



KRISHI VIGYAN KENDRA

Hirehalli, Tumkur, KARNATAKA



ICAR - INDIAN INSTITUTE OF HORTICULTURAL RESEARCH
BENGALURU



NH-4, Hirehalli, Tumkur -572 168

Ph : 0816-2243175 Fax : 0816 -2243177

E-mail : iihrkvk@gmail.com Website : www.iihrkvk.org

BACKGROUND

Krishi Vigyan Kendra (KVK), Hirehalli, was established by the Indian Council of Agricultural Research (ICAR), New Delhi on 24th March, 2009. It is located opposite to Hirehalli railway station, in the NH-4 main road, about 10 k.m from Tumkur towards Bangalore. The major aim of the KVK is to cater to the needs of farmers of Tumkur District, covering five out of ten taluks viz., Pavgada, Sira, Madhugiri, Koratagere, (Central Dry Zone IV) and Tumkur (Eastern Dry Zone V). This KVK is functioning under Indian Institute of Horticultural Research (IIHR), Bangalore.

MANDATE

Main mandate of the KVK is assessment, refinement and demonstration of technologies/products.

ACTIVITIES OF KVK

The major activities of the KVK are given below:

- On-farm testing to identify the location specificity of agricultural technologies under various farming systems.



- Frontline Demonstrations to establish production potential of technologies on the farmers' fields



- Training of farmers to update their knowledge and skills in modern agricultural technologies, and training of extension personnel to orient them in the frontier areas of technology development.



- To work as resource and knowledge centre of agricultural technology for supporting initiatives of public, private and voluntary sector for improving the agricultural economy of the district.
- In order to create awareness about improved technology, a large number of extension activities will be taken up.



- The seeds and planting materials produced by the KVKs will also be made available to the farmers.



FACILITIES AT KVK

❖ General Facilities :

☐ Infrastructure/Buildings:

The KVK has very well developed administrative building having training hall, library and office space.



❑ Farmers' Hostel

The KVK has a farmers' hostel that can accommodate more than 30 farmers' at a time. The facilities are also available on nominal charges to outside farmers who visit us during study tours.



❑ KVK Sales Counter

One of the mandates of KVK is to provide genuine and good quality seed/planting materials. To fulfill this object KVK has exclusive sales counter to sell all the KVK and Farm Products.



❑ Automatic Weather Station / Meteorological Unit

This automatic weather station at KVK records daily minimum & maximum temperature, humidity, rainfall, evaporation rate etc. It also provides information for weather forecasts and agro advisory based on the forecast. This data can be made available to farmers on demand, free of cost for working out the water requirements of the plants & prediction of plant diseases due to changes in weather.



❑ Farm Machinery Unit

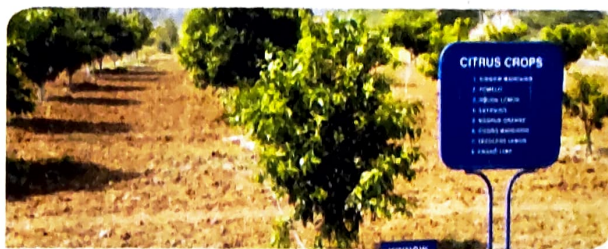
Farm Machinery Unit of K.V.K. Hirehalli has following Machinery and equipments. viz - Tractor, Power-tiller, trailer, water tank and farm implements like Rotovator, disc plough, chisel plough cultivator, etc. These above machineries

and Implements are used for farm-operation, as well as for demonstration to farmers.



❖ Instructional Farm :

The KVK possesses about 50 acres of farm land that is fully under cultivation of crops relevant to this area. The main purpose of the farm is to demonstrate the latest agricultural practices. It also acts as a tool to do applied research on agricultural technologies and undertake trials before their transfer to farmers' fields. After careful planning and analysis of soil types, the farm was divided into three major blocks such as Horticulture, Seed Production and Nursery unit. Thereafter, planting of mother plants of horticulture crops such as mango, sapota, guava, amla, custard apple, pomegranate, figs etc was undertaken. In seed production block, crops like french beans, onion, radish, cowpea, tomato and chili are being grown. Now the entire farm is operated on drip irrigation system for which the water storage tank of 1 Lakh Litres capacity has been established.



❖ Production/Processing Units :

❑ Micro Nutrient Production Unit

Due to excessive use of DAP fertilizers and introduction of high yielding cultivars, deficiency of micronutrients has become a major problem in the farmers' fields. However, very few farmers use micronutrient fertilizers. Balanced nutrition is very important for high yield, quality and resistance to diseases. Hence, foliar spray comprising secondary and micronutrients viz., Magnesium, Sulphur, Zinc, Boron, Iron, Copper, Manganese and Molybdenum is important. To meet farmers' demand, KVK is producing micronutrient formulations as Banana, Vegetable, Mango and Citrus Special and making them available to the farmers through sales counter.



❑ Mango Fruitfly Trap Production Unit

Bacteroara SPP is a major pest in Mango orchard. As a monitoring tool for Fruitfly, a convenient polythene sachet trap using plywood impregnated with pheromone chemical and insecticide was developed by IHR. To meet the farmers' demand, KVK, Hirehalli is producing the same in large scale.



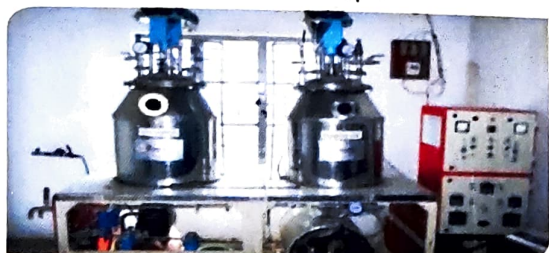
❑ Biological Products Unit

KVK, Hirehalli is producing different biological products such as Arka Microbial

Consortium, Neem and Pongamia Soap and bio control agent for the benefit of farmers.

● Arka Microbial Consortium

In horticultural production, overuse of mineral fertilizers, pesticides and inadequate management practices of soil, can significantly affect the soil quality by changing their physical, chemical, and biological properties. Arka Microbial Consortium is a combined application of microbial products (N fixer, P solubilizer and growth promoter) which had better results than single microbial product for the sustainable production of vegetables and other crops.



● Neem and Pongamia Soap

These are prepared from the respective oils and are in the form of concentrates which can be diluted easily when required and sprayed. The shelf life is about three months. These products help in controlling pests and diseases of various field crops.



● Bio Control agents

Biological Control agents such as *Trichogramma chilonis* are produced in this units and supplied to farmers as Tricho cards. Other important Bio Control agents, sticky traps etc. are also available for farmers.



□ Seed Production Unit

Institutes like Indian Institute of Horticultural Research (IIHR, Bangalore), University of Agricultural Sciences, Bangalore, have umpteen numbers of potential varieties/hybrids known for their high yield and other nutritional benefits. These are being regularly produced at our farm and sold at reasonable price. On an average, 3000 kg quality seeds are being produced and sold every year from farm.



□ Seed Processing Unit

A seed-processing unit has been established having a capacity of processing one tone per hour. The main aim of this unit is to promote the participatory seed production with farmers in Tumkur district, which will benefit both producers as well as the buyers. Those farmers who wish to take up seed production may register their names with the KVK and receive the benefit.



□ Green House and Shade House

The KVK has constructed two green houses which are naturally ventilated. They are meant for cultivation of flowers and vegetables under protected condition. There are three shade houses meant for nursery purpose.



□ Model Nursery

The KVK has a government recognized nursery over 0.2 ha area. Farmers can purchase grafts and seedlings of fruits and plantation crops.



□ Medicinal Plants Nursery

The main emphasis of this unit is to multiply the important medicinal plants which are having high demand in Tumkur district. Important medicinal Plants such as Amla, Tulasi, Aloe vera, etc., are being multiplied here and sold to farmers.



❑ Food Processing Unit

To achieve sustainable income from agriculture, value addition is an important factor in which small scale food processing units play a major role. Hence, demonstrations on processing and value addition to farm produce is being conducted through training programmes.

❑ Amla Processing Unit

Amla can be easily processed into various products such as squash, powder, salted supari, candy, murabba, pickle etc. However the nutritive and health benefits have to be transferred to farmers/farm women/youth/school children through demonstration and trainings as they are not aware of the benefits of Amla. In view of the aforesaid, it is now proposed to promote usage of amla through demonstrations-cum-trainings on its value addition.



❑ Mushroom Spawn Production Unit

For farmers who wish to cultivate mushroom, spawn may be obtained from this unit. All facilities have been created here to produce different kinds spawn, mushrooms and being sold at reasonable rates.



❑ Arecanut Plate Production Unit

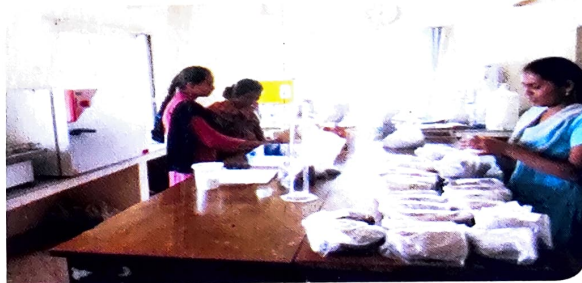
Arecanut is grown in large area in Karnataka, mainly for nuts and the leaves are wasted or used for firewood purpose.

KVK has started making plates from arecanut leaves by using latest technologies. These arecanut plates are eco-friendly and bio degradable in nature.



❖ Laboratories :

- ❑ **Soil, Water and Leaf Testing Lab :** In this well equipped laboratory, samples of soil, water, petiole (leaf), and fertilizer/manure can be analyzed using advanced facilities like Atomic Absorption Spectrophotometer, at reasonable rates. The laboratory is supported with computer software for more precise interpretation of results. Every soil sample is analyzed for eight parameters such as pH, Electric Conductivity, Organic Carbon, available Nitrogen, available Phosphorus & Potassium, Exchangeable Sodium, Calcium, Magnesium, Zinc, Copper, Iron, & Manganet content.



- ❑ **Plant Health Clinic:** The KVK has established a plant health clinic that provides farm consultancy services with regard to pests and diseases. Farmers may visit us with their queries or write to us for guidance.



SERVICES OFFERED BY KVK

Following are services offered by the KVK.

- **Training Programmes:** Interested farmers may register their names with the KVK either personally or through phone or e-mail for the training that he/she wishes to attend. The KVK is also arranging off-campus training on desired topics in farmer's villages. For such trainings minimum 25 farmers from the same village need to participate. Special trainings can also be arranged for organizations on topics of their choice.



- **Participation in Extension Activities:** Farmers can participate in extension activities like Kisan melas, study tours, field days organised by KVK by prior registration.



- **Consultancy:** Farmers may interact with the scientists at the KVK and get consultancy on issues related to agriculture, allied fields and information on advanced agricultural technologies.



- **Source of Information:** Farmers can get information on weather, pest and diseases forecast, government schemes etc, in the form of mobile SMS from the KVK. Accordingly they can decide on their agricultural activities and future plans.
- **Availability of Infrastructure:** Other organizations that wish to conduct trainings for the farmers can use our class rooms and audio visual aids on nominal charges.
- **Demonstration Units:** Farmers can visit KVK, its instructional farm and demonstration units on greenhouses, nursery, mushroom, bio-fertilizers, micro-nutrient formulations and unit of agri implements. Farmers can stay in our hostels on nominal charges.
- **Soil and Water Testing:** Farmers can get their soil, water and leaf samples tested for various parameters of their choice at reasonable rates at our soil testing laboratory.
- **Diagnostic Services:** Farmers can request KVK scientists to visits their problematic fields for getting curative and diagnostic recommendations.



Farmers can buy given below inputs from KVK, which are sold on nominal cost.

- Improved varietal seeds of vegetables, cereals, pulses, oilseeds, fodder varieties and mushroom spawn.
- Grafts of improved varieties of fruit plants and medicinal plants.
- Value added products from agriculture and horticultural crops.
- Micronutrient foliar nutrients such as Vegetable Special, Banana Special and Mango Special.
- Bio-fertilizers such as Arka Microbial Consortium.
- Pheromone traps against heliothis, diamond back moth and fruit borers of vegetables.
- Chemical traps for the control of fruit flies in mango, guava and cucurbitaceous crops.
- Other agents of biological control of pests such as tricho cards, sticky traps etc.

STAFF DETAILS

Name of the Incumbent	Designation	Discipline
Dr. N. Loganandhan	Programme Coordinator	Agricultural Extension
Sri K.N. Jagadish	Subject Matter Specialist	Agricultural Extension
Sri P.R.Ramesh	Subject Matter Specialist	Soil Science
Sri J.M. Prasanth	Subject Matter Specialist	Horticulture
Sri B. Hanumanthe gowda	Subject Matter Specialist	Plant Protection
Smt. Radha R.Banakar	Subject Matter Specialist	Home Science
Dr. Somashekhar	Subject Matter Specialist	Plant Breeding
Sri. H.D.Parshuram	Farm Manager	Horticulture
Ms. Jyoti Appu Naik	Programme Assistant(Computer)	Information Science
Sri. K.N. Shashidhara	Programme Assistant (Lab Tech.)	Crop Physiology
Smt. Veda Kurnalli	Jr. Stenographer	--
Sri M.H. Ningappa	Driver	--
Sri Hemanth Kumar	Driver	--
Sri G.Manjanna	Skilled Supporting Staff	--

Technological Products for Sale at KVK, Hirehalli

Sl. No.	Particulars	Price per Kg (Rs.)	Sl. No.	Particulars	Price per Kg (Rs.)
1	Seeds		5.	Fruit Fly Trap (Mango, Annona, Guava-with 3 lures)	55/Unit
	Ragi ML-365	40	6.	Banana Special (Micro nutrients)- Nutrient Formulation for Foliar Spray for Banana	150
	Chilli	1500	7.	Mango Special (Micro nutrients)- Nutrient Formulation for Foliar Spray for Mango	150
	Tomato	2000	8.	Citrus Special (Micro nutrients)- Nutrient Formulation for Foliar Spray for Citrus	150
	Brinjal	1200	9.	Vegetable special (Micro nutrients)	125
	Frenchbean	180	10.	Arka Microbial Consortium (Bio Fertilizer)	75
	Cowpea	150	11.	Vesicular Arbuscular Mycorrhiza -Bio Fertilizer	60
	Okra	400	12.	Neem Soap (Bio Pesticide) - An Organic Formulation for Insect Pest Management in Horticultural Crops	150
	Amaranthus	400	13.	Pongamia Soap (Bio Pesticide) -An Organic Formulation for Insect Pest Management in Horticultural Crops	100
	Onion	1000	14.	Sealer cum Healer (Mango stem borer control)	100
	Pumpkin	600	15.	Amla Candy	250
	Ridgegourd	800	16.	Amla Juice	100/Litre
	Vegetable Seed Kit	100	17.	Amla Supari	250
	Drumstick	2500	18.	Ragi Malt	150
	Papaya	100000			
2	Seedlings				
	Arecanut seedlings	20/seedling			
	Amla seedlings	25/seedling			
	Coconut seedlings	80/seedling			
	Tulsi seedlings	10/seedling			
	Aloevera seedlings	10/seedling			
	Stevia seedlings	10/seedling			
	Fruit Crops seedlings	35/seedling			
	Drumstick seedling	10/seedling			
3.	Mushroom spawns(Oyster/milky)	60			
4.	Mushroom (Oyster)	100			

Contact Address :

Programme Co-ordinator

Krishi Vigyan Kendra (IIHR), Hirehalli, Tumkur – 572 168

Phone: 0816-2243175, Fax: 0816-2243177

Website : www.iihrkvk.org Email: iihrkvk@gmail.com