

IAUA NEWS

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CONTENTS	
1. 15 th National Symposium	1
 2. New Technologies A. Crop & Horticultural Sciences Varieties/Hybrids Products and Processing Package of Practice 	2-10
B. Animal and Fisheries Sciences	10
3. Teaching	11-13
4. Events and Activities	13-29
5. MoUs	29-31
6. Patents	32-34
7. Awards & Recognition	34-44
8. Limelight	44-49
9. Research Publication	49
10. Future Programmes	49-51

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15th National Symposium

The Food and Agriculture Organization (FAO) of the United Nations has recognized 2023 as the

International Year of Millets, and consequently the Government of India has been celebrating this 'International Year of Millets 2023' as a people's movement, thus aiming to position India as the global hub of millets. Efforts are being made globally to popularize millets in different ways to catalyze the stakeholders involved in the process right from farm-gate to dining-plate. Nevertheless, there are several challenges that need to be addressed at various stages right from input procurement, cultivation, value addition to trade, among others.



In this context, with a view to addressing the above pertinent issues, the 15th National Symposium of IAUA on Millets for Climate Smart Sustainable Agriculture and Sound Human Health, was organized on 16-18 November 2023 at the University of Agricultural Sciences (UAS), Dharwad, Karnataka, jointly with the support of the Indian Agricultural Universities Association (IAUA), New Delhi.

The structure of the aforesaid 15th National Symposium was as follows:

- Inaugural Session
- Technical Session-1: Enhancing Productivity and Profitability of Millets Economic and Ecological Concerns
- Technical Session-2: Millets for Sound Human Health
- Technical Session-3: Public-Private Partnership for Collaborative R&D and Trade
- Technical Session-4: Policy and Institutional Framework for Promotion of Millets
- Field Visits
- Common issues of SAUs in advancement of Teaching, Research and Extension
- Valedictory Session

Technical Sessions comprised Lead Lectures by eminent domain experts followed by Panel Discussions.

The Vice Chancellors, Deans, Directors, Professors, Scientists from various State Agricultural,

Horticultural and Veterinary Universities, and senior officials from DoAC&FW and Private Sector attended the symposium. Besides, former Vice Chancellors of UAS, Dharwad and Rani Channamma University, Belagavi also attended the symposium.

Dr Ashok Dalwai, former Secretary, Government of India was the Chief Guest in the Inaugural session and delivered the inaugural address. The experts shared their experiences and also put forward their views for the way forward with regard to increasing the productions and consumption, and health



benefits of millets. The proceedings and recommendations of the Brainstorming Session have been shared with the stakeholders.

NEW TECHNOLOGIES

A. CROP and HORTICULTURAL SCIENCES

The earnest efforts at Agricultural Universities resulted in development of new technologies in Crop and Horticultural Sciences which included varieties/hybrids; machines and equipment; products and processing; and package of practices as given below:

VARIETIES/HYBRIDS

Dr Rajendra Prasad central Agricultural University (Dr RPCAU), Pusa, Bihar

Lahsun

Rajendra Lahsun 1

- Yield potential: 83-85 t/ha.
- TSS 41° Brix, Dry matter 42 %, Pyruvic acid 28.5 μmol/g.
- Moderately resistant to purple blotch and Stemphylium blight diseases and thrips.
- Released by SVRC (Bihar) for the state of Bihar.



Navsari Agricultural University (NAU), Navsari, Gujarat

Sorghum

GJ 102 (Surat Goti)

- Average grain yield of 2,731 kg/ha and dry fodder yield of 7,390 kg/ha during *rabi*; and grain yield of 2,535 kg/ha and 13,937 kg/ha dry fodder yield during *kharif*.
- Superiority in grain quality parameters viz. protein, Fe, Zn, Mn and Cu over better checks.
- Disease reaction and insect infestation was comparable with popular checks.
- Released for Gujarat State.

Rice

GR 25 (Mahatma)

- Average grain yield of 6,301 kg/ha in Gujarat.
- High head rice recovery (58.3%) and high 1,000 grain weight (33.8 g).
- Moderately resistant to leaf blast, stem borer, sheath mite and leaf folder.
- Released for Gujarat State.

GR 26 (Navsari Lalmoti)

- The biofortified rice variety GR 26 has recorded average grain yield of 4,898 kg/ha in Gujarat.
- It has red colour kernel, long bold grain, long panicle and more productive tillers per plant.
- It contains high amount of protein content (11.91 %), intermediate amount of zinc content (21.68 ppm), amylose content (23.51 %) and high head rice recovery (62.70%).
- Released for Gujarat State.

Fenugreek

GM 4 (Supriya)

- The variety GM 4 possesses indeterminate V shaped growth pattern along with tall plant height (60.26 cm), less number of primary branches (5.95) as well as secondary branches (2.63) per plant, which makes it more suitable for dense planting.
- Higher seed yield (1,538 kg/ha) in a shorter duration.
- It is moderately resistant to powdery mildew as well as root rot diseases.
- Released for Gujarat State.

Cotton

G.Cot. 31 (Narmada Gold)

- Variety G. Cot. 31 recorded 1,399 kg/ha average seed cotton yield.
- Disease resistant reaction against wilt, *Alternaria* leaf spot as well as bacterial leaf blight diseases.
- Released for South Gujarat.

GN.Cot. 44

- The *hirsutum* cotton variety GN.Cot. 44 recorded highest average seed cotton yield of 2,534 kg/ha and average lint yield of 997 kg/ha under rainfed conditions of Gujarat.
- Resistant reaction for bacterial leaf blight and also for *Alternaria* leaf spot and resistant to moderately resistant for grey mildew.
- Released for Gujarat State.

Tannia

G. Tannia 1 (Navsari Pari)

- Average green leaves yield (7.96 t/ha) and corm and cormel yield (10.02 t/ha).
- It has erect plant type, soft leaf structure and more number of leaves (34.73) per plant.
- Released for Gujarat State.

Adenium

Gad 5 (Shashaank)

- White flowers having multipetalous form with dual whorls of petals in each flower.
- The flower size is small (7.2 cm) and bears more clusters per plants, more open flowers per cluster (4.5) and bears flowers for longer duration i.e. flowering period is long (197 days).
- Released for Gujarat State.

Turf grass

GTG 1 (Arna)

- The variety having good aesthetic appearance, requires less number of mowing and less incidence of pest and diseases.
- Released for Gujarat State.

Professor Jayashankar Telangana State Agricultural University (PJTSAU), **Hyderabad**

Rice

Telangana Rice (WGL 1289)

- Duration 140 -145 days with yield potential of 7.0-8.0 t/ha.
- Moderately resistant to plant hoppers (BPH and WBPH), moderately resistant to leaf and neck blast, sheath rot and glume discoloration.
- Recommended for the states of Chhattisgarh, Gujarat and Maharashtra.



Telangana Rice (KNM 7037)

- Duration 115-120 days with yield potential of 7.0-8.0 t/ha.
- Moderately resistant to leaf blast, low grain shattering, good head rice recovery, good cooking quality.
- Recommended for the states of Odisha, Uttar Pradesh and West Bengal.





Rajendranagar Vari (RNR 28361)

- Duration 130 days with yield potential of 7.5-8.0 t/ha.
- Moderately resistant to brown plant hopper, bacterial leaf blight, neck blast and sheath rot, three weeks of seed dormancy.
- Recommended for the state of Telangana State.





Warangal Vari (WGL 119)

- Duration 125 -130 days with yield potential of 6.0-7.0 t/ha.
- Resistant to multiple Gall midge biotypes (i.e. Biotype 1, 3 and 4M), moderately resistant to neck blast and sheath rot.
- Recommended for the state of Telangana.







Maize

Telangana MAKKA 3 (DHM 206)

- Duration 105-110 days with yield potential of 7.3-8.5 t/ha.
- Moderately resistant to post flowering stalk rot (PFSR), moderately resistant to all kinds of foliar diseases.





• Recommended for the states of Bihar, Delhi, Haryana, Jharkhand, Odisha, Punjab, Uttarakhand, Uttar Pradesh and West Bengal.

Sorghum

Tandur Jonna (SVT 55)

- Duration 115-120 days with yield potential of 2.4-2.5 t/ha.
- Resistant to shootfly, stemborer, aphids, and moderately resistant to charcoal rot.
- Higher levels of iron (41.86 mg/kg), zinc (26.67 mg/kg) and crude fibre (2.7%) in the grain.
- Recommended for the state of Telangana.





Pearl Millet

Palem Sajja (PBH 1625)

- Duration 130 days with yield potential of 2.2 t/ha.
- Drought tolerant during mid-season and terminal crop growth stages.
- Recommended for Telangana State.





Finger Millet

Palem Ragi (PRS 38)

- Duration 100-110 days with yield potential of 2.5-2.8 t/ha.
- Tolerant to lodging and grain shattering.
- Recommended for the state of Telangana.





Sher-e-Kashmir University of Agricultural Sciences and Technology of Kashmir (SKUAST-K), Srinagar

Maize

Shalimar Krishan Ganga 3

- The variety is cold tolerant with yield potential of > 5q/ha.
- Released for Northern Hill Zone.

Oats

Shalimar Fodder Oat 7

- 450 q green fodder yield.
- High quality, Disease resistant.
- Released for zone I and II National release.



University of Agricultural Sciences (UAS), Bengaluru

Rice

KMP 225

- Short duration variety, suitable for sowing during 3rd to 4th week in July.
- Long bold grains similar to IR 64.
- Moderately resistant to leaf and neck blast diseases.
- Yield grain: 24-26 q/acre, straw: 26-28 q/acre.
- Recommended for Zone 6 of Karnataka by State Committee.



KMP 225

RNR 15048

- Short duration variety, suitable for sowing during 3rd to 4th week of July.
- Medium slender grains with good cooking quality.
- Low glycemic index.
- Yield grain: 22-24 q/acre, straw: 26-28 q/acre.
- Endorsed for Zone 6 of Karnataka by State Committee.



RNR 15048

Maize

MAH-14 138

- Long cobs with attractive light orange grains fetches higher price in the market.
- Stays green even at harvest.
- Resistant to *Turcicum* leaf blight.
- Moderately resistant to sorghum downy mildew diseases.
- Grain yield: 34-38 q/acre.
- Recommended for Zone 5 and 6 of Karnataka by State Committee.



MAH 14-138

Browntop Millet

GPUBT-2

- Medium duration, Semi-tall (110-120 cm).
- Number of tillers (15-20), Compact shaped inflorescence.
- Resistant to leaf blight disease.
- Yield grain: 6-8 q/acre, straw: 10-12 q/acre.
- Recommended for Zone 5 and 6 of Karnataka by State Committee.



GPUBT 2

Little Millet

GPUL 11

- Arched shaped inflorescence with intermediate compact panicle.
- Oval shaped grain with dark grey colour.
- Suitable for sowing in *kharif* (June-July).
- Highly resistant to grain smut and leaf blight disease.
- Yield grain: 6.1-8.1 q/acre, straw: 12-15 q/acre.
- Recommended for Zone 5 and 6 of Karnataka by State Committee.



GPUL 11

Proso Millet

GPUP 32

• Intermediate compact with diffused shaped inflorescence.

Volume 23 No. 4

October-December, 2023

- Semi-tall variety.
- Oval shaped golden yellow colour grain with higher test weight.
- Suitable for sowing in *kharif* (June-July).
- Highly resistant to grain smut and brown spot disease.
- Yield grain: 7.2-8.1 q/acre, straw: 12-15 q/acre.
- Recommended for Zone 5 and 6 of Karnataka by State Committee.



GPUP-32

Finger Millet (Ragi)

ML 322

- Medium height (100-105 cm) variety with stiff stalk that resists lodging.
- More number of tillers (6-7).
- Resistant to neck and finger blast and is drought tolerant.
- Releases less chaff dust during threshing.
- Yield grain: 10-12 q/acre, straw: 15-20 q/acre.
- Recommended for Zone 5 of Karnataka by State Committee.



ML-322

Dolichos Bean

HA 5

- Photo-period insensitive, semi-determinate growth habit.
- Yield green pod: 13-14 q/acre, dry seed: 2.5-3.0 q/acre.
- Recommended for zone 5 of Karnataka by State Committee.



HA-5

Sesamum

GKVKS 1

- Short duration variety with more number of branches and filled pods.
- · Leaves stays green at harvest.
- White seeds with 47-48 % oil content.
- Yield grain: 1.8-2 q/acre, oil: 9-9.5 q/acre.
- Recommended for Zone 5 of Karnataka by State Committee.



GKVKS-1

Niger

KBN 2

- Short duration variety with more number of branches and filled pods.
- Bold black seeds with 47-48 % oil content.
- Suitable for intercropping.
- Yield grain: 1.9-2 q/acre, oil: 90-100 kg/acre.
- Recommended for Zone 5 of Karnataka by State Committee.



KBN-2

Castor

ICH 66

- Red color stem and semi-spiny capsules.
- Triple bloom group (waxy coat is present on stem, lower and upper side of the leaves).
- Suitable for *kharif* (June- July) under both rainfed and irrigated ecosystems.
- Wilt resistant and green leaf hopper tolerant hybrid.
- Seed yield: 6-7 q/acre.



ICH-66

• Endorsed for Zone 4, 5 and 6 of Karnataka by State Committee.

Fodder Sorghum

CNFS 1

- Suitable for both *kharif* (June July) and *rabi* (October November).
- Rich in fibre (35-36%), rich in protein content (9-10%).
- Straw yield: 22-23 t/acre.
- Recommended for Zone 6 of Karnataka by State Committee.



CNFS-1

PRODUCTS and PROCESSING

Dr Y.S.R. Horticultural University (Dr YSRHU), Venkataramannagudem

Dr YSRHU - Floral Magic

Dr YSRHU - Floral Magic instant floral ink spray when applied to white chrysanthemum flowers (Poornima variety), witnessed the swift transformation of the flower colour, showcasing the innovative application of the technology by Miss Jagadeeswari, Ph.D. Scholar, under the guidance of Dr T. Janakiram, Vice Chancellor, Dr YSRHU and Dr R. Nagaraju, Principal Scientist (Horticulture) and Head, Dr YSRHU – CRS, Tirupati.



PACKAGE of PRACTICE

NAU, Navsari

Crop Production

• Fertigation on Vegetable Okra in Clay Soils of South Gujarat

The farmers of South Gujarat growing summer okra under drip irrigation system are recommended to apply 5 t/ha biocompost as basal and recommended dose of fertilizer (100-50-50 kg N – P_2O_5 – K_2O/ha). Apply either N in form of urea through fertigation and P in form of single super phosphate and K in form of muriate of potash as basal or apply N in form of urea and K in form of muriate of potash through fertigation and P in form of single super phosphate as basal for getting higher yield and net income.

• Levels of Irrigation on Sweet Potato Under South Gujarat Conditions

The farmers of South Gujarat, heavy rainfall zone, growing sweet potato during *rabi* are recommended to adopt drip method of irrigation and place drip line between two rows on raised bed (100 cm top width and 60 cm furrow width) at a spacing of 80 cm × 30 cm for achieving higher tuber yield, net profit and good quality tubers along with 39 per cent water saving.

System details

Lateral spacing: 1.60 m Dripper spacing: 0.60 m Dripper discharge: 4 lph

Operating pressure: 1.20 kg/cm²

Operating time (alternate day): December: 60-85 min, January: 70-100 min,

February: 80-110 min, March: 120-150 min

• Irrigation and Mulching to Increase Productivity of Brinjal Under Coastal Salt Affected Soils

The farmers of coastal areas of South Gujarat, heavy rainfall zone, growing late *Kharif* brinjal
following ridge and furrow method, are recommended to use silver black plastic mulch (50 µ thick,
50 % coverage) on ridge and give irrigation of 50 mm depth at 18-20 days after cessation of
monsoon and remaining 9 irrigations at 12-14 days interval for getting higher fruit yield and net
income.

• Planting Geometry for Single Eye Budded Settling on Sugarcane Under South Gujarat Condition

The farmers of south Gujarat planting sugarcane through single eye bud settling are recommended to plant the settling at 120 cm row spacing or with pair row of 60-120-60 cm. Further, it is also recommended to keep plant to plant distance 45 cm for getting higher yield and net return.

• Boron and Zinc Application for Quality of Sugarcane (Saccharum officinarum L.) Under South Gujarat Condition

The farmers of South Gujarat growing plant and ratoon sugarcane are recommended to apply 2 kg boron/ha (20 kg borax/ha) if soil is deficient in boron or 10 kg Zn/ha (50 kg zinc sulphate/ha) if soil is deficient in zinc or if soil is deficient in both then apply 2 kg boron/ha (20 kg borax/ha) and 10 kg Zn/ha (50 kg zinc sulphate/ha) at the time of planting in plant crop only along with recommended dose of chemical fertilizer to plant and ratoon cane for getting higher yield, quality and net return of plant and ratoon sugarcane.

• Nitrogen Levels and Planting Density Under Rainfed Condition for Arboreum Cotton

Farmers growing Arborium cotton (Desi) under rainfed condition are recommended to sow the crop at 60×15 cm spacing in South Gujarat heavy rainfall zone and 60×30 cm spacing in South Gujarat zone and apply 150 kg nitrogen/ha in two equal splits (75 kg N/ha each) at 30 and 60 days after sowing for achieving higher seed cotton yield and net income.

• Integrated Nitrogen Management in Kharif Grain Sorghum

The farmers of South Gujarat growing *kharif* sorghum are recommended to apply 20 kg N/ha through neem cake (803 kg/ha) + 20 kg N/ha through castor cake (463 kg/ha) well mixed with soil during land preparation along with recommended basal application of phosphorus (40 kg P_2O_5 /ha) and top dressing of 40 kg N/ha through urea at 30 DAS to achieve higher yield and net return.

• Manures and Nutrient Requirement of Kharif and Summer Rice Crop Sequence

The farmers of South Gujarat growing *kharif* rice- summer rice crop sequence for long term are recommended to apply either 5.0 t bio-compost/ha + 25.0 kg N/ha and 25.0 kg P_2O_5 /ha as basal and remaining 25.0 kg N/ha in 2 equal split at 25 DATP and at 50 DATP (12.5 N/ha) or 1.0 t castor cake/ha + 25.0 kg N/ha and 25.0 kg P_2O_5 /ha as basal and remaining 25.0 kg N/ha in 2 equal split at 25 DATP and at 50 DATP (12.5 N/ha) to *kharif* and summer rice for getting higher yields.

• Integrated Nutrient Management in Summer Fodder Pearl Millet (*Pennisetum glaucum* L.) under South Gujarat Condition

Farmers of South Gujarat growing fodder pearl millet in summer are recommended to apply biocompost 5.0 t/ha as basal and 125.0 kg N/ha (62.5 kg N/ha as basal and 62.5 kg N/ha at 30 DAS) with seed treatment of biofertilizer (Azotobacter + PSB @10 ml/ kg seed each) for getting higher yield.

• Drought Mitigating Strategies in Pigeon pea Under Rainfed Condition

Farmers of south Gujarat growing rainfed pigeon pea are recommended to sow pigeon pea either on broad bed furrow system (150 cm bed and 30 cm furrow) or on ridges and furrow system with 5 t/ha FYM. Further, Pusa Hydrogel 2.5 kg should be applied in sowing rows mixed with FYM or 1% KNO₃ spray after cessation of rainfall should be done to increase pigeon pea production.

Spacing and Fertility Levels for Pigeon Pea Under Rainfed Condition of South Gujarat

Farmers of South Gujarat growing rainfed pigeon pea (GNP 2) crop are recommended to apply biocompost 2 t/ha + seed treatment with rhizobium and PSB biofertilizer (each 10 ml/kg seeds) or bio-compost 2 t/ha + 1 % foliar spray of Banana pseudostem enriched sap at bud initiation and flowering stage for higher and profitable yield of pigeon pea crop and to improve nitrogen and phosphorus availability in soil.

B. ANIMAL and FISHERIES SCIENCES

Various technologies developed in Animal and Fisheries Sciences by the universities are given here under:

G.B. Pant University of Agriculture and Technology (GBPUAT), Pantnagar

New Breeds/Genetic Resources

• The live brood bank of *Labeo gonius*, *Labeo dyocheilus*, *Puntius* spp., *Chagunius chagunio* and *Tor putitora*, the native cyprinids of Uttarakhand have been developed.

Tamil Nadu Veterinary and Animal Sciences University (TANUVAS), Chennai

Vaccine, Drugs and Medicine and Diagnostics

The following vaccines/diagnostics/products were developed by the faculty members of TANUVAS:

- CRISPR/Cas12 assay-based detection of *Ehrlichia canis* and *Babesia gibsoni* genome in dog blood sample.
- CRISPR/Cas12 assay for detecting ORF virus genome from scab lesion.
- CRISPR/Cas12 assay for detecting lumpy skin disease virus in cattle.
- Development of colorimetric assay for detection of antibiotic residue using magnetic nanoparticles.
- ELISA kit for serosurveillance and diagnosis of Babesia gibsoni in dogs.
- Macrophage enriched *Theileria annulata* schizont infected cell culture as potential anti-theileria vaccine candidate.
- Thermo-reversible polymer for intramammary drug delivery.

TEACHING

ANGRAU, Guntur

In pursuit of fulfilment of agricultural education needs of the Andhra Pradesh in particular and India is general, the ANGRAU established New Agriculture College in APCARL Premises at Pulivendula from AY 2023-2024.

GBPUAT, Pantnagar

• Department of Plant Pathology organized two days practical training programme for UG and PG students, to enhance their skill in disease diagnosis, identification of plant pathogens, isolation and mass production of bio-control agents on 17 October and 21 October 2023. Dr Raman Kumar Walia, Former Head of Department of Nematology, and Associate Dean, College of Agriculture, CCSHAU, Hisar (Haryana), Eminent Nematologist Former Project Coordinator, ICAR-AICRP (Nematodes) and Dr J.C. Bhatt, Eminent Plant Pathologist and former Director ICAR-VPKAS, Almora, Uttarakhand, delivered lectures and imparted hands on training to the students.

Kamdhenu University (KU), Gandhinagar

Educational Tour

Educational tour was organized on 27 October 2023 for fourth year undergraduate students of the college as per the VCI course curriculum for the practical teaching of various activities related to collection and examination of female genital organs for the subject of Veterinary Gynaecology and Obstetrics at Slaughterhouse, Surat

and for various activities related to wild life conservation. Seventy-four students of fourth year along with two faculties of Veterinary Gynaecology visited the places. At slaughterhouse students learned male genital organs and at zoo they learned about routine process of zoo, various diseases of wild life and its treatment approach. The educational tour was successfully managed by Dr C. T. Khasatiya and Dr L. C. Modi.



College of Veterinary Science and Animal Husbandry, Junagadh

Orientation Programme Organized for First Year Veterinary Science Degree Course Students

Orientation programme for first year B.V.Sc. and Animal Husbandry degree course was organized during 16-20 October 2023 where concerned teachers of various subjects, Dr Anil Sharma, Dr Arun Sharma, Dr Viral Gamit had

interactions with students. After welcome programme, students visited all departments. All HODs and teachers of respective departments gave information about their respective departments to freshers in detail. Principal, Dr P.H. Tank also



First year B. V. Sc. and AH students' visit to Department of Veterinary Microbiology

congratulated first year students for joining the noble profession and taking admission to Veterinary College, Junagadh. Dr H.B. Patel gave his time and efforts for the success of this orientation programme.

PJTSAU, Hyderabad

Student Placements

A Workshop on Management Career Options for B.Sc. (Hons) Agriculture students, was organized at College of Agriculture, Rajendranagar on 7 October 2023 in association with the IMS Learning Resources Pvt. Ltd, Mumbai. Students (169) of AELP and RAWEP registered for the workshop. Eighty-eight AELP students attended the workshop in offline mode and 45 students of RAWEP attended in the online mode.

Inter Polytechnic Sports, Games, Cultural and Literary Meet

The Inter Polytechnic Sports, Games, Cultural and Literary Meet 2023-24 was held at Regional Agricultural Research Station, Jagtial from 17-19 October 2023. Students (230) from 12 Polytechnics of Telangana State participated in the event. Several games and sports events, viz. volley ball, throw ball, shuttle badminton, table tennis, tennikoit, carroms, chess, athletic events were conducted for boys and girls. Cultural and Literary events like songs, group dance, *rangoli*, essay writing, elocution and quiz were also organized during the event. The overall championship in sports and games for boys was bagged by Agricultural Polytechnic, Palem. The overall championship for girls was awarded to Agricultural Polytechnic, Tornala. The overall championship for cultural and literary events was received by Agricultural Polytechnic, Madhira.

Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-J), Jammu

As a part of teaching, the following activities were conducted for the Management students:

- A Business Quiz on the topic Current Business Affairs, was held on 22 December 2023 in the Division for the students of MBA(ABM) degree programme.
- Group discussion based on case studies were organized on Wildlife Protection Act, 1972; India's Space Odyssey in 2023: Satellite and Rocket Start Ups; Rising Asia: Where India and China are Placed in Emerging Global Market Economy? and Land Acquisition and Agricultural Communities, were held on 28 December 2023 for the students of MBA (ABM) degree programme in the Division of AEABM.
- A Guest Lecture was delivered by Mr J.B. Chirag, CEO, JKMPCL on the topic Development Techniques in Dairy Sector with Special Reference to JKMPCL, J&K (UT) on 4 December 2023 in the Division of AEABM.

TANUVAS, Chennai

Under the ICAR-NAHEP funding scheme on Institutional Development Plan of TANUVAS, 28 students from TANUVAS underwent overseas clinical externship at Oklahoma State University, USA and 24 faculty members visited various Veterinary Universities in USA, Europe, Australia to gain knowledge on modern teaching and research methods during the year 2023.

SKUAST-K, Srinagar

- Faculty of Agriculture and Faculty of Horticulture organised an awareness programme on Dual Degree Programme at Western Sydney University, Australia on 4 October 2023. About 50 students and five faculty members participated in the programme.
- SKUAST-K kick-started on 12 December 2023, its flagship 21-day student orientation-cumfoundation program, IRTIQA 2023, in line with NEP-2020. All the freshers from seven faculties and colleges of the university participated in the foundation program titled LEED to LIVE love each other and innovate with the vision to achieve excellence.
- Prof. KG Raghothama, a distinguished agriculture scientist and renowned landscape architect from Purdue University, USA, delivered a special talk on molecular mechanisms of plant nutrition with special reference to phosphorus at Faculty of Horticulture, SKUAST-K, Shalimar campus, Srinagar on 11 October 2023. Scientists and students from the university attended the talk. SKUAST-K inducted Prof. KG Raghothama as honourary adjunct faculty. Vice Chancellor, SKUAST-K, Prof. Nazir Ahmad Ganai handed over an offer letter to Prof. Raghothama in his office at SKUAST-K on 9 October 2023.
- The Faculty of Horticulture organised a keynote lecture, Phenomics Shaping Agriculture Revolution: A Cost Effective Approach by Prof. Yong Suk Chung from the University of Jeju, South Korea on 17 October 2023, at the Shalimar campus, Srinagar. About 75 students and 12 faculty members participated.
- Students (15) from different faculties of SKUAST-K went for a six-week international fellowship sponsored under IDP-NAHEP to Western Sydney University, Australia on 6 November 2023.



EVENTS and ACTIVITIES

Anand Agricultural University (AAU), Anand

Vocational Training

A Vocational Training Programme of seven days on Scientific Poultry Farming was organized by Krishi

Vigyan Kendra, Dahod, Anand Agricultural University, from 16-22 October 2023. The trainees got hands-on practical experience in vaccination, debeaking and other routine chores involved in poultry farming at KVK's Poultry unit. A one-day exposure visit was also organized at IPDP, Department of AH, Dahod, wherein the participants were shown a live demonstration of the workings of a hatchery, followed by a visit to the IPDP poultry sheds wherein the



Glimpses of the programme

trainees got a first-hand experience of the workings of intensive system of chicken rearing. On the last day, a test was conducted to evaluate the knowledge gained by the trainees and in the afternoon a valedictory programme was held wherein the trainees were conferred with certificates. Enthusiastic farmers (27) attended the training programme.

International Conference on Driving Agriculture Forward

The International Conference on Agricultural Market Intelligence was jointly organized by the Center for Agricultural Market Intelligence, AAU, Anand and School of Computer, Data and Mathematical Sciences, Western Sydney University, Australia on 11-13 December 2023, at the Auditorium of BACA

under the chairmanship of Dr K. B. Kathiria, Vice Chancellor, Anand Agricultural University. The Chief guest of the function was Prof. Vijay Paul Sharma, Chairman, Commission for Agricultural Cost and Price (CACP), Ministry of Agriculture and Farmers Welfare, Government of India, New Delhi.

Guest of Honour, Dr R. C. Agrawal, Deputy Director General (Agril. Education) and Dr Anuradha Agrawal, National Coordinator, NAHEP-CAAST and Professor Athula Ginige from Western Sydney University, Australia, attended the inaugural function in virtual model. Other dignitaries who shared the dais included Dr M. K. Jhala, Director of Research and Dean, PG Studies, AAU, Ms. Namrata Anand, Regional Director (South Asia) and representative of Western Sydney



Glimpses of the conference

University, Australia, Dr R. S. Pundir and Dr D. K. Parmar, organizing secretaries of the conference. The Chairman of the inaugural function and Vice Chancellor, Dr K. B. Kathiria mentioned in his speech about the importance of price forecasting in the changing scenario of uneven market prices of agricultural products and climate change. Prof. Vijay Paul Sharma, Chief Guest of the function, highlighted the significance of the market intelligence in the changing economic environment apart from giving a detailed account of the broad indicators of the Indian economy with focused attention on agriculture. Dr M. K. Jhala gave precise overview of AAU, Anand. Dr R. S. Pundir discussed about the various components of the International conference and their significance. Dr D. K. Parmar presented the vote of thanks.

Participants (483) from across the country and globe participated in this international conference. A total of 16 technical sessions were organized and theme-wise 256 papers and posters presented. Participants discussed and shared their views on various aspects, viz. Agricultural market intelligence and innovative price forecast methods, Role of market institutions in creating efficient marketing systems, Digital agricultural marketing, and Machine learning and AI applications for predictive analysis.

J-Gate@CeRA Awareness Workshop

J-Gate@CeRA Regional Training and Awareness Program was organized jointly by AAU, Anand, Indian Council of Agriculture Research and Informatics Ltd., Bengaluru. More than 30 CeRA Nodal Officers from western region SAUs / ICAR-Institutes participated in this training program. Dr K. B. Kathiria, Vice Chancellor, AAU; Dr M. K. Jhala, Director of Research and Dean, PG Studies and other officers of AAU, Dr H. K. Tripathi, Incharge-CeRA from ICAR Head Quarters and Mr Devendra Thakur, CEO, Informatics Ltd. were present.



J-Gate@CeRA Awareness Workshop

ANGRAU, Guntur

National Agricultural Education Day was celebrated on 03
 December 2023 at all ANGRAU institutions and at RARS,
 Lam. Around 6,500 school students participated in the program and visited the experimental fields. During the program, a demonstration of agricultural drones for spraying, seeding, and fertilizer application was also conducted.



- ANGRAU, in association with the Department of Agriculture, organized a 3-day Conference and Exhibition on Latest Agriculture Technologies (AG-TECH 2023) on 3-5 December 2023 in which11,000 participants benefited.
- RARS, Anakapalle organized the 64th Kisan Mela on 19 December 2023.

Agriculture University (AU), Kota

Kisan Mela

KVK, Bundi organized Kisan Sammelan on the occasion of Kisan Diwas on 23 December 2023. Dr A. K. Vyas, Vice Chancellor, Agriculture University, Kota was the Chief Guest of the event.



Dr A. K. Vyas Addressing the Farmers

CSK Himachal Pradesh Agricultural University (CSKHPAU), Palampur

National Training on Sonography Concluded at CSKHPAU, Palampur

A national training on Comprehensive Small Animal Abdominal Sonography concluded on 01 October 2023 at CSKHPAU, Palampur in which 23 practicing veterinarians from all over the country trained. Dr S. P. Tyagi was the Course Chairman. Dr D.K. Vatsa, Vice Chancellor was the Chief Guest during the concluding session.



Training on Veterinary Emergency Response

A four-day certification program by the Veterinary Emergency Response Unit concluded at CSKHPAU on 30 December 2023. While addressing trainees and scientists, Chief Guest Dr D. K. Vatsa, Vice Chancellor appreciated Dr G.C. Negi, College of Veterinary and Animal Sciences for organising such trainings at regular intervals. He said that proactive problem-solving approach resolves many issues. He said that it is encouraging that 47 aspiring veterinarians have got extensive expertise in disaster management, animal rescue, and emergency care under the guidance of multidisciplinary experts.



Business Meet and Training on Recent Aspects of Agriculture for the NABARD Officers

A day-long business meet and training on 'Recent aspects of Agriculture' for the NABARD officers organized at CSKHPAU, Palampur on 12 October 2023. Dr D. K. Vatsa, Vice Chancellor inaugurated the meet in the presence of Dr Vivek Pathania, General Manager, NABARD.



Workshop on Farmer First

Dr U. S. Gautam, Deputy Director General (Extn), ICAR, inaugurated a three-day National Review Workshop on Farmer First Program at CSKHPAU, Palampur on 28 November 2023. The workshop was attended by around 150 delegates from all over the country. Dr R. R. Burman, Assistant Director General, ICAR was the Guest of Honour. CSKHPAU, Palampur was rated as the best center and received Best Performance Excellence Award for its Farmer FIRST Program.

Workshop on Career Development Centres and Blended Learning Platform

A national workshop on Sustainability of Career Development Centres (CDCs), National Agricultural Research Education System and Blended Learning Platform (BLP) was held at the CSKHPAU, Palampur on 4 October 2023 for nurturing talent and creating leaders for the future agriculture. Dr D. K. Vatsa, the Vice Chancellor, CSKHPKV, Palampur was the Chief Guest in the inaugural function. Dr Sudeep Marwaha, Head, Indian Agriculture Statistics Research Institute, New Delhi was also present on the occasion.



Agrometeorologists Meet

Dr S. K. Chaudhari, Deputy Director General (NRM), Indian Council of Agricultural Research inaugurated three-day Working Group Meeting of All India Coordinated Research Project on Agrometeorology and Annual Review Meeting of National Innovations on Climate Resilient Agriculture at CSKHPAU, Palampur on 20 November 2023. The workshop was attended by 100 farm scientists from 20 agricultural universities.



Dr S. K. Chaudhari Chairing the Inaugural session

Dr RPCAU, Pusa

- **Swachta Hi Seva** programme was celebrated by the Dr RPCAU, Pusa on 01 October 2023. Union Minister of Rural Development and Pachyati Raj, Shri Giriraj Singh was the Chief Guest of the function. Deans, Directors, faculty members and more than 100 students participated in the programme.
- On the occasion of **Gandhi Jayanti**, Union Minister of Rural Development and Pachyati Raj, Shri Giriraj Singh planted tree at Bio-Diversity Park, RPCAU, Pusa. Deans, Directors, faculty members and more than 100 students participated in the programme.





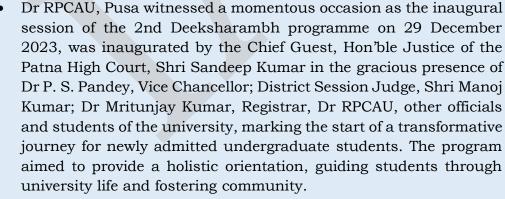
Workshop

• The Sugarcane Research Institute, RPCAU, Pusa, successfully organized **Annual Group Meet 2023**• of AICRP on Sugarcane during 26-27 October 2023. Dr D.K. Yadav, Assistant Director General, Seed and Commercial Crops was the Guest of Honor for the inaugural function and Plenary session and was present as chairman of technical



session of Crop Improvement while Dr P.S. Pandey, Vice Chancellor, Dr RPCAU, Pusa was the Chief Guest of the function. Other distinguished participants in this programme were Dr G. Hemaprabha, Director, ICAR-SBI, Coimbatore, Dr R. Vishawnathan, Director, ICAR-IISR, Lucknow and Scientists of various Sugarcane Research Institutes, ICAR and Zonal Centres.

- Prime Minister Shri Narendra Modi virtually inaugurated **5G Use Case Labs** granted to CAET, Dr RPCAU, Pusa on 27
 October 2023. This **'5G Use Case Labs'** granted to the university is one lab out of 100 labs granted to different institutions across the country. More than 200 students and faculty members participated in the programme.
- On 26 November 2023, Constitution Day was celebrated in the Vidyapati Sabhagar, Dr RPCAU, Pusa, under the chairmanship of Vice Chancellor, Dr RPCAU, Pusa. On this occasion competition for elocution, drawing and poster-making were organized for students of different colleges. The staffs and students participated in recitation programme of Preamble. Vice Chancellor graced the gathering with his enlightening address, highlighting the unique virtues and relevance of our revered Constitution, captivating the audience with his profound observations. More than 200 faculty members, staffs and students participated in the programme.



The program included Yoga, Arts and Crafts, Literary pursuits, Sports, Music, Dance, Soft Skills, and Communication Skills. The goal was to cultivate smart professionals with a sound body and mind who can contribute to society. The Chief Guest, Hon'ble Justice of the Patna High Court, Shri Sandeep Kumar, emphasized the importance of knowledge acquisition and a moral sense of duty towards society.









• During 7-9 December 2023, Dr RPCAU, Pusa, Bihar organized 31st Annual Conference of the Agricultural Economics Research Association (AERA), New Delhi. Dr Prabhu Pingali, Professor of

Applied Economics and Director, Tata-Cornell Institute (TCI), Cornell University was the president at the conference. The Conference stretched over twelve sessions for three days. Around 108 papers were



received from eminent scientists, students and young faculty members in the field of Agricultural Economics.

Dr YSRHU, Venkataramannagudem

Training

Dr YSRHU-KVK, V.R. Gudem conducted two 15-day training programmes on the Freshwater

Aquaculture from1-15 November and 16-30 November 2023 to the students of Late Shri Punaram Nishad College of Fisheries, DSVCKV, Kawada, Chhattisgarh. Dr A. Devivaraprasad Reddy, Scientist at the Krishi Vigyan Kendra (KVK), V.R. Gudem acted as Course coordinator. Various in-house and external scientists participated as resource persons in this program to enlighten the topics related to aquaculture for innovation, sustainability, eco-friendly and scientific



management for better improvement of production and productivity. The training programme aimed to provide comprehensive insights into freshwater aquaculture practices.

Guru Angad Dev Veterinary and Animal Sciences University (GADVASU), Ludhiana

Youth Festival

Week long inter-college youth festival was organized. Shri Harpal Singh Cheema, Finance Minister, Government of Punjab was the Chief Guest. Competitions in 25 events were held with active

participation of more than 200 students. Four in campus colleges, viz. College of Fisheries, College of Veterinary Science, College of Dairy Science and Technology and College of Animal Biotechnology participated along with College of Veterinary Science Rampura Phul, Veterinary Polytechnic, Kaljharani, Bathinda and Khalsa College of Veterinary and Animal Sciences, Amritsar. Students showcased their talent in different fields like Fine Arts, Theatre, Singing, Dances and Literary events.



Participants of Youth Festival

Alumni Meet-2023

GADVASU organized Alumni Meet-2023 on 18 November 2023. More than 500 participants from diverse backgrounds, viz. Veterinary, Fisheries, Dairy Sciences, Bio-technology, etc. joined this event. Shri Gurmeet Singh Khuddian, Minister for



Agriculture and Farmers Welfare, Animal Husbandry, Fisheries and Dairy Development and Food Processing, Government of Punjab inaugurated the Alumni Meet. He also inaugurated the examination and lecture halls of the University.

Dog Show

The university organized the Dog Show- 2023 on 03 December 2023 at its Ludhiana Campus. The

Dog Show was inaugurated by the Member of Legislative Assembly Shri Gurpreet Singh Gogi. A special show of the Dog Squad of Border Security Force was also organized during the inaugural session. Breed competitions were held across different categories of dogs including Toy, Terrier, Utility, Hound, Gun dog, Working, Pastoral and Miscellaneous groups. More than 100 owners showcased their dogs during the breed competition. The Dog Show witnessed a huge gathering of breeders, pet enthusiasts and



audience. An exhibition of feed, health supplements and other accessories was also held by the industry.

GBPUAT, Pantnagar

Convocation

The 35th Convocation of the university was held on 07 November 2023 in which 1041 students were awarded undergraduate, Masters and Doctoral degrees in various courses. Honorable President of India, Smt Droupadi Murmu graced the ceremony as the Chief Guest and delivered the Convocation address. On this occasion, 14 Gold medals, 11 Silver medals, 10 Bronze medals and 06 other cash awards were awarded to meritorious students.



Hon'ble President Smt Droupadi Murmu giving Certificate to the student

Kisan Mela

The 114th Kisan Mela, an All India Farmers' Fair and Agro-Industrial Exhibition was held in the university from 13-16 October 2023 in which about 25,000 farmers from across the country participated. Farmers were provided with Pantnagar seeds and were made aware of latest technologies in agriculture.



Trainings

- A 10-day training entitled Fish culture, seed production and processing and four 5-day trainings on Innovative Techniques of Fish Farming, Value Addition and Processing, were organized for the progressive fish farmers of Bihar and Uttarakhand States, respectively.
- A 10-day training programme on Veterinary Clinical Diagnosis was organized for undergraduate students under IDP-NAHEP project during 18-27 September 2023.
- The department of Veterinary Public Health and Epidemiology, College of Veterinary and Animal Sciences organized an ICAR- sponsored Winter School on Mitigation Strategies to Manage AMR and Zoonosis to Ensure Food Safety in the College of Veterinary and Animal Sciences from 18 December 2023 to 07 January 2024.

KU, Gandhinagar

College of Veterinary Science and Animal Husbandry, Junagadh Clinical Camp at Bhanvad

A Veterinary Clinical Camp was organized by Shri Bhanvad Mahajan Panjarapol Gaushala, Bhanvad in collaboration with College of Veterinary Science and Animal Husbandry, Junagadh, Kamdhenu University on 29 December 2023 at Bhanvad. Associate Professors Dr R.H. Bhatt, Dr K.B. Vala, Assistant Professors Dr D.T. Fefar, Dr N.R. Padaliya, Dr A.K. Bilwal, and Veterinary Officer Dr P.G. Dodia, participated as clinical experts along with postgraduate students of clinical departments and undergraduate students of college participated in this clinical camp. A sizable number of sick animals from Bhanvad and surrounding villages were brought for the treatment in the camp. During the camp, 117 animals were treated for different medicinal, surgical and gynaecological ailments. In the camp, different clinical cases were treated such as medicinal cases-78, surgical cases-23 and 16 gynecological cases, etc. Additionally, anthelmintics medicine was distributed to farmers for deworming of 21,010 animals. A total of 178 livestock owners were direct beneficiaries of the camp.



Veterinary Clinical Camp' organized at Bhanvad

Kerala Veterinary and Animal Sciences University (KVASU), Wayanad

Kerala Veterinary Science Congress

The three-day Kerala Veterinary Science Congress and International Seminar jointly organized by Indian Veterinary Association Kerala and Veterinary College, Pookode. Detailed discussions were held on the challenges and opportunities faced by the animal husbandry sector. Sixteen main papers and 340 related papers were presented in the science congress, which was attended by about 400 delegates from different countries.

Prizes were awarded for selected papers at the Science Congress, where eminent scientists, researchers and graduate students were given the opportunity to present their papers.

As part of the scientific congress, a panel discussion having experts in the field of animal husbandry, was also organized. Following key guidelines emerged from the discussion:

- I. Veterinary sector and medical sector must work together to prevent many diseases affecting humans from Nipah and Monkey Fever. A separate department called Veterinary Public Health needs to be created under the Department of Animal Husbandry.
- II. Vaccination, public awareness and modernization of diagnostic facilities should be given more emphasis for prevention of animal diseases.
- III. It was suggested that maintaining the genetic value of native cows in crossbreeds is essential to combat diseases caused by climate change.

International Symposium

A three-day international symposium on Advanced Research and Application in Animal Reproduction, and the 38th Annual Conference of ISSAR were jointly organized by Kerala Veterinary and Animal Sciences University and Indian Society for Study of Animal Reproduction (ISSAR) at Veterinary College, Mannuthy.

President of ISSAR, Prof. Sivaprasad pointed out that despite being the world leader in milk production, the productivity of cattle in India is lesser than that of the developed countries. He said that advanced technologies such as sex-sorted semen, artificial insemination, assisted reproductive technology including *in-vitro* fertilization for infertility control and cloning are essential for the long-term sustainable development of the animal husbandry sector.

Vice Chancellor of Kerala Veterinary and Animal Sciences University, Prof. M. R. Saseendranath released the thesis collection and delivered the keynote speech. ISSAR' General Secretary, Prof. M. Selvaraju presented the annual report. Director of Entrepreneurship, Dr T. S. Rajeev and Kerala Livestock Development Board Managing Director, Dr R. Rajiv spoke on the occasion offering greetings. Award distribution to eminent persons in related fields was held as part of the ceremony. Dean of Faculty of Veterinary and Animal Sciences, Prof. K. Vijayakumar extended welcome on the occasion. Organizing Secretary and Head of Department of Animal Reproduction, Gynecology and Obstetrics Dr C. Jayakumar delivered the vote of thanks.

In the symposium, experts presented papers on Reproductive health care of cattle, sheep, pigs, horses, camels, domestic animals and wild animals, Innovative biotechnologies for increasing fertility and preventing infertility. Eighteen experts including six international experts from related fields delivered keynote speeches. Around 300 scientists from different parts of India and abroad participated in the symposium.

University Merit Day-2023

The KVASU celebrated University Merit Day-2023 at the College of Veterinary and Animal Sciences, Mannuthy. Various endowment awards were distributed to eminent faculty members and outstanding students in recognition of their exemplary performance.

Dr H. Rahman, Regional Representative-South Asia, International Livestock Research Institute (ILRI), New Delhi was the Chief Guest of the function. He reiterated the significance of ILRI, which is one among the fifteen Consultative Group on International Agricultural Research (CGIAR) centres, in reducing of poverty, assuring food and nutritional security and sustainable livestock production in developing countries. Diseases among animals is a major area of concern as it accounts for 35% of the economic losses in livestock sector. As many zoonotic diseases like covid, zika and nipa have been reported from Kerala, timely reporting, effective surveillance and adoption of preventive measures including development of vaccines and diagnostics are the need of the hour. The ILRI, being a knowledge/technical partner, the human resources training opportunities from ILRI could be leveraged by institutions like KVASU, he said.

The awards for best teachers were given to Dr K. Radha, Dr K. Vijayakumar, Dr Prajith, Dr Senthil Murugan and Dr Jess Varghese. Best Thesis awards were given to Dr Ambily V. R., Dr Jasmin Rani and Dr Bincy Mathew. Best Outgoing Student's awards were presented to Dr Sruthy, Dr Ann Mary Raju, Dr Arunkumar M. L., Dr Naveenraj K. and Dr Jini S. Pillai.

The Vice Chancellor of KVASU, Professor M.R. Saseendranath presided over the function. Prof. C. Latha, Director of Academics and Research, KVASU presented report on Merit Day - 2023. Felicitations were offered by the board of management member, Dr Sajith Purushothaman; Prof. M.K. Narayanan, Dean, Veterinary College, Pookode and the management council members of the university, Prof. Sabin George, and Prof. K. Vijayakumar, Faculty Dean, Veterinary and Animal Sciences welcomed the gathering, and Prof. S. N. Rajakumar, Faculty Dean, Dairy Science offered vote of thanks.

Sustainable Milk Production Workshop

A one-day workshop was organized under the auspices of the KVASU and the State Planning Board to deliberate on changes in feeding regime and ways to increase fodder production for sustainable milk production in the state.

Since imported sexed semen is being used more for insemination of cows in the state to provide maximum number of calves, there was a discussion on the changes required in the diet of high yielding cows and ways to increase the availability of quality fodder in the state. The workshop was held at Verghese Kurien Institute of Dairy Science and Food Technology, Mannuthy under the leadership of State Planning Board member Dr Ramkumar. The workshop was inaugurated by KVASU Vice Chancellor Dr M. R. Saseendranath. Registrar, Dr P. Sudheer Babu, Director of Academic Research, Dr C. Latha and Director of Entrepreneurship Dr T. S. Rajeev were also present. Experts from the State Animal Husbandry Department, Dairy Development Department, Kerala Livestock Development Board, Milma, Kerala Feeds and Kerala Veterinary and Animal Sciences University participated in the workshop and analysed future programs.

NAU, Navsari

Three-Day International Conference

DEE; ICAR-NAHEP CAAST; ACoH, NAU, Navsari in collaboration with NADCL, Baramulla (JandK) organized three-day international conference on Impact of Climate Changes on Global Food,

Livestock, Livelihood and Environmental Security: Advanced Approaches and Mitigation Strategies, during 28-30 December 2023 in hybrid mode at main campus of NAU, Navsari. The inaugural function was presided over by Vice Chancellor, Dr Z. P. Patel in presence of Dr K. K. Singh, Former Scientist- Additional Director, Scientist- G and Head, Agromet Advisory Services Division, IMD, New Delhi as a Chief Guest; Dr Paulraj Rajamani,



Dean, School of Environmental Sciences, JNU, New Delhi as Special Guest; P. Qamar-ud-Din Shah, Chairman, NADCL, Baramulla; Dr Subrata Kumar Roy, Director, ICAR-ATARI, Pune; Dr T. R. Ahlawat, Director Research and Dean (PGS); Dr N. M. Chauhan, DEE; Dr Alka Singh, Dean and Principal, ACoH and Dr Alpesh K. Leua, Associate Prof. and Head, Department of Social Science, ACoH and Organizing Secretary of the Conference. In the inaugural function, Dr Z. P. Patel was conferred with the Best Administrator Award and Dr N. M. Chauhan, DEE with Life Time Achievement Award by NADCL. Participants (721) from across the India were present in the conference.

Training

ICAR-NAHEP CAAST, NAU, Navsari organized national level training program on 'Entrepreneurship

Opportunities in Exports and Imports of Agricultural Commodities' during 18-20 December 2023. The event was inaugurated and presided over by Vice Chancellor, Dr Z. P. Patel in presence of Mr Abhishek Nathani, CEO, Vama Skylight LLP, Daman as the Chief Guest; Mr Paresh Solanki, International Export-Import Trainer, Exporter and Director of OES Export Import Pvt. Ltd. and Global Business Consulting, Ahmedabad as a Special Guest and Dr T. R. Ahlawat, Director Research



and Dean (PGS) as Guest of Honour. Participants (428) included PG students, farmers, entrepreneurs, aspiring exporters and faculties.

Agricultural Innovation and Entrepreneurship Conclave

ICAR-NAHEP CAAST, NAU, Navsari organized The Agricultural Innovation and Entrepreneurship Conclave during 4-8 December 2023 at Navsari Agricultural University, Navsari. The conclave was

inaugurated and presided over by Vice Chancellor, Dr Z. P. Patel. Dr Anuradha Agrawal, National Coordinator (NAHEP-CAAST and Component 2) ICAR, New Delhi graced the occasion as the Chief Guest; Dr Abdul Samad, Former Dean and Director of Instruction MAFSU, Nagpur as a Special Guest. Dr Mahesh Chander, Principal Scientist and Former Joint Director, IVRI, Izatnagar and Dr T. R. Ahlawat, DR and Dean PGS; PI and Nodal Officer, NAHEP-CAAST, NAU, Navsari as



esteemed Guests of Honour. The conclave was attended by 432 participants.

Odisha University of Agriculture and Technology (OUAT), Bhubaneswar

Agri-Edu Fair 2023

State Level Agri-Edu Fair 2023 was organized at Odisha University of Agriculture and Technology, Bhubaneswar from 20-22 December 2023. Shri Ashok Chandra Panda, Minister, Social Security and

Empowerment of Persons with Disabilities, Public Enterprises and Science and Technology, Government of Odisha inaugurated the function as the Chief Guest. Prof. Pravat Kumar Roul, Vice Chancellor, OUAT presided over the inaugural function and Shri Rohit Kumar Lenka, Director, Directorate of







Plenary session of Agri-Edu Fair

Horticulture, Odisha graced the occasion as the Guest of Honour. Shri Ranendra Pratap Swain, Minister, Agriculture and Farmers' Empowerment, Fisheries and Animal Resources Development, Government of Odisha graced the plenary session as the Chief Guest. There was farmer-scientist interaction and special talks for the benefit of participants. An exhibition was also arranged during the occasion. Farmers, academicians, scientists, students, extension personnel, agricultural entrepreneurs, self-help groups, FPOs, etc. from various parts of Odisha participated in the programme.

Agri-Journalism Conclave

OUAT, Bhubaneswar hosted the Agri-Journalism Conclave on 11 December 2023 by involving eminent personalities and enthusiasts from agriculture and media sectors. The conclave brought

together key stakeholders to discuss about the role of print, digital and social media dedicated for the farmers. The Chief Guest, Shri Ranendra Pratap Swain, Minister of Agriculture and Farmer Empowerment, Fisheries and Animal Resources Development, Government of Odisha highlighted the significance of agricultural journalism for the benefit of farming community. Prof. Pravat Kumar Roul, Vice Chancellor of the university emphasized the critical role of media in agriculture sector. Dr Pramod Kumar Mohapatra, Editor, The Samaja; Mr M.C. Dominic,



Agri-Journalism Conclave at OUAT

Founder and Editor-in-Chief of Krishi Jagran and Mr Jagadananda, Former State Information Commissioner were among the dignitaries present in the programme.

PJTSAU, Hyderabad

Symposium on Quality Planting Material Production

Three-day Annual Group Meeting of AICRP on Agroforestry and Symposium on Quality Planting Material Production, in association with ICAR- Central Agroforestry Research Institute (CAFRI), Jhansi, Uttar Pradesh was inaugurated at PJTSAU, Hyderabad on 16 October 2023. Dr S. K. Chaudhari, Deputy Director General (NRM), ICAR, New Delhi, graced the occasion as Chief Guest. He suggested that a vision document related to agroforestry should be prepared and implemented according to existing climatic conditions. Dr M. Venkata Ramana, Registrar, PJTSAU said that efforts should be made to identify the native species in agroforestry and to develop them. Dr A. Arunachalam, Director, ICAR-CAFRI, Jhansi; Dr P. Raghu Rami Reddy, Director of Research, PJTSAU, Dr A. V. Ramanjanevulu, Head, AICRP on Agroforestry, PJTSAU; University Officers, Scientists from different fields participated in the program. Several publications developed by network centers were released on the occasion.





International Conference on Plant Health Management - Innovation and Sustainability

A four-day International Conference on Plant Health Management - Innovation and Sustainability, was organized by Plant Protection Association of India from 15-18 November 2023 at PJTSAU,

Hyderabad. Shri M. Raghunandan Rao, IAS, Vice Chancellor, PJTSAU and APC and Principal Secretary, Government of Telangana participated as Chief Guest of the inaugural programme. Dr Sarada Jayalakshmi Devi, Vice Chancellor, ANGRAU; Dr S.C. Dubey, ADG (Plant Protection and Biosafety), ICAR, New Delhi participated as Guests of Honour. Shri R. G. Agarwal, Chairman, Dhanuka Agritech Ltd, India, participated as Special Invitee. Dr K. R. K. Reddy, Chairman, Bioagri Inputs Producers Association, India also participated. On the occasion, special postal cover to commemorate the golden jubilee celebrations, souvenir and edited abstracts of the research articles were released by the dignitaries. Lifetime Contribution award was presented to Dr D.V. Raghava Reddy, Dr K.S.R.K. Murthy for their



notable contribution. Former Vice Chancellors, University Officers, Scientists, Industry experts and students participated in the programme.

Agricultural Education Day

The Agricultural Education Day was celebrated on 6 December 2023 in University Campus and at all the Constituent colleges. The Registrar, PJTSAU participated as Chief Guest of the program and

visited the stalls organized by various departments. University Officers, Teaching and Non-teaching staff, and around 1,600 students from various schools visited the stalls. Prizes were distributed to the students who won in the competitions.

SKUAST-J, Jammu

Kisan Mela

KVK, Doda working under the aegis of Directorate of Extension, SKUAST-J, Jammu organized programme on GI tagged Bhaderwah Rajmash and Kisan Mela at KVK, Doda on 06 November 2023 in which 203 farmers from the district participated.



Glimpses of Kisan Mela

Trainings

- 10-day training programme on Basic Molecular Tools in Animal Biotechnology, was organized from 15-24 November 2023 at FVSc&AH, R. S. Pura under NAHEP-IDP, SKUAST-Jammu for UG and PG students
- One-week Training Programme on Empowering Agriculture Students with Digital Tools and Resources, was organized from 6-12 December 2023.
- Organized one-month certificate course entitled Vertical Farming and Hydroponics is an Advanced Entrepreneurship in Smart Agriculture, in the Division of Plant Physiology, Faculty of Basic Sciences, SKUAST Jammu, Chatha from 10 November to 11 December, 2023.
- Organized 15-day certificate course for Input dealers on integrated nutrient management at KVK, Jammu w.e.f 06-23 November 2023 in which 20 participants benefitted.



 KVK, Jammu in collaboration with ICICI Foundation organized eightday programme from 12-19 December 2023 on Milk by-products and post-harvest managements at Dhardarochain in which 35 applicants participated.



Workshop/Conference

- Two-day workshop on Role of Veterinarian in Mitigating Human –Wildlife Conflict (the need for Human –Wildlife coexistence) was organized at FVSc&AH, R. S. Pura on 12-13 December 2023.
- Two-day conference on Advances in Veterinary Medicine for Holistic Development of Animal Health and Productivity with One Health Approach, was organized at FVSc & AH, R. S. Pura on 21-22 December 2023.

SKUAST-K, Srinagar

 Month-long Ayurveda Celebration to promote awareness about the role of Ayurveda and medicinal plants in the life of people, organised by SKUAST-K and the Regional cum Facilitation Centre (RCFC) NR-II, National Medicinal Plants Board, Ministry of Ayush, Government of India, concluded on 10 November 2023 at Faculty of Agriculture. In the concluding ceremony 100 students and 20 faculty members participated.



Workshops

- The Faculty of Veterinary Sciences organised a 10-day workshop on capacity building of research scholars focusing on laboratory techniques and impactful manuscript writing under IDP-NAHEP of SKUAST-K from 6 December 2023. The participants (50) were students, scholars and faculty members.
- The Faculty of Veterinary organised a 10-day workshop on research skills, laboratory techniques and manuscript writing under IDP-NAHEP from 11-16 December 2023. The participants (90) were students, research scholars and faculty members.

Trainings

- SKUAST-K conducted 17 skill training programs under Entrepreneurship Awareness Programmes sponsored by the Union Ministry of MSME at its various Faculties, KVKs and Research on a vast range of topics in agriculture and related fields across Kashmir division of J&K UT and Ladakh UT. Besides entrepreneurs, farmers and youth, a good number of students from the SKUAST-K also participated in these awareness programs conducted by the faculty members and scientists of the university. Each training had 50 participants.
- The Faculty of Agriculture conducted two weeklong Existing Management Development Programme (E-MDP) on Statistics, Big Data Analytics and Machine Learning in Agriculture and Allied Sciences and Developing an *Ex-situ* Conservation Plan for Forest Genetic Resources, from 12-18 November 2023. 25 students and entrepreneurs participated in each training program.
- SKUAST-K's College of Temperate Sericulture organised a weeklong entrepreneurship skill development program (ESDP) on Productivity Improvement in Bi-voltine Cocoon Crop through Skill Enhancement of Job Aspiring Youth, at the Degree College, Hyderpora from 2-8 December 2023. Participants (30) were mainly students and aspiring entrepreneurs.
- The Faculty of Horticulture organised a one-week Existing-Management Development Programme (E-MDP) titled Development of Professional Business Plan for Sunrise Industries, from 27 November to 3 December 2023. About 30 students and aspiring entrepreneurs participated in the training.
- **World Soil Day:** To celebrate World Soil Day on 5 December 2023, various faculties, directorates of research and extension and research and extension centre of SKUAST-K organized various functions including debates and discussions, rallies, etc. on this year's theme of the day Soil and Water–A Resource of Life. More than 300 students, besides faculty members, farmers and agriculture extension officers participated.

TANUVAS, Chennai

Training

 Tamil Nadu Veterinary and Animal Sciences University organized a CAFT training on Principles and Practices in Diagnostic Imaging, Endoscopy and Interventional Procedures in Farm and Pet Animal Medicine, at Madras Veterinary College, Chennai from 16 November 2023 to 06 December 2023.



CAFT Training: Participants Receiving Certificates from Dr Selvakumar, VC, TANUVAS.

Tamil Nadu Veterinary and Animal Sciences University conducted a National training on Basic and Advanced Ultrasonographic Diagnostic Techniques in Large Animals, from 20-24 November 2023 at Veterinary College and Research Station, Orathanadu.



National Training on Basic and Advanced Ultrasonographic Diagnostic Techniques in Large Animals

 Tamil Nadu Veterinary and Animal Sciences University organized National workshop on Mitigating Climate Change Impact on Livestock Production through Strategic Transformative Approaches, at Veterinary College and Research Institute, Salem, TANUVAS on 21 November 2023.



Dignitaries Releasing Publication During Workshop on Climate change

UAS, Bengaluru

Conferences

- Conference on Feeding the Future through Sustainable Eco-friendly Innovations in Rangeland, Forage and Animal Sciences, was jointly organized by UAS, Bengaluru; Range Management Society of India and ICAR-Indian Grassland and Fodder Research Institute, Jhansi from 2-4 December 2023 at GKVK Campus, Bengaluru. The conference featured 16 plenary lectures, 106 oral, 196 poster and 8 young innovators presentations.
- In commemoration with International Year of Millets (IYOM) 2023, University of Agricultural Sciences, Bengaluru (UAS-B) and Sri Sri Naisargik (An Initiative of the Art of Living), Bengaluru jointly organized International Conference and Expo on Millets, Organic and Natural Farming: Opportunities and Challenges to Ensure Food and Nutritional Security, at Art of Living, International Center, Udayapura, Kanakapura Road, Bengaluru, Karnataka from 9-11 December 2023. This programme was mainly organized to





provide a great opportunity and a vibrant platform with convergence of all the stakeholders from across the globe including researchers, technologists, extension officers, managers, industry officials, nutrition experts, policy makers and progressive farmers to share their views and experiences on national and global issues and initiatives for profitable, sustainably popularizing the area under cultivation of Millets, Organic and Natural Farming and also enlightening about its health benefits.



Training

All India Network Project on Agricultural Acarology organized seven days training programme on Identification of Plant-associated Mites from 6-12 December 2023 for scientists, research scholars and post graduate students. In this programme, the focus was given on the correct identification of (i) phytophagous of the families Tetranychidae, Tarsonemidae, Tenuipalpidae, Tuckerellidae and Eriophyidae which are pests of cultivated crops, and (ii) Phytoseiidae, Stigmaidae, Cheyletidae, Bdellidae, Cunaxidae, Tydeidae, Ameroseiidae, Laelapidae, etc. the natural enemies of pest mites. This was the hands-on type training programme in which each trainee was provided with a phase contrast microscope and asked to identify the mites of different families based on the key characters provided. The training programme was attended by 19 scientists, research scholars and PG students from across the country: Punjab Agricultural University, Ludhiana, Punjab; Kerala Agricultural University, Thrissur, Kerala; Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu; Assam Agricultural University, Jorhat, Assam; Keladi Shivappa Nayaka University of Agricultural and Horticultural Sciences, Shivamogga, Karnataka and University of Agricultural Sciences, Bangalore, Karnataka.

Krishimela

- The University of Agricultural Sciences, Bengaluru, organized Krishimela from 17-20 November 2023 at GKVK, Bengaluru with the theme Millets for Food-Health-Income. Agricultural exhibition
 - in collaboration with developmental Departments of Government of Karnataka, the Farm Universities of State, ICAR Institutes, private and public sector organizations organized to create awareness among the farming community on the frontier technologies in agriculture and allied sectors. Five crop varieties and 32 new farm technologies developed by UAS, Bengaluru were released. About 720 stalls exhibited



- Agricultural inputs, State Developmental Departments, Farm Universities, ICAR, Central Government, NGOs, Banking sector and Private Sector Organisations. More than 15.67 lakh farmers, general public and students participated in the four-day mela. The special attractions included millets expo, farmer to farmer interactions, beeja santhe, entrepreneurship for rural youth, FPOs and nutir-cereals, processing and value addition, bamboo products, hydroponics, etc. During the mela 138 awards were conferred to the progressive farmers of Tumakuru, Chikkaballapura, Chamarajanagara, Hasssan, Kolar, Mandya, Mysuru, Bengaluru Rural and Urban and Ramanagara districts.
- A two-day Krishimela 2023 was organized at Zonal Agricultural research Station, VC Farm, Mandya on 4 and 5 December 2023. Well laid out demonstration plots depicting recently released varieties and technologies in millets, rice, maize, cotton, sunflower, groundnut and pulses were

appreciated by more than 60,000 farmers who visited Krishimela. Various implements, tractors, tillers and other machineries were exhibited and demonstrated in the field. Exhibition stalls by public and private organizations besides FPOs showcasing their products and enthusiastic farmers rearing local breeds of bullock, sheep and goats were also the highlights of the Krishimela.



MoUs

AAU, Anand

MoU between AAU, Anand and Western Sydney University, Australia

On 16 November 2023, an MoU was signed between Western Sydney University, Australia and Anand Agricultural University, Anand.

Western Sydney University, Australia, invited Director of Research, AAU, Anand Dr M. K. Jhala as a part of the high-level delegation comprising office-bearers of various agricultural universities of India from 15-17 November 2023 to discuss pertinent issues related to agriculture and sign the MoU in the field of education and research. The MoU will strengthen the relationship between AAU and WSU, which is a top ranked international institution. The MoU will also go a long way in executing various collaborative academic and research activities for strengthening higher agricultural education for the benefit of the farmers.



Exchange of MoU

ANGRAU, Guntur

The university signed following MoUs:

- With, National Bureau of Plant Genetic Resources (NBPGR), New Delhi for facilitating students' training and Postgraduates' Research for a period of 3 years on 07 November 2023.
- With, Purdue University, Indiana, USA for facilitating students' training and Postgraduates' Research for a period of 5 years on 19 November 2023.
- With, Central Plantation Crops Research Institute (CPCRI), Kerala for facilitating students' training and Postgraduates' Research for a period of 5 years on 30 November 2023.
- With, University of Florida, Florida, USA for facilitating students' training and Postgraduates' Research for a period of 3 years on 07 December 2023.

AU, Kota

MoU between AU, Kota and ICRISAT, Patancheru

A strategic partnership agreement signed between Agriculture University, Kota and International Crops Research Institute for Semi-Arid Tropics, Patancheru, India on Enhancing Pigeon Pea Production and Productivity in India by promoting high yielding early maturity varieties and hybrids.

MoU between AU, Kota and ICAR-NRCSS, Ajmer

A strategic partnership agreement signed between Agriculture University, Kota and ICAR-National Research Centre on Seed Spices, Ajmer for cooperation in seed spices education, research and extension.

MoU between AU, Kota and GKMS-IMD, New Delhi

A strategic partnership agreement signed between Agriculture University, Kota and Gramin Krishi Mausam Seva-India, Metrological Department, New Delhi to disseminate advisories through SMS, Firms under PPP mode, extension agencies and other mode of communication and uploading in the division website, print media, etc.

Bihar Agricultural University (BAU), Sabour

A Memorandum of Understanding (MoU) was signed between Bihar Agricultural University (BAU), Sabour, and the ICAR-Indian Institute of Oilseeds Research (IIOR), Hyderabad to promote oilseed crops in Bihar. This partnership is part of the broader Agriculture Roadmap initiative. This collaboration is expected to contribute to the advancement of knowledge and practices in the cultivation of oilseeds, ultimately benefiting the agricultural sector in Bihar. One of the anticipated benefits is the development of new varieties of oilseeds through joint research efforts, enhancing agricultural productivity and thus contributing to the overall growth of the oilseed sector in the region.

GBPUAT, Pantnagar

GBPUAT signed following MoUs with different organizations:

- With BIS, New Delhi for establishment of BIS-Chair at GBPUAT, Pantnagar with a corpus fund of ₹ 90 lakh initially for a period of 10 years.
- With Raksha, Jaipur wherein Raksha will be providing grant support to a PG student from the Department of Surgery and Radiology, College of Veterinary and Animal Sciences, GBPUAT for a period of one year.
- With Welfare Association for Children Tikapur (WACT), Kailali, Far Western Province, Nepal for Technical support in the construction and management of improved cattle sheds, Exploring locally available, affordable, and sustainable sources of animal feeds, Quasi-field experimentation studies, Research studies in the areas of environment-friendly farming and animal husbandry practices, and Identifying appropriate plant types for plantation in home gardens, community forests, and community spaces.

NAU, Navsari

NAU has signed 5 MoUs with Mandals on 03 October 2023 for the promotion of millets and millet value chain activities Biofortified variety/ technology CFMV-2/GIRA of finger millets as a technology.

- MoU signed between NAU, Navsari and Ambika Sakhi Mandal, Jamlapada, Gujarat.
- MoU signed between NAU, Navsari and Nari Shakti Sakhi Mandal, Ahwa, Gujarat.
- MoU signed between NAU, Navsari and Jamlapada Vividh Sewa Co-Operative Mandali Ltd, Gujarat.
- MoU signed between NAU, Navsari and Sanket Organic Farm, Dist Dang, Gujarat.
- MoU signed between NAU, Navsari and Raja Millets Food Products, Surat, Gujarat.

TANUVAS, Chennai

- A Memorandum of Understanding was signed between TANUVAS and Tamil Nadu Dr MGR Medical University, Chennai on 01 November 2023 for a period of three years. This MoU will foster academic and research collaboration.
- MoU was executed between TANUVAS and Mohan's Diabetic Research Foundation, Chennai and exchanged on 14 November 2023.



Exchange of MoU between TANUVAS and Mohan's Diabetic Research Foundation

UAS, Bengaluru

UAS-B signed following MoUs:

- For supply of parental seeds for monitor and implementation of seed production programme with National Dairy Development Board (first party), UAS Bengaluru (second party) and ICAR-IIOR, Hyderabad (third party) on 06 October 2023 for 3 years.
- For relationship/collaboration in Post-Graduate Research activities on interested issues with Gene2Go Pvt. Ltd, Chennai on 09 October 2023 for 5 years.
- Incubatee under Agri-Incubation Center of UAS-B for getting service and technology to innovate and to develop technologies and commercialization of agri-based products with Bio-Agrotech Solutions Private Ltd, New Delhi on 09 October 2023 for 3 years.
- Incubatee under Agri-Incubation Center of UAS-B for getting service and technology to innovate and to develop technologies and commercialization of agri-based products with Agri-App Technologies Private Ltd, Doddaballapur, Bengaluru Rural on 09 October 2023 for 3 years.
- MoU for renting of Maize Food processing Unit place at ZARS, VC Farm, Mandya with Smt. Prakruthi Manikanta Swamy, Mysuru on 27 October 2023 for 3 years.
- MoU on Non-Financial Agreement in designing and advancing scientific based approaches and to
 evolve tools and technology for effective and scientific watershed management, planning and
 development together by Center of Excellence on Water Management-UAS-B and with Foundation
 for Ecological Security, Anand, Gujarat on 30 October 2023 for 2 years.
- MoU for implementation of Prime Minister's Fellowship for Doctoral Research with CII and Sci. and Engineering Research Board (SERB) with Confederation of Indian Industry, Mohammed Azaruddina B.R. and Katra Phytochem (India) Pvt. Ltd and Confederation of Indian Industry, Nagangouda Babagouda Patil and Katra Phytochem (India) Pvt. Ltd on 30 August 2023 for 4 years.
- For educational, training, consultation and research activities in the mutual interested areas with Harrisons Malayalam Ltd (HML) Kochi, Kerala on 01 December 2023 for One year.
- Incubatee under Agri-Incubation Center of UAS-B for availing technical services towards innovation, development and commercialization of agri-based products with Arkashine Innovations Pvt. Ltd on 04 December 2023 for 3 years.

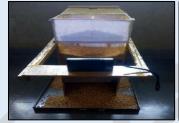
PATENTS

AAU, Anand

Patent for an Apparatus and Method for Measuring Angle of Repose

A patent on Apparatus and Method for Measuring Angle of Repose was granted to AAU, Anand (Patent No. 479162) by Controller of Patents, The Patent Office, Government of India. The vision and motivation received from Dr K. B. Kathiria, Vice Chancellor, AAU played a key role in realizing this visionary invention.

The angle of repose refers to angle between the free inclined-plane and the base of piled grains. The angle is being affected by the shapes of particle, size, moisture content, stacking condition, etc. The angle of repose is useful in food industry, chemical industry, warehouses, feed, pharmacy, etc. Angle of repose and curvature of grains play an important role in selection of design features of hoppers, chutes, dryer, storage bins and other equipment.







Apparatus and Patent Certificate

The apparatus was developed at Department of Processing and Food Engineering, College of Agricultural Engineering and Technology, Godhra, AAU. The contribution of inventors namely, Dr Navneet Kumar, Dr Neeraj Seth, Er. Sravan Kumar, Er. Vishal Mehra, Dr Pankaj Gupta, Dr R. Subbaiah and Dr B. K. Yaduvanshi are truly commendable and noteworthy.

Dr RPCAU, Pusa

Patent Granted

A patent for an invention entitled 'A SOLAR POWERED FISH PRESERVATION AND TRANSPORTATION CART' was granted on 23 November 2023 (Patent No. 472593). Vice Chancellor, Dr P.S. Pandey felicitated the Scientists associated with this innovation.











The Cart

Dr P. S. Pandey Facilitating the Scientists

GBPUAT, Pantnagar

- Cover Spun Yarns of Flax, Lyocell and Spandex Fibers and their Fabrics: Inventers-Dr Swati Sahu and Dr Alka Goel (Patent Number 472743, Date of Grant 24 November 2023).
- Biosensor Equipped Toxin Detection Device: Inventers-Dr Amit Kesarwani (Patent Number 394825-001, Date of Grant 11 September 2023).

NAU, Navsari

Patents for Decorative Butterfly Paper Weight Article

NAU prepared the Decorative butterfly paper weight article to enhance the elegance of the product. This is novel and meant for office tables as well as in insect-museum for long term preservation without deterioration of butterfly for study reference. It is compact and easy to carry. This design was registered in the name of 1. Navsari Agricultural University, 2. Dr Sachinkumar R. Patel, 3. Dr Abhishek Shukla and 4. Dr Zinabhai P. Patel. The elegancy of butterfly paper weight article especially the real butterflies, is in having aesthetic value and importance to attract the artists.





SKUAST-K, Srinagar

- Comprehensive, automatic in-shelled walnut processing system and an application method thereof by Dr Zameer Hussain. Granted on 22 November 2023; Patent No: 471699; application No. 202011026411.
- Nucleotide sequences for imporving tolerance of plants to environmental stress by Dr Khalid Z. Masoodi. Granted on 18 December 2023; Patent No: 484202; application No. 202011034328

TANUVAS, Chennai

Patents were granted for the following three technologies:

- A method for detecting RBC/platelets bound antibodies in canines and the kit thereof (Patent No.472138 and Date of grant 23 November 2023).
- A Hammer with pre-determined tattooing pins for impregnating the information of the animal (Patent No.438440 and Date of grant 12 July 2023).
- A mechanical width adjustable dual integration arm device for hoisting the injured animal developed by the faculty members of TANUVAS. (Patent No.473733 and Date of grant 29 November 2023).

UAS, Bengaluru

• A Biosensor for the Early Detection of Plant Pathogens (Indian Patent 456261, Date of grant 03 October 2023), Associated scientists: Anitha Peter, Amrita Sukrity, Rohini Bhat V., Soumya Ganapati Bhat, M. Roshni, Regional Station, Anantapur.

• A soil conditioner and application related thereto (Patent No. 450892, Date of grant 12 August 2023), Associated scientists: Dr N.B. Prakash and his co-workers at University of Agricultural Sciences, GKVK, Bengaluru and Tata Steel.

AWARDS

AAU, Anand

Dr Kalyanrao received Young Scientist Award-2022

Dr Kalyanrao, Assistant Professor and Head, Department of Seed Science and Technology, B. A. College of Agriculture, AAU, Anand was admitted as a Fellow and received the Young Scientist Award of the prestigious Indian Society of Seed Technology, for his significant contribution in the field of Seed Science and Technology during the 12th National Seed Congress-2023 held at the Taj Vivanta, Aurangabad

from 11-13 December 2023 organized by Vasantrao Naik Marathwada Krishi Vidyapeeth, Parbhani and Indian Society of Seed Technology under the aegis of Ministry of Agriculture and Farmer's Welfare, Government of India.

Dr Kalyanrao, received award from Padma Bhushan Dr R. S. Paroda, Former secretary, DARE and DG-ICAR in the presence of Dr Indra Mani, VC, VNMKV, Parbhani.





Dr Kalyanrao Receiving Fellowship Certificate and Young Scientist Award

Faculties from CAET, Godhra of AAU Secured Best JAEI Reviewer Award 2023, and Second Place in Oral Presentation

57th Annual Convention of Indian Society of Agricultural Engineers (ISAE) on Agri-Food Systems' Transformation through Engineering Innovations and International Symposium on Engineering Interventions for Making Millets a Global Food, was held at University of Agricultural Sciences, Raichur, Karnataka during 6-8 November 2023.

The following faculties of CAET, Godhra of AAU received awards in different categories:

- Dr Mukesh Kumar Tiwari, Assistant Professor and Head, Department of SWCE was awarded as Best JAEI Reviewer Award (2023) for his excellent work as reviewer of articles in Soil and Water Engineering in Journal of Agricultural Engineering (India).
- Dr R. C. Salunkhe, Assistant Professor and Dr K. L. Dabhi, Assistant Professor, Department of FMPE, secured Second Place in Oral Presentation for their research paper Design and Development of Mini Tractor Drawn Two Row Automatic Potato Planter cum Fertilizer Applicator, under the theme of Farm Mechanization.





Dr M. D. Patel Library Received J-Gate@CeRA Award

Dr M. D. Patel Regional e- Library received J-Gate@CeRA Award during J-Gate@CeRA Regional Training and Awareness Program for western region SAUs and ICAR institutes held at AAU, Anand on 21 December 2023.



University Librarian Receiving the Award

Best Oral Presentation and Poster Presentation Awards

Dr Rucha Dave, Assistant Professor of Physics, Department of Basic Sciences and Humanities, BACA, AAU, Anand, was awarded with the Best Oral Presentation for the work on Soil Moisture and Plant

Height Retrieval Through C-Band Synthetic Aperture Radar (SAR) Remote Sensing. Dr P. M. Patel, Associate Professor, Department of Agronomy, BACA, AAU, Anand, along with Dr R. D. Shinde, Dr A. P. Patel, and Dr S. N. Shah were awarded with the Best Poster Presentation Award for their collaborative work on Evaluation of Bacterial Bio-decomposer on Crop Residues. These awards were received under the theme Precision Agriculture: A New Vista for



Faculty receiving award

Indian Agriculture, Next-Gen Digital Agriculture Concept, Opportunity and Challenges (Including Nano-technology) at the National Conference on 'Transformation of Agro-technologies for Enhancing Production under Diverse Agro-ecosystem' held during 12-14 October 2023 at Saputara, the Dangs, Gujarat, India, in collaboration with Navsari Chapter of Indian Society of Agronomy and Navsari Agricultural University, Navsari.

ANGRAU, Guntur

Institutional Award

• 27.11.2023: KVK, Utukur identified as a Best KVK Promoting Millets through Value Addition, and the award received at HICC, Hyderabad.

Individual Awards

- Dr M.V.S. Naidu, Associate Dean, Agricultural College, Pulivendula conferred with the Fellow of Indian Society of Soil Science at Indian Institute of Soil Science, Bhopal.
- Dr P.V.K. Jagannadha Rao, ADR, RARS, Anakapalle received ISAE fellow 2023 award in 57th Annual Convention of ISAE at UAS, Raichur.
- Dr M. Madhava, Professor, Dr N.T.R. CAE, Bapatla received ISAE Commendation Medal-2023 during ISAE annual convocation and international conference held at UAS Raichur.
- Dr K. Vemana, Principal Scientist (Plant Pathology) Groundnut at the Agricultural Research Station, Kadiri, Dr M. Visalakshi, Principal Science (Entomology), AICRP on Bio Control, RARS, Anakapalle, Dr M. K. Jyotsna, Associate Professor, SV Agriculture College, Tirupati, Dr Gopalaswamy, Principal, Agriculture Polytechnic, Anakapalli were conferred with the Fellow of Plant Protection Association of India at the International Conference on Plant Health Management for Innovation and Sustainability, held in Hyderabad.
- Dr B. Sree Lakshmi, Principal Scientist (Plant Pathology), RARS, Lam, Guntur received Fellow of Indian Society of Plant Pathologists during the National Symposium on Plant Pathology:

Sustainable Approaches for Food Security and Human Health, at Banaras Hindu University, Varanasi.

AU, Kota

• Dr A.K. Vyas, Vice Chancellor, Agriculture University, Kota received Life Time Achievement Award-2021 by Indian Society of Agronomy, New Delhi during National Symposium on Climate Smart Agronomy for Resilient Production Systems and Livelihood Security, held at ICAR-Central Coastal Agricultural Research Institute, Goa during 22-24 November 2023.



Dr A. K. Vyas Receiving Lifetime Achievement Award

- NCC cadets Kajal Kanwar, Bhoomika Chanda Choriya, Keshav Sharma and Govind Saini selected for IGC RDC camp and got 1st prize in NIAP programme at IGC RDC camp, Jaipur during 18-27 November 2023.
- Dr M.C. Jain, Dean, CoA, Kota received best poster presentation award in 10th Indian Horticulture Congress-2023 held at Assam Agricultural University, Guwahati, Assam during 06-09 November 2023. He also received Award of Outstanding Dean during International Conference on One Health-One World organized under NAHEP at RVSKVV, Gwalior during 28-29 December 2023.



Dr M. C. Jain Receiving the Award

• Dr Anju Bijarnia received Best Ph.D. thesis while Ms Uditi Dhakad and Ms Monika Choudhary received best M.Sc. thesis awards during XXII Biennial National Symposium held at Goa and organized by Indian Society of Agronomy during 22-24 November 2023.



Dr Anju Bijarnia received the Best Ph.D. Thesis



Ms Monika Choudhary receiving the Best M.Sc. Thesis Award

• Dr Rajendra Kumar Yadav, Assistant Professor (Soil Science), AICRP-IWM, ARS, Kota, was awarded NESA Scientist of the Year Award-2023 by National Environmental Science Academy, New Delhi.

BAU, Sabour

Dr Tushar Ranjan Received ITS from SERB-DST, Government of India

Dr Tushar Ranjan, Assistant Professor, Department of Molecular Biology and Genetic Engineering, BAU bagged ITS award from SERB-DST, Government of India for attending international conference on Plant and Animal Genome-31 (PAG-31) at San Diego, USA. His novel work on Assembly of Plant Viruses was duly recognised and accepted for presentation during the conference.

Dr Nintu Mandal Received Prestigious Golden Jubilee Young Scientist Award

Dr Nintu Mandal, Assistant Professor cum Junior Scientist, Department of Soil Science and Agricultural Chemistry, BAU received prestigious Golden Jubilee Young Scientist Award 2023 of Indian Society of Soil Science (ISSS) for his outstanding research work on Nano-technological Intervention for Increasing Nutrient Use Efficiency.

Dr YSRHU, Venkataramannagudem

Dr P. Ashok, Principal Scientist (Hort.) and Head, HRS, V. R. Gudem participated and presented



the paper entitled Effects of Plant Growth Regulators in Yield and Quality of Rambutan (*Nephellium lappaceum var. Lappaceum*) in the International seminar on Exotic and Underutilized Horticultural

Crops: Priorities and Emerging Trends, from 17–19 October 2023 at IIHR, Bengaluru, and received best oral presentation award in the

above seminar.

 On 09 October 2023 and 10 October 2023, Dr E. Khamdhar Naik, received Dr A.P.J Abdulkalam Research Award Young Scientist Award 2023 and Ramanunjam Research Award 2023 from Journal of Agriculture Biotechnology and Applied Science by Punjab Hydroponic Terrace Gardening.



On 14 October 2023, Shri G. Shaliraju, Scientist (Entomology) Dr YSRHU - KVK, V. R. Gudem received Padma Shri, Dr I. V. Subbarao Rythu Nestham Award for the year 2023 from former Vice President of India Shri M. Venkaiah Naidu at Swarna Bharat Trust, Gannavaram, Vijayawada.



• On 16 November 2023, Dr N.B.V. Chalapthi Rao, Principal Scientist and Head, received Dr Bap Reddy award for IPM for the Years 2020-22 from Plant Protection Association of India during the International Conference on Plant Health Management 2023.



 Dr K. Mamatha, Pr. Scientist (Hort.), Dr YSRHU- HRS, Kovvur received best research paper award for the oral presentation during the National Conference on Tropical Tuber Crops for Sustainability, Tradition, Agri-food Systems and Resilience held at ICAR-CTCRI, Thiruvananthapuram from 28-29 November 2023.



GADVASU, Ludhiana

Faculty and Students Excelled in National Conference on Animal Reproduction

Faculty and students of Department of Veterinary Gynaecology and Obstetrics and Livestock Farms, attended 38th Annual Convention of The Indian Society for Study of Animal Reproduction (ISSAR) and International Symposium on Frontiers in Theriogenology: Research and Practice. It was held at College of Veterinary and Animal Sciences, Kerala Veterinary and Animal Science University, Mannuthy, Kerala. Drs Ajeet Kumar, Narinder Singh, Amarjeet Bisla, Nakul Gulia along with 10 M.V.Sc. students attended and presented their research papers. A total of 4 awards won by faculty and students during the event.



International Award at Commonwealth Countries Forum

Dr Preeti, M.V.Sc student of Centre for One Health, won Commonwealth Veterinary Association Essay Competition. In this competition, veterinary students across commonwealth countries participated and the first prize has been conferred to Dr Preeti. She was awarded with the citation and cash prize of AUS \$500.



Dr Preeti

Students Bring Laurels at Punjab State Inter-Varsity Youth Festival

Students from varsity participated in Punjab State Inter-Varsity Youth Festival and brought laurels to the university by bagging awards in five different events. Students of Varsity secured first position in Elocution, second Position in Debate, second Position in Giddha, second Position in Installation, and third Position in Short Video Film Making.



Professor honoured at International Conference

Dr Pranav K. Singh, Associate Professor, College of Dairy Science and Technology, bagged the award for best paper presentation at 11th International Conference on Fermented Foods, Health Status and Social Well-being. The conference was jointly organized by the North Eastern Hill University, Shillong, in association with the Swedish South Asian Network on Fermented Foods on 05 December 2023. It was attended by many eminent scientists from India, Japan, Thailand, and Sweden besides the industry personnel. Dr Singh presented his paper on Nanobubbles – A



Promising Technology for their Application in Fermented Dairy Foods.

Scientists and Students Bring Laurels in International Symposium

Faculty members and students from the Centre for One Health, participated in the International Symposium on the Promotion of One Health: Opportunities, Challenges and Solutions, and achieved different awards. It was the XIX Annual Conference of the Indian Association of Veterinary Public Health Specialists (IAVPHS), organized by Lala Lajpat Rai University of Veterinary and Animal Sciences, Hisar, Haryana on 14 December 2023. Dr Randhir Singh, was honoured with the Fellow IAVPHS 2023 Award. Amongst students Dr Anamika, was bestowed with the Best Ph.D. Thesis Award, Dr Rhythm and Dr Preeti secured the first position in the poster presentation, Dr Akshara Babu and Dr Nilam Wavhal earned the second position in the poster and Oral presentation, respectively.



Veterinary Pathologists Shine at IAVP Congress 2023

The students and faculty members of the Department of Veterinary Pathology attended Veterinary Pathology Conference-2023 organized at Indian Veterinary Research Institute, Bareilly (Izatnagar), Uttar Pradesh. Dr Priyanka Syal, a former Ph.D. Student bagged Best Second Poster Presentation Award, Dr Sonam Sarita Bal, Ph.D. scholar of the department bagged First Best Clinical Case Presentation Award, Dr Rajat Sood, M.V.Sc. student was awarded Second Best Clinical Case Presentation Award. Dr Himanshu Garg, another M.V.Sc. student got the Consolation Clinical Case Presentation Award.



GBPUAT, Pantnagar

- Vice Chancellor, Dr M. S. Chauhan was honoured with Academic Leadership Award 2023 by Union Minister of Agriculture and Farmers' Welfare, GoI in the 14th Agriculture Leadership Conclave 2023.
- All India Coordinated Research Project on Cattle-Sahiwal running in
 Department of Livestock Production Management, College of
 Veterinary Sciences won third prize in the Breed Conservation Award- 2023 on 23 December 2023
 in all Species category at the ICAR- National Bureau Animal Genetic Recourses, Karnal (Haryana).
- Dr Aditi Vats, Professor and HoD, RMCS awarded Indo- Pacific Excellence Award 2023 on 05 October 2023 by International Multidisciplinary Research Foundation, Andhra Pradesh, India.
- Dr S.D. Samantaray, Head, Department of Computer Engineering was nominated as a Member of the Executive Committee of Uttarakhand State Council of Science and Technology (UCOST) by Uttarakhand Government on 3 November 2023 and is also included as an Expert in the Expert Group to make the work quick and effective of information Technology Development Agency (ITDA) Department of Information Technology Science and Technology, Uttarakhand.

KU, Gandhinagar

College of Veterinary Science and Animal Husbandry, Anand Awards Received by Staff and Students

Dr S. K. Raval and Dr Neha Rao received B.P. Joshi Recognition Awards. Rahul Chauhan and Om Patel received Best Poster Presentation Awards during 4th Annual Convention of Veterinary Internal and Preventive Medicine Society and National Symposium organized at SKUAST-J, Jammu during 18-19 December 2022.



Veterinary Students Won in Drawing Competitions

Students of Veterinary College, Junagadh participated in different events of drawing organized by various institutes at Junagadh. Ms Tisha Khatri, student won second prize in the drawing competition organized by Sakkarbaug Zoo, Junagadh for celebration of 69th Wildlife Week Celebration during 02-08 October, 2023. Shri Divyesh Dafda, student also won second prize in drawing competition–Bird Fest organized on 08 October 2023 by Bahauddin Science College, Junagadh.







Participation of students in drawing competitions

Animal Nutrition Research Station, Anand

The Outstanding Ph.D. Thesis Award is presented to Dr Sorathiya Kalpesh Keshubhai, Assistant Research Scientist, Animal Nutrition Research Station, Anand of Kamdhenu University for quality research work on Dietary Interventions to Enhance Performance of Growing Crossbred Heifers, carried out for Degree of Doctor of Philosophy (Veterinary Science) at Department of Animal Nutrition, College of Veterinary Science and Animal Husbandry, Anand of Kamdhenu University on the occasion of International Conference on Impact of Climate Changes on Global Food, Livestock, Livelihood and Environmental Security: Advanced Approaches and Mitigation Strategies (ICCGFLLES-2023) jointly organized by NAU, Navsari and NADCL, Baramulla, in-collaboration with ICAR-NAHEP, Centre for Advanced Agricultural Science and Technology (CAAST), NAU, Navsari, held at Navsari Agricultural University, Navsari, Gujarat (India) during 28-30 December 2023.

Dr M. R. Chavda Received Two Awards at National Symposium

Dr M.R. Chavda, Assistant Professor from Polytechnic in Animal Husbandry, Junagadh had received two awards at National Symposium on Recent Biotechnological Advances in Health and Management of Livestock, Poultry and Companion Animals, and X Annual Convention of Society for Veterinary Science and Biotechnology held at College of Veterinary Science and Animal Husbandry, NDVSU, Jabalpur (Madhya Pradesh) during 05-07 October 2023. He received the Second-Best Paper Award-2023 of SVSBT for research article entitled Effect of Peripartum



Dr M.R. Chavda receives award

Supplementation of Rumen Protected Choline and Rumen Protected Fat on Energy Status, Insulin, IGF-1 and Postpartum Fertility in Gir Cows, published in IJVSBT, 2022, Vol. 18(1):34-38. He also received Best Oral Presentation (First Prize) Award for paper entitled Efficacy of Rumen Modifiers on *In-vitro* Degradability, Total Gas Production and Methane Production of Maize Hay and Wheat Straw Based Total Mixed Ration.

Dr Surendra Sawarkar Received Best Veterinarian Award at an International Conference

Dr Surendra Sawarkar of COVSAH, Junagadh of KU received Best Veterinarian Award during an International Conference Impact of Climate Changes on Global Food, Livestock, Livelihood and Environmental Security: Advance Approaches and Mitigations Strategies held on 28-30 December 2023 at NAU, Navsari in recognition of his more than 20 years' outstanding contribution in the field of veterinary and animal extension.



Dr Surendra Sawarkar receives award at an International conference

Dr Harshad Patel gets Best Oral Presentation Award

Dr Harshad B. Patel, Assistant Professor of COVSAH, Junagadh received Best Oral Presentation Award-1st position in Toxicology of Xenobiotics session for research paper entitled Acrylamide Induced

Testicular Toxicity in Aquatic Animal Model: Alterations in Oxidative stress parameters, Gene expression and Histological structure, authored by Paida, B.V., Patel, H.B., Modi, C.M., Patel, H.R., Ramchandani, D.M., Patel, P.M., Patel, U.D. and Trangadia, B.J. in 23rd Annual Conference of Indian Society of Veterinary Pharmacology and Toxicology (ISVPT) organized by Department of Veterinary Pharmacology and Toxicology, COVSAH, Bikaner, RAJUVAS during 02-04 November 2023.



Dr Harshad Patel receives 'Best Oral Presentation Award'

Gujarat State Yogasana Sports Championship

The first year student of CoVS and AH, Navsari, Kadambari Upadhyay participated in the 4th Gujarat State Yogasana Sports championship 2023 organized by Gujarat Yogasana Sports Association at Bhavnagar on 08/12/2023, and she won 1 gold and 1 silver medal and was selected for Nationals Yogasana Championship.



PJTSAU, Hyderabad

Agriculture Leadership Award 2023 under Entrepreneur Leadership Award category

AgHub, PJTSAU, was honored with the prestigious Agriculture Leadership Award 2023 under Entrepreneur Leadership Award category by the esteemed Agriculture Today Group. Recognized for impactful contributions to Agritech and allied sectors, especially for promoting entrepreneurship and innovations in Agri-Food systems in Telangana and across India, this award is a testament to commitment to revolutionize agriculture. The grand ceremony took place in New Delhi and witnessed the



presence of illustrious dignitaries like Shri Arjun Munda, Minister for Agriculture and Farmers' Welfare, Government of India, and several other luminaries from the agricultural domain. The registrar, PJTSAU received the Award.

SKUAST-J, Jammu

- Dr Ghanshyam N Jha of KVK-Doda received Fellowship award (FNAS) and Innovative Researcher Award-2023 during International Conference on Science Society and Culture (ICSC-2023) held during 6-7 October 2023 organized by Nepal Aquaculture Society (NAS) at Kathmandu, Nepal.
- Dr Amit Singh Charak of KVK-Doda received Chaudhary Charan Singh Award for Agricultural Innovations from Global Environment and Social Association (GESA), New Delhi during 5th International Conference on Environment and Society (ICES-2023), held during 29-30 December 2023 at Dr R.M.L. Avadh University, Ayodhya (Uttar Pradesh).
- Dr Nrip Kishore Pankaj received 1st prize for oral presentation in the session Antimicrobials and antimicrobial resistance during the 23rd Annual Conference of ISVPT and national symposia on Integrated Animal Health Care System: opportunities and Challenges and Exploring New Avenues for Pharmacologist and Toxicologist for employability perspective organized by the Department of Veterinary Pharmacology and Toxicology, COVAS, Bikaner, RAJUVAS- Bikaner during 02-04 November 2023.
- Dr Pawan Kumar Verma received Fellow of National Environmental Science Academy (NESA) during National Conference on Recent Trends and Challenges in Green Chemistry, Pollution Control and Climate Change organized by National Botanical Research Institute (NBRI), Lucknow, UP on 14-16 December 2023.
- Ms Lenesha Manhas, Ph.D. scholar has received the first prize in the Essay Competition on Antimicrobial Drugs: Boon or Curse organized on the occasion of Antimicrobial Awareness Week by the Department of Veterinary Microbiology and Animal Biotechnology Teaching and Research Cell, Nagpur Veterinary College, Nagpur on 24 November 2023 under the ambit of MAFSU, Nagpur, E-certificate no. NVC/Micro-ABT/AMR/306/2023.
- Ms Lenesha Manhas also received an Outstanding M. V. Sc Thesis award entitled Estimation and Quantification of Antimicrobial Residue in Poultry Meat Available in and Around Jammu Region during the 3rd National Conference held at DSPMU, Ranchi, India organized by Society for Agriculture Innovation and Development, Ranchi.

SKUAST-K, Srinagar

• SKUAST-K student Mehak Hafeez won US\$ 5,000 scholarship award for her innovative project on the detection of Harmful Algal Blooms (HABs) in Dal Lake through sensor-based technology. A Ph.D. scholar at SKUAST-K in Division of Aquatic Animal Health Management (AAHM), Faculty of Fisheries, Mehak was awarded the Dr Gregory D. Bossart Memorial One Health Scholarship for her One Health Project titled Sensor-Based Detection of Harmful Algal Blooms (HABs) in Dal Lake, Kashmir: Advancing One Health through Participatory Surveillance by the United States-based One Health Commission and Georgia Aquarium.

- Prof. Tasneem Mubarak, Chief Scientist Agronomy, Mountain Research Center for Field Crops (MRCFC), SKUAST-K, was conferred with prestigious International Potash Institute and Fertilizer Association of India IPI-FAI Award 2023. The award including a gold medal, citation and cash reward ₹ 2 lakh was presented to him by Dr Mansukh Mandaviya, Union Minister for Chemicals and Fertilizers during the inaugural session of 3-day seminar organized by Fertilizer Association of India held from 06-08 December 2023.
- SKUAST-K has emerged as the No.1 institution with the highest number of startups and innovations among all 11 universities of the Union Territory of Jammu and Kashmir as per the ranking awarded by the Science and Technology Department of Jammu and Kashmir Government on 29 October 2023 at the J and K's first skill convocation presided by Lt Governor Manoj Sinha at SKICC.
- Chief Executive Officer, SKUAST-K Innovation, Incubation and Entrepreneurship (SKIIE) Centre, Naveed Hamid, has been selected Top Mentor by Entrepreneurship Cell, IIT Bombay, a trailblazing organization with 25 years of legacy and backing from UNESCO, Make in India, Startup India, and Digital India on 31 October 2023.



Prof. Parvaze Ahmad Sofi, Division of GPP, Faculty of Agriculture, was appointed
as a member of the Crop Science Teaching Improvement Jury by the Crop Science Society of
America, USA.

TANUVAS, Chennai

- College of Food and Dairy Technology (CFDT), Koduveli, TANUVAS certified as Eat Right Campus by the FSSAI, Ministry of Health and Family Welfare, Government of India.
- Thiru Ranjith Kuttan, the Toda farmer (Documented by Sheep Breeding Research Station, Sandynallah, TANUVAS) received Breed Conservation Award from the National Bureau of Animal Genetic Resources, Karnal on 23 December 2023 for conserving the Endangered Toda Breed of Buffalo.



Toda Buffalo (Left) and Thiru Ranjith Kuttan, Toda farmer receiving Breed Conservation Award from NBAGR, Karnal

 Poultry Research Station of TANUVAS was awarded Second Prize for conservation of Aseel breed of Chicken in the Institution/Community category by National Bureau of Animal Genetic Resources, Karnal on 23 December 2023.



Scientist of Poultry Research Station of TANUVAS Receiving 2^{nd} Prize from NBAGR, Karnal

October-December, 2023

 Bargur Cattle Research Station, Bargur of TANUVAS was awarded Third Prize in the Large Ruminant Category (Institutions) for conservation of Bargur breed of cattle by National Bureau of Animal Genetic Resources, Karnal on 23 December 2023.



Bargur Cattle (Left) and Scientist of Bargur Cattle Research Station, Bargur of TANUVAS Receiving Award from NBAGR, Karnal

• Selvi M. Thulasimathi, Student of Veterinary College and Research Institute, Namakkal, TANUVAS made India proud in the Badminton Asian PARA games at Hanghzou, China by winning Gold medal in singles, Silver medal in women's doubles and Bronze medal in mixed doubles.



Selvi M. Thulasimathi in a Badminton Match in Asian PARA Games

UAS, Bengaluru

- Dr Shobha D., Associate Professor (Food Science and Nutrition), AICRP on PHET was awarded with the Prof. B.V. Venkatarao award for best scientific article in Krishi Vignana (A monthly magazine) on Kaachakki- Poushtika Mahathva haagu Moulya Vardhane at the Krishimela -2023 of UAS-B held during 17-20 November 2023 at UAS, Bengaluru.
- Dr Sukanya T. S. was awarded Scientist of the year-2023 by Gochar Educational and Welfare Society, Saharanpur (Uttar Pradesh), India at the 4th International Conference on Natural Resource Management and Sustainability at Udayana University on 27 November 2023 at Bali, Indonesia.
- Dr Vishwanath Koti was awarded Fellow of the Indian Society of Seed Technology from the Indian Society of Seed Technology at the 12th National Seed Congress-2023 Innovations and Challenges in Quality Seed Availability under Changing Climate held at Aurangabad from 11-13 December 2023.
- Srividya R., IV B. Tech. (Agri Engg.) student secured Silver Medal in Sate Fencing Championship-2023 (in Senior Category) held at Koramangala Stadium, Bengaluru during 30 September 2023 to 02 October 2023. She was also selected to represent State in the 34th Senior National Fencing Championship 2023-24 scheduled at Assam during 28-31 January 2024.

LIMELIGHTS

Dr YSRHU, Venkataramannagudem

Pushpa Prasadam portrait of 'Shri Venkateswara Swamy' crafted with worshipped flower powders under the supervision of Dr R. Nagaraju, Principal Scientist (Hort) and Head at Dr YSRHU - CRS, Tirupati was presented to Shri Narendra Modi, Prime Minister of India at Tirumala Tirupathi Devastanams by Shri Karunakara Reddy, Chairman, TTD and Shri A.V. Dharma Reddy, E.O., TTD on 26 November 2023. Dr YSRHU-KVK, Venkataramannagudem represented Dr YSR Horticultural University at World Food India-



Pushpa Prasadam Being Presented to Shri Narendra Modi, Prime Minister, India

2023 conducted at Pragati Maidan, New Delhi from 03-05 November 2023. The exhibits from Dr YSRHU research stations and KVK's were presented in the stall. This program was coordinated by Dr K. Venkata Satish Kuchi, Scientist (Horticulture), Dr B. Baburao and Dr E. Karunasree, Director Extension. Master trainers – Mrs M. Vani and Mrs P. Sreelakshmi represented Krishi Udhyana Mahila Rythu Uthpattidarula Sangam [KU foods] which was established with the help of ARYA project. Agricultural Minister for Andhra Pradesh Shri Kakani Govardhan Reddy also visited the exhibition.



Dr YSR Horticultural University at 'World Food India- 2023'

- 17th Global Connect Series on Floriculture- A Profitable and Ecofriendly Agribusiness, organized by Dr YSRHU in Collaboration with Bangladesh Agricultural Research Institute, Bangladesh, on 17 November 2023.
- Exotic fruit orchard: On 30 November 2023, Vice Chancellor Dr T. Janakiram, Director of Research Dr L. Naram Naidu initiated Exotic Fruit Orchard at 'A' Block of Horticultural Research Station, V.R.Gudem. Staff of HRS, V.R.Gudem, RHWEP students from CoH, Parvathipuram were actively involved in planting of different exotic fruit saplings.



Inauguration of Exotic Fruit Orchard

Workshop on Millets

• Dr YSRHU in collaboration with Adikavi Nannaya University under APHEPB – Godavari Regional Cluster Group activities organized one day workshop on Millet for Health and Entrepreneurship

on 30 December 2023 at Rajamahendravaram. The distinguished guests of honour were Dr T. Janakiram, Vice Chancellor, Dr YSRHU; Prof. K. Padma Raju, Vice Chancellor, AKNU, Prof. GVR Prasad Raju, JNTUK and keynote speaker Dr C. Tara Satyavathi, Director, IIMR, Hyderabad. The programme was co-ordinated by Dr E. Karuna Sree, Director of Extension Dr YSRHU and Nodal officer for cluster group activities, in the presence of the Registrar, Dr B. Srinivasulu and Dr A. S.



Workshop on 'Millet for Health and Entrepreneurship

Padmavatamma, Dean of Horticulture, Dr YSRHU; Dr D R Salomi Suneeta, Dean of Student Affairs, Dr YSRHU. Dr M. Raghavendra Reddy, Scientist (SSandAC), KVK, V R Gudem presented the cultivation practices of various millets and the initiatives of Dr YSRHU –KVKs for promotion of millet cultivation and consumption. The ELP students of CoH, V. R. Gudem under the guidance of Dr Usha Kumari, Associate Professor (Hort.) displayed their products in the exhibition stall. Seven entrepreneurs successfully running the millet processing units participated in the event and displayed their products.

• Banana Research Station, Pulivendula organized CSS – MIDH District Level Seminar on Turmeric Production Technology from 19- 20 December 2023 in convergence with Dr YSRHU-Krishi Vigyan Kendra, Vonipenta under the guidance of Dr P. Suseela, Principal Scientist and Head, BRS, Pulivendula. Dr L. Naram Naidu, Director of Research and Dr E. Karuna Sree, Director of Extension Dr YSRHU graced the occasion as the chief guests. A book was released on Turmeric cultivation practices and distributed to the farmers. Scientists from HRS, LAM, Guntur and HRS, Anantharajupeta



District Level Seminar on Turmeric Production Technology

participated as resource persons and enlightened about the improved production technologies in turmeric for high returns

Dr YSRHU-Year of Banana- 2023

Dr YSRHU- Year of Banana Valedictory Programme was conducted on 23 December 2023 at Dr YSRHU-HRS, Kovvur. Shri Kakani Govardhan Reddy, Minister for Agriculture and Cooperation, Marketing and Processing was the Chief Guest. Dr T. Janakiram, Vice Chancellor, Dr YSRHU presided over the function. Shri Asithosh Srivatsava, Sub-Collector, Kovvur; Dr A. Padmavathamma, Dean of Horticulture; Dr L. Naram Naidu, Director of Research; Dr E. Karuna Sree, Director of Extension; Dr B. Srinivasulu, Registrar; Dr D. Venkata Swamy, Dr Salomi Sunitha, Dean of Student Affairs; Dr M. Madhavi, Associate Dean CoH,V.R. Gudem; Smt Bhavana Ratna Kumari, Municipal Chairperson, Kovvur, scientists of HRS, Kovvur; HRS, Pulivendula; and KVK – V.R. Gudem and Pandirimamidi and other scientists from Coastal Zone –I, Department officials, farmers and students participated in the programme.

Exhibition of Banana diversity with more than 30 varieties was the special attraction. Released 8 publications and a video on tissue culture laboratory on this occasion. The scientists who were involved in the release of banana variety Godavari Bontha were felicitated as a token of appreciation and other dignitaries on the dais were also felicitated by the Vice Chancellor, Dr YSRHU. Approximately 300 farmers participated in the programme. Machinery like banana fibre extractor, slicer, tray drier for banana processing and value addition were provided by Dr YSRHU-KVK, Venkataramannagudem to the SARD FPO in Kovvur mandal.







Dr YSRHU-Year of Banana- 2022-23 Concluding Ceremony

KU, Gandhinagar

Celebration of Gandhi Jayanti

College of Veterinary Science and Animal Husbandry (CoVS&AH), Navsari

College of Veterinary Science and AH, Navsari of Kamdhenu University, celebrated Gandhi Jayanti on 02 October 2023 to commemorate the birth anniversary of Mahatma Gandhi, the father of the

Indian nation. The day was celebrated by conducting cleaning drive movement at Dandi, because the day also emphasizes the importance of Swachh Bharat Abhiyan, reflecting Gandhi's emphasis on cleanliness and sanitation as fundamental aspects of



personal and community wellbeing. The NCC students of the college actively participated in the events. Dr V. B. Kharadi, Principal, CoVS&AH, KU, Navsari gave best wishes to all the students to make clean India campaign successful. The event was successfully organized by 9 Naval NCC Unit,

Navsari and Sub Lt. (Dr) Lalit Modi, Associate NCC Officer and Dr Ajay Raval, NSS Officer of the college.

Lal Bahadur Shastri Jayant Organized at Polytechnic in Animal Husbandry, Junagadh

Lal Bahadur Shastri Jayanti is celebrated in India every year on 2 October to pay tribute to a great leader Late Shri Lal Bahadur Shastri, the second Prime Minister of India. NSS unit of Polytechnic in Animal Husbandry, Veterinary College, KU, Junagadh celebrated Lal Bahadur Shastri Jayanti on 2 October 2023 under the Chairmanship of Dr G.P. Sabapara, I/c Principal, Polytechnic in Animal Husbandry, Veterinary College, KU, Junagadh. Dr G.M. Chaudhary, Programme Officer, NSS, Veterinary College, Dr M.R. Chavda, Asst. Professor, Dr K.B. Savalia, Veterinary Officer., Polytechnic in Animal Husbandry and Dr P.G. Dodiya, Programme Officer, NSS, Polytechnic were also present in this event. This event was celebrated by organizing Pushpanjali Programme to Lal Bahadur Shastri at Polytechnic campus.



Celebration of World Animal Welfare Day, CoVS&AH, Navsari of KU

CoVS&AH, Navsari celebrated World Animal Welfare Day on 04 October 2023 to raise awareness about improving the welfare standards of animals. The event was organised in collaboration with Bhramakumari and Lions Club, Navsari. Ms Geetaben and Mr Babubhai from Bhramakumari, Navsari gave the excellent speech on importance of animals in our life and regarding various welfare activities for animal welfare. The NCC and NSS students of the college actively participated in the events. Dr V. B. Kharadi, Principal, CoVS, KU, Navsari graced the occasion. He emphasized the significance animals in nature and their importance for maintaining the ecological balance. The faculty members of the college also attend the event.



Celebration of World Teachers Day

College of Veterinary Science and AH, Kamdhenu University, Navsari celebrated World Teachers Day on 05 October 2023. This year the theme was The teachers we need for the education we want: The global imperative to reverse the teacher shortage. The NCC and NSS students of the college actively participated in the events, viz. elocution on the subject of importance of teacher in the life. Dr V. R. Patel and Dr Sudhir Mehta, faculty members of the college also spoke on the topic. Dr V. B. Kharadi, Principal, CoVs, Navsari, KU graced the occasion and congratulated the students for their excellent speech. He also said that teachers are the most responsible and important members of society as their professional efforts affect not only the fate of a country but the world too.



KVASU, Wayanad

Brilliant Performance in National PG and UG Entrance Examinations

The students of the Kerala Veterinary and Aimal Sciences University scored high ranks in the entrance examination conducted by the Indian Council of Agricultural Research to various agricultural and animal husbandry institutes in the country. Nithya PN in PG-Food Plant Operation and Management and Jayalakshmi in Veterinary Anatomy in Senior Research Fellowship Examination in Research, Farhana PH secured 4th rank in PG-Dairy Science, Angela Joseph B secured 5th rank, Adrija R secured 9th rank and Sissa AB secured 5th rank in CSIR-CFTRI MSc (Food Technology). Also 31 students secured top ranks in post graduate subjects like Dairy Science, Dairy Technology, Food Science Technology, Veterinary Science and Animal Science. This success will help to raise the ranking of the University among the national level universities.

SKUAST-J, Jammu

World Soil Day

SKUAST-J, Jammu celebrated World Soil Day 2023 on 5 December 2023. Two eminent lead speakers Prof. S.K. Patil, Former Vice Chancellor, IGKV, Raipur and Dr Bijay Singh, Former National Professor

(Soil Science), ICAR, PAU, Ludhiana sensitized and interacted with the students and faculty on topic Soil and Water: A Source of life. How We can protect soil and conserve water' and Smart Nitrogen Fertilizer Management and Food Production Water Pollution and Climate Change, respectively. Prof. B. N. Tripathi, Vice Chancellor, SKUAST -Jammu, Chief Guest of the Programme said that owing to the intensive agriculture



Prof. Bhupendra N. Tripathi, Vice Chancellor, SKUAST - Jammu and Eminent Speakers Addressing the Gathering

soil is under threat. Prof. Tripathi emphasized that sustainable management of soil along with holistic development of agriculture are the two pillars on which our production system will sustain.

Other Extension Activities

- Krishi Vigyan Kendra, Jammu organised Millet's Awareness cum Recipe Contest at Panchayat Ghar, Ambaran Akhnoor on 30 October 2023.
 During the programme NRLM UMEED Group members and ICDS workers showcased the various recipes prepared from millets. A total of 90 participants attended the programme.
- Awareness cum recipe competition on Value Addition on Millets at Kaleeth Khour NRLM UMEED was organized on 09 November 2023. 70 participants attended the programme. Group members and ICDS workers showcased the various recipes prepared from Millets.
- KVK-Jammu celebrates AYURVEDA Day-2023 on 10 November 2023 at Sher-e-Kashmir University of Agricultural Sciences and Technology of Jammu (SKUAST-

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Jammu) under the dynamic leadership of Prof. B. N. Tripathi, Vice Chancellor. Ninety participants attended the programme.



UAS, Bengaluru

Field Days Organised

- Organic Rice field day was organized by Organic Farming Research Station (OFRS), Naganahalli, Mysore in collaboration with Extension Education Unit, Naganahalli at Organic Farming Research Station (OFRS), Naganahalli on 29 November 2023. Demonstrations of local varieties of rice grown in organic farming, Geographically Indexed Crops of Mysore District namely Nanjangudu Rasabale, Mysore mallige and Brinjal cv. Iranagere, Animal Husbandry Unit: Sheep, Goat, Poultry and Piggery units, Millet processing Unit, different types of compost preparation, different varieties of fodder crops, ragi and field bean crops under organic farming, Horticultural crops, viz. coconut, sapota, drumstick, amla, mango and curry leaves, medicinal plants and Agromet Observatory unit were organized. Exhibition stalls with varied extension activities and stalls for sale of organic products and saplings of sesbania and drumstick were also organized. Around 250 farmers (108 women and 142 men) participated in the field day.
- Millets Mela cum field day- 2023 was organized by Agricultural Research Station, Kunigal on 06 December 2023. Demonstration of various millets, forage crops, hybrids of castor, pigeonpea,
 - horsegram, maize and medicinal and aromatic crops, Agromet Observatory unit, Animal Husbandry Unit, Vermicomposting unit, Solar operated pumps, Integrated farming system coconut, lime, jack and drumstick, Nursery and polyhouse papaya, arecanut and coconut and Utilization of drone in ragi and pigeonpea was organised. Exhibition from KVK, FPO, Input dealers was also organized. Around 650 farmers



(350 women and 300 man) from Kunigal and Tumkur district participated in the field day.

RESEARCH PUBLICATION (>15 NAAS RATING)

GBPUAT, Pantnagar

• Shivvendra Singh, Sumit Chaturvedi, Prayasi Nayak, Vipin Chandra Dhyani, Tony Manoj K Nandipamu, Dhananjay Kumar Singh, Pratibha Gudapaty, Prabhakar Mathyam, Kanchu Srinivasrao, Kasivelu Govindaraju (2023) Carbon offset potential of biochar based straw management under rice-wheat system along Indo-Gangetic Plains of India. *Science of The Total Environment*. Volume 897, 1 November 2023, 165176 (NAAS Rating: 16.88)

FUTURE PROGRAMMES

GADVASU, Ludhiana

Punjab's Maiden Dairy Based Incubation Centre

GADVASU is gearing up to establish Punjab's maiden Dairy-Based Inclusive Technology Business Incubation (i-TBI) Centre at its campus with project cost of ₹ 4.23 crore. The endeavor is set to receive significant financial backing from the Department of Science and Technology (DST). Dairy Innovation and Incubation Centre in the region would boost innovations leading to entrepreneurship and self-

employment in the livestock sector. This initiative aligns with the vision of creating a sustainable and technologically advanced dairy ecosystem.

GBPUAT, Pantnagar

- Center of Excellence development for imparting quality education and conducting cutting edge
 research in the field of crop-weather interaction, pests/diseases-weather interaction, Climate
 Smart Agriculture, Robotics in Agriculture, Agri-Informatics, Climate Change and its Impact on
 Agriculture and Mitigation Measures, Geospatial technologies and their uses in agriculture and
 sustainable natural resources management.
- Agromet advisory services based on medium range weather forecast to the farmers of all districts of Uttarakhand through the District Agromet Unit (DAMU) at KVKs.
- Development of Remote Control Airplane with MSS camera for training purposes and later on to monitor crop data disease identification, crop gap monitoring, soil moisture estimation, etc.
- Prepare District Level Crop Weather Calendars of Major Crops in Uttarakhand.
- Research on alternative performance enhancers for animals.
- Seed production of native minor carps for incorporating in the culture systems along with other carp species.
- Development of fish park in the College.
- Mechanical Engineering -Department is planning to set up 3D printing Laboratory.
- Civil Engineering-M.Tech programme will be started in Transportation Engineering. The programme is already approved.

SKUAST-J, Jammu

- Creation of Agriculture Branding Centre (ABC) and Market Intelligence Cell (MIC) at Main Campus, Chatha of SKUAST-Jammu.
- Low-cost feed formulation for commercially important fishes.
- Development of cost effective progestogen implant for estrus induction in dairy animals.

SKUAST-K, Srinagar

- 66th Research Council Meeting.
- 40th Standing Evaluation Committee (SEC) Meeting.
- 43rd Academic Council Meet to be held.
- 45 days training programme on New Feeds and Feeding Technology in Aquaculture under Vritika Scheme SERB, Govt. of India.
- Kisan Mela 2024.

TANUVAS, Chennai

Tamil Nadu Veterinary and Animal Sciences University has planned to conduct following programmes:

• International Conference on Sustainable Animal Nutrition for Global Health and Production: Innovations and Directions at Madras Veterinary College, Chennai from 23-25 January 2024.

- National Conference on Moving towards Sustainability: Livestock production Systems and Adaptive Strategies in the Era of Climate Change at Madras Veterinary College, Chennai from 01-02 February 2024.
- International Workshop on Molecular Diagnosis of Poultry Diseases from 12-16 February 2024 at Veterinary College and Research Institute, Namakkal.
- National Conference on Optimization of Livestock Farming for Sustainable Development in the Era of Climate Change and 30th Annual Convention of Indian Society of Animal Production and Management 2024 from 22-24 February 2024 at Madras Veterinary College, Chennai.

"Agriculture is the soul of India"

- Mahatma Gandhi