



हर कदम, हर डगर  
किसानों का हमसफर  
भारतीय कृषि अनुसंधान परिषद

*Agrisearch with a human touch*

ISSN NO. 2321- 6220

# ICAR - KVK ERNAKULAM Newsletter

April 2017 - March 2018

Issue No: 19



Dr. Trilochan Mohapatra, Director General, ICAR at KVK Stall

Vigova duck to enhance Pookali Farmer's Income

Training for students at KVK



## ICAR - KRISHI VIGYAN KENDRA (ERNAKULAM)

ICAR - CENTRAL MARINE FISHERIES RESEARCH INSTITUTE

Dept. of Agricultural Research and Education, Ministry of Agriculture & Farmer's Welfare, Govt. of India  
Arattuvazhi Beach, Narakkal P.O., Ernakulam, Kerala - 682 505

Phone: 0484 2492450 / e-mail: kvk.ernakulam@icar.gov.in / website: www.kvkernakulam.org.in



## Mandates

The overall mandate of ICAR-KVK is to develop and disseminate location specific technological modules at district level through Technology assessment, refinement and demonstration and to act as knowledge and resource centre for agriculture and its allied activities. The specific activities to carry out this mandates are:

- Conducting on-farm testing to identify the location specificity of agricultural technologies under various farming systems
- Organizing frontline demonstrations to establish production potential of various crops and enterprises in farmer's fields
- Organizing need based training for farmers to update their knowledge and skills in modern agricultural technologies related to technology assessment, refinement and demonstration, and training of extension personnel to orient them in the frontier areas of technology development.
- Creating awareness about improved technologies to larger masses through appropriate extension programmes.
- Production and supply of good quality seeds and planting materials, livestock, poultry and fisheries breeds and products and various bio-products to the farming community.
- 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.



## Director's Message



ICAR-KrishiVigyan Kendra (Ernakulam) of the Central Marine Fisheries Research Institute (CMFRI) is a knowledge and resource centre for agriculture and its allied activities for the whole district. It is quite remarkable that the Ernakulam KVK has developed a strong bondage with the farmers in the district through a slew of extension activities to reach out to them regularly and a series of effective measures for developing adequate facilities to keep the farming practice on right track.

Aimed at promoting safe food production which is the main thrust area of the KVK, quality organic inputs and seeds are supplied through its Sales Counter located at the CMFRI. In addition, the satellite production centres, established in public-private partnership mode in farmer's fields, produce quality vegetable & fruit planting materials and poultry chicks in large-scale and supply accordingly. Dynamic efforts of the KVK, which are still on since the last five years, in the setting up of many satellite seed production centres of pearl spot with the financial support of the National Fisheries Development Board (NFDB) have been vital to woo youngsters into fish farming. In what is considered as one of the commendable outreach programmes, we could manage to distribute 10,000 curry leaf seedlings to school children as part of 'Karshkamitram' programme conducted by the Vidhyadhanam trust functioning under the patronage of Ernakulam M.P. Prof. K. V. Thomas.

In a major move to resolve the issue faced by the urban farmers in home-stead agriculture owing to soil scarcity and the difficulty to set up grow bags, the KVK launched soil-less planting medium based on composted press-mud which received a huge response from farmers as well as entrepreneurs for production and marketing.

Needless to say, marketing their produce has appeared to be a hurdle for the farmers these days. In order to resolve this snag and develop a healthy market atmosphere, the KVK has conceived the idea of farm-gate markets for Pokkali fish and the continuous efforts are underway in successfully facilitating seasonal markets since the last five years. Emulating this model, Pokkali duck could also be marketed in a larger extent this year, helping Pokkali farmers to earn an increased income. Moreover, the Krishi Vigyan Kendra has also formed two farmer producer's companies - Periyar Valley Spices Farmer Producer Company (PVSFPO) and Pokkali Farmer Producer Company (PFPO) with the funding from the NABARD to empower farmers in direct marketing avoiding middlemen.

However, we are of the view that the concerned departments and all agencies functioning in the field of agriculture and allied areas should equally be in touch with the farmers with their valuable contributions in order to improve their living standard. Ernakulam Krishi Vigyan Kendra is always committed for any sorts collaborative initiatives for the benefits of the farmers and it maintains strong linkages with the AMTA and line departments to provide technology backstopping in their programmes.

We also believe that dissemination of information has its own significance in reaching out to the targeted audience timely. This edition of newsletter provides a ringside view of various programmes undertaken by this KVK during the period of 2017-18 with a view to invite fruitful future collaborations from peer institutions, line departments and research organizations and, most importantly, the farmers to work together in the coming years for the betterment of the farming sector in the district.

(A. Gopalakrishnan)  
Director

### Published by

Dr. A. Gopalakrishnan  
Director  
ICAR - Central Marine Fisheries Research Institute  
(Indian Council of Agricultural Research)  
Ernakulam North P.O., P. B. No. 1603  
Kochi - 682 018, Kerala, India

### Compiled and Edited by

Dr. Shinoj Subramannian  
Dr. K. Smita Sivasadan  
F. Pushparaj Anjelo  
Dr. Vikas P.A  
Shoji Joy Edison  
P. Sreeletha  
ICAR-KVK Ernakulam, CMFRI



## **With Best Compliments From...**

**Dr. A. Gopalakrishnan**  
Director  
ICAR- CMFRI

**Dr. Shinoj Subramannian**  
Senior Scientist & Head  
ICAR-KVK Ernakulam of CMFRI





## KVK ORGANIZED SANKALP SE SIDDHI PROGRAMME

KVK organised the New India Manthan: Sankalp Se Siddhi programme on 24<sup>th</sup> August 2017 at ICAR-CMFRI, Kochi. Prof. K V Thomas, Member of Parliament, Ernakulam inaugurated the programme and administered New India pledge. Dr Pravin Puthra, Assistant Director General of Indian Council of Agricultural Research (ICAR) explained the seven-point development strategies and Govt. of India programmes for doubling farmers' income by 2022. Dr.A.Gopalakrishnan, Director, CMFRI presided over. In addition, a farmer-scientist interface meeting was also conducted.



Sankalp Se Siddhi- Inaugural address by Prof. K. V. Thomas, MP



Farmer Producer company shareholder's meet

## FARMER PRODUCER COMPANY SHARE HOLDER'S MEET CONDUCTED

KVK conducted a meet of shareholder's of two farmer producer companies registered by it, viz., Periyar valley spices farmer producer company Ltd and Pokkali farmer producer company Ltd., on 2<sup>nd</sup> August 2017 at CMFRI, Kochi. The shareholders were given orientation on probable business ventures that can be taken up in the initial stage of establishment. There was also a lead lecture on company incorporation act and follow up procedures by Mr. Joel George, Chartered Accountant, Ernakulam.

## KVK'S SATELLITE PACKING UNIT COMMENCED AT SUBJAIL, ERNAKULAM

KVK's satellite packing unit was commenced at SubJail, Ernakulam on 11<sup>th</sup> May 2017. DIG Prisons (South Zone), Shri. Pradeep B., inaugurated. Sub jail Superintendent Mr. Somarajan K, Kochi Municipal Corporation ward councillor Smt. Gracy Babu, and KVK Head Dr. Shinoj Subramannian were present. SMS (Agril.Extn.) Shri. F. Pushparaj Anjelo and SMS (Fisheries) Dr. P.A Vikas carried out capacity building programme for the inmates.



Inauguration of KVK's satellite packing unit at Sub jail, Ernakulam

**SOIL-LESS PLANTING MEDIA LAUNCHED**

**K**VK launched planting media devoid of soil during a sales mela conducted at CMFRI, Kochi on 21<sup>st</sup> September, 2017. The media is composed of composted pressmud; a by-product from sugar mills, coirpith and powdered cowdung. It also contains neem cake, dolomite and biocontrol agents. The media can be used as an alternative to soil in farming. Approximately 1000 city residents visited the mela and 2000 packets each 10kg were sold. In addition, KVK received booking for 5000 packets. Approximately 70 potential entrepreneurs approached the Business Desk at the mela expressing their willingness to produce soil-less medium commercially.



Soil less planting media

**ENTREPRENEURSHIP DEVELOPMENT PROGRAMME (EDP) ON SOIL LESS MEDIA**



Demonstration of mechanized production of the soil-less media

**K**VK conducted Entrepreneurship development programme (EDP) on Soil less media: Production and marketing at CMFRI on 8<sup>th</sup> November 2017. During the programme, technology of the soil less mix was transferred to the participants. 25 participants from various parts of Kerala attended the programme. Demonstration of mechanized production and a session on marketing strategies held.

**WORLD FISHERIES DAY CELEBRATED**

**K**VK celebrated World Fisheries Day on 21<sup>st</sup> November 2017 at Kothamangalam by conducting inland fish farmers' meet. 100 progressive inland fish farmers attended the programme. Shri. Antony John MLA inaugurated. The meet suggested to venture into farm tourism to enhance farmer's earnings. In addition, business plans for fish seed rearing, feed supply, farmer operated fish market and inland fish farmer's task force were chalked out.



World fisheries day speech by Shri. Antony John, MLA, Kothamangalam

## SALES MELAS CONDUCTED

KVK conducted 2 sales melas at its sales counter during report period. Curry leaf-Coriander sales mela was conducted with the objective of propagating safe to eat homestead cultivation of Coriander and Curry leaf as these are the ones that contains maximum pesticide residues. The mela was conducted at CMFRI on 31<sup>st</sup> August, 2017. About 490 people participated in the mela in which 1100 kits of curry leaf seedlings and coriander seeds were distributed.

Another sales mela cum exhibition of fruit plants conducted at CMFRI on 26<sup>th</sup> to 28<sup>th</sup> September, 2017. Around 700 farmers attended and 2200 different fruit tree sapling like Mango, Jack, Jamun, Pomegranate, Guava, Sapota, different Citrus species, Rose apple types, Custard apple, Passion fruit, Cherry etc comprising of good quality graft and layers were distributed in the programme. The exhibition showcased procedure of setting up mini orchards on roof tops.



Curry leaf-Coriander sales mela



Fruit plant Sales Mela

## CURRY LEAF KITS DISTRIBUTED TO SCHOOL CHILDREN



Inauguration of Curry leaf distribution programme

KVK distributed 10,000 curry leaf kits to Higher secondary school children in Ernakulam district as part of Karshakamithram, a programme conducted by Vidhyadhanam trust functioning under the patronage of Ernakulam MP, Prof KV Thomas. The seedlings were supplied along with dolomite kits and leaflets. The inauguration of the programme was conducted at SDPY School, Palluruthy on 15<sup>th</sup> December, 2017. Subsequently, 4 more distribution programmes were conducted during December 2017 and January-February 2018 at Tripunithura, Pachalam, Thoppumpady and Parur.

**LIVE WEBCASTING OF PRIME MINISTER'S SPEECH**

Live webcasting of Prime Minister's speech during inauguration of biennial KVK conference and Krishi Unnati mela was done by KVK at CMFRI, Kochi on 17<sup>th</sup> March 2018. The Petroleum Conservation Association conducted an exhibition on Low cost biogas models at the venue. Assorted vegetable seed packets were distributed to participated farmers. Subsequently, training on rooftop fruit cultivation was also conducted. The event was attended by 265 candidates.



**Farmers watching Live webcast of Prime Minister's speech at CMFRI**

**DUCK FARMING TO AUGMENT POKKALI FARMER'S INCOME**

Subsequent to the success of cage fish culture in Pokkali fields, KVK demonstrated Duck farming in Pokkali to enhance income from unit area. KVK also conducted sales mela for Pokkali duck on March 31<sup>st</sup> 2018 at Kottuvally. This marketing intervention programme was planned as part of KVKs safe to eat produce campaign. Grama Panchayath president Smt.K.K.Santha inaugurated the sales mela.



**Inauguration of Pokkali duck sales mela**

**LINKAGES WITH ATMA**

KVK attended 7 Monthly Technology Advisory meetings, 2 ATMA Governing body (GB) and ATMA Management Committee (AMC) meetings held at Collectorate, Kakanad during the report period.

KVK attended Kisan Goshti programme organized by ATMA Narakkal block and Kuzhupplilly Service co operative bank on 12<sup>th</sup> October 2017 and delivered a lecture on "New Trends in agriculture & Aqua culture" and scientist farmer interface attended by 75 farmers conducted.

KVK participated in the Kisan Goshti 2017 programme organized at Pothanikkad, Kothamangalam on 3<sup>rd</sup> November 2017 and KVK experts delivered lectures on "Organic vegetable cultivation and Safe to eat fish production in homesteads".



**Shri. Shoji Joy Edison, SMS (Horticulture) delivering lecture in an ATMA programme**



## PROGRAMME FOR STUDENTS

Conducted two days Orientation on *Aquaculture Prospects* for the second year VHSE Students of Kadamakkudy Higher Secondary School during 20<sup>th</sup> and 22<sup>nd</sup> September 2017. Twenty nine students participated. KVK has also conducted six days On The Job training for VHSE Plus Two (Fish Processing) students of Govt. Vocational Higher Secondary School, Narakkal during 22<sup>nd</sup> to 29<sup>th</sup> September 2017 attended by 59 students and another programme for 22 students of Govt. Vocational Higher Secondary School, Kaipamangalam during 23<sup>rd</sup> to 28<sup>th</sup> October 2017. Hands on training on value added product

preparation, packing, branding, labeling and marketing strategies were covered during the programme.

In order to create awareness on the career opportunities in Agriculture and allied fields and also to answer student's queries on the farming activities which they undertake at their schools and homes, KVK organized one day event on *Sowing agriculture in young minds* for 60 selected students from Gifted Students scheme functioning at various schools across Ernakulam district on 28<sup>th</sup> November, 2017 at CMFRI. Dr.G Maheshwarudu, Director i/c, CMFRI inaugurated the programme and Dr.Shyam S Salim, Principal Scientist conducted a session on *Careers in feeding masses-Study and Job opportunities in Agriculture and allied sectors*.



Programme for students-Sowing agriculture in young minds

## PARTICIPATION IN EXHIBITIONS

KVK participated in the Agri-Aqua-Food fest and exhibition as part of the second International SAFARI Symposium held at CMFRI during 15<sup>th</sup> to 17<sup>th</sup> January 2018. KVK conducted test marketing of Pokkali Farmer producer company products such as Pokkali raw rice, Pokkali parboiled rice, Pokkali rice powder, Pokkali dried Shrimp, etc.

KVK participated in the exhibition-VAIGA at Kerala Agricultural University during 27<sup>th</sup> to 31<sup>st</sup> December 2017.



KVK stall in Onam exhibition at Ernakulam

KVK organized exhibition of its products at CMFRI during the visit of Union Minister of State for Agriculture Shri. Sudarshan Bhagat on 5<sup>th</sup> May 2017.

KVK participated in the Njattuvela fest at Choornikkara organized by Krishi Bhavan, Choornikkara from 29<sup>th</sup> June to 1<sup>st</sup> July (3 days) and supplied curry leaf saplings.

KVK associated in the Jaiva Jeevitham Onam-Jai-vamela during 25<sup>th</sup> August to 3<sup>rd</sup> September 2017 at Rajendra Maidan, Ernakulam.



**KVK stall at Njattuvela Fest Choornikkara, Ernakulam**

## WORLD ENVIRONMENT DAY

**M**angrove afforestation programme was conducted on the World Environment day occasion at KVK Narakkal campus on 5<sup>th</sup> June 2017. KVK staff participated in the programme. Hundred mangrove saplings of *Bruguiera gymnorrhiza* and *Rhizophora apiculata* planted along the campus border facing sea side as a natural barrier from heavy sea waves.



**World Environment day celebration at KVK**

## INTERNATIONAL YOGA DAY CELEBRATED



**International Yoga Day Celebration at KVK**

**I**nternational yoga day celebrated at KVK on 21<sup>st</sup> June 2017. Video documentaries on "Introduction of Yoga and Significance of International Yoga day" of Spiritual leader and Isha Foundation founder Sadhguru Jaggi Vasudev were played on the occasion. 20 members participated in the programme.



Swachh bharaoh abhiyan at Ernakulam fish market



Quiz competition as part of Swachhata Hi Seva campaign



KVK staff participating in Sewa Diwas

## SWACHH BHARAT ABHIYAN

As part of the Swachh Bharat Abhiyan Programme, KVK conducted one day cleaning cum awareness programme in Ernakulam fish market on 17<sup>th</sup> May 2017. Smt. P. Sreelatha, SMS (Home Science) took the lead. KVK staff participated. Fish waste collected from the market brought to Satellite organic manure production unit at Muvukad island processed into organic manure-fishlizer and sold at KVK sales counter. Total of 890 kg fishlizer sold and revenue of 70,860/- generated during report period.

In order to inculcate the importance of hygiene and sanitation in young minds, a quiz competition on the topic-Sanitation and hygiene was conducted as part of the Swachhata Hi Seva campaign at KVK campus on 28<sup>th</sup> September 2017. 59 students from Government Vocational Higher Secondary School, Narakkal participated in the competition.

KVK celebrated Sewa Diwas on 17<sup>th</sup> September 2017 at its campus. All staff together cleaned the office and its premises. Swachhata Hi Seva banner displayed in front of the office building to give awareness among staff and public.

## BEST POSTER AWARD (NATIONAL)

The paper entitled "Site specific fertility management for productivity enhancement of black pepper and nutmeg" V. Sreenivasan, R. Dinesh, R. Praveena, S. Hamza, Lijo Thomas, M.S. Maria dainy, Shoji Joy Edison & Rathakrishnan that is the outcome of Planning board project 'Enhancing the economic viability of Coconut based land use systems for land use planning in Kerala state' won Best poster award of Indian Society of Spices SYMSAC-IX- National Symposium on Spices, Medicinal and Aromatic plants held at SASRD, NU, MEDZIPHEMA during 15<sup>th</sup> to 17<sup>th</sup> March, 2018.

## PROGRAMME PARTICIPATION

- ❖ Shri. Shoji Joy Edison, Subject Matter Specialist (Horticulture) attended the review meeting of KSPB funded project on "Enhancing economic viability of coconut based land use systems" at CPCRI Regional station, Kayamkulam on 27<sup>th</sup> April, 2017.
- ❖ Shri. F. Pushparaj Anjelo, Subject Matter Specialist (Agricultural Extension) acted as escort officer during Parliamentary Committee visit at Mangalore RC of CMFRI during 28<sup>th</sup> to 29<sup>th</sup> April 2017.
- ❖ Dr. Shinoj Subramannian, Sr Scientist and Head, KVK attended Annual review workshop of Kerala, Tamil Nadu, Karnataka and Lakshadweep KVKs at ICAR-Central Coastal Agricultural Research Institute, Goa on 06<sup>th</sup> May, 2017.
- ❖ Dr. P.A.Vikas, Subject Matter Specialist (Fisheries) participated in the "National consultation on Intensification of Macrobrachium rosenbergii culture in India; Status, constraints and the way forward" Organized by NCAAH, CUSAT as part of the 21<sup>st</sup> century knowledge initiative 2015, UGC on 28<sup>th</sup> July 2017
- ❖ Shri. Shoji Joy Edison, Subject Matter Specialist (Horticulture) attended Zonal Research and Extension Advisory Committee meeting held at RARS, Pattambi and presented KVK Ernakulam activities on 28<sup>th</sup> July, 2017.
- ❖ Dr. P.A.Vikas, Subject Matter Specialist (Fisheries) participated in the Kerala State Governments 1st anniversary programme "Fish festival and fish Adalath" of the Ernakulam District held during 25<sup>th</sup> to 27<sup>th</sup> July 2017 at Ernakulam and delivered a lecture on "Cage culture in the Brackish Water Aquaculture".
- ❖ Dr. P.A.Vikas, Subject Matter Specialist (Fisheries) participated in Karshakadinam programme organized by Mulavukad Gramapanchayath on 17<sup>th</sup> August 2017 at Vallarpadam, Ernakulam.
- ❖ Shri. Shoji Joy Edison, Subject Matter Specialist (Horticulture) attended Kisan Ghoshti programme organized by ATMA Narakkal block and Kuzhupplilly Service co operative bank on 12<sup>th</sup> October 2017 and delivered a lecture on "New Trends in agriculture".
- ❖ Dr. P.A.Vikas, Subject Matter Specialist (Fisheries) participated in Pokkali fest conducted as a joint venture of kadamakudy-varapuzha ICS and department of agriculture development and farmers welfare on 17<sup>th</sup> October 2017 and delivered a lecture on Cage fish farming in Pokkali fields.
- ❖ Dr. Shinoj Subramannian, Sr Scientist and Head, KVK delivered invited talk on Practical approaches in Food and Agri Entrepreneurship on 21<sup>st</sup> October 2017 at College of Agricultural Engineering, KAU, Tavanur during World food day celebrations.
- ❖ Smt. P Sreeletha, Subject Matter Specialist (Home Science) attended the 'Centre-State interactive meet' held on 28<sup>th</sup> October 2017 at Central Tuber Crops Research Institute (CTCRI), Thiruvananthapuram.
- ❖ Shri. Shoji Joy Edison, Subject Matter Specialist (Horticulture) participated in the Kisan Ghoshti 2017 programme organized at Pothanikkad, Kothamangalam on 3<sup>rd</sup> November 2017 and delivered a lecture on "Organic vegetable cultivation in home-steads."
- ❖ Shri. F. Pushparaj Anjelo, Subject Matter Specialist (Agricultural Extension) and Shri. Shoji Joy Edison, Subject Matter Specialist (Horticulture) attended five days training on 'Pesticides Application Techniques and safety measures' at NIPHM, Hyderabad during 15<sup>th</sup> to 19<sup>th</sup> January 2018.
- ❖ Dr. Shinoj Subramannian, Sr Scientist and Head, KVK attended Pre action plan workshop of Kerala KVKs held at Kerala Agricultural University, Thrissur during 1<sup>st</sup> to 3<sup>rd</sup> March 2018.
- ❖ Dr. Shinoj Subramannian, Sr Scientist and Head, KVK participated in the Krishi Unnathi Mela and KVK National conference held at IARI, New Delhi during 15<sup>th</sup> to 18<sup>th</sup> March 2018.
- ❖ Dr. Shinoj Subramannian, Sr Scientist and Head, KVK attended action plan workshop of Kerala, Karnataka and Lakshadweep KVKs at KVK Kodaku, Karnataka on 22<sup>nd</sup> to 24<sup>th</sup> March 2018.

## PUBLICATIONS

- ❖ Vikas P.A & Shinoj Subramanninan (2017) *Koodumalsyakrishi Samshayangalum marupadiyum* (Malayalam). Kerala Karshakan Book 63. Issue 1. Pages. 44-48.
- ❖ Vikas P.A, Shinoj Subramannian (2017). *Kulangal Vrithiyaakkanum malsyangal* (Malayalam). Kerala Karshakan. December 2017. Book 63. Issue 5. Pages. 49-50.
- ❖ Vikas P.A, Shinoj Subramannian (2017). Significance of nature synchronised cage aquaculture pattern in Kerala; a case study. Fostering Innovations in Fisheries & Aquaculture- Book of Abstracts, 11th Indian Fisheries Forum ICAR-CIFT, AFS, 21-24 November, 2017, Kochi, India, pp.231.
- ❖ Vikas P A and Shinoj Subramannian (2017). Fish Farming. Training Manual on Theeranaipunya III Scaling up Fisher Youth Domains in Cognitive development. Central Marine Fisheries Research Institute, Kochi. Chapter 69.Pages. 397-410.
- ❖ Shoji Joy Edison (2017). Building self-confidence and competence. Training Manual on Theeranaipunya III Scaling up Fisher Youth Domains in Cognitive development. Central Marine Fisheries Research Institute, Kochi. Chapter 6.Pages. 19-21.
- ❖ Shoji Joy Edison, F.Pushparaj Anjelo and Shinoj Subramannian (2017). *How to grow curry leaf* (English)/ *Karivepp engane valartham* (Malayalam)/ *Kari patthe kaise ugayem* (Hindi). Trilingual folder. Krishi Vigyan Kendra, Narakkal.
- ❖ Vikas P.A, Shinoj Subramannian (2018). *Oru Jalakrishikk Poomeen* (Malayalam). Kerala Karshakan. January 2018. Book 63. Issue 6. Pages. 66-69.
- ❖ V. Sreenivasan, R. Dinesh, R. Praveena, S. Hamza, Lijo Thomas, M.S. Maria dainy, Shoji Joy Edison & Rathakrishnan (2018) "Site specific fertility management for productivity enhancement of black pepper and nutmeg".; Indian Society of Spices SYMSAC-IX-National Symposium on Spices, Medicinal and Aromatic plants held at SASRD, NU, MEDZIPHEMA during 15-17th March, 2018.

## RADIO PROGRAMME

- ❖ Dr.P.A.Vikas, Subject Matter Specialist (Fisheries) delivered a talk on "*Pokkali Padangalile Samyuktha malsyakrishi*" in Kisanvani All India Radio, Kochi FM 102.3 on 7<sup>th</sup> November 2017.

## TV PROGRAMMES

- ❖ Documentary on KVK's soil less media, Nattupacha programme of Malayalamorama Television broadcasted on 24<sup>th</sup> September 2017.
- ❖ News on KVK's soil less media, Malayalamorama Television broadcasted on 21<sup>st</sup> September 2017.

## FINDINGS AND RECOMMENDATIONS

### AGRICULTURE

Application of lime 2 kg/ tree, Micronutrient mixture 250 gm/ tree and farmyard manure 50 kg/tree enhances flowering in Garcinia (Malabar tamarind). Fruit drop can be reduced considerably.

*Green challenger* is a suitable variety of cabbage for cultivation in rain shelters during June-October period.

Guava trees can be made productive by following semi hard pruning at 2 meter height by retaining 4-5 primary branches. Please ensure 3-4 secondary branches in each primary branch.

Giant African Snails can be effectively controlled using Tobacco decoction and Copper sulphate mixture spray. The snails can be attracted with papaya leaves or cabbage leaves sprayed with toddy.

Good quality Neera can be produced from fishtail palm popularly known as "Kaalippana".

Fruit fly trap is effective against the attack of fruit flies in Bitter gourd. The traps have to be placed in the field at the flowering stage or one month after planting. One fruit fly is sufficient for one cent area.

Application of Dolomite as 2 splits (Basal dressing of 50 percent of recommended dosage and remaining at 30 days after transplanting) and application of borax at 30 days of transplanting increases production in paddy by 16 %.

Prophylactic application of pure neem oil extracted from kernels reduces the sucking pest incidence in Solanaceous crops.

Neem cake from kernels is a better organic manure than crushed neem fruit. The former gave 32% more yield in Okra.

### FISHERIES

Scientific nursery rearing of fish seeds till fingerling stage is a must follow pre-requisite before releasing to ponds to increase survival percentage.

Karimeen (Pearl spot) seed production is an economically viable venture in brackish water ponds. Ideal size of brackish water pond for commencing such breeding unit is 50 to 100 cent. Pond preparation, weed fish removal, brood stock are the prerequisite steps to commence breeding. Stocking density is 3 pairs per cent area.

Sea fish extract (Aminoplus) is an ideal phytoplankton bloom production/regulator in brackish water fish ponds. Apply sea fish extract 30 ml in one cent area three days after pond preparation and top up in 15 days interval.

## ANIMAL HUSBANDRY

Chabro poultry developed by Central Poultry Development Organisation (CPDO), Chandigarh is suitable for growing in homesteads for safe meat production. Its meat has flavour similar to desi poultry.

Broiler duck rearing (9-12 weeks) can be integrated with Pokkali-fish-shrimp culture to augment income of farmers.

It is possible to fabricate Hydroponic unit locally so as to reduce cost. Feeding hydroponic fodder saves pellet feed up to 30%.

### KVK SALES COUNTER

**K**VK sales counter located in the ground floor of ICAR-CMFRI building by the side of Goshree road near High court junction in Kochi supply various products useful for organic/safe farming. The facility is open for public on all working days from 10:00 am to 4:00 pm. Following items are available at KVK sales counter.

Sl. No.	Item	Quantity	Price at Sales Counter(Rs)*
1	Amino plus	200 ml	40
2	Organo excel	1 kg	70
3	Panchagavya	200 ml	45
4	Neem de pest	250 g	60
5	Neem oil	200 ml	105
6	Neem Cake	1 kg	50
7	Tobacco decoction kit	1 No	42
8	Fruit fly trap	1 No	30
9	Pheromone trap (Vegetables)	1 No	145
10	Pheromone trap (Mango)	1 No	145
11	Vegetable Top Up	500 g	75
12	Banana Top Up	500 g	75
13	Fishliser	500 g	40
14	Vermicompost	1 kg	25
15	Enriched cowdung	1 kg	35
16	Desi Gomutra	1 litre	40
17	Nanma	500 ml	180
18	Menma	200 ml	90
19	Shreya	200 ml	65

20	Shakti	200 ml	95
21	Vegetable seeds		10/- to 25/-
22	Pearl plus feed PS3	1 kg	95
23	Pseudomonas	1 kg	75
24	Trichoderma	1 kg	105
25	Verticillium	1 kg	75
26	Beuveria	1 kg	75
27	Menma Applicator	1 No	20
28	Detrodigest	1 No	150
29	Aqua Feed Supplement	1 No	400
30	PS1 - Pseudomonas Aeruginosa (Brackish Water)	1 No	150
31	PS4 - Pseudomonas Aeruginosa (Marine)	1 No	150
32	Enterotrophic	1 No	120

\* Competent authority may change price from time to time

## KVK'S PRICED PUBLICATIONS

Sl.No.	Name of Publication	Price (in Rs.)
1	100 days schedule for vegetable cultivation in grow bags (User's Manual)	10
2	Jaiva Pachakkari Krishikkoru Kaipusthakam	30
3	Ernakulam KVK yude Jaiva Karshika Ulpadana Upadhikal	10
4	Nadan Vittinangalude Registrationum Karshakarude Anubandha Avkashangalum	5
5	Jaadi krishiyude vaarshika calender	5
6	GIFT Tilapia krishi	5
7	Koodu malsyakrishi (FAQs)	15

## ICAR - CMFRI NEWS

### SEED PRODUCTION TECHNOLOGY FOR INDIAN POMPANO DEVELOPED

**M**ariculture activities in India will get a major boost with ICAR-CMFRI successfully developing the seed production technology of Indian pompano (*Trachinotus mookalee*), which has high commercial value both in domestic and international markets. The institute had earlier developed seed production technology for cobia, silver pompano, orange spotted grouper and pink ear emperor. This is the first report of successful large scale seed production of Indian pompano in the world.



## ANTI-OBESITY NUTRACEUTICAL PRODUCT FROM SEAWEEDS COMMERCIALISED

The recently developed nutraceutical product named Cadalmin™ Antihypercholesterolemic extract (Cadalmin™ ACe) for reducing obesity and cholesterol was licensed to VLCC, a leading Indian MNC in wellness and obesity management. Dr. A. Gopalakrishnan, Director ICAR-CMFRI signed a license agreement with Sandeep Ahuja, Director, VLCC Group and Dr. A. H. Zaidi, Executive Vice President (R & D) of the firm on 23<sup>rd</sup> May 2017 at Kochi.



Dr. A. Gopalakrishnan, Director, CMFRI signing MOU on commercialization

## HON'BLE UNION MINISTER OF STATE FOR AGRICULTURE AND FARMERS' WELFARE, SHRI SUDARSHAN BHAGAT INTERACTED WITH FISHERMEN AT CMFRI

An interactive meeting with the fishermen representatives and scientists was held at ICAR-CMFRI Headquarters on 5<sup>th</sup> May 2017 chaired by the Hon'ble Union Minister of State for Agriculture and Farmers' Welfare Shri Sudarshan Bhagat. As part of its ongoing platinum jubilee celebrations ICAR-CMFRI identified a marine fisher couple Mrs. Rekha and Mr. Karthikeyan who have been venturing into the deep sea for fishing for around 15 years, to launch sea cage fish farming by extending the required financial and technical support. On the occasion, Shri Sudarshan Bhagat, felicitated them and handed over the fish seeds for stocking in the cages sponsored by the institute.



Shri. Sudarshan Bhagat, Union Minister interacting with fishermen

## SEA CAGE FARMING OF COBIA UNDER TECHNOLOGY UPGRADATION SCHEME OF NFDB

The training programme on 'Sea-cage Farming of Cobia' under the technology up-gradation scheme of NFDB was successfully organized at Mandapam Regional Centre of ICAR-CMFRI for the fisheries officials of State Fisheries Departments during 13<sup>th</sup> - 15<sup>th</sup> November 2017. A total of 18 fisheries officials representing Tamil Nadu, Andhra Pradesh, Kerala and West Bengal Fisheries Departments participated in the training. Hands on training in cage and net fabrication, feed management, growth assessment, net exchange, nursery management, packing & transportation of fish seed, stocking of fingerlings in cages and disease management. Field visit to farming site was also arranged.

## MULTIVENDOR E-COMMERCE PLATFORM LAUNCHED

To help fish farmers and fishermen sell their catch directly to the customers, a multi vendor e-commerce website and mobile app has been developed by ICAR-CMFRI under the National Innovations on Climate Resilient Agriculture (NICRA) project. The website "marinefishsales.com" and its mobile app named "marinefishsales" is an interface of multiple vendors and consumers with the

institute as a facilitator, monitoring vendor profiles, order status and sales. It is envisaged as part of improving the income of the small scale fishers and coastal fishermen community whose livelihoods are often affected by Climate Change related processes and help them to get better profits by avoiding middlemen in the market chain.



Participants of the training programme on Marine Fish Sales organized by NICRA

## ICAR-CMFRI PARTNERS WITH ISRO TO FORECAST POTENTIAL FISHING ZONES

The institute has joined hands with the Indian Space Research Organisation (ISRO) to identify and forecast Potential Fishing Zones (PFZ), an area in sea where fishes are seen in abundance. In the first phase, ICAR-CMFRI and the Space Applications Centre (SAC) of the ISRO have jointly launched a research project for identifying, forecasting and monitoring PFZ in coastal and off-shore waters of Tamil Nadu. The collaborative project named 'SAMUDRA' is aimed at helping fishermen easily locate shoals of fish without wasting time and fuel. The research work focuses on developing and running a satellite-based ocean forecasting model to provide PFZ advisories.



Dr. A. Gopalakrishnan, Director, CMFRI signing MOU

# KVK IN NEWS

## ഒരുകാം മൃദുപഥയിൽ ഒരു പഴത്തോട്ടും: പിന്തുണയുമായി കെ.വി.കെ



കൊച്ചി കിഴക്കൻ പട്ടണത്തിൽ കെ.വി.കെ.യുടെ മൃദുപഥയിൽ ഒരു പഴത്തോട്ടും ഒരു വെട്ടിലും കൂടി പാലാക്കാൻ സാധിക്കുന്നതായി കാണാം. കെ.വി.കെ.യുടെ സഹായത്തോടെ പട്ടണത്തിൽ പഴത്തോട്ടും വെട്ടിലും കൂടി പാലാക്കാൻ സാധിക്കുന്നതായി കാണാം.

## Development plan to double farmers' income

Express News Service

A part of doubling farmers' income by 2022 under the 'New India Movement' introduced by the Central Government, a seven-point development plan for agricultural farmers in Ernakulam district will be declared on Thursday at the Central Marine Fisheries Research Institute (CMFRI).

The plan is meant for developing the entire farming system in the district and to improve the income of the farmers. Areas such as infrastructure facilities for agriculture, fish culture, dairy etc; organic farming; e-marketing; value addition; food processing; e-extension; institutional loans will be covered in the plan.

Programme is part of implementing the Central Government's New India Movement which envisages the motto 'industrial safe food production' in Ernakulam district. Topics related to organic vegetable farming, dairy farming, reduction, meat production, fish farming, soil management, organic fertilisers and value addition. Queries will be answered by the experts from the Free farm-kits that includes vegetable seedlings, free farm-kits that includes vegetable seedlings...

## മൃദുപഥയിൽ പഴത്തോട്ടും തൈ വിൽപന നാളെ മുതൽ



കൊച്ചി - വിജയപുരം പാലാക്കാൻ സാധിക്കുന്നതായി കാണാം. കെ.വി.കെ.യുടെ സഹായത്തോടെ പട്ടണത്തിൽ പഴത്തോട്ടും വെട്ടിലും കൂടി പാലാക്കാൻ സാധിക്കുന്നതായി കാണാം.

## Weed control programme launched

SPECIAL CORRESPONDENT

KOCHI: The ICAR (Indian Council of Agricultural Research) Krishi Vigyan Kendra, Ernakulam, has launched a programme to control aquatic weed grass carps...

## തേനീച്ച വളർത്തലിൽ വിദഗ്ധ പരിശീലനം

ഇന്ന് രോഗം തേനീച്ച ദിനം

കൊച്ചി: രോഗം തേനീച്ച ദിനം നേരിടാൻ വിദഗ്ധ പരിശീലനം നൽകുന്നതിനായി കെ.വി.കെ.യുടെ സഹായത്തോടെ പട്ടണത്തിൽ പഴത്തോട്ടും വെട്ടിലും കൂടി പാലാക്കാൻ സാധിക്കുന്നതായി കാണാം.



## KVK soil-less medium proves a huge hit

Express News Service

The Ernakulam Krishi Vigyan Kendra (KVK) soil-less medium which can be used as an alternative to the soil in farming, has become a huge hit among Kochis. The initiative received a great response from the public at the sales mela held at the Central Marine Fisheries Research Institute (CMFRI).



## Soon, fruit orchards to bloom on terraces of city homes

KVK to organise exhibition at CMFRI on September 27, 28

This will definitely help us attain self-reliance in fruit production. In a bid to attain self-reliance in the production of toxic-free organic fruits, the Krishi Vigyan Kendra (KVK), Ernakulam, functioning under the Central Marine Fisheries Research Institute (CMFRI), has planned to set up mini fruit orchards on the terraces of maximum number of houses in Ernakulam district and thus to increase fruit production.

## കർഷകരുടെ വരുമാനം ഇരട്ടി: പദ്ധതി പ്രഖ്യാപനം നാളെ

2022ൽ കർഷകരുടെ വരുമാനം ഇരട്ടിയാക്കുന്ന പദ്ധതികൾ

കൊച്ചി • കർഷകരുടെ വരുമാനം ഇരട്ടിയാക്കുന്നതിനുള്ള പദ്ധതികൾ നാളെ പ്രഖ്യാപിക്കും. കെ.വി.കെ.യുടെ സഹായത്തോടെ പട്ടണത്തിൽ പഴത്തോട്ടും വെട്ടിലും കൂടി പാലാക്കാൻ സാധിക്കുന്നതായി കാണാം.

## മണ്ണിലൂടെയും ജൈവകൃഷി വഴിയും നട്ടിയിട്ടുള്ള കൂഞ്ചി വിത്തുകൾ നട്ടി

കൂഞ്ചി വിത്തുകൾ നട്ടി

കൂഞ്ചി വിത്തുകൾ നട്ടി. കൂഞ്ചി വിത്തുകൾ നട്ടി. കൂഞ്ചി വിത്തുകൾ നട്ടി. കൂഞ്ചി വിത്തുകൾ നട്ടി.

## Krishi Vigyan Kendra to promote curry leaf in pots

TIMES NEWS NETWORK

Kochi: In a bid to promote cultivation of pesticide-free curry leaves and coriander leaves in balconies and rooftops in the city, the Krishi Vigyan Kendra (KVK), Ernakulam, under the Central Marine Fisheries Research Institute will conduct a mega sales mela for distributing saplings and seeds at CMFRI on Thursday.

## കൂഞ്ചി വിത്തുകൾ നട്ടി

കൂഞ്ചി വിത്തുകൾ നട്ടി

കൂഞ്ചി വിത്തുകൾ നട്ടി. കൂഞ്ചി വിത്തുകൾ നട്ടി. കൂഞ്ചി വിത്തുകൾ നട്ടി.



Smt. P. Steelethra, SMS Home Science, inaugurating Goshreepuram fish market, Ypeen



Demonstration of irrigateasy drip kit of KVK



Data Collection - demonstration on drought management in paddy



Demonstration of Garcinia rejuvenation



**ICAR - KRISHI VIGYAN KENDRA (ERNAKULAM)**  
 ICAR - CENTRAL MARINE FISHERIES RESEARCH INSTITUTE  
 Dept. of Agricultural Research and Education, Ministry of Agriculture & Farmer's Welfare, Govt. of India  
 Arattuvazhi Beach, Narakkal P.O., Ernakulam, Kerala - 682 505  
 Phone: 0484 2492450 / e-mail: kvk.ernakulam@icar.gov.in / website: www.kvkernakulam.org.in

