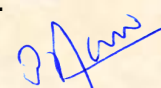


- Fortnight Focus**
- The Events
 - Education
 - Research
 - Extension

From Vice-Chancellor's Desk HORTICULTURAL BIOTECHNOLOGY

Horticulture is the sunrise sector of the Indian economy contributed more than 25-30% of gross value of agricultural inputs. In the last two decades there has been a perceptible shift from cereal based to horticultural crops. Biotechnology has emerged as an important turnover with clear potential which can address the problems of productivity and quality. The major areas of biotechnology which can be adopted for improvement of horticultural crops are Tissue Culture, Genetic Engineering, Molecular Diagnostics, Molecular markers and development of beneficial microbes.

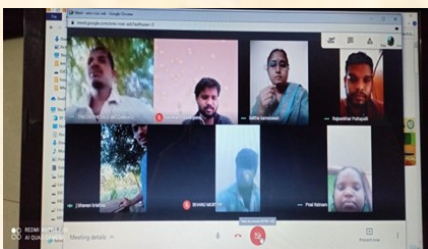
The University has standardized commercial *in vitro* protocols for traditional banana cultivars like Tella Chekkarakeli, Red Banana, Karpoora Chekkarakeli at Tissue Culture Lab, Horticulture Research Station, Kovvur. This centre also standardized the regeneration from male flower bud of banana cv.Karpura Chekkarakeli to scale up the plant material production in this recalcitrant genotype. Molecular diagnosis laboratory for virus indexing bud wood certification programme at Citrus Research Station, Tirupati and DNA finger printing at Citrus Research Station, Tirupati, Horticultural Research Station, Lam & HRS, Kovvur are on going activities of the university.


Dr T.Janakiram
Vice-Chancellor

The Events

World Bee Day

On 20 May 2021, Farmers Advisory Cell, KVK, Venkataramannagudem, Dr. YSRHU and YFA-KVK, Mahaboobnagar, Telanagana jointly organised one day virtual programme on “World Bee Day”. Dr T.Janakiram, Vice-Chancellor, Dr.YSRHU participated as chief guest and addressed the gathering. Dr. B. Srinivasulu, Director of Extension, Dr.YSRHU chaired the programme and stressed the importance of the day, future plan for further expansion and creating awareness among the farmers on importance of honey and bees. Technical sessions followed. Dr. E. KarunaSree, Principal Scientist & Head and Shri. G. Shali Raju, Scientist (Agri. Entomology) coordinated the programme

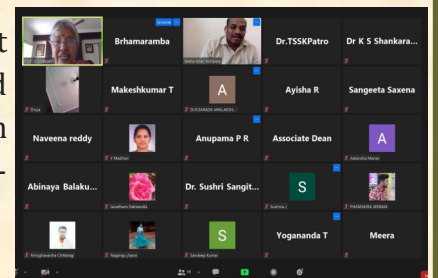


Krishi Vigyan Kendra Pandirimamidi conducted awareness program on “Importance of bee in agriculture and horticulture” on the occasion of World Bee day. Dr.P.Lalita Kameswari, Principal Scientist & Head coordinated the programme.

Education

Special Lecture

Dr.V.G. Malathi, Retired Principal Scientist, Advanced Centre for Plant Virology, Indian Agricultural Research Institute, New Delhi delivered a talk on "Pathogenesis of Whitefly transmitted Begomoviruses" on 28 May, 2021 for Postgraduate students of Plant Pathology and Entomology Departments, College of Horticulture, V.R.Gudem.



Under adopted Village programme Dr.K.Swarajya Lakshmi, Dr.Ch.Ruth and Dr.Chandramohan Reddy, CoH, Anantharajupeta have conducted awareness programme on “Nutri Garden” at Nagavaram an adopted village on 18 May 2021.



Research

Dr. D. Aparna, Senior Scientist (Horticulture), HRS, Venkataramannagudem conducted Betelvine hybrid evaluation trial under Multi location testing where Dr YSRHU released state variety Swarna kapoori recorded the highest number of branches (4.58) and overall leaf yield per vine (60.49 leaves) followed by newly released hybrid HY-09-16 (48.83 leaves) from IIHR.



Dr.T.Janakiram, Vice-Chancellor along with Dr.R.V.S.K.Reddy, Director of Research visited mango garden of Sri.P.Srinivas with cauliflory and local mango varieties at Edupugallu on 17 May 2021. Dr.B.K.M.Lakshmi, Principal Scientist (Plant Pathology) & Head, MRS, Nuzvid, HO, Lakpathy coordinated the programme.

Scientists of HRS, Lam collected bottle gourd disease specimens with stem splitting and oozing of gum from effected portion were collected from farmers field and *Fusarium* sp. was isolated. The fungus, *Fusarium* at species level needs to be identified.



Fusarium Sp colony

Mycelium of Fusarium sp

Micro and macro conidia of Fusarium sp

A greater yam selection from kovvur local which was coded as TGY 14-11 and evaluated in AICRP trials has been recommended for state release in Andhra Pradesh during the 21st Annual group meeting of AICRP on tuber crops held from 27 to 28 May 2021.



Dr D. Aparna, Senior Scientist (Horticulture), HRS, Venkataramannagudem collected three new *Bacopa monneri* germplasm accessions and kept for evaluation which established well at HRS.

Dr D. Aparna, Senior Scientist (Horticulture), HRS, Venkataramannagudem collected *Decalepis hamiltonii* seeds from fruits having variability in shape, size, colour and maturity levels which are kept for germination had shown better germination percentage at CEPC.

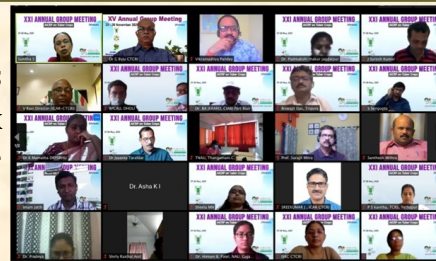


Meetings

Dr K.T.Venkata Ramana, Principal Scientist (Horticulture) & Zonal Research Head, Dr T. Naga Lakshmi, Scientist (Plant Pathology) and Dr Y.Sharat Kumar Reddy, Scientist (Pl. Physiology), HRS, Anantharajupet, Dr D.Srinivasa Reddy, Senior Scientist (Entomology), Dr T. Rajasekharam, Senior Scientist (Plant Pathology), CRS, Tirupati attended Webex meeting on SCSP implementation programme and development of Mobile App by the Plant Protection Scientists with Project Coordinator, ICAR-AICRP on Fruits on 25 May 2021.

Dr T.Rajasekharam, Senior Scientist (Plant Pathology), CRS, Tirupati attended online SLTP-2020-21 Plant Pathology and SLTP-2020-21 Entomology, ANGRAU through Zoom on 26 & 28 May 2021, respectively for finalizing the research programme for PG students.

Dr K Mamatha, Principal Scientist (Horticulture), HRS, Kovvur participated in the 21st Annual group meeting of AICRP on tuber crops on virtual mode from 27 to 28 May 2021 and presented the work done report pertaining to HRS, Kovvur and HRS Peddapuram for the year 2020-21 and acted as rapporteur for technical session II and presented the proceedings.



Dr.C.Sarada, Principal Scientist (Hort) & Head attended DPC meeting at ANGRAU as member of committee on 28 May 2021.

Scientists of AICRP on MAP & Betelvine participated in midterm review meeting, and Dr. P. Rama Devi, Principal Scientist (PP) & Head presented the work done under Horticulture, Plant Pathology and Entomology for the year 2021-21 on 19 May 2021.

Extension Activities

Training Programmes

On 17 May 2021, Sri Bhanumurthy K.C, Scientist (Horticulture), KVK, Pandirimamidi has attended as resource person for virtual training program on “ICM Practices in Cashew” for progressive farmers and VHAs/VAAAs at RBK level through DRC, East Godavari district. Addressed the trainees on cashew varieties, young orchards management, integrated nutrient management, integrated pest and disease management, flower and fruit drop. About 178 farmers, VHAs/VAAAs, H.Os have participated.

Dr. B. Vijayasree, RA, KVK, Periyavaram visited Anganwadi center and Raithu Bharosa Kendram (RBK) and created awareness on care to be taken during the COVID-19 period by incorporating herbal drinks (Immunity boosters) in our regular diet every day.



KVK, Venkataramanangudem conducted the following virtual training programmes during the second fortnight of May 2021.

Date	Training Programme	No.of participants	Coordinated by
24 May 2021	ICM in pulses	41	Dr.E.KarunaSree PS & Head and Dr.V.Deepthi, Scientist (Agri. Extension)
28 May 2021	Water conservation technologies	26	Dr.E.KarunaSree PS & Head and Dr.V.Deepthi, Scientist (Agri. Extension)
29 May 2021	Farm made feeds – Formulations and preparations	26	Dr.E.KarunaSree PS & Head and Dr.A.Devivaraprasad Reddy, Scientist (Fishery Science)
	Improved backyard poultry	25	Dr. T. Vijaya Nirmala, Scientist (Veterinary Science)

Date	Training Programme	No.of participants	Coordinated by
29 May 2021	Importance of bio fertilizers and Rugose spiraling whitefly management in orchards	79	Dr.E.KarunaSree Principal Scientist & Head and Dr.V.Deepthi, Scientist (Agri. Extension)
31 May 2021	Capacity Building Programme on “Improved cultivation practices in Acid lime”	60	G.Shaliraju, Scientist (Entomology) and Dr. K. VenkataSubbaiah, Scientist (Horticulture)

Dr M.Kavitha, Senior Scientist (Plant Pathology) and Dr L.Ranjith Kumar, Scientist (Entomology), CRS, Petlur attended as resource persons for training programmes conducted by District Resource Centre, SPSR Nellore district under capacity building to VAAs, VHAs & VSAs through online on “Pest & Disease management in Horticultural crops” on 19, 20, 22 & 28 May 2021 pertaining to different mandals of Nellore district.

On 21 & 26 May 2021, Dr N.B.V.Chalapathi Rao, Principal Scientist (Entomology), HRS, Ambajipeta participated in crop wise virtual training programme for controlling measures of Rugose spiraling white fly on coconut & other Horticultural crops organized by Department of Horticulture, Amalapuram.

Dr. P. Rama Devi, Principal Scientist (Plant Pathology) & Head, HRS, VR.Gudem attended a virtual training programme to farmers as resource person and delivered a lecture on “Importance of bio fertilizers in orchards” organized by KVK, V.R.Gudem on 29 May 2021.

Dr. M. Ravindra Babu, Senior Scientist (Horticulture), HRS, Venkataramanangudem attended a virtual training programme for VHAs, Kakinada Zone of E.G.Dist as resource person and delivered a lecture on “Cultivation aspects of vegetables” on 19 May 2021 organized by AIMA and Department of Horticulture.

Dr. M. Ravindra Babu, Senior Scientist (Horticulture), HRS, Venkataramannagudem attended a virtual training programme for VHAs and VAAs of Amalapuram division of E.G.Dist as resource person and delivered a lecture on “Cultivation of Vegetables on permanent pendals” on 25 May 2021 organized by AIMA and Department of Horticulture.

Dr. M. Ravindra Babu, Senior Scientist (Hort.) attended a virtual training programme for VHAs and VAAs of Amalapuram division of E.G.Dist as resource person and delivered a lecture on “Cultivation of intercrops and fertilizer management in coconut gardens” on 26 May 2021 organized by AIMA and Department of Horticulture.

Soil Samples

On 27 May 2021, P Raja Sekhar, Scientist (SS&AC), KVK, Pandirimamidi visited Ummetha village of Gangavaram mandal and collected composite soil samples in Tobacco fields.



Diagnostic Visits

On 29 May 2021, Dr. V.Govardhan Rao, Scientist (Plant Pathology), HRS, Ambajipeta carried out a diagnostic field visit in coconut gardens at Billakurru village, Kothapeta mandal of East Godavari district.



Scientist of HRS, Anantharajupeta observed incidence of PRSV in papaya field at farmers field at Raghavarajapuram village (Virtually). For management of PRSV in Papaya, farmers were advised to spray imidachloprid @ 0.3 ml per litre of water, Zinc @2 g, Boran @ 1g and Urea @10 g per litre of water.

Dr.G.Sravanthi, Scientist (Ento.), MRS, Nuzvid visited mango gardens at Adavinekkala and Pothavarappadu on 18 May 2021 for survey and evaluation of fruitfly damage and advised farmers regarding measures to be taken to prevent damage along with installation of methyl eugenol traps.



Dr.B.K.M.Lakshmi, Principal Scientist (Plant Pathology) & Head, MRS, Nuzvid visited Acid lime gardens at Chillaboyanapalli, Musunuru (M) on 25 May 2021 for diagnosis regarding drying of acidlime plants garden after chemical spray along with ADH, ADA, Local HO and field staff.

On 25 May 2021, P Raja Sekhar, Scientist (SS&AC), KVK, Pandirimamidi visited sesame field which was sown during the second fortnight of March at East Lakshmipuram village of Eleswaram mandal. Observed poor vegetative growth due to delayed sowing and moisture stress and suggested the farmers to go for early sowing in the month of January or February and also to spray urea @ 1% to mitigate the drought condition.



On 28 May 2021, Dr. N. Chiranjeevi, Research Associate (Plant Pathology), KVK, Pandirimamidi visited mushroom production unit of Sirimalli Reddy (Rural Youth) at I. Bheemavaram village of Maredumilli mandal and suggested common management practices followed in mushroom production.

On 21 May, 2021, Dr. P Manjari, Scientist (Veterinary Science), KVK, Periyavaram visited poultry farm and observed that birds of 2 months age were lethargic and showed pecking. Suggested the farmer that the condition was due to summer stress and vitamin deficiency and advised to use multi vitamin solution like groviplep or vimeral for boosting immunity and fighting heat stress in summer. Also suggested to go for debeaking of birds to stop pecking problem.



On 29 May 2021, Dr. K Mallikarjunarao, Research Associate (Horticulture), KVK, Periyavaram visited okra field at Gajulapalli village of Balayapalle mandal and identified whitefly and YVMV disease and recommended to rogue out virus affected plants followed by spraying of acephate @1.5g/l.



Method Demonstrations



On 19 May, 2021, KVK, Pandirimamidi conducted a method demo for mango farmers about Low cost ripening unit to ripen their mango at farm level (Small scale) and to get quality fruits with uniform colour using ethylene gas (100 ppm per 1 cubic metre @ 250 kg) instead going for banned calcium carbide which is carcinogenic. K.C.Bhanumurthy, Scientist (Horticulture) coordinated the programme.

Phone-in-live programme

Dr.M.G.Bala Hussani, Senior Scientist, HRS, Madanapalle, "Cultivation of Tomato in Summer" at All India Radio, Vijayawada on 17 May 2021.

Dr.D.Sreedhar, Scientist (Horticulture), HRS, Anantharajupeta "Cultivation of Flower Crops in Summer Season" at All India Radio, 27 May 2021.

Phone-in-Programs under Farmers Advisory Cell of Dr YSRHU

Dr YSRHU-Farmers Advisory Cell organized the following Phone-in-Programs during the first fortnight of May (3-4 PM).

Date	Activities
17.05.2021	పాడి పశువులలో సంభవించే వివిధ వ్యాధుల యాజమాన్యం Dr.T.Vijayanirmala, Scientist, KVK, V.R.Gudem
18.05.2021	కర్ర పెండలంలో ఎరువుల యాజమాన్యం Sri M.Sattiraju, Principal, SKPP Horticultural Polytechnic, Ramachandrapuram
19.05.2021	తీగజాతి కూరగాయల సాగులో మెళకువలు Sri K.C.Bhanumurthy, Scientist, KVK, Pandirimamidi
20.05.2021	పసుపు సాగులో తీసుకోవలసిన జాగ్రత్తలు – వాటి ఉపయోగాలు, ఉత్పత్తులు Dr.K.Giridhar, Sr.Scientist, HRS, Lam
21.05.2021	ఉల్లి సాగులో మేలైన యాజమాన్య పద్ధతులు Dr.Ch.Ruth, Professor, CoH, Anantharajupeta
22.05.2021	నిమ్మ సాగులో మెలకువలు Dr.C.Madhumathi, Principal Scientist & Head, CRS, Petlur
24.05.2021	మిరపలో సమగ్ర యాజమాన్యం Dr.C.Venkataraman, Sr.Scientist, HRS, Lam

Date	Activities
25.05.2021	జీడిమామిడి తోటల యాజమాన్యం Dr.K.Rajendraprasad, Scientist, HRS, Pandirimamidi
26.05.2021	దానిమ్మ సాగులో సస్యరక్షణ Dr.K.Subramanyam, Principal Scientist & Head, HRS, Mahanandi
27.05.2021	పుట్టగొడుగుల సాగు Sri G.Shaliraju, Scientist, KVK, V.R.Gudem
28.05.2021	సేంద్రియ పద్ధతులలో కూరగాయలు, పండ్ల పెంపకం Dr.V.N.P.Sivaramakrishna, Associate Professor, CoH, Anantharajupeta
29.05.2021	గ్రామీణ ప్రాంతాలలో మహిళలు మరియు పిల్లలలో పోషకాహార సమస్యలు – నివారణ, Dr.E.Karunasree, Principal Scientist & Head, KVK, V.R.Gudem
31.05.2021	చీని, నిమ్మలో ఎరువుల యాజమాన్యం Dr.B.Govindarajulu, Principal Scientist & Head, KVK, Periyavaram

“Udyana Vani” programs under Farmers Advisory Cell of Dr YSRHU

Dr YSRHU-Farmers Advisory Cell organized the following “Udyana Vani” Programs during the second fortnight of May, 2021.

Date	Activities
17.05.2021	అరటి సాగులో మేళకువలు
18.05.2021	పెరటి తోటల పెంపకం
19.05.2021	బొప్పాయి మరియు జామ సాగులో మేళకువలు
20.05.2021	మిరప సాగులో మేళకువలు
21.05.2021	రబ్బర్ తయారీలో మేళకువలు
22.05.2021	కోవిడ్-19 వ్యాప్తి నేపథ్యంలో తీసుకోవలసిన జాగ్రత్తలు
24.05.2021	కార్నేషన్ సాగులో మేళకువలు
25.05.2021	జీవ నియంత్రణ పద్ధతుల ద్వారా హానికారక పురుగుల నియంత్రణ
26.05.2021	జీవన ఎరువులు మరియు వ్యవసాయంలో వాటి ప్రాముఖ్యత
28.05.2021	భూసారం, సాగు నీరు మరియు పంట మొక్కల పరీక్షల విధానం – ఆవశ్యకత
29.05.2021	బొప్పాయి మరియు పనస సాగులో మేళకువలు
31.05.2021	సమస్యాత్మక భూములు వాటి యాజమాన్యం

“Udyana Mitra” programs under Farmers Advisory Cell of Dr YSRHU

Dr YSRHU-Farmers Advisory Cell organized the following “Udyana Mitra” Programs during the second fortnight of May, 2021.

Date	Activities
27.05.2021	Best management practices in jack fruit by Dr P. Ashok, Senior Scientist (Horticulture), HRS, Venkataramannagudem
	Medicinal plants cultivation in Kharif for Andhra Pradesh by Dr D. Aparna, Senior Scientist (Horticulture), HRS, Venkataramannagudem
28.05.2021	Rugose whitefly management on coconut by Smt. P. Sunitha, Scientist (Entomology), HRS, Venkataramannagudem
29.05.2021	Importance of bio-fertilizers in organic farming by Dr P.Rama Devi, Principal Scientist (Plant Pathology) & Head, HRS, V.R.Gudem

Publications

Suneetha Runjala, V Nagarjuna, G Sandeep Naik, V Yugandhar and Srividya Rani N (2021) Study on effect of triple layer hermetic bags in seed storage system at domestic level. The Pharma Innovation (10), 518-522.

V Nagarjuna, G Sandeep Naik, V Yugandhar, Suneetha Ranjula and Srividhya Rani N (2021) Studies the effect of integrated crop management practices in turmeric for getting sustainable yield in Mydukur division of YSR Kadapa district. The Pharma Innovation (10), 919-922.

V Yugandhar, V Nagarjuna, G Sandeep Naik, Suneetha Ranjula and Srividhya Rani N (2021) Studies the effect of bunch management in yield and quality of banana Cv. Grand Naine (AAA). The Pharma Innovation (10), 1264-66.



Patron: **Dr T.Janakiram**, Vice-Chancellor

Editors: **Dr B. Srinivasulu**, Director of Extension

Dr R.V.S.K.Reddy, Director of Research

Dr K.Gopal, Registrar

Sub-Editor : **Sri K.Ratna Kishore Babu**, Public Relations Officer

Dr Y.S.R. Horticultural University

Administrative Office, Venkataramannagudem-534 101,

West Godavari district, Andhra Pradesh

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