flowering, fruiting and quality of Guava (Psidium guajava L)
	varieties under high density conditions.
4	Effect of quantitative plant traits on the efficacy of in-vitro cloning of dragon fruit
	(Hylocereus undatus)
5	Effect of rooting media on germination, shoot and root growth of lime acid (Citrus
	aurantifolia. Swingle)



6	Effect of time and intensity of shoot pruning on fruit size, yield and quality of Guava
	(Psidium guajava L.) under western U.P. conditions.
7	Effect on plant growth regulators micro propagation of mulberry (Moras alba) through in
	vitro culture of shoot tip and nodal explant
8	In-vitro micro propagation of poinsettia (Euphorbia pulcherrima)
9	In-vitro propagation of pomegranate and assessment of genetic diversity using RAPD,
	ISSR and SSR markers
10	Studies on effect of different gelling agents for micro propagation of banana. Variety
	Udhayam
11	Studies on heterosis and character association analysis in papaya (Carica papaya L.)
12	Studies on morphology and bearing behavior of guava cultivars under western U.P.
	conditions
13	Establishment of mother plant nurseries for high pedigree planting material of fruit crop
14	Evaluation of different elite Mango (Mangifera indica) varieties for NWPZ of UP.
15	Evaluation of different elite Guava (Psidium guajava) varieties for NWPZ of UP
16	Evaluation of different elite Pear (Pyrus commumis) varieties for NWPZ of UP





### Seed production

For enhancing the crop diversification and increasing in farmer's income through horticultural crops, HRC is producing and distributing the seed of different vegetable crops and sapling of different fruit and medicinal crops. The major crops under seed production are: Okra, Coriander, Fenugreek, Fennel, Bottle gourd, Sponge gourd, Colocassia, Pea, Beans, Turnip, Radish, Carrot, Vegetable mustard, Kalonji, Tomato, Brinjal, Turmeric, Fennel and Palak etc.



Tagging and data recording by the student



Seed production of Garlic var G-282



### Major achievements and ongoing activities

- Standardized optimum dose of foliar feeding of fermented solution of animal dung on of chemicals of explants treatments
- 2. Improvement of papaya through tissue culture technique medicinal plants
- 3. Micropropagation of banana through callus induction, shoot multiplication and rooting by use of auxins and cytokinin's in the media under *in-vitro* condition
- 4. Mulberry Germplasm evaluated from Medicine Rich Fruit Block of HRC, has been identified. 10.5cm fruit length of mulberry strain has been noted which is very much sweet, tasty, delicious and full of antioxidants properties.

- 5. Mother block of guava, peach, mango has been established and quality planting material is being ready to sale.
- 6. Farmers are adopting the cultivation of spices crops.

### 3. Livestock Research Centre (LRC)

University has a Livestock Research Centre at headquarter where research experiments of post graduate students and faculty members of College of Veterinary Animal Sciences are being carried out. Apart from this milk production at Livestock Research Centre is being used for university employee. Two breeds of Cattle and Buffalo are being maintained at Livestock Research Centre namely Sahiwal cow and Murrah buffalo.

Table: Milk Production and income generated through milk during year 2019-20

		Cow	Milk	Buffal	o Milk	
S.No.	Month	Production (Kg)	Income (Rs.)	Production (Kg)	Income (Rs.)	Total Income
1.	April, 2019	858.00	34320.00	2305.50	103748.00	138068.00
2.	May, 2019	618.5	24740.00	2083.50	93757.50	118497.5
3.	June, 2019	462.5	18500.00	1912.50	77062.50	95562.50
4.	July, 2019	360.00	14400.00	1382.50	62212.50	76612.50
5.	Aug. 2019	342.00	13680.00	1116.00	50220.00	63900.00
6.	Sept. 2019	301.00	12040.00	1527.00	68715.00	80755.00
7.	Oct. 2019	383.00	15320.00	2783.00	125235.00	140555.00
8.	Nov. 2019	1243.00	49720.00	3710.50	166973.00	216693.00
9.	Dec. 2019	1883.50	75340.00	4335.00	195075.00	270415.00
10.	Jan. 2020	2016.50	80660.00	4649.00	209205.00	289865.00
11.	Feb. 2020	1991.00	79640.00	4327.00	194715.00	274355.00
12.	March, 2020	2295.00	91800.00	4302.00	193590.00	285390.00
		12754.00	510160.00	34233.50	1540509.00	2050669.00

Income generated through milk in financial year 2019-20 - Rs. 2050669.00

Income generated through animal auction in financial year 2019-20-Rs. - 535000.00

Total income (including milk sale and animal auction)-Rs. 2585669.00 Total expenditure at LRC (including Approx. labour wages): Rs. 4980988.00



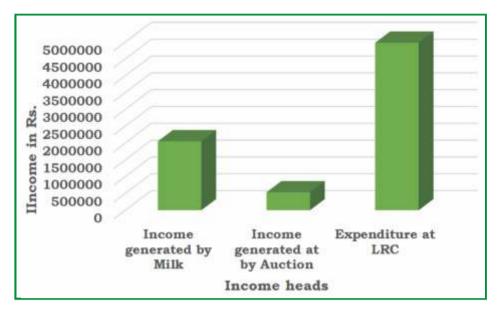


Fig.1: Graph of income and expenditure at LRC

Details of animals at Livestock Research Centre

Bovines Species maintained at LRC Cattle and Buffaloes

Sahiwal Cattle							
	Total	Adult Cows	> 1 year	1-3 year	< 3 year		
Female Stock	40	19	04	16	01		
Male Stock	21	-	09	09	03		
	61	19	13	25	04		
Murrah Buffaloes							
	Total	Adult Cows	> 1 year	1-3 year	< 3 year		
Female Stock	79	24	19	25	11		
Male Stock	17	-	13	01	03		
	96	24	32	26	14		

### Animal housing facility available at Livestock Research Centre

S.No.	Animal house	No.
1.	Conventional barn	
2.	Semi- intensive housing (low shed structure)	03
3.	Semi- intensive housing (high shed structure)	01
4.	Animal experimental house	01
5.	Feed and forage storage	03
6.	Animal parturition house	01
7.	Animal isolation house	01



### Fodder Production at Livestock Research Centre Rabi Season, 2019-20

### a. University Campus

Name of crops	Average Area	Status
Barseem+ Mustard green fodder	07 acre	Fed to livestock
Oat green fodder	12 acre	Fed to livestock

### b. Chirodi Farm

Name of crops	Average Area	Status
Oat green fodder	29.00 acre	Fed to livestock
Barley green fodder	09.00 acre	Fed to livestock

### Seed production at Chirodi farm

University has seed production farm with an area of 136.44 ha for the production of breeder/foundation/certified/TL seed of field crops improved varieties. The details given below:

### Kharif 2019

S.No.	Crop	Variety	Class of Seed	Intake Seed Qty.	Processed Seed Qty.
1.	Paddy	PB-1509	F/S	70.21	80.98
		PB-1509	C/S	156.84	68.49
		PB-1121	F/S	89.70	30.34
		PS-6	F/S	41.71	27.65
		PB-1	F/S	165.45	115.85
		PB-1782	C/S	113.75	50.40
		PB-1782	F/S	79.45	16.56
		PB-1718	C/S	24.20	94.85
		PB-1718	F/S	43.00	00.72
		PS-5	F/S	66.95	00.30
		PB 1637	F/S	85.85	
		PB 1637	C/S	61.95	
		PB-1121	Commercial	68.60	
		VB-24	B/S	02.00	
		Total		1069.66	506.14
2.	Arhar	PUAS-2016	F/S	2.80	
		Total		2.80	
3.	Urd	Sekhar-2	C/S	3.76	
		Vallabh Urd 1	B/S	6.30	
		Total		10.06	
Grand	Total			1082.52	515.04



### Rabi 2019-20

S.No.	Crop	Variety	Class of Seed	Intake Seed Qty.	Processed Seed Qty.
1.	Wheat	DBW 17	B/S	46.69	
		DBW 173	F/S	116.09	
		DBW71	F/S	83.19	
		HD 2967	C/S	115.04	
		HD 2967	F/S	131.00	
		DBW 90	F/S	48.15	
		DBW 90	C/S	50.73	
		DBW 90	B/S	71.83	
		DBW 88	B/S	70.60	
		PBW 226	F/S	125.10	
		PBW 226	T/L	86.00	Processing is in
		DBW 187	F/S	74.05	progress
		WB 02	F/S	51.10	P1081000
		HD 3226	F/S	47.15	
		DBW71	F/S	141.45	
		DBW71	B/S	54.80	
		DBW 222	F/S	300.10	
		Total		1613.07	
2.	Mustard	PUSA VIJYA	T/L	29.45	
		NRCY 50502	T/L	16.25	
		Total		45.70	
Grand	Total			1658.77	

### 5. Seed Processing Plant

A fully equipped seed processing plant of 2TPH capacity with pre-cleaner, seed grader, indented cylinder, gravity separator, seed dryer, destoner, seed treater and mistomating auto weighing machine etc., is available at main campus. Seed production program of the University is running

under the Mega Seed Project on "Seed Production in Agricultural Crops" since 2008. It is financially assisted by ICAR-Indian Institute of Seed Science, Mau. Production of breeder/ foundation/certified/ registered seed is the major activity supported by technology dissemination programs.

### Kharif 2019: Seed Status (A) Arhar

S.No.	Variety	Class of Seed	Intake Qty. (q)	Processed Qty. (q)	Sale Qty. (q)	Rate/q (Rs.)	Amount (Rs.)
A. Uro	d						
1.	VU-1	BS	3.30	2.25	2.07	20700.00	42849.00
2.	Shekhar 2	FS	3.76	2.60	2.23	10500.00	23415.00
Total			7.06	4.85	4.30		66264.00



### B. Paddy (Rabi 2019-20 Seed Status)

S.No.	Variety	Class of Seed	Intake Qty. (q)	Processed Qty. (q)	Sale Qty. (q)	Rate/q (Rs.)	Amount (Rs.)		
A. Uro	A. Urd								
1.	PB 1509	F/S	66.81	40.80	38.03	7000	266210		
2.	PB 1121	F/S	84.80	40.85	24.93	7000	174510		
3.	PB 1718	F/S	39.41	26.93	36.65	7000	256550		
4.	PB 1	F/S	157.10	82.60	21.58	7000	151060		
5.	PS 5	F/S	63.05	45.15	38.60	6500	250900		
6.	PB 1509	C/S	150.78	96.90	92.50	6500	601250		
7.	PB 6	C/S	39.34	17.50	Fail	Fail	Fail		
8.	PB 1718	C/S	22.36	14.92	3.60	6500	23400		
9.	PB 1728	C/S	180.53	77.00	3.85	6500	25025		
10.	PB 1637	C/S	137.05	73.41	7.86	6500	51090		
11.	VB-24	B/S	2.00	1.55		-	-		
Total	Total (B)		943.23	517.61	267.60		1799995		
Grand Total (A+B)		950.29	522.46	271.90		1866259			

### (A). Mustard

S.No.	Variety	Class of Seed	Intake Qty. (q)	Processed Qty. (q)	Sale Qty. (q)	Rate/q (Rs.)	Amount (Rs.)	
Mustard								
1.	Pusa Vijay	T/L	25.03					
2.	NRCYS 0502	T/L	11.36	After proc	essing the se	eed will be se	old during	
3.	YSH 401	T/L	4.50	October to December, 2019				
	Total		40.89					
Musta	ard							
4.	DBW 17	B/S	46.69					
5.	DBW 90	B/S	71.83					
6.	DBW 88	B/S	69.06	After proc	essing the se	eed will be so	old during	
7.	DBW 71	B/S	54.00	October to	December, 20	)19		
8.	PBW 226	F/S	122.57					
9.	DBW 187	F/S	72.58					



10	WB 02	F/S	50.20	
11	DBW 71	F/S	221.76	
12	DBW 222	F/S	293.49	
13	DBW 173	F/S	116.09	
14	HD 2967	F/S	130.00	After processing the seed will be sold during
15	DBW 90	F/S	48.15	October to December, 2019
16	HD 2967	C/S	115.04	
17	DBW 90	C/S	50.73	
18	PBW 226	T/L	84.28	
19	HD 3226	T/L	46.19	
Total	Total (B)		1592.66	
Gran	Grand Total (A+B)		1633.55	

### 6. Fisheries Research and Training Center

The Fish Demonstration and Training Center established at S.V.P University of Agriculture and Technology, Meerut, India is working especially in the Inland Fisheries Sector, needs of the farmers to train in fish technology, transferring the technologies to fish culturists and entrepreneurs. A large number of modern fish farms have been established by the farmers. Integrated fish farming has also been taken up. The Fish Demonstration and Training Center is now emphasizing on the development and management of fisheries in the freshwater resources. Special emphasis is being put on the transfer of technology for the culture and hatchery seed production of carp fish species. Presently, SVPUAT has implemented the experiential learning (EL) program in Fish & Aquaculture. EL provides the students an excellent opportunity to develop analytical and entrepreneurial skills and knowledge through meaningful hands-on experience, confidence in their ability to design and execute project work. The main objectives of EL are:

- To promote professional skills and knowledge through meaningful handson experience.
- To build confidence and to work in project mode.
- To acquire enterprise management capabilities

### 7. Mushroom Production Center

University established Mushroom production centre old campus of the university to conduct the research and training, experiential learning for UG and PG student as well as farmers. The research work is carried out on Oyster and milky mushroom at the centre. Trainings were given to the students, farmers and deference personals on mushroom production technology. Commercial spawn was sold to the farmers. More than 400 visitors visited and benefited by the centre.

### 8. Technology Park

University developed Technology Park to demonstrate the technology to the farmers and visitors. Field demonstrations were organized on newly released varieties i.e., 08 varieties of lentil, 12 varieties of chickpea 42 varieties of wheat, 12 varieties of Indian



mustard during Rabi 2019-20 crop season and 30 varieties of basmati rice, 10 varieties of Green gram and 09 varieties of Urd were demonstrated in Technology Park during Kharif 2019 crop season.

### 9. Bio-Agents production centre

Several bio-agents are being produced by the university to facilitate the farming community of this region during 2019-20. The details of the same are given below: -

### Production and maintain of following Bio agents:

- I. Parasitoid:Egg parasitoids, Trichogramma spp.
- ii. Predator: Chrysoperlacarnea
- iii. Pathogens:Beauveria bassianaTrichoderma harzianumMetarhiziumanisopliaeHaNPV

Entomopathogenic Nematodes Host insect Corcyra cephalonicareared

Technology developed and its impact:

I. Proposed BIPM Module for sugarcane in the Bio control Laboratory Unit

### Before sowing:

- 1. Ploughing field with nail-attached paata.
- 2. Beauveria bassiana and Metarhiziumanisopliae treatment@2kg/ha(CFU:3.0Í109conidia/g).

### After sowing:

- 3. Installation of light trap and/or pheromone trap (methoxy benzene for H. consanguinea) soon after pre-monsoon rain and destruction of adult beetles collected from pesticide-treated host trees.
- 4. Release of Trichogrammachilonis or T. japonicum (@ 100,000 adults/ha) at two weeks interval.
- 5. Heterorhabditis indica treatment (2.5 Í 109 infective juveniles/ha).
  - \* Mechanical control of root borers by uprooting root borer-infested plants.
- 6. Redistribution of Epiricania melanoleuca and spray of *M. anisopliae* in Pyrilla-infested sugarcane field.

- Farmer field visited and trained about the use of chemical insecticide in combination of cultural and mechanical practices.
- Guided/attended approximate 375 farmer's telephone call regarding insect-

pests management of different field crop for advising Bio control agents.

 250 farmers/Trainees visiting at Bio control laboratory.



### 10. Compost Unit

The Vermi compost unit established at S.V.P University of Agriculture and Technology, Meerut, to provide the training for UG and PG student as well as farmers. During experiential learning team of students of B.Sc. (Ag.) are attached to the unit to get the knowledge about the production of Vermi Compost.

### 11. Poultry Research and Training Centre

Poultry Research and Training Centre of the university is consistently serving the farming community of this region by providing technical knowledge on various aspects of poultry production through organization of trainings and demonstrations. During 2019-2020, sixty rural youths of Meerut and its adjoining districts were benefited for capacity building and entrepreneurship development on poultry farming through organization of training programmes sponsored by National Bank for Agricultural and Rural Development (NABARD), Lucknow and ICAR (Schedule Caste-Sub Plan) from 16-22December, 2019 and 05-15February, 2020, respectively. Necessary critical input like day old chicks of Vanraja breed, supplementary feed for 06 weeks, veterinary medicines, feeder and waterers were also provided to the trainees. As per the telephonic feedback, farmers are



happy with the training and few of them are willing to initiate their own enterprise on poultry farming in near future. However, 06

beneficiaries of last year training programmes are successfully running their poultry farms with the following details:

S.No.	Name of Entrepreneur	Father's Name	Address	Type and strength of farm	Housing System	Benefit Cost Ratio	Mobile Number
1.	Wajahat Alam	Haji Istiyak Alam	Kandhla, Meerut	Layer, 8000	California cages	1.15	9997401940
2.	Shyam Singh	Harnam Singh	Mundawali, Meerut	Broiler, 12000	Deep Litter	1.22	8127914210
3.	Devendra Chauhan	Bheem Singh	Uldepur, Rajpura, Meerut	Broiler, 2500	Deep Litter	1.27	0121-3521625
4.	Preet (Monty)	Mahavir Singh	Mandora, Sakauti	Layer, 4000	California	1.17	9870632652
5.	Ashwani Kumar	Peetam Singh	Khedi, Daurala	Layer, 8000	California	1.24	9837748728
6.	Iquramu	Mohd Idrish	Siwaya, Meerut	Broiler, 2000	Deep Litter	1.27	8127332790

Besides this, several students-oriented activities including research trials are being executed continuously as a part of course curricula.





A training programme conducted at PRTC

### 12. Livestock Farm Complex

Livestock Farm Complex established at SVPUA&T, Meerut for veterinary students.

### Livestock farm Complex-II Major objectives

 To undertake basic, applied and adaptive research in major areas of small ruminants including conservation and maintenance of elite sheep and goat germplasm.

- Impart quality teaching to B.V Sc and AH degree programme students.
- To impart specialized training and post graduate research for students interested in the field of small ruminants.
- To develop and standardize package of practices related to small ruminants and pig



- feeding, management and health cover.
- Transfer of technology to the sheep, goat and pig farmers.
- To provide referral and consultancy services on various aspects of sheep, goat and pig production

### Major ongoing and proposed researchable activities

- Conservation of Muzaffarnagri sheep breed.
- Establishment of goat unit for conservation and revitalization of superior germ plasm of Barbari goat.

- Research trail on feeding behavior of sheep and goat.
- Improvement of meat and wool production through various breeding tools
- Development of viable technologies and to promote commercial sheep, goat and pig farming among weaker section of society for self-employment.
- Standardization of cost-effective feeding modules for small ruminants and pigs.
- Identification of available feed resources and their effective utilization.







Goat Unit Horse Unit Pig Unit

### Infrastructures and land available with ILFC Unit II

S.No.	Building/Shed	Capacity
1.	Goat and Sheep Shed (Under construction)	100 Animals
2.	Research sheep and goat shed	24 Animals
3.	Horse Shed	02 Animals
4.	Pig Shed	03
5.	Storage Room	02 Rooms, 01 Hall
6.	Administrative Block	04 Acre
7.	Grazing Land	

### Major breeds/Species reared

S.No.	Name and Breed of Animals/ Birds
1.	Goat (Barbari)
2.	Sheep (Muzaffarnagari)
3.	Pig (Middle White Yorkshire)
4.	Horse



### 13. Golden Jubilee Forage Garden

Golden Jubilee Forage Garden was established in the university. The basic purpose of this forage garden would be to create awareness among the general masses about the significance of forage crops in Indian agriculture and for increasing the milk production in the country. It will be a scientifically designed garden which will help to sensitize the farmers/livestock keepers as well as students/faculty/visitors about different fodder crops, their feeding value, production level etc. The 50 improved high yielding varieties of both annual (for both rabi and Kharif season) and perennial species were demonstrated in Golden Jubilee Forage Garden.

### 14. Organic Research Block

Soil is one of the most important resources. Organic farmers aim to maintain the long-term fertility of the soil. Biologically active soil will decompose organic matter faster, so bacteria, fungi and earthworms are encouraged. When soil organisms decompose organic matter, nutrients essential for plant growth are recycled back into the soil to 'feed' the next crop.

Organic food is very fresh when consumed so the quality is high. Reduce the risks of human, animal, and environmental exposure to toxic materials. The Organic Research Block was established in the university to stimulate the research on organic farming.

**Zonal Research Stations:** University has three zonal research stations in its jurisdiction area.

**1. Zonal Research Station-** Nagina (AREA 17.50 ha)

Research Station Nagina is one of the premier Rice Research Station of the country which was established by British Govt. after intensive survey of undivided India in 1921 situated in foot hills of great Himalaya at an altitude of  $29^{\circ}$ 28' North, and latitude 78° 32' East at 245 meter above sea level. This station has released 24 rice varieties for different eco-systems before green revolution era and some of them are still under cultivation. An export quality rice variety Type -3, known as Dehradun Basmati, is the first variety by which the quality rice export was started first time by our country India, was also released by this station. Another rice variety N-22, a drought resistant variety, is still being used as donor parent for drought resistant breeding. ICAR funded AICRP on rice is also running at Nagina. Some of major achievements are summarized below

### **Function of Research Station**

- Development of high yielding rice varieties.
- Collection and evaluation of rice germplasm.
- To test and verify the genetic material of crops (Rice and wheat) developed different parts of country through All India Coordinated Research Programmes.
- Quality seed production of rice and wheat.
- Standardization and evaluation of new agro techniques like resource conservation technology for the region.
- Diseases and pest management studies of various crops.

### Major Accomplishments Crosses Made: 28

### Breeding material handled: 302

- Maintained 681 rice germplasm.
- 501 Scented germplasm.
- 106 Non scented germplasm
- 35 Blast resistant germplasm
- 39 BLB resistant germplasm



### Trials Conducted Agronomy Kharif 2019

S. No.	Name of Trials	Achievement
1.	NMT-ETP	IET26767 was found significantly superior over other entries and popular check.
2.	NMT-IME	Culture IET 24950 and IET 25745 were performed significantly better compared to other cultures
3.	NMT-IM	Under 150% RDFIET 27263 and IET26420 were found promising.
4.	NMT-L	IET 26974 and IET 26948 were found promising in term of grain yield.
5.	NMT-MS	IET 25802, IET 26549 and IET 24990 were found statically at par in term of grain yield.
6.	NMT-BT	Entries IET 26999 and IET 26995 were found promising over the rest entries
7.	NMT-Biofortified	Entry IET 27179 was found statistically superior and promising
8.	Evaluation of Imazethapyer herbicide tolerant genotype under direct seeded condition.	IET 28812 and IET 28813 showed no injury to Imatehapyz. IET28814 and IET 28815 was statistically similar in term of grain yield.  Highest grain yield was recorded with weed free followed by Pendimethalin fb Biosyribac sodium.

### Rabi 2019-20

S. No.	Name of Trials	Achievement
1.	Performance of timely sown wheat varieties under restricted irrigation conditions.	Performance of timely sown wheat varieties under restricted irrigation conditions.
2.	Evaluation of Imazethapyr herbicide tolerant aromatic genotypes under dry direct seeded rice and succeeding crop.	Evaluation of Imazethapyr herbicide tolerant aromatic genotypes under dry direct seeded rice and succeeding crop.

### Kharif 2019 Plant Breeding

S. No.	Name of Trials	Promising Entries
1	IVT (BT)	IET 28579, 28588
2	AVT-1 (BT)	IET 26999, 28815
3	IVT (ASG)	IET 28569, 28563
4	IHRT E	IET 28113, 28114



### Rabi 2019-20

S. No.	Name of Trials	Promising Entries
1.	Advance varietal trial of wheat (timely sown irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-IR-TS-TAS).	NW-TS-108 & NW-TS-102
2.	Advance varietal trial of wheat (Late sown irrigated condition) under All India Coordinate Wheat Improvement Project (AVT-IR-LS-TAS).	NW-LS-211 and NW-LS-212
3.	ERA Trial under All India Coordinated Wheat Improvement Project	E12 & E13
4.	Advance varietal trial of wheat (timely sown restricted irrigated condition) under All India Coordinated Wheat Improvement Project (AVT-RI-TSTAS)	NW-RI-TAS 304, NW-RI-TAS 309 and NW-RI-TAS 301

### Seed Production Kharif 2019 PADDY

Variety	Class of Seed	Net Weight	Remark
PB-I637	C/S	125.90	Supply to NSC

### Rabi 2019-20 WHEAT

Variety	Class of Seed	Net Weight	Remark
HD3059	CS	138.85	Supply to NSC
	Grand Total	264.75	



Dr. A.K. Singh, Director, IARI New Delhi



Visit of Hon'ble Vice Chancellor



### Zonal Research Station- Bulandshahr (AREA 10.00 ha)

This station was established in the year 1905 by the Department of Agriculture U.P. as a seed multiplication farm. In the year 1944, this farm was converted into a research station with the responsibility of cotton research entrusted to the Assistant Economic Botanist (cotton). The status of the research station was further raised during 1951 to the main Cotton Research Station with post of economic Botanist (Cotton and Tobacco). In May 1973 this research station was transferred to G.B. Pant University of Agriculture & Technology, Pant Nagar and multidisciplinary research work on important field's crop of the region was carried out. After the division of the Uttar Pradesh this station was transferred to S.V.P. University of Agriculture & Technology, Meerut in October, 2000.

### EXPERIMENT CONDUCTED Kharif-2018

- Evaluation of Desi cotton germplasms -Dr. Shiv Singh
- 2. Evaluation of American cotton germplasms (Trial-1) Dr. Shiv Singh
- 3. Evaluation of American cotton germplasms (Trial-2) Dr. Shiv Singh
- 4. Effect of weed control measures on the performance of Rice yield variety Pusa-1509

### Rabi 2019-20

Evaluated Coordinated Trials on Wheat allotted by IIWBR, Karnal. - Dr. Shiv Singh

- NIVTA-1A
- AVT-RI-TS-TAS
- AVT-IR-TS-TAS
- AVT-IR-IS-TAS
- SPL-VLS-TAS-Trial

### **PADDY**

Variety	Class of Seed	Net Weight	Remark
PB-1509	F/S	21.50	
PB-1121	F/S	24.18	
PS-5	C/S	15.30	Sold to Farmers
Pant Basmati 1	C/S	15.30	
	Total	93.18	

### **ARHAR**

Pant-291	C/S	26.55	Sold to Farmers

### Rabi 2019-20 WHEAT

Variety	Class of Seed	Net Weight	Remark
DBW-88	F/S	30.80	
HD-2967	F/S	38.10	
DBW-71	F/S	22.00	
DBW-17	F/S	19.00	Cald to Farmage
DBW-90	F/S	19.00	Sold to Farmers
WB-02	F/S	26.50	
	Total	155.40	
	<b>Grand Total</b>	275.13	



- 1. Produced more than 275 quintals seed of different crop/ varieties for distribution to farmers for enhancing the yield.
- 2. Make the coordination with different departments of government to fulfil the objectives of farmers strengthening programmers.
- 3. Rejuvenated the buildings of centre to make it more utilized.
- 4. Participated by the scientists of center in many gosthies, trainings etc. organized by State Govt. Deptt well as other functionaries to provide more technical knowledge about agriculture to the farmers and extension workers.

Zonal Research Station - Ujhani (AREA 16.51 ha)

Zonal Research Centre comes in the Mid-Western Plain Zone of Uttar Pradesh which falls in between 27° 60 and 29° 50 N Latitude and 78° and 80° 40 S Longitude of the State. The altitude in this region varies between 150-300m. The Ganges flow from North to South in the west part of this Zone & separates it from western plain zone. This zone comprises an area of 30.50 thousand square Kilo meter, being third largest region of Uttar Pradesh, accounts for 10.50 per cent of the total reported area under land utilization of the state. The Agro climatic conditions of this zone are dry and warm. Soils are mostly alluvial and neutral to moderately alkaline in reaction with low to medium in organic contents. Average rainfall of this region ranges from 650 mm to 1,600 mm and district Budaun receives minimum rainfall. Almost 90 per cent of rainfall is concentrated in four months from mid-June to mid-October which is variable and erratic. In this zone tube wells and canals are the major sources of irrigation but larger area is irrigated through tube wells except Bareilly district. Budaun has the least area under irrigation i.e., approx 44 per cent.

An Agriculture farm of 34.85 acre at Ujhani has been transferred by the State Agriculture Department to G. B. Pant University of Agri. and Tech. Pantnagar to established a Zonal Research Station at Ujhani, Distt. - Budaun during December, 1986. The Research works were

started after appointment of Chief Scientist and J.R.O. in Oct. ,1991 during NARP Phase II, Oct. 1989 to Sept. 30, 1993.

### Major Achievement During 2019-20

- To harvest higher grain yield of field pea in light textured soils of mid-western plan zone of U.P. The field Pea crop should be nourished with 5.0 Kg zinc, 1.0 Kg Boron/ha and seed should be inoculated with biofertilizer (Rhizobium & PSB) along with recommended dose of fertilizer (20:60:40:20 kg N, P2O5, K2O & S/ha).
- To harvest higher pod yield and economic return of groundnut in light textured soil of mid-western plan of U.P. groundnut crop should be nourished with recommended dose of fertilizer (20:30:45:20 kg N, P2O5 K2O & S/ha) + 2.0-ton vermi-compost + 20 kg ZnSo4+1.0 Kg B/ha + 0.1% FeSo4 foliar application at 45&60 days after sowing and seed should be inoculated with Rh.+PSB.

### Experiments Conducted During Kharif - 2019

- 1. Collection, selection, evaluation and maintenance of germplasm and segregating populations of groundnut.
- 2. Evaluation of groundnut genotypes for pod yield and maturity
- 3. Effect of potassium and boron nutrition on yield on economics in groundnut (*Arachis hypogaea L.*) in lite-textured entisol.

### Experiments Conducted During Rabi: 2019-20

- 1. Collection, evaluation, selection and maintenance of germplasm and segregating populations of mustard.
- 2. Advance varietal trial on late sown irrigated wheat.
- 3. Growth and yield response of Pea (*Pisum sativum*) to level and mode of application of boron in loamy sand soil.

Treatment - 09

Variety -IPFD -10-12

4. Response of Chickpea (*Cicer arietinum*) to sapphire and boron nutrition in course coarse - textured soils of mid - western plan zone of U.P.

Treatment - 09

Variety - RVG - 202



### Seed Production Kharif 2019 URD

Variety	Class of Seed	Net Weight (Qt.)	Remark
NASH 479	C/S	8.20	Supply to NSC
PU-31	C/S	1.29	Sold to Farmers
	Total	9.49	

### Groundnut

-			
GT 26	T/L	1.16	Sold to Farmers

	<b>Grand Total</b>	463.70	
	Total	453.05	
PBW 723	C/S	4.30	
DBW 173	C/S	4.00	Sold to Farmers
HD 3059	C/S	9.30	
PBW 550	C/S	156.55	Supply to NSC
PBW 723	C/S	278.90	Cumby to NCC



### **EXTENSION**

The Directorate of Extension started functioning with the inception of university in the year 2000 with a team at head quarter and KVK's in different districts of the area jurisdiction. At present 20 KVKs i.e.Baghra (Muzaffarnagar), Ujhani (Badaun), Khekra (Baghpat), Nagina (Bijnor), NoorpurChholas (G.B. Nagar), Muradnagar (Ghaziabad), Hastinapur (Meerut), Rustamnagar, Bilari (Moradabad), Dhamora (Rampur), Saharanpur, Niyamatpur (Shahjahanpur), Tandabijesi (Pilibhit), Bulandshahr, Sambhal, Dataganj (Badaun-II), Shamli, Amroha, Babugarh (Hapur), Chittora (Muzaffarnagar-II) and Moradabad-II are working under administrative control of the university. There is a strong team of extension scientists and supporting staff at Head Quarter to monitor and support extension activities under the supervision of Director Extension. Establishment of ATIC as single window advisory unit for advisory, diagnostic services and supply of critical inputs is on the cards. The

salient features are given as below-

### 2. Annual Zonal Workshop

27th Annual Zonal Workshop of KVKs was jointly organized by ICAR, ATARI, Kanpur Zone - III and CSUA&T, Kanpur on 25-27th June 2020. Shri Kailash Chaudhary Minister of State for Agriculture & Farmer Welfare Government of India inaugurated the workshop. In the workshop KVK Heads were presented the progress report of 2019 and action plan for 2020-21. Director Extension along with all heads of KVKs participated in this workshop.

# 3. Training, Front Line Demonstrations and on Farm Trails

Prime mandate of KVKs is to disseminate the developed technologies through various methods of technology dissemination such as trainings, front line demonstrations (FLD) and on farm trials (OFT). The trainings, FLDs and OFTs organized by all the 20 KVKs working under SVPUAT during the period 2019-20 have been given in following tables.





## **KISAN MELA**

Directorate of Extension organized Kisan Mela at university Headquarter on 08-10 November, 2019 along with Krishak Gosthi in which approximately 10000 farmers participated. Shri

Surya Pratap Shahi Hon'ble Agriculture Minister Uttar Pradesh inaugurated the farmer fair. Animal show were main attraction of farmer fair.



Hon'ble Agriculture Minister Surya Pratap Shahi Inaugurate the Kisan Mela



Hon'ble Agriculture Minister Surya Pratap Shahi Addressing the Gathering



Hon'ble Agriculture Minister & Vice Chancellor Visiting the Mela Stalls



Farmers Gathering During The Kisan Mela





## 1. Training Programmes

Clientele	No. of Courses	Male	Female	Total Participants
Farmers & Farm Women	971	16589	2820	19409
Rural youths	145	1321	304	1625
Extension Functionaries	254	2966	738	3704
Sponsored Training	166	12495	953	13448
Vocational Training	28	498	43	541
Total	1564	33869	4858	38727

# 2. Frontline demonstrations

Clientele	No. of Farmers	Area (ha)	Units/Animals
Oilseeds	407	152	-
Pulses	1247	482.36	158
Cereals	1203	421.04	45
Vegetables	259	42.12	73
Other crops	194	59.05	10
Hybrid crops	46	11.5	10
Total	3356	1168.07	296
Livestock & Fisheries	208	0	233
Other enterprises	267	56.2	4587
Total	475	1168.07	296
Grand Total	3831	1224.27	5116

# 3. Technology Assessment & Refinement

Category	No. of Technology Assessed & Refined	No. of Trials	No. of Farmers
Technology Assessed			
Crops	93	345	411
Livestock	15	145	158
Various Enterprises	6	24	24
Total	114	514	593
Technology Refined			
Crops	-	_	-
Livestock	-	_	-
Various Enterprises	-	_	-
Total	-	-	-
<b>Grand Total</b>	114	514	593



# 4. Extension Programmes

Category	No. of Programmes	Total Participants
Extension Activities	16854	244275
Other Extension Activities	7882	-
Total	24736	244275

# 5. Mobile Advisory Services

Name of Message Type Type of Message								
KVK		Crop	Livestock	Weather	Marketing	Awarness	Other enterprise	Total
SVPUAT	Text only	1795	484	412	113	1140	407	4351
Meerut	Voice only	7275	966	372	135	1427	747	10942
KVK	Voice & Text	_		-	-	_	-	-
	Both							
	Total Message	9070	1430	784	248	2567	1157	15293
	Total farmers Benefitted	22521	4502	3854	1171	10279	5224	47571

# 6. Seed & Planting Material Production

	Quintal/Number	Value Rs.
Seed (q)	4610.87	55,29,155.00
Planting Material (No.)	197913.00	54129.50
Bio-Products (No.)	32.10	-
Livestock Production (No.)	_	_
Fishery Production (No.)	-	_
Other Production	1906.67 kg/1072 lit	75,5760.00

## 7. Soil, Water & Plant Analysis

Samples	No. of Beneficiaries	Value Rs.
Soil	4658	4,30,875.00
Water	-	-
Plant	-	_
Total	4658	4,30,875.00



## 8. HRD and Publications

S.N.	Category	Number
1.	Workshops	36
2.	Conferences	33
3.	Meetings	136
4.	Trainings for KVK officials	57
5.	Visits of KVK officials	69
6.	Book published	6
7.	Training Manual	19
8.	Book chapters	14
9.	Research papers	59
10.	Lead papers	8
11.	Seminar papers	36
12.	Extension folder	82
13.	Proceedings	32
14.	Award & recognition	21
15.	Ongoing research projects	11
16.	TV Talks	20
17.	Radio Talks	39

# **Externally funded Research Project (s)**

Name of Project	Year of start	Funding agencies	Amount (Rs.)
NICRA	2012-13 Contd.	CRIDA, Hyderabad, & ICAR	15-20 Lacs annually
Attracting and Retaining Youth in Agriculture (ARYA)	2015-2020 Contd.	ICAR	Rs. 20-25 Lacs Annually
Crop Residue Management (CRM)	2019-20	ICAR	Rs. 1.51 Lacs annually
District Agromet Unit (DAMU)	2019-20	ICAR, New Delhi	14.40 Lacs annually



# KRISHI VIGYAN KENDRA SAHARANPUR Activities



Hon'ble VC visited at farmer's field



Technical Calendar Inauguration by Honble MP

# **Training on Animal Health Worker**











# Impact, Assessment and Technology Demonstration By KVK, Bijnor.

### 1. Varietal diversification of wheat change the productivity of district average yield:

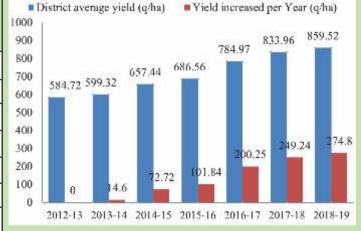
Demonstrated Varieties	Year	District Average	Yield increase
		Yield (q/ha)	d (q/ha)
WB-02	2014-15	27.03	_
HD-2967	2015-16	31.00	3.97
HD-3086	2016-17	34.57	7.54
WH-1105	2017-18	34.60	7.57
HD-3059	2018-19	36.50	9.47
DBW-88 DBW-90 &	2019-20	37.10 (Aprox.)	10.07
HPBW-01		(11p10/)	

# 2. Trench Method in Sugarcane big way for District

It is well known that the sugarcane is the major crop of district Bijnor and its cover 2,20,269 ha area in district. The production and productivity are very low in comparison to National average yield due to traditional planting method and delayed sowing. Keeping in mind that facts, KVK introduce new planting

techniques i.e. Trench Method & September sowing in 2010-11. The average yield gradually increased from 2010-11 to 2019-20 and average yield in demonstrated field was recorded 1415q/ha, the enhancement in productivity due to adoption of Trench method and September sowing and farmers got highest yield. Presently the area covered under Trench method is 65,000 ha in district Bijnor.

Year	District Average Yield (q/ha)	Yield increased per Year (q/ha
2012-13	584.72	0
2013-14	599.32	14.60
2014-15	657.44	72.72
2015-16	686.56	101.84
2016-17	784.97	200.25
2017-18	833.96	249.24
2018-19	859.52	274.80





### 3. Sugarcane+ Mustard Intercropping Big Way District

Technology (Sugarcane + Mustard) Intercropping is developed by the G.B.Pant University of Agriculture and Technology, Pantnagar. Scientist of KVK Bijnor continuously focused on farmer's profitability, nutritional security and resource optimization.  Year		Area Under Intercropping	Area under intercropping  14000 12000 10000 8000 6000 4000 2000
2015-16	Sugarcane - 1123.75, Mustard -11.50	Starting Year	201. 201. 201. 201. 201.
2016-17	_	850	
2017-18	_	3800	
2018-19	_	7500	
2019-20	-	12000	

### **KVK Pilibhit**

### Technology identified for Dissemination Pant Pili Sarson - 1 Identified by KVK Pilibhit

Need of the district- In Pilibhit district mustard/ toria is sown at approximately 16,500 ha. area. Here most of the mustard is sown after harvesting of paddy and followed by sugarcane crop. The conventional toria varieties like PT-303 and PT-507 were sown by the farmers, which did not fetch good profit to the farmers. The toria varieties perform well if they are sown upto 20 September but it could not be done as the harvesting of paddy is done upto 15

November in the district. The late sowing of toria varieties could not give good yield of the crops.

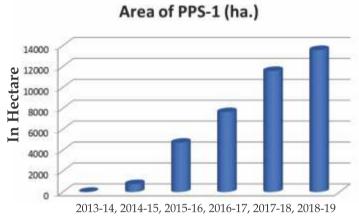
So, the farmers needed a mustard variety of short duration so that it could fit between the paddy and sugarcane crop in the district. KVK Pilibhit identified and introduced Pant Pili Sarson-1 variety in Rabi 2012-13 season through front line demonstrations. It soon gained the popularity and the area of the variety is increasing year after year giving farmers a good crop as well as profit.



Table: Area expansion of the mustard variety PPS-1 in district Pilibhit

Year	Area of Mustard/	Area of PPS-1 (ha.)	Share of PPS-1 (%)
	Toria (ha.)		
2013-14	16683	20	0.12
2014-15	16572	762	4.60
2015-16	16334	4723	28.92
2016-17	16562	7645	46.16
2017-18	16683	11581	69.42
2018-19	16481	13582	82.41

PPS-1 in district Pilibhit



Share of PPS-1 (%)

90.00
80.00
70.00
60.00
30.00
10.00
2013-14, 2014-15, 2015-16, 2016-17, 2017-18, 2018-19



**Students Demonstration at Field** 



A View of the Demonstration Feild



# **Success Stories Creation of Self-Help Group**

### Situation analysis/Problem statements

Village Haidernagar is situated about 2 KM from Block Baghra. Population of village Haidernagar consists of all the caste and category. The village has two Primary Schools and two Anganwadi Centers. People belonging to Backward class, Jogi. They have no land holding and work as a labor in others fields. Women of this community also do their household work or work as a labor. Hence these community people belong to economically weaker section.

### Plan, Implementation and Support

Home Scientist from KVK Muzaffarnagar conducted practicing farm women training in their locality and came to know the condition, and felt the need to form a SHG for their empowerment. Meetings were organized one after another among them and focus of those meetings was to make them aware of advantage of Self-Help Groups, NABARD schemes, credit linkages as well as other Government schemes. Other local concerns of those women were also discussed. The discussion in three meetings with them helped in motivating them in setting up the Self-Help Group.

### **Out Put**

Sixteen women of that village got motivated with the idea of starting Self Help Group and they elected Smt. Ravita W/ShNempal as their President and Durga Women Self Help Group was formed. The Bank Account in the name of Durga Women Self Help Group was opened in Punjab National Bank, Baghra on 24 April 2014. Each member of the group decided to deposite Rs. 200 per month.

### **Out Come**

Today the group has saving of Rs.252400/ the



SHG members Interaction with Gen, V K Singh

group also has an internal loaning of Rs 238000/. After formation of SHG the group members started a small cottage industry with the help of a NGO. They got the raw material for making brooms from NGO, Financial assistance was provided by NABARD. All the group members got the training and started making brooms with Rs 12 per broom making charge. In 2018 District Magistrate of Muzaffarnagar, Sh Rajeev Sharma passed an order to all the Primary and Junior high School of the district regarding school uniforms to be given to the students will be stitched and supplied by SHG members. Durga Women Self Help Group got the order and supplied uniform in both the schools of village Haidernagar. In this order the group members earned good profit (Rs 20000-22000).

### **Impact**

They earned good income which helped them in meeting their daily needs as well as education and medical service to their children. I feel worth mentioning here, Mrs Ravita, president of the group belongs to a very poor family has a five years old daughter suffering from Muscular Dystrophy disease, she was not able to give her enough medical care due to financial crisis but now she is getting her daughters treated at Dehradun.

After being linked with Self Help Group the women have developed a better understanding on a wide range of issues which has brought about a positive change in their thinking and behaviour. They have become stronger both socially as well as economically as a result of growth of these women other women of their community also got motivated and four more Self Help Groups have formed in last five years.



SHG members meeting with DDM, NABARD



### Mushroom Production for Self-Employment

Sandeep Saini S/O Rajesh Kumar a marginal farmer of Village- Kaakda, Block- Sahahranpur, District- Muzaffarnagar. He visited KVK in the year 2015 regarding some plant protection problem of his sugarcane crop. He shared to the scientist of plant protection discipline that he had been practicing sugarcane wheat cropping system since long time in his 1.0 ha of land but the total income from his small holding was not enough to meet out the family requirements. Scientist advised to start Mushroom Cultivation as a small-scale business to enhance his earnings. He visited the Mushroom Production unit of KVK and curiously asked about its technical know-how. Shri Sandeep Saini requested the training programme on

mushroom production technology. Considering the request, scientist organized a six-day training for RY and two days training programme under Attracting & Retaining Youths in Agriculture (ARYA) project at Krishi Vigyan Kendra. Sandeep Saini sincerely participated in training programmes and learnt the technical issues of mushroom production. The training programmes covered the all topics of cultivation technologies of particular reference to production of Button Mushroom, Oyster Mushroom and Milky Mushroom (Substrate preparation, Spawning, Crop Management with biotic and abiotic factors, Harvesting and Post-Harvest Management and Marketing etc)

### **Economics of Button Mushroom Production of Single Cycle(3.0 Months)**

S. No.	Inputs	Quantity	Cost (Rs.)	Amount (Rs.)
Compost & Casing Preparation				
1.	Wheat Straw	20 qt	300/qt	6000.00
2.	CAN/Am.Nitrate	60 Kg.	12/Kg	720.00
3.	Urea	20 Kg	05/Kg	100.00
4.	MOP	20 Kg	05/Kg	100.00
5.	SSP	20 Kg	06/Kg	120.00
6.	Gypsum	200 Kg	2.5/Kg	500.00
7.	Wheat Bran	100 Kg	15/Kg	1500.00
8.	Carbendazim	1.0 Kg	700/Kg	700.00
9.	Neem Oil	1.0 Lt	100/Kg	100.00
10.	FYM	8.0 Qt	150/Qt	1200.00
11.	Formalin	5.0 Lt	60/Lt	300.00
12.	Packaging, Transport & Other Expenses			5000.00
13.	Labours- 40 Mandays @ Rs. 200/-			8000.00
Total Expenditure (Rs.)			24340.00	

### **Total Production from 40 qtl of Substrates: 750 Kg**

Gross Income : Rs. - 750X70= Rs. 52500/-Net Income : Rs. 52500-24340= Rs. 28160/-



### **Beginning Experience**

After completion of training programme mentally equipped with technical know-how of the enterprise. Sh. Saudeep Saini started button mushroom production unit at his village-Kaakda, Muzaffarnagar with 2.0 ton of wheat straw (40 qtl compost). The first harvest was very less but it enhanced day by day in favourable conditions of mushroom. So enhanced the confidence of entrepreneur for next year. Next year KVK scientists supported him technically at his production unit and grower had obtained good production. He sold his mushroom in local market of Muzaffarnagar with average @ Rs. 70/ Kg. But after two successful flushes of yield, the production declined and he faced the problem of turning the colour white buttons to brown resulting quality deterioration.

Identification of Problems and Possible Solutions

Scientists visited his unit many times to identify the causes of problems and advised him to avoid overwatering and to maintain indoor possible environmental conditions i.e. Unit hygienic condition, Ventilation, Carbon dioxide concentration & Caking and Ruffling etc.

Ultimately by the KVK intervention and sincere effort of Sh Sandeep Saini after end of the mushroom crop approximately 750 kg produced from one cycle of 3.0 months. Scientists estimated economics of mushroom production.

Sh. Sandeep Saini could gain an additional income of Rs. 28,160/- with a CB ratio 1:2.16 in three months. His wife was also involved with him in his work so they reduced the labor costs. Impact

Basically, this was an entrepreneur's own success under the guidance of KVK scientists. Sh Sandeep Saini kept his enterprise name "RM MUSHROOM UNIT". The idea was to raise the income of farmer by taking advantage of diversified agriculture system. Position of entrepreneur has significantly uplifted in terms of improved socio-economics status with the following details

### Impact on Socio-economic Status on Sh Sandeep Saini:

Particulars	Before Enterprise	After Enterprise
Annual Income	Rs. 125000.00	Rs. 180000.00
Motor Vehicle	No	Yes
House Status	Below Average	Medium
Education for Children	Govt School	Private School
Living Standard	Poor	Medium

The farmer family not only captured the scope for gainful employment round the year, but also ensured good income and higher standard of living even from small holding.

### **Technology Expansion**

The success story of Sandeep Saini encouraged other farmers of the village and other village. They realized that there was immense scope for income generation from the small-scale

enterprises i.e.Mushroom Production. Thereafter a number of farmers from Kaakda and nearby villages contacted to KVK for training. The Scientists conducted various vocational training programmes for rural youths. Farmers were trained technically as well as advised to establish a strong marketing network for absorbing their produce to avoid their exploitation



## **PUBLICATIONS**

# College of Agriculture

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- 11. Chandra, M. Sharath., Naresh, R. K., Mahajan, N. C., Kumar, Rajendra., Kumar, Arvind., Singh, S.P., Kumar, Yogesh and Navsare, Rahul Indar. (2019). A Review on Hydrodynamic Cavitation A Promising Technology for Soil and Water Conservation in Inceptisol of North West IGP. International Journal of Current Microbiology and Applied Sciences, 8 (8):739-753.



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# **Book Chapters**

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- 12. Singh S., Singh G., Singh R., Mishra P., Srivastava A. K., Gupta A. and Singh P. (2020). RNA Interference for Plant Disease Resistance 169-188 In Current Research and Innovations in Plant Pathology (Vol 9)



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### **Books**

- 1. Arya Archana et. al Eds. (2020). (Adhunik Matashya Palan), Published by Department of Basic Science, SVPUA&T, Meerut, pp. 1-54.
- 2. Gautam Mahender Pratap, Singh Hem Botanicals In Insect Pest Management" pp. 202, ISBN: 978-93-82166-57-0.
- 3. Dhaliwal S.S., Naresh R.K., Vivek Kumar, Sudhir Kumar, Vivak and Setia K. Raj (2019) Precision Farming Geoinformatics & Nanotechnology. Jaya Publishing House, Sector- 16, Rohini, Delhi. ISBN: 978-93-89235-02-9.
- 4. Naresh R.K., Dhaliwal S.S., Vivek and Tomar S.S (2019). Crop Production and Management. Jaya Publishing House, Sector- 16, Rohini, Delhi. ISBN: 978-93-89235-01-2.
- 5. Naresh R.K., Dhaliwal S.S., Vivek and Tomar S.S., Mahajan N.C. and Chandra M.S. (2019) Agroforestry and its Application. Jaya Publishing House, Sector- 16, Rohini, Delhi. ISBN: 978-93-89235-01-2
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- 14. Yadav Ashok and Shahi Uday Pratap (2019). Major Soils of India, p 62-68 In Yadav, Rajendra Kumar, Hand Book of Plant Sciences, Kalyaani Publisher, New Delhi, 239pp. ISBN:978-93-5359-264-6.
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# Paper presented in seminar/symposium (abstract):

- 1. Singh Anand, Shahi U.P., Kumar Pramod, Singh Akansha, Singh Prashant Deo and Pandey Bhavya Raj (2019). Crop Residue Burning and Environment in National Conference on Identification, Convergence, Implementation & Extension of Science-Tech-Research for Sustainable Development (ICIESSD-2019) from 20-21 April at SVPUAT Meerut
- 2. Arya A. (2019). Enhancing the Fisheries Sector. In Souvenir National Conference, ICIESSD-2019 held at SVPUAT, Meerut from 20-21 April, pp. 111.
- 3. Arya A. (2019). Traditional Knowledge for Conservation of Water and Fisheries Resources. In Souvenir National Seminar-cum-Consultation Workshop on Revisiting Traditions and Culture (RTC 2019): Impacts on Environment,



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- 4. Arya A. and Sisodia D. (2019). Enhancing the Fisheries Sector published In Souvenir National Conference, ICIESSD-2019, held at SVPUAT, Meerut during 20-21 April, 2019, pp.111.
- 5. Arya A. and Sisodia D.(2019). Health Benefits of Fish. In: Souvenir National Seminar on Environment and Health held at CCS University, Meerut on 8th April, pp 27.
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- 8. Bhardwaj S., Rashmi and Parcha V. (2019). Artemisia roxburghiana Wall. Ex Besser volatiles: a less explore high altitude medicinal/aromatic plant, published in Souvenir -Cum abstract book on Conservation and sustainable use of high altitude medicinal and aromatic plants for the socio-economic development, organized by Uttarakhand Ayurvedic University, Dehradun from 29-30 November,pp.96.
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- 13. Singh D. V., Kumar Arvind and Kumar Mukesh (2019). Integrated Pest Management in Mango. National Conference on Identification, Convergence, Implementation & Extension of Science-Tech-Research for Sustainable Development. Meerut, Uttar Pradesh. Pg No-59.
- 14. Reddy D. V. Chandrasekhar and Singh D.V. (2019). Studies on population dynamics of Chilopartellus (swinhoe) on



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- 19. Lehari Khyati, Burman Vishakha, Aastha, Kumar Jaygendra, Kumar Mukesh and Vaishali (2019). Role of Heat Shock Protein of Cellular Thermotolerance in Triticum Aestivum. An Abstract published in 3rd Global meet on Science and Technology for Ensuring Food and Nutritional Security (GMST 2019) held at Ajmer during 01-03, December.
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- 25. Ali Nazim, Roy Debashis, Sahu D. S., Fahim A., Kumar Ajit, Singh Deepak and Kumar Raj (2019). Evaluation of different locally available medicinal plants at Meerut district of Uttar Pradesh for their chemical composition. In: Proceedings of 3rd International conference on GIASE-2019, June, 16-18, Kathmandu, Nepal.
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- 31. Semwal D, Gupta P.K., Rashmi and Parcha, V. (2020). Study on chemical composition of Znthoxylumarmatum and Cyperus scariosus essential oil and their antifungal potential against forest pathogens, published in abstracts and Souvenir of 14th Uttarakhand State Science and Technology Congress organized by Uttarakhand council of



- science and Technology, Dehradun from 27-29th February, pp83.
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- 33. Shahi U.P, Dhyani B.P., Rawal Sanjay, Singh Shiv, Awasthi N.K., Singh Prem amd Singh Anand (2020). Assessment of POLY4 (polyhalite mineral) for growth yield and quality of potato in Western Uttar Pradesh In Global potato conclave Gandhinagar Gujrat from 28-31 January.
- 34. Sharma P. (2019). Approximation by some genuine integral type Lupas-Beta operators (id MA-17), In: 24th International Conference of International Academy of Physical Sciences (CONIAPS XXIV), held at C.C.S. University, Meerut from 9-11 August, pp. 98.
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- India "Modelling, optimization and computing for technological and sustainable development" held at SRM-IST, Modinagar from 26-28 April pp. 41.
- 37. Singh B. (2019). Estimation Methods of Crop Yield for Small Area, In: Conference book of 24th International Conference of International Academy of Physical Sciences on "Innovation in Physical Sciences" held at ChaudhayCharan Singh University, Meerut from 09-11 August, pp. 210.
- 38. Singh B. (2019). Rainfall analysis for storage and irrigation planning in Rajasthan, India, published In: Conference book Eighth International Conference on Agricultural Statistics (ICAS-VIII) held at New Delhi, India from 18-21November, pp.50.
- 39. Singh B., Kumar V. and Vaishali. (2018). Organic Horticulture: Challenges and Future Possibilities in Indian Scenario. Lead Paper published during 2nd Global Meet on Science and Technology for Ensuring Quality Life (GMST-2018) held at Bali, Indonesia during 13-17, November.
- 40. Singh D., Singh D. K., Yadav R. N., Singh L. B., and Singh V. K., (2019). "Knowledge level of Cole crops growers with respect to chemical fertilizers and pesticides" International Conference on 3rdGlobal Meet on Science and Technology for Ensuring Food & Nutrition Security organised by Society for Recent Development in Agriculture, Meerut at National Research Centre on Seed Spices, Ajmer, Rajasthan during 1-3 Dec.
- 41. Singh J., Khilari K., Kumar A. and Kumar



- A. (2019). Evaluation of different bioagents against root knot nematode (M. graminicola) in rice. National conference on (ICIESSD-2019) held on 20th & 21th April, 2019 organized by "New Age Mobilization society, New Delhi, in collaboration with SVPUA&T, Meerut.
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- 43. Sisodia D. (2019). ICT and Its Role in Agriculture published In Souvenir National Conference, ICIESSD-2019 held at SVPUAT, Meerut during 20-21 April, pp.121.
- 44. Sisodia D., Shahi U.P. and Arya A. (2019). Effects of indiscriminate use of chemicals in agriculture on environment and human health. published In National Seminar on Environment and Health held at CCS University, Meerut on April 8, pp21.
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- 46. Verma V. and Mahajan K. (2020). Quenching the Soil's Thirst, Published In: International Conference on "Modern Approaches for Smart Agriculture (MASA 2020)", held at Shobhit University Meerut, (U.P.), India during 28-29 February, pp. 46.
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- 48. Kumar Vipin, Dhyani B.P., Kumar Satendra, Singh Akansha and Navsare Rahul Inder (2019). Nitrogen management for growth and yield attributing character of late sown wheat (Triticum aestivum L.) crop. Paper presented in 84th Annual Convention of the Indian Society of Soil Science (ISSS) held at Banaras Hindu University, Varanasi during November 15 -18, (Poster presentation).
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# Popular articles

- 1. Gupta S., Sengar R.S., Yadav M. and Singh P.K. (2018). Kala Namak Dhanki Jaivik Khaiti. Krishi Darshika. SVPUA&T. Vol. 2 July-Dec. 32-36.
- 2. Singh Jaskarn, Khilari Kamal, Kumar Anupam, Trivedi Vivik Kumar and Devashis golui (2019). Alu mai lagne walaa ngmari rog se bachav evam upay. Krishi Lakshya. 2 (5):7-11
- 3. Kumar Sandeep, Singh Gopal, Gautam Mahandar Partap, Singh Jaskaran, Trivedi Vivek Kumar and Devashis Golui (2019). Aadhunik Taknik se kare Dhingri Mushroom Ki kheti. Krishi Lakshya. 2(5): Pp12-13.
- 4. Singh Satpal, Singh Gopal and Kumar Sandeep (2020). Mushroom ke Poshakiya Mahatv. Kishan Bharti. Pp. 30-32.
- 5. Singh Satpal, Singh Gopal, Mishra Prashant and Singh Ramesh (2020). Achha svasth chahiye to mushroom khaiye. Madhya bharat krishak bharat patrika. Pp. 21.
- 6. Singh Satpal, Singh Gopal, Singh Ramji and Mishra Prashant (2020). Jal pradusan ek Gambhir Samsya. Madhya Bharat Krishak Bharat Patrika. Pp. 52.
- 7. Singh Satpal and Singh Gopal (2019). Dhaan ki Pual Jalayenahi, Mushroom ugakar Dhan Kamaye. Krishi Darshika. Pp.5-6
- 8. Sengar R.S. (2020). Integrated development of Horticulture Pratiyogita Darpan, January, 102-104
- 9. Sengar R.S.(2020). Genetically modified crops: Need for rational evaluation Pratiyogita Darpan, February, Pg. 105-106,

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- 10. Shahi U.P., Dhyani, B.P. and Sisodia D. (2019). खेत हरा स्वस्थ्य धरा : जनसमृद्धि का आधार, Sindhu Vigyan Garima, published by CSTT, Ministry of HRD, GOI, (Oct-Dec 2016), pp.1-4.
- 11. Singh Alok Kumar and Sengar R.S. (2020). Environmental pollution and its impact Indian Farmers' Digest, 53(02): 22-25
- 12. Singh K. M., Prashad Narendra Singh, L. B. (2019). Mitti main Posak Tatyon ki uplabdhata me bridhikeliye fasalawa sheson ka rakh-rakhav. Patel Krishi Gyaneshwari, K.V.K. Shahjahanpur, Vol. 1 Khrif and rabi, pp 44-46
- 13. Singh K. M., Prashad Narendra and Singh, L. B. (2019) Puaal/ Parali ka mashino dawara Prabandh. Patel Krishi Gyaneshwari, K.V.K. Shahjahanpur, Ank: 1Khrifandrabi, pp. 1-4
- 15. सेंगर आर.एस., यादव आर.ऍन एवं सिंह पी. के. (2019). गन्ने की खेती में कब क्या करे, कृषि दर्षिका 30-34।
- 18. सिंह डी.वी. (2019), मतस्य पालन की है इनकम का साधन, अमर उजाला 11 नवम्बर 2019.
- 19. सिंह राजेन्द्र, मीना एल.आर. एंव सिंह एस.पी. (2020). जैविक खेती से अधिक उत्पादन भा. कृ.अनु.प.- प्रशिक्षण पुस्तिका पेज 80 भा.कृ. अनु.प.-भारतीय कृषि प्रणाली अनुसंधान, मोदीपुरम, मेरठ पेज 54-62।



### Lecture delivered in Kissan Gosthis/TV/Live telecast etc

- 1. Dr. Vivek Lecture delivered on: Weed control in rabi crops
- 2. Dr. R.K. Naresh Lecture delivered on: Resource Conservation Technology
- 3. Dr. R.B. Yadav lecture on: Seed Production Technology of wheat and rabi pulses
- 4. Dr. R. N. Yadav delivered lecture on "Relevant health and Safty requirement applicable in the work environment". In the skill development training programme for gross root level self-health group extension workers organized by K.V.K. Baghra, Mujaffarnagar dated on 27 February, 2019.
- 5. Dr. L. B. Singh delivered lecture on "Learn and Practice basis skills of communication". In the skill development training programme for gross root level self-health group extension workers organized by K.V.K. Baghra, Mujaffarnagar dated on 27 February, 2019.
- 6. Dr. D. K. Singh delivered on "Identify the extension services required in particular area" under the Skill India Training Programme for rural youths organized by K.V.K. Baghra- I, Mujaffarnagar dated on 27 February, 2019.
- 7. Dr. D.S.Sahu Delivered lecture on "Integrated Dairy farming" in the seven days Training programme on Entrepreneurship skill development on dairy farming for beneficiaries' organized by SVPUA&T, Meerut under Schedule cast sub- plan" of ICAR, New Delhi from February 18-24, 2020
- 8. Dr. D.S.Sahu Delivered lecture on "Housing Managemental practices for

- Goat farming" in the seven days Training programme on Entrepreneurship skill development on Goat and Pig farming for SC beneficiaries' organized by SVPUA&T, Meerut under Schedule Cast Sub-Plan" of ICAR, New Delhi from February 28th 05th March, 2020
- 9. Dr. Archana Arya delivered a lecture on "Integrated fish -cum -poultry farming' in 10 days Training programme for farmers on Entrepreneurship Development in Poultry farming, at PRTC, SVPUA&T, Meerut from 5-11 February, 2020.
- 10. Dr.Prerna Sharma delivered a guest lecture on "Utility of Applied Mathematics in Science and Humanity", Seminar on the utility of the measures of central tendency in data analysis for humanities subjects, 25-26 April 2019, Swami VivakaNandSubharti University, Meerut.
- 11. Dr Gaje Singh delivered lecture on "IPM in sugarcane crop" KisanGosthi organized by Rani Nangal Sugarmill on 4-7-2019.
- 12. Dr Gaje Singh delivered lecture on "IPM in and sugarcane" KisanGosthi organized by Rani Nangal Sugarmill on 5-7-2019.
- 13. Dr. Hem Singh, Delivered lecture on "Insect pest management in sugarcane seed crops" in the KishanGoshti in Faphoda village on 15.01.2020.
- 14. Dr. Hem Singh, Delivered lecture on "Insect pest management in seed crops" in the KishanGoshti in Methapur village on 10.01.2020.
- 15. Dr. Hem Singh, Delivered lecture on "Insect pest management in seed crops" in



- the KishanGoshti in NagliTeerth village on 25.01.2020.
- 16. Dr D.V.Singh delivered a lecture as a T.V talk on "Fasal Avshesh Prabhandhan" in villege Gesupur Bafabat on 22.06.2019 DD Kisan Programme Chaupalcharcha.
- 17. Dr D.V.Singh delivered a lecture as a T.V talk on "Fasal Avshesh Prabhandhan and insect pest management in sugar cane" in villegeDhanju, Meerut on 22.06.2019 DD Kisan Programme Chaupalcharcha.
- 18. Dr D.V.Singh delivered a lecture as a in winter school on "Advancement in potato production technology &its future prospects" to deliver a lecture on" Pesticide use in agriculture: Benefits, Risks and safety" on dated 06/12/2019 by ICAR-CPRI, Modipuram, Meerut.
- 19. Dr D.V. Singh delivered a lecture lecture in a training programme organized by D D Fisheries, Meerut on "Fresh water fish culture" dated.04.03.2020 at A.D. Sericulture office, Meerut.
- 20. Dr D.V.Singh delivered a lecture on Fish Farming by D.D.Meerut on dated 17/02/2020.
- 21. Dr D.V. Singh delivered a lecture on fish Farming by D.D. Meerut on dated 15/02/2020.
- Dr D.V. Singh delivered a lecture on fish Farming by D.D. Meerut on dated 14/02/2020.
- 23. Dr D.V.Singh delivered a lecture on fish Farming by of Agri Clinic Agri Business, Muzaffarnagar on dated 15th and 18th November 2019.
- 24. Dr D.V.Singh delivered a lecture on fish

- Farming by of Agri Clinic Agri Business, Muzaffarnagar on dated 23/11/2019.
- 25. Dr D.V.Singh delivered a lecture Fishcofed at Muzaffernagar on "Fish farming" on dated.17.10.2019
- 26. Dr D.V. Singh delivered a lecture in a training programme organized by Fishcofed and D D Meerut on "Fish culture in rain fed. Grampanchyat ponds, individual Culture ponds, Marketing Issue and challenges" on dated.11.09.2019.
- 27. Dr D.V. Singh delivered a lecture Fishcofed and AD Muzaffernagar on "Modern techniques of Fish culture" on dated.12.09.2019.
- 28. Dr D.V. Singh Live telecast on "Sabjio Me AkikritnasijeevPravandhan" under "HELLO KISAN" DoordarsanKisan on dated 14.08.2019 at 6:0 7:0 PM at New Delhi.
- 29. Dr D.V.Singh Live telecast on "Kharif faslo me rog vakeetPravandhan" under "HELLO KISAN" DoordarsanKisan on dated 28.08.2019 at 6:0 7:0 PM at New Delhi.
- 30. Dr D.V. Singh Live telecast on "Fish and Prawn Farming" under "HELLO KISAN" Doordarsan Kisan on dated 26.09.2019 at 6:0-7:0 PM at New Delhi.
- 31. Dr D.V.Singh Delivered ETV Talk on Fish Culture, Fish Health Management and Feeding on dated. 19.08.2019.
- 32. Dr D.V. Singh attended Live telecast on "Jaliyekheti" under "HELLO KISAN" DoordarsanKisan on dated 13.02.2020 at 6:0-7:0 PM at New Delhi.
- 33. Dr D.V.Singh attended Live telecast on



- "RangeenMachliPalan" under "HELLO KISAN" DoordarsanKisan on dated 14.11.2019 at 6:0-7:0 PM at New Delhi.
- 34. Dr D.V. Singh attended Live telecast on "Catfish &JinghaPalan" under "HELLO KISAN" DoordarsanKisan on dated 02/01/2020 at 6:0-7:0 PM at New Delhi.
- 35. Dr. D.N. Mishra attended Live Telecast on "HELLO KISAN" Doordarsan Kisan on dated 26.9.2019 at 7:45 7:50 PM New Delhi.
- 36. Dr. D.N. Mishra attended Live Telecast on "HELLO KISAN" Doordarsan Kisan on dated 18.3.2020 at 7:45 7:50 PM New Delhi.
- 37. Dr. L.K. Gangwar delivered a lecture on Research and Development of new improved varieties for farmers relayed dated 04.08.2019 by All India Radio, Nazibabad.
- 38. Dr. Gopal Singh. Fasal avshesh prabandhan me mushroom prabandhan,

- Recording: 03-10-2019, Prasaran: 03-10-2019, Akashvani: Nazibabad.
- 39. Dr. Ramji Singh. Dhankifasal me paraliprabandhan Recording: 05-11-2019, Akashvani: Nazibabad.
- 40. Dr. Gopal Singh. Mushroom utpadan va prashichhan, Recording: 28-05-2019, Prasaran: 28-05-2019, DD Kishan (New Delhi).
- 41. Dr. Gopal Singh. Mushroom utpadan va prashichhan, Recording: 28-12-2019, Prasaran: 28-12-2019, DD Kishan (New Delhi).
- 42. Dr. Gopal Singh. Mushroom utpadan va prashichhan, Recording: 18-03-2020, Prasaran: 18-03-2020, DDKishan (New Delhi).
- 43. Dr. Ramji Singh. Kharif kifaslo me rog evamkeetprabandhan, Live TV on DD Kisan New Delhi 04-07-2019.



# College of Biotechnology

### **Research Articles**

- 1. Aastha, Vaishali, Sharma Vandana, Vishakha, Lehri Khyati and Singh Naresh Pratap (2020). Proline content: as a measure of Drought stress Tolerance in Wheat (Triticum aestivum L.) published in 5th Global Outreach Conference on Modern Approaches for Smart Agriculture" (MASA-2020),Feb. 28-29, 2020 Organized by Global Outreach Research and Education Association, Jaipur, at Shobhit University, Meerut.
- 2. Amir A., Kapoor N., Kumar H., Tariq M. and Siddiqui M.A. (2019). In silico homology modelling and epitope pridiction of drug target protein in human herpes virus 8 (HHV8). Biotech today. 9(1): 41-48.
- 3. Yadav Annu, Himanshi, Shruti, Singh Jitender, Kumar Pankaj, Khanna Shivani, Sirohi Anil (2020). Identification and Expression Analysis of Stress Responsive Genes in Lentil (Lens culinaris). Biotechnology Journal International, 24(3), 24-34. https://doi.org/10.9734/bji/2020/v24i330105
- 4. Ashwani Kumar, Swati Sharma, Rai Nand Lal, Tomar Akash, Kumar Pushpendra, Sanger R.S., Singh S.K., Vaishali, Kumar Mukesh and Yadav M.K. (2019). Callus Induction and Efficient Plant Regeneration in Wheat (Triticum AestivumL.) through Mature Embryo Culture. International Journal of Chemical Studies; 7(4): 1445-1450.
- 5. Chaudhary Sorabh, Sagar Sushma, Kumar Mukesh, Lal Mehi, Kumar Vinay and

- Tomarb Akash (2020). Molecular cloning, characterization and semiquantitative expression of endochitinase gene from the mycoparasitic isolate of Trichodermaharzianum". Research Journal of Profechnology 15 (4), 40-56.
- 6. Chaudhry N., Kulshrestra R. and Kumar A. (2019). Assessment of miRNAs targeted RNA binding protein "Hur-mir-191" function under hypoxia in cancer. Multilogic in Science, vol. viii, Special issue, National Seminar on RTTEPSR, NDUAT, Ayodhya-2019. 248-252.
- 7. Singh Jitender, Kumar Manoj, Singh Koushlesh Ranjan, Kumar Amit, Kumar Pankaj, Sirohi Anil, Baranwal V.K. (2019). First complete genome sequence of garlic virus X infecting Allium sativum- G282 from India Genomicshttps: //doi.org/10.1016/j.ygeno.2019.10.020
- 9. Krishna S., Poonia S., Purushottam and Kumari S., (2019). Isolation and Biochemical characterization of Native Rhizobium species. Progressive Agriculture 19(1): 55-59.
- 10. Kumar A., Gupta V.K., Mandil R., Rahal A., Verma A.K. and Yadav S.K. (2019). Interplay of oxidative stress and antioxidant bio markers in oil adjuvant Brucella melitensis vaccinated and challenged mice. Vaccine, 37 (2019): 3343-3351.
- 11. Kumar A., Gupta V.K., Rahal A., Mandil R., Verma A. K. and Yadav S.K. (2019). nanoparticle based Brucella melitensis vaccine induced oxidative stress acts in synergism to immune response. Indian



- Journal of Animal Research. 53 (5): 648-654.
- 12. Kumar Devendra, Sengar R.S., Yadav M.K., Chand P., Singh G. and Gupta S. (2019). Evaluation of sterilant effect on in-vitro culture establishment in sugarcane variety Co 0118. International Journal of Current Microbiology and Applied Sciences, 8(7): 146-152
- 13. Kumar Devendra, Sengar R.S., Malik N., Yadav M.K., Gupta S., Chand,P., Singh G. and Kumar P. (2020). In vitro evaluation to intensify the differential morphogenetic response through plant growth regulators and antibiotic supplementation in sugarcane. Plant Physiology Reports 25:335-346
- 14. Kumar Rajendra, Singh S.K., Chand P., Kumar M., Gupta S. and Kumar M. (2019). Path analysis studies of forage sorghum. Journal of Experimental Zoology India, 22(1):1474-1480.
- 15. Gupta Madhuri, Khanna Shivani, Singh Jyoti, Singh Jitender, Kumar Pankaj and Sirohi Anil (2020). Identification and Molecular cloning of abiotic stress tolerant gene(s) and stress induced biochemical changes in lentil (Lens culinaris) Plant Cell Biotechnology and Molecular Biology, 21(13-14), 74-85. http://www.ikprress.org/index.php/PCBMB/article/view/5094
- 16. Misra Mehul, Kumar Ravindra, Dhyani B.P., Poonia Shefali, Purushottam and Akash Tomar. (2019). Isolation and Characterization of Native Azotobacter Isolates from Rhizospheric Soil Samples. Journal of Plant Development Sciences (JPDS-2019), 11(8): 453-458.

- 17. Shambhavi, Kumar Ravindra, Tomar Akash, Purushottam, Singh Jitender and Singh Shishu Pal (2020). Isolation and Identification of Bacillus Species from Soil for Phosphate, Potassium Solubilisation and Amylase Production. Int. J. Curr. Microbiol. App. Sci 9(05): 415- 426. doi: https://doi.org/10. 20546/ijcmas. 2020.905.046
- 18. Shambhavi, Kumar R, Tomar A, Purushottam, Singh J and Singh S.P. (2020). Isolation and Identification of Bacillus Species from Soil for Phosphate, Potassium Solubilisation and Amylase Production. International Journal of Current Microbiology and Applied Sciences 9(5):415-426.
- 19. Sharma L., Verma A.K., Kumar A. and Yadav S. K. (2019). Prevalence of bio film forming Staphylococcus aureus in clinical specimen from human and animals. Multilogic in Science,vol. viii, Special issue, Nat. Seminar on RTTEPSR, NDUAT, Ayodhya-2019. 230-233.
- 20. Saxena Shreshtha, Kumar Ravindra, Tomar Akash, Singh Jitender, Purushottam, Dhyani B.P. (2020). Isolation, Biochemical Characterization and Potassium Solubilzation Efficiency of Different Microbial Isolates. International Journal of Current Microbiology and Applied Sciences 9(6) 2020) https://doi.org/10.20546/ijcmas.
- 21. Singh J., Kapoor N. and Verma A. (2019). A study to evaluate the effect of phyto-silver nanoparticles synthesized using Oxalis stricta plant leaf extract on extracellular fungal amylase and cellulose. Materials



- Today: Proceedings. 18(3): 1342-1350.27. Sirohi, Mohit., Singh., S.K., Chand, P., Kumar, M., Gupta, S. and Kumar, M. (2019). Character association and path analysis in forage sorghum. Journal of Experimental Zoology India, 22(1): 1469-1473.
- 22. Suman, Singh V.K., Kumar A. and Yadav S.K.(2020). Prevelance of Staphy lococcuse pidermidis in human pyogenic cases in and around mathura. Progressive Research- An International Journal. 15(1): 45-47.
- 23. Upadhyay Surendra, Bhordia Anamika, Prajapati Malayaj R., Maurya Himanshu, Kaushik Karishma, Verma Harshit, Kumar Amit, Singh Jitender, Kumar Pankaj and Kumar Ravindra (2020). Prevalence and antimicrobial resistance pattern of *E. coli* and *Staphylococcus* spp isolated from the clinical cases of cattle metritis Progressive Research 15 (1):55-57.
- 24. Upadhyay S., Bhordia A., Prajapati M.R., Maurya H., Kaushik K., Verma H., Kumar A., Singh J., Kumar P. and Kumar. R. (2020). prevalence and antimicrobial resistance pattern of *E. coli* and

- Staphylococcus spp. isolated from the clinical cases of cattle mastitis. Progressive Research- An International Journal. 15(1): 55-57.
- 26. Veera S.P., Kumar A. and Karanati S. (2020). Safety and immunogenicity evaluation of Brucella abortus S 19 reduced dose vaccine in comparison with Brucella abortus S 19 standard dose vaccine in cattle. The Pharma Innovation. 9(4):996-1001.
- 27. Burman Vishakha, Kanaujia Himanchal, Lehari Khyati, Aastha, Singh Naresh Pratap and Vaishali (2019). "Characterization of phenolic compounds of turmeric using TLC" published in Journal of Pharmacognosy and Phytochemistry, SP2:994-998.
- 28. Yadav S., Kumar A., Yadav S.K., Singh V.K. and Rahal A. (2019). Interplay of oxidative stress and antioxidant system in mice mastitis model. Multilogic in Science, vol. viii, Special issue, National Seminar on RTTEPSR, NDUAT, Ayodhya-2019. 248-252.



# **Book Chapters**

- 1. Yadav Annu, Singh Jitender, Ranjan Koushlesh, Kumar Pankaj, Khanna Shivani, Gupta Madhuri, Kumar Vinay, Wani Shabir Hussain, and Sirohi Anil (2020). Heat Shock Proteins: Master Players for Heat-stress Tolerance in Plants during Climate Change (Chapter-9) 167-212 in Book Heat Stress Tolerance in Plants: Physiological, Molecular and Genetic Perspectives edited by Shabir H. Waniand Vinay Kumar published by Wiley [ISBN: 978-1-119-43236-4].
- 2. Kumar A., Rahal A. and Gupta V.K. (2019). Oxidative stress, Pathophysiology and immunity of Brucellosis. In Oxidative stress of Microbial Diseases Ed. by S. Chakraborti et al. Published by Springer Nature, Singapore Pvt Ltd. pp-365-378.
- 3. Singh J., Nigam R., Kumar A., Kapoor N. and Tiwari P. Modern Approaches in Crop Improvement (2019). Weser books publication, Germany ISBN: 978-3-96492-111-6

# Paper presented in seminar/symposium (abstract):

- 1. Jaiswal Ajeet, Choudhary Udit, Yadav Shweta, Mishra Rashi, Gupta Sarita, Chauhan Komal, Purushottam and Tomar Akash (2020). "Biofertilizer as prospective input for sustainable agriculture in India". National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department of Botany R.G. (P.G.) College, Meerut (College of Excellence), Jan-29, 2020. Pp33.
- Kumar Amit delivered in Invited Lead paper in International conference on global research initiatives for sustainable agriculture & allied sciences (GRISAAS-2019). 20-22nd October 2019 at ICAR-

- National Academy of Agricultural Research management, Rajendranagar, Hyderabad, Telangana.
- 3. Kumar Amit delivered in Invited Lead paper in International conference on Innovative and current advances in agriculture & allied sciences (ICAAAS-2020). 27 Jan-01 Feb., 2020 at Hotel RAMADAD D'Ma, 1091/388 New Petchburi Road, 33, Bangkok, Thailand.
- 4. Kumar Amit participated in 46thAnnual Conference of Indian Immunology Society IMMUNOCON 2019 "Advances in immunology research: impact on healthcare" 14 -16 November, 2019, DAE Convention Centre, Anushaktinagar, Mumbai-400094.
- 5. Burman V., Singh N.P., Vaishali, Lehri K., Kapoor N. and Dixit R. (2020). Identification of phenolic acids and curcuminoids in turmeric (Curcuma longa L.) using chromatography. 5th Global Outreach Conference on Modern Approaches for Smart Agriculture (MASA 2020) organized by Shobhit University, Meerut on Feb., 28-29,2020 pp 80.
- 6. Dubey Diksha, Siddharth N. Rahul, Chaudhary Sorabh, Sagar Sushma, Purushottam and Tomar Akash. 2019.

  "Studies on Optimization of Cryopreservation Protocol for Beneficial Microorganisms". National Conference on Emerging Innovations in Agriculture, Biotechnology and Health Sciences. Organized by Department of Biotechnology, B.N. College of Engineering and Technology, Lucknow (U.P.). November 8-9, 2019. Pp15.
- 7. Dixit R., Kumar P., Kapoor N., Kumar S., Singh N.P. (2019). Long non coding RNAs for abiotic stress tolerance. Published in International Conference "Genomics and



- breeding for crop improvement (ICGB-2019)" Dec., 04-06, 2019 at CCS University, Meerut pp: 146.
- 8. Rekha Dixit Presented on "Genomic Approaches for Enhancing Phosphorus Use efficiency in crop plants" during Two Weeks Training Course on "Application of Molecular and Bioinformatic Tools in Agriculture and Allied (February12, 2020 to February 25,2020 by Centre of Excellence in Agriculture Biotechnology Council of Science and Technology, UP and DBT funded BIF for Faculty members and Researchers.
- 9. Singh Jitender presented Oral Paper on "Next-Generation Sequencing Reveals the First Complete Genome Sequence of Garlic virus D infecting Garlic (Allium sativum) G282 from India" VIROCON 2020 International Conference of Virologyon "Evolution of Viruses and Viral Diseases" Organized by Indian Virological Society 18th 20th February 2020 at Indian National Science Academy (INSA), New Delhi, India
- 10. Singh Jitender presented Oral Paper on Epidemiological Studies and Molecular Characterization of Phytoplasma associated with Sugarcane" in the session 6 "Epidemiology and forecasting of plant diseases". 7th International Conference on "Phytopathology in Achieving UN Sustainable Development Goals" at New Delhi, India during January 16-20, 2020
- 11. Kapoor N. (2020). CRISPR Technology for Crop Improvement: Present Scenario and Future Prospects 5th Global Outreach Conference on Modern Approaches for Smart Agriculture (MASA 2020) organized by Shobhit University, Meerut on Feb., 28-29,2020 pp 11-12.
- 12. Kapoor N., Dixit R., Mishra S., Chauhan P.,

- Singh N.P., Sirohi A. and Kumar R. (2019). Screening of salt responsive growth and biochemical markers in fenugreek 1st national conference on "Identification, convergence, implementation & extension of science-tech-research for sustainable development (ICIESSD-2019)" held on April 20-21, 2019, organized by SVPUA&T, Meerut & New Age Mobilization Society, New Delhi.
- 13. Kapoor N., Dixit R., Singh N.P., Sirohi A. and Kumar R. (2019). Modulation of growth and biochemical parameters in fenugreek (Trigonella foenum-graecumL.) exposed to salinity stress, published in 3rd International Conference on "Global Initiatives in Agricultural and Applied Sciences for Eco Friendly Environment (GIASE-2019), held on June 16-18, 2019, organized by Agricultural Technology Development Society (ATDS) Ghaziabad, at Tribhuvan University, Kathmandu, Nepal.
- 14. Chauhan Komal, Purushottam, Tomar Akash, Kumar Ravindra, Samsher and Dixit Rekha (2020). "Prevalence of Escherichia coli from commonly consumed food samples". National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department of Botany R.G. (P.G.) College, Meerut (College of Excellence), Jan-29, 2020. pp37. (III Best Poster Award).
- 15. Chauhan Komal, Purushottam, Tomar Akash, Kumar Ravindra, Samsher and Dixit Rekha (2020). Prevalence of Escherichia coli from commonly consumed food samples. National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department

- - of Botany R.G. (P.G.) College, Meerut (College of Excellence), Jan-29, 2020. Pp37. (III Best Poster Award).
- 16. Krishanu, Singh S.P., Mishra S., Kapoor N., Singh N.P. and Dixit R. (2020). Genomic approaches for enhancing nutrient useefficiency in crop plants. 5th Global Outreach Conference on Modern Approaches for Smart Agriculture (MASA 2020) organized by Shobhit University, Meerut on Feb., 28-29,2020 pp 119.
- 17. Tyagi Mansi, Purushottam, Yadav M. K., Kumar R., Dhyani B. P. and Tomar Akash. (2020). "Bioprospecting Soil Microorganisms for Solublization of Phosphorus, Potassium and Zinc". National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department of Botany.
- 18. Tyagi Mansi, Purushottam, Yadav M.K., Kumar R., Dhyani B.P. and Tomar Akash. 2020. "Bioprospecting Soil Microorganisms for Solublization of Phosphorus, Potassium and Zinc". National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management. Organized by Department of Botany R.G. (P.G.) College, Meerut (College

- of Excellence), Jan-29, 2020. (I Best Poster Award).
- 19. Purushottam and Tomar Akash (2020).

  "Biofertilizer as prospective input for sustainable agriculturein India". National Seminar on Ethnomedicinal Wealth of India: Conservation and Sustainable Management.

  Organized by Department of Botany R.G. (P.G.) College, Meerut (College of Excellence), Jan-29, 2020. pp33.
- 20. Singh A., Ahlawat S., Saxena V., Kapoor N., Dixit R. and Sirohi A. (2020). SSR and ISSR markers for genetic assessment of drought tolerance in rice (Oryza sativa L.) 5th Global Outreach Conference on Modern Approaches for Smart Agriculture (MASA 2020) organized by Shobhit University, Meerut on Feb., 28-29,2020 pp 174.
- 21. Verma A., Kapoor N., Joshi M. D. Kumar D., Kumar R., and Dixit R. (2020). An introduction to sea buckthorn: A miraculous and complete treasure to refresh our overall health. 5th Global Outreach Conference on Modern Approaches for Smart Agriculture (MASA 2020) organized by Shobhit University, Meerut on Feb., 28-29, 2020 pp 61.

# College of Veterinary and Animal Sciences

### **Research Articles**

- 1. Aithal H.P., Kinjavdekar P., Amarpal Pawde A.M., Kumar R., Pathak R., Kumar P., Tyagi S.K., Dubey P. and Madhu D.M. (2019). Treatment of open wound fracture using epoxy pin fixation in small ruminants: A review of 96 cases. Ruminant Science., 8(1):103-114.
- 2. Anand S., Ahmad A.H., Telang A.G., Kumar D. and Pant D. (2020) Ameliorating potential of Panax ginseng on oxidative

- stress following subacute exposure to Acetamiprid in rats. Journal of Animal Research, 9(2):339-344.
- 3. Arya A., Mendiratta S.K., Agarwal R.K., Bharti S.K. and Umarao P. (2019). Antimicrobial profile and organoleptic acceptability of some essential's oils and their blends in hurdle treated chicken meat spread. International Journal of Current Microbiology and Applied Sciences, 8(9):



- 2162-2177.
- 4. Asodiya F.A., Kumar V., Vora S.D., Singh V.K., Fefar D.T. and Gajera H.P. (2019). Preparation, characterization, and xenotransplantation of the caprine acellular dermal matrix. Xenotransplantation, http://dx.doi.org/10.1111/xen.120572
- 5. Dar Y.M. and Suri S. (2019). Triidothyronine (T3) and Tetraidothyronine (T4) profile in different age groups of Bakarwali goat (Capra hircus). Cell Tissue Research, 19(2): 6749-6751.
- 6. Dar Y.M., Kumar P., Kumar A. and Gedam M. P. (2019). Basic concept of stem cells: A review. Cell Tissue Research, 19(2): 6763-6768.
- 7. Dhanze H., Bhilegaonkar K.N., Rawat S., Kumar Chethan, Kumar H.B., Gulati A., B.R. Mishra B.P. and Singh R.K. (2019). Development of recombinant nonstructural 1 protein based indirect enzyme linked immunosorbent assay for sero-surveillance of Japanese encephalitis in swine. Journal of Virological Methods, 272:113705
- 8. Dixit P., Rao M.L.V., Dixit A.K., Gupta R. and Shukla P.C. (2019). Prevalence and molecular characterization of Cryptosporidium spp. in goat kids. Indian Journal of Animal Research, 53(9):1234-1238.
- 9. Dixit A. K. and Dixit P. (2019). Pashuon me pratirodhakkrimiyonkisamasya. Krishak Doot, 20(31):10
- 10. Farooqui M.M., Sharma C.P., Gupta V., Kumar P. and Prakash A. (2019). Anatomical and Histochemical Studies of Prenatal Prostate Gland in Buck (Capra hircus). Indian Journal of Veterinary, 31(1):01-04.
- 11. Gangwar C., Saxena A., Shukla P.K., Singh S.P., Patel A., Antil M. and Verma A. (2019). Cryopeservation Induced Alteration in Sperm Morphology in

- Hariana Bull Semen. Internatinal Journal Livestock Resarch, 9(2): 282-288.
- 12. Gedam P.M., Nandeshwar N.C., Banubakode B., Mainde U.P. and Charjan R.Y. (2019). Histomorphological, histochemical and histoenzymic studies on lymphoid tissue of oropharynx in Khaki Campbell breed of Duck (Anas platyrhnchos). Indian Journal Veterinary Anatomy, 31(2):135-137.
- 13. John J.K., Das T., Sethi M., Kattoor J.J., Tomar N., and Sai Kumar G. (2019). Epidemiological study of porcine teschovirus infection in pigs at Bareilly, Uttar Pradesh, India Biological Rhythm Research, 1-8.
- 14. Katoch S., Verma H., Garg A. and Singh R. (2019). Aspergillosis in African Grey Parrot (Psittacus erithacus) in Private Aviary, Meerut, India. International Journal Current Microbiology Applied Sciences 8 (02): 1480-1483.
- 15. Keshri A., Roy D., Kumar V., Kumar M., Kushwaha R., Vaswani S., Kumari V., Dixit S., Prakash A. and Choudhury S. (2019). Impact of different chromium sources on physiological responses, blood biochemicals and endocrine status of heat stress in dairy calves. Biological Rhythm Research, DOI: 10. 1080/09291016. 2019. 1628390.
- 16. Kumar P., Prakash A., Farooqui M. M., Verma A., Gupta V. and Pathak A. (2020). Female reproductive system of Goat. Published by DUVASU, Mathura.
- 17. Kumar A. and Jain R.K. (2019). Radiographic Study on Branching Pattern of the Brachial Artery in Goat. Indian Journal Veterinary Anatomy, 31(1): 24-26.
- 18. Kumar A., Ganguly A., Potliya S., Thakur V., Singh H., Maharana B. R., Arora D. and Bisla R.S. (2019). Haematobiochemical and



- electrolytes studies on clinical cases of rumen impaction in murrah buffaloes. Indian Journal of Animal Research, 53(4): 533-536.
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- 20. Kumar A., Mishra A.K., Singh V., Yadav S., Saxena A., Garg S.K. and Swain, D.K. (2019). Molecular and functional insights into Transient Recptor Potential Vanilloid (TRPV1) in bull spermatozoa. Theriogenology, 128: 207-217.
- 21. Kumar A., Thakur V., Potliya S., Singh H., Ruhil S., Ganguly A., Maharana B. R. and Bisla, R.S. (2019). Study on incidence, haemato biochemical changes and therapeutic management of post parturient haemoglobinuria in Murrah buffaloes. Journal of Pharmaceutical Innovation, 8(1):147-150.
- 22. Kumar B., Singh V.P., Pathak V. and Verma A.K. (2019). Shelf-life assessment of natural antioxidant-treated milk smoothies stored under refrigeration at 4 ± 2°C. Nutrition and Food Science, 49(6): 1000-1013.
- 23. Kumar P., Prakash A., Farooqui M.M., Singh P. and Gupta V. (2019). Histomorphological Study on the Sebaceous Glands of Prenatal Goat (Capra hircus). Indian Journal Veterinary Anatomy, 31(1): 11-14.
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- 25. Kumar P., Prakash A., Farooqui M.M., Singh S.P. and Gupta V. (2019). Differentiation of Dermal Muscle in Region of Prenatal Goat (Chin Capra hircus). International Journal Curr. Microbiology Applied Sciences, 8(03): 640-647.
- 26. Kumar P., Prakash A., Farooqui M.M., Singh S.P. and Verma A. (2019). Histomnorphogenesis of sweat glands in prenatal goat (Capra hircus). Indian Journal Veterinary Anatomy, 31(2): 91-94.
- 27. Kumar R., Ali N., Siddique R.A., Singh R., Kumar Raj, Sahu D.S., Roy D. and Fahim A. 2019. The Effect of different levels of mushroom (Agaricusbisporus) and probiotics (Saccharomyces cerevisiae) on sensory evaluation of broiler meat. Journal of Entomology and zoology studies, 7(4):347-349.
- 28. Kumar S., Yadav S.P., Chandra G., Sahu D.S., Kumar R., Maurya P.S., Yadav D.K., Jaiswal V. and Ranjan K. (2019). Effect of dietary supplementation of yeast (Saccharomyces cerevisiae) on performance and hemato biochemical status of broilers. Indian Journal of Poultry Science., 54(1): 15-19.
- 29. Kumar V., Vora S. and Asodiya F. (2019). Laryngotracheaoesophageal compression due to giant benign hyperplasticthyroid in a Jaffarabadi buffalo. Buffalo Bulleten, 38(4): 673-680.
- 30. Malik V., Singh A. and Pandey R.P. (2020). Oral commissural reconstruction in a Buffalo calf with congenital defects. Buffalo Bulletin., 39(1): 109-114
- 31. Malik V., Singh A. and Pandey R.P. (2020). Surgical management of a deeply located retrobulbar lipoma in a buffalo. Buffalo Bulletin, 39(1): 103-108.
- 32. Minakshi P., Brar B., Ikbal, Ranjan K., Singh I., Nehra V. and Misri J. (2019).



- Jumping of Camelid Coronavirus in Bovines: A Report from Rural Area of Haryana, India. Open Access Journal of Veterinary Science and Research, 4(3): 000183.
- 33. Minakshi P., Ghosh M., Brar B., Kumar R., Lambe U.P., Ranjan K., Manoj J. and Prasad G (2019). Nano-antimicrobials: A New Paradigm for Combating Mycobacterial Resistance. Current Pharmaceutical Design, 25(13):1554-1579.
- 34. Ojha S., Pathak V., Goswami M., Bharti, S.K., Singh V.P. and Tanuja (2019). Comparison of quality and safety parameters of milk from Mathura city. Ruminant Science, 8(1): 55-60
- 35. Pal A.S., Singh V. and Patel A. (2020). Studies on Seminal Attributes of Neat Semen of Hariana Bulls. International Journal of Current Microbiology and Applied Sciences, 9(1): 1742-1749
- 36. Patel A., Kumar B., Sachan V., Yadav S., Yadav D., Kumar A. and Saxena A. (2019). Atypical cyclopia associated with arhinia in buffalo calf and its management through fetotomy. Buffalo Bulletin., 38(1):189-163.
- 37. Prasad M., Ghosh M., Kumar R., Brar B., Lalmbe U.P., Banerjee S., Ranjan K., Manuja B., Goel P., Malik Y.S. and Prasad G. (2020). Insight into Nanomedicinal Approaches to Combat Viral Zoonoses. Current Topic in Medicinal Chemistry doi: 10.2174/1568026620666200325114400
- 38. Pratap J. (2018). Training Willingness of Beneficiaries under Mini Kamdhenu Dairy Scheme in Lucknow Mandal of Uttar Pradesh. Journal Krishi Vigyan, 7:1551-1558.
- 39. Pratap J., Khan M.A., Mandil R., Singh V. and Singh V.P. (2019). Level of satisfaction among farmers attending Kisan Mela. International Journal of Current Microbiology Applied Sciences, 8(11): 227-234

- 40. Pratap J., Khan M.A., Singh V.P., Singh V. and Mandil R. (2019). Farmers Perception about Constraints during Kisan Mela. The Pharma Innovations, 8 (9): 241-243
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# College of Post-Harvest Technology and Food Processing

### **Research Articles**

- 1. Kumar Kapil, Chandra Suresh, Samsher, and Kumar Ratnesh (2020). Evaluation of physico-chemical properties of multiflour-based noodles. International Journal of Current Microbiology and Applied Sciences (ISSN 2319-7706), Vol. 9(6):412-419.
- 2. Kumar Lalit, Samsher, Chandra Suresh and Kumar Vishal (2020). To study the storage stability of mango wine during different conditions with pretreatments. International Journal of Chemical Studies (ISSN 2349-8528), Vol. 8(2): 2974-2978.
- 3. Kumar Rahul, Kumar Vivak, Chandra Suresh, Singh G.R., Singh Jaivir, Kumar Pushpendra and Kumar Tarun (2019). Effect of pretreatments and drying characteristics of potato sticks under open sun drying. International Journal of Chemical Studies (ISSN 2349-8528), Vol. 7(3):1494-1498.
- 4. Kumar Ratnesh, Chandra Suresh, Samsher, Kumar Rahul, Vaishali and Kumar Vikrant (2019). Effect of sensorial characteristics of potato chips fried in different types of edible oils. International Journal of Pure & Applied Bioscience, 7(2):

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- 5. Samsher (2019). Food processing and value addition for enhancement of farmer's income. ISBN-978-3-96492-103-1
- 6. Kumar Tarun, Samsher, Chandra Suresh, Chauhan Neelash, Singh Gopal and Vaishali (2019). Nutritional content of different pretreated mushroom (Pleurotusflorida) powders. International Journal of Agricultural Engineering, 12 (2): 256-260.
- 7. Kumar Tarun, Samsher, Chandra Suresh, Chauhan Neelesh, Singh Gopal and Vaishali (2019). Nutritional contents of different pretreatment mushroom (Pleurotusflorida) powders. International Journal of Agricultural Engineering, (2): 256-260
- 8. Kumar Vikrant, Singh Jaivir, Chandra Suresh, Kumar Ratnesh, Sunil, Singh Kavindra, Chaudhary Vipul and Kumar Pankaj (2019). Post Harvest Technology of papaya fruits & its value-added products-A review. International Journal of Pure & Applied Bioscience, 7(2): 169-181.



### **Books**

- 1. Arya Ankur Mahendra, Kumar Tarun and Chandra Suresh (2020). Practical Manual on Post Harvest Management and Value addition of Fruits and Vegetables. The Jain Brothers, Karol Bagh, New Delhi. ISBN: 978-81-944137-4-5.
- 2. Kumar Ratnesh, Chandra Suresh and Samsher (2020). Practical Manual on Protected Cultivation and Secondary Agriculture. The Jain Brothers, Karol Bagh, New Delhi. ISBN: 978-81-944137-5-2.
- 3. Kumar Ratnesh, Chandra Suresh, Samsher, Kumar Vikrant, Sunil and Chaudhary Vipul (2020). Physicochemical properties of edible oils and fats. In: Chandra S., Goyal Samsher, S.K. and Kumari D. (Eds.), Engineering Properties of Agricultural Produce. New India Publishing Agency, New Delhi (India). p. 195-206. (ISBN: 9789389130447).
- 4. Chandra Suresh and Samsher (2020). Normal water soaking depended physical properties of white speckled kidney beans (Phaseolus vulgaris). In: Chandra, S., Samsher; Goyal, S.K. and Kumari, D. (Eds.), Engineering Properties of Agricultural Produce. New India Publishing Agency, New Delhi (India). p. 23-30. (ISBN: 9789389130447).
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- 7. Chandra Suresh, Samsher and Goyal S.K. (2020). Assessment of physical properties of food grains. In: Chandra S., Samsher Goyal S.K. and Kumari D. (Eds.), Engineering Properties of Agricultural Produce. New India Publishing Agency, New Delhi (India). p. 9-16. (ISBN: 9789389130447).
- 8. Chandra Suresh, Samsher, Goyal Suneel Kumar, Kumari Durvesh (2020). Engineering Properties of Agricultural Produce. New India Publishing Agency (NIPA), New Delhi-110034 (India). (ISBN: 9789389130447). P: xviii + 242.
- 9. Kumar Tarun, Chandra Suresh, Samsher, Chauhan Neelesh, Singh Jaivir, Arya Ankur M, Singh Kavindra and Kumar Ratnesh (2020). Comparative study on physical properties of different varietals tomatoes. In: Chandra, S., Samsher; Goyal, S.K. and Kumari, D. (Eds.), Engineering Properties of Agricultural Produce. New India Publishing Agency, New Delhi (India). p. 121-128. (ISBN: 9789389130447).
- 10. Kumar Vikrant, Singh Jaivir, Chandra Suresh, Chauhan Neelash, Kumar Ratnesh, Sunil and Chaudhary Vipul (2020). Cereal grains: frictional and aerodynamic properties. In: Chandra, S., Samsher; Goyal, S.K. and Kumari, D. (Eds.), Engineering Properties of Agricultural Produce. New India Publishing Agency, New Delhi (India). p. 31-44. (ISBN: 9789389130447).
- 11. Kumar Vikrant, Kumar Ratnesh, Singh Jaivir, Chandra Suresh, Chauhan Neelash and Kumar Pankaj. (2019). Practical Manual on Proximate Analysis of Food Products. Department of Agric. Engg. and Food Technology, Sardar Vallabhbhai Patel University of Agriculture and Technology, Modipuram, Meerut (UP). ISBN: 978-81-942288-7-5.



# **KVK Publications**

### **Research Papers**

- 1. Dhaka, S.S. and R. Rana. (2019). Efficacy of some novel insecticides against fruit and shoot borer, Leucinodes orbonalis (Guenee) in brinjal. Progressive Research. 14(1): 23-26.
- 2. Dhaka, S.S., H. Singh, F. Mohsin, N. C. Tripathi and M. Kumar. (2020). Field evaluation of some novel insecticides against mustard aphid, Lipaphis erysimi (KALT). Journal of Experimental Zoology India. 23(1): 607-610.
- Dhaka, S.S. Monika Rai, M. Rai, and A. Yadav. (2020). Field evaluation of novel insecticides against brown planthopper, Nilaparvata lugens and white backed planthopper, Sogatella furcifera in rice. Indian Journal of Agricultural Sciences. 90 (8): 1528-1531.
- 4. Mohsin, F., Dhaka, S.S. and Mohsin, A. (2020). Economics of eucalyptus: Shifting from traditional farming to income based farming. Journal of Pharmacognosy and Phytochemistry. 9 (SP6): 365-373.
- 5. Dhaka, S.S. Kumar, A. and Pal, D. (2020). Field efficacy of some insecticides against mustard sawfly and their toxicity to coccinellid predators on Indian mustard. International Journal of Current Microbiology and Applied Sciences. SP10: 683-689.
- 6. Joshi Sarita, Kumar Surender and Pal Gajender (2019) Revolving stool: A drudgery reducing intervention. Published in Journal of community mobilization and sustainable development vol 14 (2).325-328.
- 7. Kumar Ravi, Kumar Anant and Jogendra Singh (2019) Estimate of genetic parameters & correlation coefficient analysis for yield and its trails in bread wheat (Triticum estivum L.). published in International Journal of Agricultural Invention, vol. 04, No. 02, Dec. 2019. 135-139.
- 8. Katiyar A.K. and Jaat A.S. (2019) Field evaluation of some biorational insecticides against yellow stem borer in Paddy published in Progressive Agriculture: International (13) 379-392.
- 9. Katiyar A.K. and Jaat A.S. (2019) Front Line Demonstration to Improve Production of Soya

- bean published in Progressive Agriculture : International (14) 114-116.
- 10. Singh, Y.P; Singh, S.P; Kumar, Sanjay and Jat, A.S. (2019) Scientific cultivation of capsicum might play key role in doubling the farmers income. IN: National Seminar on Holistic approach for emerging Agricultural growth in changing rural scenario. Published in Indian Society of Extension Education IARI, New Delhi p. 163.
- 11. Tiwari P.S. Singh H.R, Kumar Vipin and RK Tiwari (2019) Enhancement of pulse production through Front Line Demonstrations." published in Agricultural update Volume 14 Issue 4 Nov., 2019 314-318.
- 12. Pal Virendra, Chandra Naveen and Singh Omveer (2019) Performance and adoption of frontline demonstration on Marigold (Tagetes eracta Linn.) cv. Calcutta in Western Uttar Pradesh conditions. Published in Hortflora Research Spectrum. Vol-8(2): 217-220.
- 13. Pal Virendra, Chandra Naveen, Kumar Vipin and Singh Omveer (2020) Growth, flowering and bulb yield of Tuberose (Polyanthus tuberose L.) as affected by nitrogen and phosphorus under varying spacing. Published in Progressive Agriculture (An International journal). Vol-20(1):112-114.
- 14. Tiwari P.S., Singh Hansraj, Kumar Vipin and Tiwari Rakesh (2019) Enhancement of pulse production through front line demonstration. Published in Agricultural Update journal vol-14,issue-4, Nov. 2019 PP-314, 318.
- 15. Singh Anshul, Tiwari Rakesh, Kumar Ashok (2019) Maximization of crop yield and sustaining of soil health through site specific nutrient management. Published in rural and Agricultural research journal vol-19, Nov. 2019 PP-125.
- 16. Tiwari P.S., Tiwari Rakes and Omveer Singh (2019) Assessment of productivity and soil fertility of Meerut irrigated agro-ecosystem of western U.P. published in International Journal of chemical studies 2020-8(5).



# **Information Communication and Publicity Services**

University is maintained for quick effective and fast effective delivery of Agricultural information to all the stake holders in the agriculture sector. With the changing time the university is modifying its methods to showcase the technologies, policies and other activities through different media, viz. print and electronic mode, university website. The university website was updated on regular basis. Tele Agriculture, Whats app based on the

utility group is a public and farmer connect plateform for stakeholder in more effective, quick and simple manner by direct approaches. On and average one post is uploaded to university facebook page every day. The youtube channel of university includes videos, lectures by dignitaries and eminent scientists etc. Popular magazines Krishi Darshika is as also published by the university.





# Coverage of University in Press and Media





# **Awards and Recognitions**

- 1. Dr. Vipin Kumar recipient of Scientist of The Year Award-2019 held by Hi- Tech Horticulture Society, Meerut.
- 2. Dr. Vipin Kumar recipient of Honorary award-2019 held by Sri. Venketeshwara University, Meerut.
- 3. Dr. Arvind Kumar recipient of Honorary award-2019 held by Sri. Venketeshwara University, Meerut.
- 4. Dr. Arvind Kumar recipient of Scientist of The Year Award -2019 held by Society for Recent Development in Agriculture.
- 5. Dr. Satya Prakash recipient of Distinguish Scientist Award-2019 held by Hi- Tech Horticulture Society, Meerut.
- 6. Dr. Satya Prakash recipient of Outstanding Horticulturist Award-2019 held by PRAGATI Professional society Dhanbad.
- 7. Dr. Satya Prakash recipient of National Fellowship Award-2019 held by New Age Moblization Society New Delhi.
- 8. Dr. Satya Prakash recipient of Distinguished Scientist Award-2019 held by ATDS Ghazibad U.P. India.
- 9. Dr. Bijendra Singh recipient of Distinguished Scientist Award-2019 held by ATDS Ghazibad U.P. India.
- Dr. Satya Prakash recipient of Gauri Kallo Memorial Award-2019 held by National Gladiolus Trust Jammu.
- 11. Dr. Satya Prakash recipient of Certificate of Honour- 2019 held by ICAR- ATARI, Kanpur.
- Dr. Manoj Kumar Singh recipient of HTHS Gold Medal Award-2019 held by Hi- Tech Horticulture Society, Meerut.
- 13. Dr Rekha Dixit recipient of Excellence in Teaching Award-2019 held by Agricultural Technology Development Society (ATDS) Ghaziabad.
- Dr. Amit Kumar Invited Guest Scientist-2019 organized by International Goat Association (IGA) during Regional Conference on goats (ARCG), Chitwan,

- Nepal.
- 15. Dr. Pankaj Chauhan recipient of National Fellow Award-2019 held by New age mobilization society, New Delhi.
- 16. Dr. Naresh Pratap Singh recipient of Young Achievers Award-2019 held by Agricultural Technology Development Society (ATDS) Ghaziabad.
- 17. Dr. Neelesh Kapoor recipient of Young Scientist Award 2019 held by New Age Mobilization Society, New Delhi.
- 18. Dr. Neelesh Kapoor recipient of Fellow Award 2019 held by Agricultural Technology Development Society (ATDS) Ghaziabad.
- 19. Dr. Shalani Gupta recipient of Excellence in Teaching Award-2019 held by Agricultural Technology Development Society (ATDS) Ghaziabad, Uttar Pradesh, India.
- 20. Dr. Debashis Roy recipient of Best Oral Presentation Award at XVIII Biennial International Conference, ANSI, Kolkata held by Animal Nutrition Society of India (ANSI).
- 21. Dr. Gulab Chandra recipient of Best Research Paper-2019 held by Animal Physiologist Association.
- 22. Dr. Debashis Roy recipient of ANSI Best Paper Award-2019 held by Animal Nutrition Society of India (ANSI).
- 23. Dr. V.P. Singh recipient of Scientist of the Year-2019 held by PISRF India
- 24. Dr. Surbhi K. Tyagi recipient of Appreciation award for best paper presentation-2019 held by Indian Society for Veterinary Surgery.
- 25. Dr. Surbhi K. Tyagi recipient of Best oral presentation award-2019 held by Society for Veterinary Science and Biotechnology.
- 26. Dr. Vineet Kumar recipient of Young Scientist award-2019 held by Society for Veterinary Science and Biotechnology.
- 27. Dr. ShailjaKatoch recipient of Young



- Fellow Award-2019 held by Society for Recent Development in Agriculture (SRDA).
- 28. Dr. RA Siddique recipient of 2nd Best Oral Presentation Award-2019 held by ATDS Society.
- 29. Dr Ahmad Fahim recipient of Best Oral Presentation-2019 held by National conference at ICARE-CIRC, Meerut.
- 30. Dr. Mohd. Ameer Khan recipient of Young Scientist Award-2020 held by Society for World Environment, Food and Technology, New Delhi.
- 31. Dr. Mohd. Ameer Khan recipient of Young Scientist Award-2020 held by Global Outreach Research Education Association (GOREA).
- 32. Dr. Prashant Mahadev Gedam recipient of Distinguished Scientist Award-2020 held

- by Society for World Environment, Food and Technology (SWEFT), New Delhi.
- 33. Dr. Vivek Malik recipient of Young Scientist Award-2020 held by Society for World Environment, Food and Technology (SWEFT), New Delhi.
- 34. Dr. Gulab Chandra recipient of Young Scientist Award-2020 held by Society for World Environment, Food and Technology (SWEFT), New Delhi.
- 35. Dr. Neelash Chauhan recipient of Scientist of the year-2020 held by Academy for Environment and Life Science, Agra.
- 36. Prof. Samsher recipient of Life Time Achievement Award-2020 held by 5th Global Outreach Conference on Modern approaches for Smart Agriculture organized by Shobhit University, Meerut.

### **Faculty Superannuation**

S.No.	Name	Designation	Date of Superannuation
1.	Dr. Mohan Lal Singh	Professor & Head, Agronomy	31-12-2019
2.	Dr. Bal Raj Singh	Professor Horticulture	31-01-2020



# Seminar, Conference, Symposia, Training and Workshop

- 1. Dr. Bijendra Singh, Dr. Satya Prakash, Dr. Vipin Kumar, Dr. Arvind Kumar and Dr. M.K. Singh attended the International conference on "3rd Global meet on science & technology for ensuring food & nutrition security (GMST-2019) Pp 68, during 01-03, December, 2019 at National research centre on seed spices Ajmer, Rajasthan.
- 2. Dr. Satya Prakash, Dr. Vipin Kumar, Dr. Arvind Kumar and Dr. M.K. Singh attened 5th Global Outreach Conference on "Modern Approaches for Smart Agriculture (MASA-2020)on 28-29, Feb, 2020 at Shobhit University, Meerut (UP).
- 3. Dr. Vipin Kumar Organized 3rd International Conference in Agriculture and Applied Science for Eco Friendly Environment (GIASE-2019) during June 16-18, 2019 at Tribhuvan University, Kathmandu (Nepal) as Joint secretary of the conference.
- 4. Dr. Satya Prakash Organized 3rd International Conference in Agriculture and Applied Science for Eco Friendly Environment (GIASE-2019) during June 16-18, 2019 at Tribhuvan University, Kathmandu (Nepal) as Chairman of the conference.
- 5. Dr. Satya Prakash organized 02 days national conference on "Identification, coverge, implementation and extension of science and technology for sustainable development on 20-21, Apr, 2019 held at SVPUAT, Meerut. as a member of executive committee. The conference was jointly organized by New Age Mobilization Society, New Delhi
- 6. Dr. Satya Prakash Presented the invited lecture on "Varietal performance of bottle gourd in western plain zone of Uttar Pradesh" during 3rd International Conference in Agriculture and Applied Science for Eco Friendly Environment

- (GIASE-2019) during June 16-18, 2019 at Tribhuvan University, Kathmandu (Nepal).
- 7. Dr. Satya Prakash attended the 26th Annual Zonal Workshop of KVKs held at NDUAT, Ayodhya. Organized by Directorate of ICAR- ATARI, Kanpur on 08-09, July 2019.
- 8. Dr. Satya Parkash attened and organized as Jt. Secretary of the society 05 days International conference on "Soil and water resources management for climate smart agriculture, global food and livelihood security held at NASC complex, New Delhi, organized by SCSI, New Delhi.
- 9. Dr. Pankaj Kumar participated in the First National Conference on "Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment" during August 2, 2019 at NIPGR, New Delhi.
- 10. Dr Rekha Dixit participated in e-Conference on Genetics and Plant Breeding Research in Post COVID-19 Era, organized by Department of Genetics and Plant Breeding, Ch, Charan Singh University, Meerut during 13-14June 2020
- 11. Dr Rekha Dixit participated in International Conference on Genomics and Breeding for Crop Improvement, organized by Department of Genetics and Plant Breeding, Ch, Charan Singh University, Meerut during 04-06 December 2019
- 12. Dr Rekha Dixit participated in 3rd International Conference on "Global Initiatives in Agricultural and Applied Sciences for Eco Friendly Environment (GIASE-2019), JUNE 16-18,2019, Organized by Agricultural Technology Development Society (ATDS) Ghaziabad, at Tribhuvan University, Kathmandu, Nepal.



- 13. Dr. Jitender Singh attended webinar on "Pandemics and hunger: Mainstreaming millets for addressing food and nutritional security" organized by Department of Plant Sciences, School of Life Sciences, University of Hyderabad on June 8, 2020.
- 14. Dr. Jitender Singh attended Live Webinar Series "Applications of omics in climate smart agriculture" from 30 April to 02 May, 2020 Centre for Advanced Agricultural Science and Technology for Climate Smart Agriculture and Water Management (CAAST-CSAWM) Mahatma Phule Krishi Vidyapeeth, Rahuri, Tal. Rahuri, Dist. Ahmednagar 413 722
- 15. Dr. Jitender Singh participated in VIROCON 2020 International Conference of Virology on "Evolution of Viruses and Viral Diseases" Organized by Indian Virological Society 18th 20th February 2020 at Indian National Science Academy (INSA), New Delhi, India
- 16. Dr. Jitender Singh participated in 7th International Conference on "Phytopathology in Achieving UN Sustainable Development Goals" at New Delhi, India during January 16-20, 2020.
- 17. Dr. Jitender Singh attended Workshop on Gene Editing at NIPGER, New Delhi-12
- 18. Dr. Jitender Singh participated in "First National Conference on "Neglected and Underutilized Crop Species for Food, Nutrition, Energy and Environment" NIPGR, New Delhi | August 2, 2019 (Friday)
- 19. Dr. Amit Kumar Participated in Regional Conference on goats (ARCG), Chitwan, Nepal during 20-23rd October, 2019.
- 20. Dr. Amit Kumar Participated in 46thAnnual Conference of Indian Immunology Society IMMUNOCON 2019 "Advances in immunology research: Impact on healthcare" 14 -16 November, 2019, DAE Convention Centre, Anushaktinagar, Mumbai-400094.

- 21. Dr. Amit Kumar Participated in SPARC-INDO-US Immunology workshop organized by IIT, Ropar and The George Washington University, USA during 12-13th June, 2020.
- 22. 3rd International Conference on "Global Initiatives in Agricultural and Applied Sciences for Eco Friendly Environment (GIASE-2019), June 16-18, 2019, Organized by Agricultural Technology Development Society (ATDS) Ghaziabad, at Tribhuvan University, Kathmandu, Nepal.
- 23. Dr Rekha Dixit Participated in 5th Global Outreach Conference on "Modern Approaches for Smart Agriculture" (MASA-2020) held on February 28-29. 2020 by School of Bioengineering and Life Sciences, Shobhit Institute of Engineering and Technology, Meerut in collaboration with GOREA and Society for Plant Research, and presented on Genomic Approaches for Enhancing Nutrient Use efficiency in crop plants.
- 24. Dr. Rekha Dixit attended National Conference on Identification Convergence, Implementation and Extension of Science-Tech-Research for Sustainable Development (ICIESSD-2019) organized by New Age Mobilization Society, New Delhi and SVPUA&T, Meerut on 20-21 April, 2019 held at SVPUA&T, Meerut, UP.
- 25. Dr. Pankaj Chauhan attended National Conference on Identification Convergence, Implementation and Extension of Science-Tech-Research for Sustainable Development (ICIESSD-2019) organized by New Age Mobilization Society, New Delhi and SVPUA&T, Meerut on 20-21 April, 2019 held at SVPUA&T, Meerut, UP.
- 26. Dr. Neelesh Kapoor participated as Course Co-coordinator in Faculty training "Application of molecular and bioinformatics tools in agriculture and Allied sciences" Feb., 12-25, 2020.
- 27. Dr. Neelesh Kapoor One Month training



- for UG/PG students on "Hands on training on conventional, molecular and bioinformatics tools" during 17.06.2019 16.07.2019.
- 28. Dr. Neelesh Kapoor participated in 1st national conference on "Identification, convergence, implementation & extension of science-tech-research for sustainable development (ICIESSD-2019)" during April 20-21, 2019 organized at SVPUA&T, Meerut by NAMO Society, New Delhi.
- 29. Dr. Shalani Gupta attended National Conference on Identification Convergence, Implementation and Extension of Science-Tech-Research for Sustainable Development (ICIESSD-2019) organized by New Age Mobilization Society, New Delhi and SVPUA&T, Meerut on 20-21 April, 2019 held at SVPUA&T, Meerut, UP.
- 30. Dr. Pankaj Kumar attended training on Clean milk production and value addition in milk and milk products organized by College of Veterinary & Animal Sciences, SVPUAT, Meerut from 2-7 March, 2020.
- 31. Dr Rekha Dixit attended training on Role of Immunology in Societal Health organized by College of Biotechnology, SVPUA&T, Meerut from April 29, 2019.
- 32. Dr. Rekha Dixit attended training on Massive Open Online Course on Psychology of Learning organized by ICAR-National Academy of Agricultural Research Management, Hyderabad from May 1-15, 2020.
- 33. Dr. Jitender Singh attended training cum workshop on Workshop on Gene Editing organized by NIPGER, New Delhi-12 from 18-22 November, 2019.
- 34. Dr. Amit Kumar attended training cum workshop on Workshop on Gene editing and plant tissue culture techniques organized by National Institute of Plant Genomic Research, New Delhi from 18-22 November, 2019.
- 35. Dr. Amit Kumar attended training on

- Psychology of Teaching organized by ICAR-National Academy of Agricultural Research Management, Hyderabad from 1-15 May, 2020.
- 36. Dr. Amit Kumar attended training on Lessons from Ebola: Preventing the Next Pandemic organised by Harvard University, Cambridge, UK from 1-28 April, 2020.
- 37. Dr. Amit Kumar attended training on Newer approaches in disease diagnosis and vaccines for livestock and poultry organized by ICAR- National Research Centre on Equines, Hisar, India from 28.01.2020 to 06.02.2020.
- 38. Dr. Naresh Pratap Singh attended training on MOOC training programme on "TEACHING EXCELLENCE" organized by NAARM Hyderabad from 01-30 November, 2019.
- 39. Dr. Shalani Gupta attended training on MOOC training programme on "TEACHING EXCELLENCE" organized by NAARM Hyderabad from 01-30 November, 2019.
- 40. Dr. Naresh Pratap Singh attended faculty training on Applications of molecular and bioinformatics tools in agriculture and allied sciences organized by College of Biotechnology, SVPUAT, Meerut from 12.02.2020 to 25.02.2020.
- 41. Dr. Sandeep Kumar attended faculty training on Applications of molecular and bioinformatics tools in agriculture and allied sciences organized by College of Biotechnology, SVPUAT, Meerut from 12.02.2020 to 25.02.2020.
- 42. Dr. Vivak Malik attended 32nd Advanced faculty training course on "Diagnostic anaesthetic and surgical interventions in emergency and trauma patient" held from 11/09/2019 to 01/10/2019 at GADVASU, Ludhiana.
- 43. Dr. Mohd. Ameer Khan attended training programme on "New Extensionist:



- Changing Paradigms in Agricultural Extension" at Indian Veterinary Research Institute Izatnagar U.P. from 21-30 September 2019.
- 44. Dr. Aditya Kumar, Dr Arbind Singh, Dr Ajit Kumar Singh, Dr Amit Kumar Verma, Dr Rajesh Mandil, Dr Akhilesh Verma, Dr Shweta Anand, Dr Pramila Umaraw, Dr Shivani Sahu, Dr Shriya Rawat, Dr Desh Deepak, Dr Manish Shukla, Dr Akhil Patel, Dr M Bharti attended Massive open online course on 'Dynamics of Teaching-Learning' from 1-30Nov, 2019 held at ICAR-NAARM, Hyderabad.
- 45. Dr Alok K. Dixit attended ICAR short course on "Advances in the management of drug resistance in economically important parasites" held from 4-13Nov. 2019 organized by ICAR-IVRI, Izatnagar.
- 46. Dr Jeny K John attended CAFT training on 'Diagnosis of poultry and animal diseases with emphasis on morphological characterization of gross and histopathological lesions' held from 17 Nov-7 Dec, 2019 organized by GADVASU, Ludhiana.
- 47. Dr. Debashis Roy attended Training cum workshop on "Developing winning research proposals on Digital solution in agriculture" held from 19-23Nov, 2019organized by ICAR-NAARM, Hyderabad.
- 48. Dr. ShailjaKatoch attended ICAR CAFT training on "Microbiological techniques for diagnosis of emerging and re-emerging diseases of Veterinary importance" held from 20 Nov-10 Dec., 2019 organized by LUVAS, Hisar.
- 49. Dr V.P. Singh, Dr Amit Kumar Verma, Dr Arbind Singh attended 21 days ICAR-CAFT training programme on "Recent advances in sample survey and data analysis using statistical software" held from 28 Nov to 18 Dec, 2019 organized by ICAR-IASRI New Delhi.
- 50. Dr. Akshay Garg attended ICAR

- sponsored winter school on 'Advances in Diagnosis and control of endemic and emerging infectious diseases of livestock and poultry in north eastern region of India' held from 03-23 December 2019 organized by Assam Agriculture University Khanapara Campus Guwahati Assam.
- 51. Dr Gulab Chandra attended An Advance Short Course on 'Dietary Manipulation for Improving Energetic Efficiency and Reducing Methane Emission in Ruminants' held from 3-23 Dec. 2019 organized by ICAR-IVRI, Izatnagar.
- 52. Dr. R.K. Singh attended CAFT training on "Neuro-endocrine regulation of livestock production: Prospect and Retrospect" organized by Indian Veterinary Research Institute, Izatnagar, Bareilly held from 28 Jan-17 Feb2020.
- 53. Dr. Debashis Roy attended CAFT training on "Understanding gut-microbiome crosstalk for augmenting feed efficiency and economizing livestock production" held from 07 27 February 2020 organized by ICAR-IVRI, Izatnagar.
- 54. Dr Pramila Umaraw attended CAFT Training on "Issues in export of livestock and livestock products vis-à-vis SPS agreement held from 7-27 Feb 2020 organized by LUVAS, Hisar.
- 55. Dr. Akshay Garg attended Training on "Application of molecular and bioinformatics tools in agriculture and allied sciences" held from 12 25Feb 2020 organized by College of Biotechnology, SVPUA&T Meerut.
- 56. Dr. M.K. Bharti attended Training on "Application of molecular and bioinformatics tools in agriculture and allied sciences" organized by from 12 25Feb 2020 organized by College of Biotechnology, SVPUA&T Meerut.
- 57. Dr. R.A. Siddique attended Training on "Application of molecular and bioinformatics tools in agriculture and



- allied sciences" organized by from 12 25Feb 2020 organized by College of Biotechnology, SVPUA&T Meerut.
- 58. Dr R. A. Siddique attended 3rd International Conference, "Global Initiatives in Agricultural and Applied Sciences for Eco Friendly Environment (GIASE-2019)" on 16-18th June, 2019 at Tribhuvan University, Kathmandu, Nepal.
- 59. Dr V.P. Singh, attended International Conference on "Sustainable agriculture production for food, nutritional livelihood security: a challenge for Asian Farmers during 25-27 September, 2019 at Pattaya, Thailand organized by Pragati International Scientific Research Foundation (PISRF), India.
- 60. Dr R.K. Singh, attended International Conference on "Sustainable agriculture production for food, nutritional livelihood security: a challenge for Asian Farmers during 25-27 September, 2019 at Pattaya, Thailand organized by Pragati International Scientific Research Foundation (PISRF), India.
- 61. Dr V.P.Singh, attended 9th IMSACON & International Symposium On "Advances in Production, Processing and Quality Assurance of Muscle Foods for Improved Health and Nutrional Security" Organized by Department of Livestock Products Technology, DGCN College of Veterinary & Animal Sciences, CSK HPKV, Palampur (HP) 176062, India in collaboration with Indian Meat Science Association from 6-8 November, 2019.
- 62. Dr. Debashis Roy attended XVIII Biennial International Conference, 2019 of Animal Nutrition Society of India from December 17-19, 2019 at Kolkata.
- 63. Dr. Mohd. Ameer Khan and Dr. Jitendra Pratap attended a National Conference of Indian Veterinary Extension Forum on "Beyond Information Transfer-Revisiting Livestock Extension for Sustainability and Farmers' Prosperity" from 11th to 13th July,

- 2019 at Nagpur Veterinary College, Maharashtra Animal and Fishery Sciences University, Nagpur and presented a lead paper and research paper during this conference.
- 64. Dr. Prashant Mahadev Gedam, Assoc. Prof. attended workshop on "Vigyan Sulabh Goshala Prabandhan" at MAFSU, Nagpur on 28th July, 2019.
- 65. Dr Prabhakar Kumar Assoc. Prof. & OIC attended workshop "Plastination: Hands on workshop" at Sapthagiri Institute of Medical Sciences & Research Center, Hessarghata, Bengaluru on 1st and 2nd August, 2019.
- 66. Dr. Prashant Mahadev Gedam attended workshop on "Willed body program and humane alternatives for laboratories in veterinary education" at NTR College of Veterinary Science, Gannavaram on 30th August, 2019.
- 67. Dr.Gulab Chandra participated and presented APACON-2019 organized by the Animal Physiologists Association on "Issues and Strategies for Physiological Capacity Building in Animals" on October14-15, 2019 at College of Veterinary Science, SVVU, Tirupati-517502, A.P., India
- 68. Dr. Rajeev Singh attended a workshop on "Food Borne Zoonotic Diseases" at National Academy of Agriculture Sciences at New Delhi on 21st Nov 2019.
- 69. Dr. Prabhakar Kumar Assoc. Prof. & OIC attended XXXIV Annual Convention & National Symposium on "Recent Advances in Veterinary Anatomy and Its Application in Clinical Sciences" at Department of Veterinary Anatomy, Veterinary College, Karnataka Veterinary, Animal & Fisheries Sciences University, Bengaluru during 28th to 30th November 2019
- 70. Dr. RA Siddique attended conference from 1-2nd Dec, 2019 at Kumaon University, Nainital, on Global Perspective in



- Agricultural and Applied Sciences for Food and Environmental Security (GAAFES-2019).
- 71. Dr. Rajesh Mandil attended National workshop on "In silico and cell culture techniques as alternatives to animal use". Department of Veterinary Pharmacology & Toxicology, College of Veterinary and Animal Sciences, Mannuthi, Thrissur, Kerala, KVASU, Kerala dated 17/12/2019. 2009.
- 72. Dr. Rajesh Mandil attended XIX Annual Conference of ISVPT and National Symposia on "Parmacogenomics in the development and validation of indigenous drugs" held at Department of veterinary pharmacology & toxicology, College of Veterinary and Animal Sciences, Mannuthy, Thrissur, KVASU, December 18-20, 2019
- 73. Dr Alok K. Dixit, Dr AmitVerma& Dr Desh Deepak attended one day workshop on Glanders and farcy disease control and surveillance organized by Department of Animal husbandry, Meerut on 30/12/19 and delivered lecture on parasitic diseases of horses.
- 74. Dr Rajbir Singh and Dr. Ahmed Fahim attended 2 days workshop on "Productivity enhancement in goats through artificial insemination: Scope, Challenges and Strategies" under flagship programme of Rashtriya Krishi Vikas Yojana (RKVY) at DUVASU, Mathura from 13-14 Jan., 2020.
- 75. Dr. Mohd. Ameer Khan, Associate Professor & OIC attended national conference of Society for World Environment, Food and Technology, at

- Lucknow U.P. 7-8 Feb, 2020
- 76. Dr. Mohd. Ameer Khan, Associate Professor & OIC attended National Conference of society of Global Outreach Research Education Association (GOREA) at Meerut 28-29Feb, 2020.
- 77. Prof. Samsher participated in 5th Global Outreach Conference on "Modern Approaches for Smart Agriculture (MASA- 2020)" during 28- 29 February, 2020 organized by School of Biological Engineering and Life Sciences, Shobhit University, Meerut.
- 78. Dr. Suresh Chandra attended the 2nd National Conference on "Technological and Emerging Aspects in Agriculture and Community Science" during February 7-8, 2020 at Conference Hall, International Buddhist Research Institute, Lucknow.
- 79. Dr. Suresh Chandra participated in First national webinar "Agriculture and Food during COVID-19 pandemic" organized by Society for World Environment, Food and Technology, Meerut on dated May 30, 2020.
- 80. Dr. Suresh Chandra participated two days national webinar on "Food and Nutrition in the present scenario of COVID-19" organized by Vasant Kanya Mahavidyalaya. Kamachha, Varanasi (UP) during May 13-14, 2020.
- 81. Dr. Suresh Chandra attend two-week online training on "Advances in Smart Food Processing Technology" organized by CAAST-CSAWN, Mahatma Phule Krishi Vidyapeeth, Rahuri (MS) under NAHEP, ICAR New Delhi held during June 4-15, 2020.



# Trainings Organized by the University

A collaborative workshop on Academia-Industry- Government linkages for Quality Agricultural Education in collaboration with ICAR- National Academy of Agricultural Research Management was organised by Prof. Samsher, Dean PGS at Sardar Vallabhbhai Patel University of Agriculture & Technology, Meerut during November 27-28, 2019 under dynamic leadership of Dr. R. K. Mittal, Vice-Chancellor, SVPUA&T, Meerut. The objective of this workshop was to get input for developing a framework in order to strengthen the

relationship between the three parties i.e. Agricultural Universities, Industry and State Government for improving quality of Agricultural Education. The Workshop was organized as a part of the World Bank funded by National Agricultural Higher Education Project (NAHEP) Component - 2A. About seventy participants representing various Agricultural Universities, Industry and Government organizations hailing from the states of Uttar Pradesh, Uttarakhand, Madhya Pradesh and Bihar participated in the workshop.













Department of Veterinary Gynaecology and Obstetrics organized training on "Artificial Insemination Services for Productivity Enhancement of Livestock" for master trainers under National Livestock Mission sponsored by UPLDB, Lucknow from 17-06-2019 to 21-06-2019.



The Department of Livestock Production and Management organized 7 days Entrepreneurship training programme on poultry production for SC beneficiaries under ICAR, SC-SP from 5-15 February 2020 at PRTC, SVPUAT.



Training programme on Fish Culture under ICAR SC-SP subplan for Entrepreneurship Development



Tutorial classes for students of the University sponsored by ICAR-SC-SP Plan.



# **Events Organized**



Organize an invited lecture on "Food Security and New Plant Breeding Technologies" by Dr Anil Sirohi

Awareness campaign by NSS volunteers highlighting different governmental schemes for farmers during Kisan Mela 2019





Organization of poster and model competition during Kisan Mela 2019

Organizes poster competition on National Constitution day







Organize a NukkadNatak on women empowerment "BetiBachaoBetiPadhao"

# Campus View







1. World Veterinary Day 2019 was celebrated on 27/4/2019 with the Theme Value of Vaccination. During this programme a walk was conducted, along with poster, rangoli, college logo competition. In the afternoon a seminar was organized to highlight the value of vaccines. The chairman of the occasion was Dr. Ashok Kumar, ADG (AH). Besides lectures on the topic were also delivered by the faculty & students of the college.

# 2. International Literacy Day



International Literacy Day 2019 with the theme "Literacy and Multilingualism" was celebrated by COVAS NSS Unit on 7th September 2019. The NSS voulteers participated in quiz, essay writing, elocution, poster and placard competions.

National Service Scheme DayThe NSS day was celebrated by COVAS

NSS Unit by organizing a "Shramdaan" program in the COVAS campus

# 4. 150th Birth Anniversary Celebration of "Father of Nation"

Central Institute for Research on Cattle (CIRC), Meerut organized an essay writing competition in collaboration with COVAS, Meerut to celebrate the 150th Birth Anniversary Celebration of "Father of Nation" on 27th Oct 2019. A total of 22 NSS COVAS volunteers participated in the essay writing competition. On 2nd Oct CIRC, Meerut presented with Ist, IInd, IIIrd and consolation prize and certificates to Vikas Agarwal, PradumanChaurasia, Mayank Singh and Manish Kumar.

### 5. Fit India Plogging Run

As per the order of Regional Directorate NSS, NSS volunteers of COVAS NSS unit participated in the Fit India Plogging run on 2nd Oct 2019. The volunteers collected litter from college campus to University gate.

### 6. PadheJanpad Meerut Abhiyaan

To inculcate the habit of reading books, the students were asked to bring books of their interest and the NSS class was devoted for reading under PadheJanpad Meerut Abhiyaan.

### 7. Ek Bharat Shreshth Bharat

Essay writing competition on the topic Ek Bharat Shreshth Bharat was organized on 15th February 2020 in the NSS class.

## 8. International Women Day

8th March 2020 was celebrated as Internation Women Day by COVAS NSS Unit. The volunteers prepared placards to celebrate the day.

**9. World Food Day:** World Food Day-2019 was organized by College of Post-Harvest Technology and Food Processing on dated





October 16, 2019 in collaboration with Society for World Environment, Food and Technology (SWEFT), New Delhi under the chairmanship of Dr. R.K. Mittal, Hon'ble Vice Chancellor, SVPUAT, Meerut. A guest lecture was delivered by Mr. Sunil Kumar (CEO, Fryo Chips, Meerut) on "Production and Processing Technologies of Potato". On this occasion, several activities viz. Rangoli, Quiz and Elocution competitions were conducted. All the winners were awarded by Hon'ble Vice Chancellor.

### 10. Celebration of 73rd Independence Day



Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut celebrated 73rdIndependence Day on August 15, 2019. All university officers, staff, students of different faculties, NCC cadets, NSS volunteers and family

members of the staff remained present to grace this August celebration. Dr.R.K. Mittal, Hon'ble Vice Chancellor hoisted the flag and delivered speech about Nation and University development.

### 71th Republic Day celebration. 2020



NCC Cadet Received the Award by Hon'ble Vice Chancellor

Sardar Vallabhbhai Patel University of Agriculture and Technology, Meerut celebrated 71th Republic Day on January 26, 2020. All University Officers, staffs, students of different faculties and family members of the staff remained present to grace this yearly celebration. Dr.R.K. Mittal, Hon. Vice Chancellor hoisted the flag and gave speech about 71th Republic Day of the Nation & University development.





# **VISITORS**







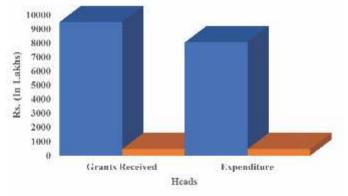






# **University Finance**

S.No.	Head	Grants Received (Rs. in Lac)	Expenditure (Rs. in Lac)		
I. Reve	nue				
1	General	3970.87	3959.20		
2	Farm	252.89	279.06		
3	Education	1237.55	1251.15		
4	Projects (UP)	950.39	61.67		
5	ICAR Development grant	407.54	295.14		
6	ICAR Projects	114.47	54.97		
7	ICAR Projects 75%- U.P.25%				
	A. ICAR 75%	80.01	65.91		
	B. U.P.25%	Nil	Nil		
8	Krishi Vigyan Kendra (Farms)	117.01	99.50		
9	Krishi Vigyan Kendra, ICAR	2351.89	1975.47		
10	CATET	2.44	1.77		
	Total	9484.06	8043.84		
II. Capi	II. Capital				
1	UP Govt. Grant	252.28	252.28		
2	ICAR Grant	219.35	219.35		
	Total	471.63	471.63		
	Grand Total	9956.69	8515.47		



**Graphical Representation of University Budget** 



# **Board of Management**

S.No.	Name & Designation	Address	Status
1	Dr. R. K. Mittal, Vice-Chancellor	SVPUA&T, Meerut	Chairman
2	Sri Om Prakash Sharma	Hon'ble MLC	Member
3	Sri Jitendra Pal Singh	Hon'ble MLA	Member
4	Dr Aneeta Lodhi	Hon'ble MLA	Member
72	Principal Secretary, Agriculture	Uttar Pradesh, Lucknow	Member
9	Principal Secretary, Finance	Uttar Pradesh	Member
	Principal Secretary, Higher Education	Uttar Pradesh	Member
∞	Director, Agriculture Department	Uttar Pradesh	Member
6	Director, Animal Husbandry	Uttar Pradesh	Member
10	Livestock Breeder	Vacant	Member
11	Agricultural Industrialist	Vacant	Member
12	Dr. Mahesh Kaushik, Agriculture Scientist	Mohammadpur Lala, Meerut	Member
13	Shri Manohar Singh Tomar, Progressive Farmer	Rajpura, Meerut	Member
14	Smt. Sushma Singh, Woman Social Worker	2/524, Vineet Khand,	Member
15	Dr. K. K. Singh, Assistant Director General, (Farm Engineering) ICAR	Gomtinagar, Lucknow	
,	representative	ICAR, New Delhi	Member
16	Registered Graduate	Vacant	Member
17	Shri Avadh Narayan, Comptroller	SVPUA&T, Meerut	Member/ Secretory



# **ACADEMIC COUNCIL**

S.No.	Name	Designation	Department	Member	College
1.	Dr. R.K. Mittal	Vice-Chancellor	-	Chairman, Academic Council	
2.	Prof. Samsher	Dean, PGs and Dean College of Post-Harvest Tech	Food Process Technology	Member	COA
3.	Dr. N.S. Rana	Dean Agriculture	Agronomy	Member	COA
4.	Dr. S.K. Sachan	Director Extension	Entomology	Member	COA
5.	Dr. Anil Sirohi	Director Agricultural Experiment Station/DSW	Microbiology & Genetics Engineering	Member	СОВ
6.	Dr. B.R. Singh	Registrar/Dean College of Technology	Agricultural Engineering	Secretary, Academic Council	СОТ
7.	Dr. Rajbir Singh	Dean College of Veterinary & Animal Sciences	Animal Production	Member	COA
8.	Dr. Ravindra Kumar	Dean College of Biotechnology	Cell Biology	Member	СОВ
9.	Dr. Bijendra Singh	Dean College of Horticulture	Vegetable Science	Member	СОН
10.	Dr. Ashok Kumar	Senior Professor	Soil Science & Agricultural Chemistry	Member	COA
11.	Dr. Shiv Singh	Senior Professor	Agronomy	Member	Res. Center
12.	Dr. Vivek	Senior Professor	Agronomy	Member	COA
13.	Dr. B.P. Dhyani	Professor & Head	Soil Science & Agricultural Chemistry	Member	COA
14.	Dr. R.N. Yadav	Professor & Head	Agricultural Extension & Communication	Member	COA
15.	Dr. Yogesh Prasad	Professor & Head	Fruit Science	Member	СОН
16.	Dr. Sunil Malik	Professor & Head	Floriculture & Landscaping Architecture	Member	СОН
17.	Dr. Nazim Ali	Professor & Head	Animal Production	Member	COA
18.	Dr. Gopal Singh	Professor & Head	Plant Pathology	Member	COA



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19.	Dr. Satya Prakash	Professor & Head	Horticulture	Member	COA/COH
20.	Dr. L.K. Gangwar	Professor & Head	Genetics & Plant Breeding	Member	COA
21.	Dr. H.L. Singh	Professor & Head	Agriculture Economy	Member	COA
22.	Dr. H.L. Mishra	Professor & Head	Entomology	Member	COA
22.	Dr. H.L. Mishra	Professor & Head	Entomology	Member	COA
23.	Dr. Pushpendra Kumar	Professor & Head	Agricultural Biotechnology	Member	COA
24.	Dr. Rashmi	Professor & Head	Basic Science	Member	COA
25.	Dr. Pankaj Kumar	Professor & Head	Biochemistry & Physiology	Member	СОВ
26.	Dr. Rekha Dixit	Professor & Head	Commercial Biotechnology	Member	СОВ
27.	Dr. Aarti Bhatele	Professor & Head	Veterinary Pathology	Member	COVAS
28.	Dr. Rajeev Singh	Professor & Head	Veterinary Mocrobiology	Member	COVAS
29.	Dr. Rachana Verma	Professor & Head	Veterinary Pharmacology	Member	COVAS
30.	Dr. Tarun Sarkar	Professor & Head	Veterinary Medicine	Member	COVAS
31.	Dr. Vijay Singh	Professor & Head	Veterinary Gynecology & Obstetrics	Member	COVAS
32.	Dr. D.K. Singh	Professor & Head	Livestock Production & Mgt.	Member	COVAS
33.	Dr. Amit Kumar	Professor & Head LFC	Livestock Production & Mgt.	Member	COVAS
34.	Dr. R.K. Naresh	PG Faculty Secretary	Agronomy	Member	COA
35.	Dr. Rajkumar	Faculty Secretary, College of Agriculture	Animal Production	Member	COA
36.	Dr. Jitendra Singh	Faculty Secretary, College of Biotechnology	Immunology & Defence Mechanism	Member	СОВ
37.	Dr. Amit Kumar Verma	Faculty Secretary, College of Veterinary and Animal Sciences	Veterinary Medicine	Member	COVAS



38.	Dr. Vaishali	Senior Assoc. Professor	Agricultural Biotechnology	Member	COA
39.	Dr. Archana Arya	Senior Assoc. Professor	Basic Science	Member	COA
40.	Dr. Purshottam	Senior Assoc. Professor	Pathology and Microbiology	Member	СОВ
41.	Dr. Shalini Gupta	Senior Assoc. Professor	Molecular Biology and Genetic Engineering	Member	СОВ
42.	Dr. Veer Pal Singh	Senior Assoc. Professor	Livestock Product Technology	Member	COVAS
43.	Dr. Atar Singh	Senior Asstt. Professor	Genetics and Plant Breeding	Member	COA
44.	Dr. Adesh Singh	Senior Asstt. Professor	Agronomy	Member	COA
45.	Dr. Sandeep Kumar	Senior Asstt. Professor	Biochemistry and Physiology	Member	СОВ
46.	Dr. Neelesh Kapoor	Senior Asstt. Professor	Finger Printing	Member	СОВ
47.	Dr. Shriya Rawat	Senior Asstt. Professor	Public Health and Epidemiology	Member	COVAS
48.	Dr. Gulab Chandra	Senior Asstt. Professor	Physiology and Biochemistry	Member	COVAS
48.	Shri Avadh Narayan	Comptroller	-	Member	-



# **University Officers and Staff**

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	,	Dean Postgrad	uate Studies	•		
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	Director Placement Cell Office					
14.	Dr. Ramji Singh	Director	9410275769	singh.ramji@gmail.com		
		Directorate of Ex	tension Office			
15.	Dr. S.K Sachan	Director Extension	9412923199	deesvpuat2014@gmail.com		
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		Directorate of Ro	esearch Office			
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18.	Dr. Bijendra Singh	Joint Director	9412701340	drbijendrasingh66@gmail.com		



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