



RASS-Krishi Vigyan Kendra

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KRISHI e-Newsletter

Volume:1

January - March 2023

No:9

Significant Activities:

Awareness cum demonstrations on usage of Drones in Agriculture

KVK has conducted 193 demonstrations (December 2022 to February 2023) on usage of drones for pesticide sprayings in different crops to create awareness to farmers in Tirupati and Chittoor districts under Agriculture Drone Project (ADP), 2022-23. Demonstrations were conducted in Paddy, groundnut, blackgram, greengram, sesame, sunflower, chillies, tomato, tuberose, marigold, mango and lemongrass in an area of 724 acres and created awareness on drone technology to 825 farmers in both the districts. Different formulations like insecticides, fungicides, nutrients, neem oil, infusions of natural farming, pre and post emergence herbicides were sprayed using drone.

Advantages of using drone for pesticide spraying: less time – one acre can be sprayed in 6-8 min., less chemical – 80% of the recommended dose as suggested by ANGRAU, more area coverage - 30 acres can be sprayed in a day using drone, spraying operation is easy for crops like sugarcane, sunflower and orchard crops, effective pest, disease, weed control, uniform spraying is possible.

Disadvantages: Quick discharge of batteries, non availability of charging points for charging in the fields at village level, required more number of batteries for uninterrupted spraying (high cost of batteries), lack of licensed pilots for drone operation.

S.No	Name of the Mandal	Area (Acres)	Crops sprayed
1	Renigunta	40	Mango, paddy
2	Vadamalapeta	97	Paddy, Blackgram, sugarcane,
3	Nindra	58	Blackgram, greengram
4	Srikalahasti	158	Paddy, groundnut
5	Nagari	26	Sunflower
6	Puttur	15	Mango, sunflower
7	Tirupati Rural	51	Paddy, groundnut, sesame
8	Pichatur	91	Sunflower, groundnut, paddy
9	K.V.B Puram	48	Paddy, sugarcane, lemon grass
10	Thottambedu	39	Groundnut, paddy
11	Yerpedu	83	Paddy, sugarcane
12	Chinnagottigallu	18	Paddy, groundnut, mango, tomato, muskmelon
Total		724	



KVK also purchased one drone from Garuda Aerospace Private Limited, Chennai and in a plan to operate in the villages on hire basis. The drone formally inaugurated by Dr.C.Ramana, Associate Director of Research, RARS, Tirupati, Sri. S.Venkataratnam, General Secretary, RASS and Dr.A.R.Reddy, Principal Scientist, ATARI, Hyderabad in the presence of other SAC members on 02.03.2023.

“Radio Kisan Diwas and awareness programme on millets”

KVK hosted ‘Radio Kisan Diwas and Awareness Programme on Millets and their importance’ organized by All India Radio, Tirupati as a part of International Year of millets on 15.02.23. Experts stressed the importance of millets in daily diet, good agricultural practices for millets, urged the farmers to grow millets as they are less water consuming crops, requires low cost of cultivation, importance given by the state and central governments by supporting through minimum support price for millet crops. Dr. Hemanth Kumar, Principal Scientist and Head (Retired), ARS, Perumallapalli, Sri.Sudhakar Mohan, Programme Executive and Sri.B.Venugopal Reddy, Programme Officer, All India Radio, Tirupati, Dr.Hemalatha, Dr.Madhavilatha, Scientists, ARS, Perumallapalli, KVK scientists and 72 farmers from different mandals were participated in the programme.



Scientific Advisory Committee Meeting

KVK has organized Scientific Advisory Committee (SAC) Meeting under the chairmanship of Sri.S.Venkataratnam, General Secretary, RASS at KVK campus. The committee members visited demonstration units at instructional farm, millet exhibition stall, inaugurated and demonstrated on usage of drones in agriculture and released publications (Fodder crops cultivation and Lampi skin disease annagement) developed by the KVK. Dr. S.Sreenivasulu, Sr. Scientist and Head has presented work done report of KVK for 2022-23 and action taken report against SAC meeting of 2021-22. Later All Subject Matter Specialists were presented work done for the year 2022-23 and proposed action plan for 2023-24 by using power point presentation. Dr.C.Ramana, Associate Director of Research, RARS, Tirupati, Dr. A.R.Reddy, Principal Scientist, ICAR-ATARI, Hyderabad, Dr.V.Visalakshi, Principal Scientist, Office of Director of Extension, ANGRAU, Lam, Guntur, DDM, NANARD, LDM, Tirupati, all line department officials, farmer representatives were participated and actively discussed about action plan for the coming year.



Skill training programmes

KVK has conducted 27 days long duration (210hours) programmes on 'Small Mushroom Grower', 'Small Organic Cultivator', and 'Backyard Poultry Farmer' to rural youth at KVK with the support of Agriculture Skill Council of India (ASCI) from 6th March to 2nd April. The programme was inaugurated by Dr.C.Ramana, ADR, RARS, Dr.A.R.Reddy, Principal Scientist, ATARI, Hyderabad and Dr.V.Visalakshi, Principal Scientist, Office of Director of Extension, ANGRAU, Lam, Guntur on 02nd March.

The main objective of the programmes is to update the knowledge and skills involved in the concerned aspects and make them establish their own units in the villages for income generation. Long duration training programmes includes class room trainings, practical demonstrations, exposure visits to research stations, progressive farmers fields and entrepreneur units.



Exposure visits

RASS KVK has organized a two days exposure visit to farmers with the support of Agriculture Technology Management Agency (ATMA), Chittoor during 14-15th March, 2023 to RARS, Maruteru and KVK, Undi, West Godavari district.

During the visit to RARS, farmers were enlightened about history, activities and implementing projects, high yielding paddy varieties released from the station and their performance, management practices to be followed in paddy for better yields, paddy seed production, Integrated Farming System, management of vertebrate pest, rodents, monkeys and wild bores. During the visit to KVK, farmers were got the knowledge on mandate activities, honey bee production, usage of drones in agriculture, production technologies of millets and their value addition etc.



Dr.M.V.Krishnaji, Senior Scientist, Plant Pathology, Dr.Sunitha, Principal Scientist, Plant Breeding and Dr.N.Sreenivas Rao, Principal Scientist, Entomology and Dr.M.Sreenivas, Principal Scientist, Agronomy (RARS), Dr. Debora Messiyana, SMS, Home Science, Dr.Rajesh, SMS, Entomology, Dr.Vinaya Lakshmi, SMS, Agronomy (KVK) were briefed about the activities to the farmers. Sr.Scientist & Head, and SMS, Agronomy, farmers from RC Puram, Tirupati rural, Nindra, Vadamalapeta and Yerpedu mandals were attended the visit.

KVK has also organized an exposure visit to farmers on 20.03.2023 to Center of Excellence and Regional Extension Center, Kuppam.

During the visit to Center of Excellence, Smt. Anitha, Horticulture Officer, CoE and Smt. Dimpu Priya, Mandal Horticulture Officer, Kuppam were explained about Nursery production of grafted vegetables and its cultivation under poly house, multiple cropping systems and collection centers established by Farmer Producer Organization at Center of Excellence, Kuppam.

During the visit to Regional Extension Center, Sri. Hanumantha Naik, Assistant Director Sericulture, Sri.J.Hampaiah, Sericulture Officer were explained tree plantation system in mulberry, construction of low cost rearing sheds, Water harvesting stricter, pest and disease management in mulberry and silk worm rearing, Precautions to be taken for protection against seasonal diseases in sericulture etc.



PM Kisan Samman Nidhi

Live telecasted 13th instalment of PM KISAN fund release (27.02.23) by Hon'ble Prime Minister from Bulgeri, Karnataka. On this occasion farmers were enlightened on PM KISAN fund and its utilization for agricultural operations, performance of new varieties that are demonstrated in the farmers fields etc. Sr.Scientist & Head, SMS, Agronomy and Ag Extension, MPTC, Sarpanch, RBK director and farmers were participated.



In the mid-night of 20th March, 2023 (Monday) at least 3 elephants had entered the agricultural and horticultural farms of our KVK. The elephants have entered from western side of the farm by tampering the barbed-wire fencing. And, it is heartening to see that almost the entire 24.61-acre farm of the KVK in that area, which is surrounded by Chaitanyapuram village. The loss of crops/trees comprise of 10-12-year-old 250 mango trees, a coconut tree, groundnut seed production field in 1.5 acres, tube-rose crop in 1.0 acre, chilly crop in 1.5 acres, marigold crop in 0.5 acre; drip-irrigation and pipeline system installed across the entire farm; bore-well and starters, and damage to barbed-wire fencing. The loss of crops/trees and other equipment is estimated at over Rs.5.25 lakhs. The severity of the damage has created panic in the villagers, and the staff working and residing in the campus of the KVK and have made representations to the officials of Forest Department and Agricultural Department for appropriate actions at their end to instill to curb the reoccurrence of the menace and instill confidence in the villagers and dedicated staff of the KVK.



- ▶ Sr.Scientist & Head participated in Research and Extension Advisory Council (REAC) meeting at Agricultural College, Bapatla on 6th and 7th January 2023 and emphasized about problems prevailed in the district like farm machinery requirement for groundnut and sugarcane crops, gall midge and bacterial leaf blight in paddy and requirement of capacity building on drone technology for KVK scientists.
- ▶ Sr.Scientist & Head attended monthly T&V meetings (16th February and 18th March) conducted by RARS, Tirupati and briefed about field problems prevailed in the district.
- ▶ All KVK scientists participated in Pre ZREAC meeting and presented work done report for the year 2022-23 and action plan for the year 2023-24 at RARS, Tirupati.

KVK Scientists attended as resource persons

- ▶ Sr.Scientist & Head attended as resource person in Rythu Runa Mela programme organized by RASS at Papanaidupet, Yerpedu mandal and briefed about KVK activities, emphasized about use of drones in agriculture, pest and disease management in paddy etc.
- ▶ SMS, Horticulture attended as resource person and delivered presentation on production technologies of rose and jasmine (22.01.2023) to input dealers under DAESI programme organized by ATMA
- ▶ SMS, Horticulture attended as resource person and delivered presentation on climate change agriculture to farmers under NGO programme organized by NABARD (28.01.2023)

Mandated Activities

Particulars	No. of Progs.	No. of Beneficiaries
Trainings - PF	17	792
Trainings - EF	02	119
Trainings -RF	03	59
Trainings -SD	03	75
OFTs	03	20
FLDs	06	91
Field days	02	45



Other Extension Activities

Radio Talks:

► Value added products with millets - SMS (Home Science)

Field visits : 20 visits, 189 farmers - suggested suitable management practices and plant protections measures to farmers in different crops

Farmers visit to KVK : 31 visits, 386 farmers for seed, seedlings and to know about new technologies in different crops

Method Demonstrations : 20 demos, 447 farmers

Exhibitions : 1 stall, 407 farmers

Animal Health Campus : 1 camp, 77 farmers

Exposure Visit : 4 visits, 140 farmers

Special programmes : 4 programmes, 340 farmers



Supply of seed & seedlings

Paddy	: 28 Q
Sesame	: 3.02 Q
	in No's
Chilli	: 62560
Brinjal	: 17000
Tomato	: 22000
Marigold	: 2400
Medicinal plants	: 922
Mulberry	: 4500

KVK has analyzed 2276 soil samples and supplied soil health cards to farmers



Number of phone calls received by KVK scientists: 412

