



CPCRI News



Views and News on Advances in Coconut, Arecanut and Cocoa

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DG, ICAR Visits Kahikuchi

Dr. S. Ayyappan, Secretary, DARE and DG, ICAR visited CPCRI, RC, Kahikuchi on 5th February 2011. He was accompanied by Dr. K. M. L. Pathak, DDG (AS), ADG (AS), Directors of NRC (Pig) and NRC (Orchids), Dean, Assam Agricultural University and scientists from NRC (Pig), HRS (AAU) and KVK (AAU). He visited



Dr. S. Ayyappan, Hon'ble DG, ICAR discussing with the officials of CPCRI at RC, Kahikuchi during the field visit

the field experiments along with Dr. G. C. Acharya, Scientist-in-charge and other staff of the Centre. He was briefed on the various technologies developed for the farmers of North East. A discussion with all the scientists was held at the Centre and Hon'ble DG has reviewed the various activities progressing at the Centre.

Secretary, ICAR Visits Minicoy

Shri Rajiv Mehrishi, IAS, Additional, Secretary, DARE & Secretary, ICAR and Dr. H.P. Singh, DDG (Hort.) visited CPCRI, Regional Station, Minicoy on 28th and 29th March 2011. Secretary Dept. of Agriculture and Director of Agriculture, UT of Lakshdweep and Dr. George V. Thomas,

Director, CPCRI, Dr. P.M. Jacob Head, CPCRI RS, Kayamkulam and Dr. A.C Mathew, Senior Scientist, CPCRI, Kasaragod also accompanied the team. Dr. P.M. Jacob Head, CPCRI RS, Kayamkulam presented the achievements and activities of the regional station. Deputy Collector, Minicoy, officials from Agricultural Department and representatives of Dweep Panchayat/Village have also participated in the discussions. Considering the scope and strategic importance of protecting the fragile island ecosystems in the country, the committee has taken important decisions for strengthening the demonstration of the technologies for improved production of vegetables, fruits, coconut, poultry and value addition in coconut. New thrust will be given for large-scale production and distribution of vegetables and fruits in the institute farm to cater to the needs of the Islanders. An agro-processing centre will also be established for demonstration of value addition technologies in coconut.



Shri Rajiv Mehrishi, Secretary, ICAR and Dr. H.P. Singh, DDG (Hort.) interacting with Dr. George V. Thomas, Director, CPCRI, scientists and staff at CPCRI (RS), Minicoy

RAC Meeting

The Research Advisory Council meeting was held at CPCRI, Kasaragod on 14th and 15th February, 2011 under the Chairmanship of Dr. P.L. Gautam. The new RAC comprises following officials.

Dr. P.L. Gautam, Chairman, PPV & FRA, New Delhi is the chairman of the committee. Dr. R. Siddaramappa, Retired Emeritus Scientist, UAS, Bangalore; Dr. D. Veeraraghavathatham, Former Dean, HC & RI, TNAU, Coimbatore; Dr. V. Rajagopal, Former Director, CPCRI; Dr. Sisir Mitra, Professor and Head, Department of Fruits and Orchard

Management, BCKVV, Kalyani, West Bengal; Dr. D. Alexander, Advisor Technical (Plantations), Harrisons Malayalam Limited, Cochin; Dr. S. Rajan, Assistant Director General (Hort.I), Indian Council of Agricultural Research, New Delhi and Dr. George V. Thomas, Director, CPCRI, Kasaragod are members. Adv. Mammen Iype, Ex. MLA, Chengannoor, Dr. L. Jose, Head of Division, Botany, St. Alberts College, Ernakulam are non-official members. Dr. R.V. Nair, Head, Crop Improvement Division, CPCRI, Kasaragod is the Member Secretary. First meeting of the 4th RAC was held on 14-2-

2011 and 15-2-2011. Dr. V. Rajagopal and Adv. Mammen Iype were not present in the meeting. Dr. George V. Thomas, Director, CPCRI welcomed the chairman and members of the RAC to the meeting and presented the activities and achievements of the Institute during 2010.

Dr. P.L. Gautam, Chairman, RAC, complimented the Director and the scientists of the institute for undertaking fruitful target oriented research programmes for the benefit of farming community. Recommendations of the RAC were incorporated in the ongoing Technical Programme of the Institute.



Dr.P.L.Gautam, Chairman, RAC releasing the Research Highlights 2011-12, Dr. George V. Thomas, Director is at the centre



Chairman and members of Research Advisory Committee visiting the Agricultural Processing Centre

Farm Innovators' Meet

A farm innovators' meet was conducted at CPCRI, Kasaragod on 28th February 2011 to mark the National Science Day celebrations. The meet provided an opportunity for 16 farm innovators from Kerala, Tamil Nadu and Karnataka to present their innovations in crop management techniques, pest and disease management and post harvest technologies and to explore the

possibility of scaling -up the potential technologies for the benefit of farming community. The presentations and demonstration of machineries and agro techniques were followed by interactions centred on the scientific rationale, need for conducting further experiments/trials for refinement and validation and scope for further scaling-up of the innovations. Mr. K. Abdul Rahiman, District Information Officer, Kasaragod

inaugurated the meet. Dr. George V. Thomas, Director, CPCRI chaired the inaugural session.

As part of the meet, there was also an exhibition of arecanut and coconut based value-added products such as arecanut tannin based soft drink, soap manufactured using arecanut tannin and virgin coconut oil besides various machineries such as tender coconut cutter and milking machine. The Meet

highlighted the relevance and importance of assessing the effectiveness of farmer



A view from the Farm Innovators' Meet

innovations in collaboration with the research institutions for refinement and taking up appropriate measures for disseminating the proven innovations for benefit of the farming community.

Stakeholder's Meet

The Stakeholder's Meet was held at CPCRI, Kasaragod 27th January 2011 under the chairmanship of Dr. George V. Thomas, Director. While briefly describing the genesis and importance of conducting annual stakeholders meet, he emphasized the importance of incorporating the recommendations evolved in the meeting for formulating forthcoming research advisory committee and Institute Research Council recommendations. Sri. Thirumaleswara Bhat, Deputy Director of Agriculture (Kasaragod) informed the house that Kerala Government has already come up with the organic policy on agriculture and it is certain that Kasaragod may be declared as an organic district. He expressed the anxiety on the impact of banning pesticides in the district, and need for an immediate action research on possible alternatives. Sri N Gopalan (AGM-NABARD) stressed the urgent need for developing a labour bank to solve the present crisis of acute labour shortage. Sri M Ajithkumar, LDM Syndicate Bank, Kasaragod opined that, it would be appropriate to evolve some strategies for association among CPCRI and Syndicate Bank to facilitate the requirement of farmers in the district. Sri Sreekumar, CDB, Kochi opined that it would be beneficial if an automatic device to handle large quantities of tender coconut processing is developed. Regarding labour issues, Director expressed that CPCRI is giving utmost importance to mechanization and will come out with appropriate solutions. He also welcomed the suggestion on demonstration of CPCRI technologies through CDB demonstration centers.

'Kera Keralam' - an interface programme on coconut farming

'Kera Keralam' - an interface programme on coconut farming with the focal theme on problems and prospects of coconut cultivation in Kerala state was conducted on 5-3-2011 at CPCRI Kasaragod by Doordarshan Kendra, Thiruvannanthapuram in collaboration with the Institute. The seminar was inaugurated by Shri K.N. Satheesh, IAS, District Collector, Kasaragod. Dr. George V. Thomas, Director, CPCRI presided over the inaugural function. Mr. Byju Chandran, Assistant Station Director, Doordarshan Kendra,

Thiruvannanthapuram welcomed the gathering. Dr. C. Thamban, Sr. Scientist, CPCRI presented the topic. The expert panel included scientists from CPCRI, KAU, officials of Department of Agriculture, and award winning coconut farmers. About three hundred farmers participated in the seminar. Mr. Muralidharan Station Engineer, Doordarshan Kendra, Kasaragod proposed the vote of thanks. The programme will be telecast by Doordarshan Kendra, Thiruvannanthapuram in different episodes.



Shri K.N.Satheesh, IAS, District Collector, Kasaragod inaugurating the interface programme

National Seminar on Strategies for Enhancing Productivity of Cocoa

Seminar on 'Strategies for enhancing productivity of cocoa' sponsored by the Directorate of Cashew and Cocoa Development (DCCD), Cochin was held during 28-29th January 2011 at CPCRI Regional Station, Vittal, Karnataka in which 65 delegates from Karnataka, Kerala, Tamil Nadu and Andhra Pradesh have participated. Dr. Venkatesh N. Huballi, Director, DCCD, Cochin, inaugurated the seminar and Dr. George V. Thomas, Director, CPCRI



Dr. George V. Thomas, Director inaugurating the cocoa seminar. Shri Venkatesh Huballi, Director, DCCD is also seen

Kasaragod, presided over the inaugural session. Scientists from CPCRI, KAU, TNAU and APAU have presented the research accomplishments in cocoa. The presentations were organized under five technical Sessions : Genetic improvement and biotechnology, Production techniques, organic farming, climate change mitigation and adaptation, Integrated pests and disease management, Post Harvest Technology, processing, value addition, economics, marketing and statistics and Transfer of technology programmes and developmental activities.

Farmers' Meet at Kahikuchi

A two-day Workshop on “Technological Advances for Enhancing Productivity of Arecanut and Coconut in Assam” was organized at CPCRI, RC, Kahikuchi during 10th-11th March in the SIRD, State Centre, Kahikuchi. The workshop was inaugurated by Dr R.P.Medhi, Director, NRC (Orchids) and PI (Hort. Mission for North East and Himalayan States), Pakyong, Sikkim. The workshop was attended by two hundred farmers from Kamrup and Darrang Districts of Assam. The programme included technical sessions on scientific technologies for coconut and arecanut cultivation, inter/mixed cropping with vegetables, spices, fruit crops and ornamentals in arecanut and coconut gardens to enhance the productivity and profitability. In addition, the avenues available for product diversification in coconut has also been dealt in the workshop. Experts from CPCRI RC Kahikuchi, Horticultural Research Station, (Assam Agril. University), Kahikuchi, ICAR Research Complex for NEH Region, KVK, Kamrup (AAU) and Coconut Development Board handled the sessions. Participants visited various

field experiments and the exhibition organized at CPCRI RC Kahikuchi.

Coconut sector: Experiencing a price rise regime

Market experienced a record high price for coconut during the period, which is the highest in the past 15 years. It is also noteworthy that, for the last couple of months the coconut oil prices in the market was around Rs. 90 per kg, after a long time price stagnation. Auction price for coconut at CPCRI Kasaragod during the second week of March was fixed at Rs. 8.60 per nut and the same at CPCRI Regional Station, Kayamkulam was fixed at Rs.10.75 per nut. Hence, a brief analysis of the situation to seek out the reasons behind such a price escalation was carried out. The price rise began during the 'Onam festival' season when the demand was high. In the usual scenario, the prices are supposed to get stabilized after the festival season. Contrary to this, coconut prices have not come down in Kerala owing to the supply shortage of copra probably due to the prolonged rains in Kerala and major coconut growing tracts of Tamil Nadu. In a nut shell, the recent price escalation could be attributed to: a) the supply deficits, b) price rise in substitute oils, c)

surging industrial demand d) high volume of exports and e) a global shortfall in edible oil supply. Oil production expected to reach its peak in South India during January to March end. Therefore, the insufficient stock to cater to large industrial demand, delicate demand-supply balance and other favorable factors may keep the prices up at least for a few more months from now. However, intense study and modeling data are needed for a precise long term speculation.

National initiative on climate resilient agriculture

KVK Alleppey is implementing the technology demonstration component of the project on 'National initiative on climate resilient agriculture' funded by ICAR and coordinated by CRIDA, Hyderabad. Muttar village of Veliyanad block in the Kuttanad region has been selected for implementing the project. Group meetings of farmers were conducted at Mithrakari and Muttar for finalizing the project interventions. The interventions on mushroom cultivation, value added products from rice and integrated duckfish farming are being initiated. Socio-economic survey of the farmers is in progress.



Release of technical bulletin during the workshop at Kahikuchi

NEW PROJECT SANCTIONED

A National Initiative on Climate Resilient Agriculture (NICRA) project was initiated at KVK, Alleppey and is being coordinated by CRIDA, Hyderabad. The project is for two years with an outlay of Rs. 30.35 lakhs.

Annual IRC Meeting

Institute Research Committee meeting for 2010-11 was held during 15-2-2011 to 19-2-2011 at CPCRI, Kasaragod under the chairmanship of Dr. George V. Thomas, Director. Individual scientists, who were the project leaders of each projects have presented the progress of research according to the technical programme. Based on discussions and recommendations of the meeting, Technical Programme for the year 2011-12 was formulated.

The plenary session was held on 19-2-2011 at 12:45 PM. Chairman emphasized that the recommendations of the stakeholders meeting also has to be included in the research programmes of the Institute.



INSTITUTIONAL NEWS

IJSC Meeting at Mohitnagar

8th IJSC meeting was held on 10-3-11 at CPCRI, RC, Mohitnagar. The meeting was chaired by Dr. George V. Thomas, Director, CPCRI, Kasaragod. Dr. R. V. Nair, Head, Crop Improvement, Er. K. Madhavan, Principal Scientist, Post Harvest and Technology, Dr. P.M. Jacob, Head, Regional Station, Kayamkulam, Shri P Balabramaiah, Senior Finance and Account Officer, Members Official Side

and Shri K. P. S. Gautam, Senior Administrative Officer and Secretary, IJSC (Official Side) and Members of Staff Side Sri M. Ravindran, Secretary, Staff Side IJSC, Sri M. Krishnan, Sri T. H. Nagaraj, Sri V Chinnappa Gowda, Sri K. Sukumaran and Sri O. Ramachandran attended the meeting. Dr. Arun Kumar Sit, Scientist in Charge, CPCRI, RC, Mohitnagar was present as special invitee.

RESEARCH HIGHLIGHTS

Breeding for resistance/ tolerance

Germplasm exploration undertaken in Bhagalpur, Katihar and Poornia districts of Bihar has resulted in collection of three cold tolerant coconut accessions.

An indigenous Yellow Dwarf selection and a high yielding Micro Tall selection from West Coast Tall population were identified for further studies.

A selection from IND045 is identified to be promising with early bearing nature (flowering 48-53 months after planting) and higher average nut yield of over 110 nuts per palm per year under rainfed conditions. The fruits are green coloured, medium sized with an average endosperm content of more than 300g and copra content of 180-200g.

Breeding behaviour studies conducted in Chowghat Green Dwarf and Malayan Green Dwarf revealed that both the varieties are predominantly self pollinated, to the extent of 96% in CGD

and 60% in the MGD palms. Molecular analysis was conducted to confirm genetic uniformity of CGD and MGD populations using 43 SSR primers.



A high yielding micro tall selection from IND067 population at Kidu

Monomorphic bands were detected in all the CGD samples with 41 primers indicating its genetic uniformity.

A demonstration trial was initiated at Edava Panchayat (Trivandrum District) for evaluating the performance of seedlings supplied from CPCRI, Regional Station, Kayamkulam under the 'Coconut Rejuvenation Programme' of Coconut Development Board. Further, a total of 19,625 quality coconut seedlings were distributed among farmers in the disease prevalent tract which includes 7,960 Chowghat Green Dwarf ; 4,828 West Coast Tall; 2,742 COD; 550 D x T hybrids; 459 Malayan Green Dwarf and 2,251 Natural Cross Dwarf hybrids.

Management of bud rot of coconut

Out of 136 *Phytophthora* isolates causing bud rot and fruit rot disease of coconut collected from the disease endemic areas of southern states of India, 125 isolates were identified as *P. palmivora*. Of these, the isolate KL-Co/16 isolated from Palakkad district was found to be the most virulent isolate. Among the

125 *P. palmivora* isolates, 124 isolates were A2 mating types indicating the predominance of A2 mating type. The large scale field demonstrations conducted in disease endemic areas have further confirmed the efficacy of prophylactic treatment of palms at bi-monthly interval by pouring mancozeb solution (5 g in 300 ml water/palm) + placing 2 mancozeb sachets/palm (perforated sachets each containing 5 g mancozeb) in the innermost leaf axils or

pouring phosphorous acid (Akomin) solution (0.5%) @ 300 ml/palm in the innermost leaf axil as very effective in the management of bud rot disease.

Buff coconut mealy bug (*Nipaecoccus nipae*)

Occurrence of an invasive pest, buff coconut mealy bug, *Nipaecoccus nipae* (Maskell) (Pseudococcidae : Hemiptera) was recorded for the first time on feeder tender roots of a coconut seedling at

Kayamkulam, Kerala, India. *N. nipae* was not observed on the foliage of coconut or other arboreal parts of the palm. This is the first distributional record of the alien pest in Kerala, India. The concealed nature of the pest on underground feeder roots of coconut seedling warrants a thorough examination at the seedling distribution point so as to prevent the spread of this quarantine pest to pest-free zones of the country.

HUMAN RESOURCES DEVELOPMENT

Deputation abroad

Dr. R. Manimekalai participated in the Plant and Animal Genome (PAG) Conference XIX at San Diego, California during 15-20 Jan, 2011 and presented two research papers. She was also invited to

the group discussion on coconut genomics by Bioversity International.

Trainings attended

Mrs. Jissy George, SMS (Home science) attended two days training from 25-26 March, 2011 on "Executive

enrichment interventions" at Central Training Institute, Mannuthy, Thrissur.

Smt. Shobha. S, SMS, KVK, Kasaragod attended a training on 'Precision farming' at Precision Farming Centre, KCAET, Tavanur on 2nd and 3rd of February, 2011.

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AWARDS/ HONOURS

Dr. Nagaraja, N. R. Scientist (Plant Breeding), CPCRI, RS, Vittal recieved 'Best Trainee Award' for his overall outstanding performance and for securing 1st rank in 92nd FOCARS(Foundation Course for

Agricultural Research Service) training held at NAARM(National Academy of Agricultural Research Management), Hyderabad from 1st September 2010 to 29th December 2010.

Dr. K.S. Ananda, Principal Scientist



*Dr. R. B. Singh, NCF,
Dr. P. K. Joshi, Director,
N A A R M a n d
Dr. R. P. Sharma,
Project Director on
Poultry, presenting 'Best
Trainee Award' to
Dr. Nagaraja.*

has been presented the 'Best Arecanut Scientist' award for the Biennium 2009-2010 for his outstanding contribution in the field of Arecanut Research and Development by the All India Supari (Betelnut) Federation through Indian Society for Plantation Crops during December 2010 at RRII Kottayam.

Best poster presentation for the research papers Manimekalai, R. Roshna, O.M. and V.P. Soumya has been awarded for the poster (entitled "Antigenicity prediction of SecA gene of Coconut Root (wilt) phytoplasma", presented at the National Symposium on Accelerating Biology held during 14-16, Dec, 2010 at CDAC, Pune.

SEMINARS/ SYMPOSIA/ CONFERENCES/ WORKSHOPS ATTENDED

Name of the Official	Programme	Place and duration
George V. Thomas	International Conference on Tropical Island Ecosystems: issues related to livelihood, sustainable development and climate change	CARI, Port Blair 23-3-2011 to 26-3-2011
	10 th Agricultural Science Congress	NBFGR, Lucknow 10-2-2011 to 11-2-2011
George V. Thomas, R.V. Nair Anitha Karun, K. Muralidharan, C. Thamban, S. Jayasekhar, S. Kalavathy, D. Balasimha, R. ChandraMohan, K.S. Ananda, C.T. Jose, Ravi Bhat, T. Vidhan Singh, S. Sujatha, D. V. Patil, M.K. Rajesh, S. Elain Apshara, D. Jaganathan, M. Alagar, C. Radhika, P. Geetha, Nagaraja N.R., S. Keshava Bhat and C. H. Amarnath	Seminar on strategies for enhancing productivity of cocoa	CPCRI, RS, Vittal 28-01-2011 to 29-01-2011
George V. Thomas and Jeena Mathew	National Seminar on Climate Change and Food Security: Challenges and Opportunities for Tuber Crops	CTCRI, Thiruvananthapuram 20-22 January 2011
M.K. Rajesh	Silver Jubilee Symposium on Bioinformatics	Pondicherry University 2-2-2011
Shobha K.	National Workshop on DSpace	University of Calicut 3-1-2011 to 7-1-2011
T. Vidhan Singh and H. Muralikrishna	Annual Meeting cum Workshop of South Zone ITMUs	CIFT, Kochi 4-3-2011 to 5-3-2011
Manojkumar T. S. and Jayashree M P.	A Workshop on Refinement of Agricultural Extension Strategies	KAU, Vellanikkara 17-3-2011

TRANSFER OF TECHNOLOGY

KASARAGOD

On-campus training programme

A training programme on 'Scaling up water productivity' for extension personnel/farmers was organised at CPCRI, Kasaragod on 24-1-2011.

Off-campus training programme

Farmers Training Programme was conducted at Pattana in Nileshwar as part of NAIP project. Sessions on agro techniques for higher productivity and integrated pest and disease management in coconut were handled by Dr. C. Thamban, Sr. Scientist, CPCRI and Mr. R. Sanal kumar, Subject Matter Specialist, KVK, respectively. Besides, training on coconut climbing using mechanical climbing device was also conducted for selected farmers and agricultural labourers. The training programme was inaugurated by Mr. Sunil kumar, Assistant Director of Agriculture, Nileshwar.

Special training programmes

Special Training Programmes for entrepreneurs on 'Preparation of coconut chips' was conducted on 22-2-2011 and 23-3-2011 in which 18 entrepreneurs from Kasaragod, Kannur, Kozhikode, Ernakulam and Thiruvananthapuram participated.

Cyber extension programmes

Scientist-Farmer Interface programme on coconut farming, facilitated through videoconferencing, was conducted on 15-1-2011. Scientists at CPCRI, Kasaragod, and extension personnel and farmers from Kasaragod District gathered at Kanhangad participated in the interface programme.

ATIC activities

A total of 1516 visitors including farmers, extension personnel and students made use of ATIC facilities. Technology inputs and products

including planting materials, farm products, farm literature and CD ROMs worth Rs. 62,288/- were sold through ATIC.

Radio programmes

Dr. C. Thamban, and Dr. P. Subramanian, Sr. Scientists participated in a radio interview programme on 'Management of coastal sandy soil for enhancing productivity and income', which was broadcast by All India Radio, Kannur on 16-2-2011.

KAYAMKULAM

Training programmes

A total of 95 farmers were oriented during the period.

One-day training Programme on Scientific Management of Coconut were conducted under ATMA programme, benefitting a total of 95 farmers.

Exhibition

Participated in the exhibition and put up stalls in the following exhibitions:

- (1) Exhibition organized by CTCRI, Thiruvananthapuram in connection with the National Seminar during 19-21 January, 2011.
- (2) Exhibition organized by State Bank of Travancore at Charummood during 04-06 February, 2011.
- (3) Exhibition at Town Hall, Alappuzha organized by District Panchayat during 17-19 February, 2011.
- (4) Agricultural Technology Expo and Farmers Mela organized by CIFT, Kochi and ICAR at Town Hall, Kochi during 28-29 March.



Farmers Training Programme at Pattana

Help line services: One Hundred and Eighty Six farmers utilized the help line service facility for various information on coconut cultivation.

VITTAL

Training

Training on Cocoa production technology sponsored by Directorate of Cashewnut and Cocoa Development (DCCD), Cochin was organized at Vittal for 42 farmers from Kerala during 25- 26 February 2011.



Training programme on cocoa production technology at Vittal

Extension services

A total of 1041 farmers and students visited the research station and had exposure to various research and extension activities. Seedlings of arecanut and grafts of cocoa were supplied to the farmers.

On-farm Training on 'Arecanut based multi-species cropping system' sponsored by Directorate of Arecanut and Spices Development (DASD), Calicut was organized at Nada village, Belthangady on 30th March 2011. 105 farmers from

Belthangady taluk had attended the training.

Radio talks

Dr. S. Keshava Bhat, Technical Officer has delivered a radio talk through AIR Mangalore on the topic 'Diseases of areca and cocoa and their management ' on 3-2-2011.

MOHITNAGAR

A total of 65 numbers of farmers from Mataili Block of Jalpaiguri District visited the farm on 02-03-2011. All the visitors were taught about the plantation crops and plantation based cropping system for this region.

KAHIKUCHI

Five on- and off-campus training programmes were organized during the period for more than 200 farmers, farm women, SHGs, unemployed youth on different aspects of plantation crops (photograph attached).

Participated in the exhibition and put up a stall at HRS, Kahikuchi on eve of Horticulture Show and Competition, organized by HRS and KVK, AAU on 25th-26th February 2011.

KRISHI VIGYAN KENDRA, KASARAGOD

Training programmes

Krishi Vigyan Kendra, Kasaragod organised 30 training programmes during the period from January 2011 to March 2011 with the participation of 551 trainees. Training was imparted to practicing farmers, farm women, women self help groups, rural youth and extension functionaries on various topics like Coconut based farming system,

Organic farming practices, Food processing, Processing of coconut haustorium, Coconut chips making, Ice cream making, Bee keeping, Vermicomposting, Dairy farming, Poultry rearing, Goat rearing, Quail rearing, Jasmine cultivation, Vegetable and banana cultivation, Cultivation practices of grafted pepper, IPM in cucurbitaceous vegetables, IPM in paddy,

Biocontrol of coconut rhinoceros beetle, Management of stem bleeding disease in coconut, Spawn production and mushroom cultivation, Mechanical coconut climbing, Fabric painting and Paper bag making. This includes the skill development training programmes under SGSY sponsored by Manjeshwar Block panchayat and also the trainings sponsored by NWRDPA. A total of 24 on

campus trainings were conducted, of which a total of 420 persons participated including 169 men and 251 women. A total of six off campus trainings were conducted, of which a total of 131 persons participated including 69 men and 62 women.

A new demonstration unit for quail rearing has been set up at KVK, Kasaragod on 8th of February, 2011. The cage type of unit comprises of 30 layer quails.

Ongoing OFTs and FLDs

The current On Farm Trials by KVK, Kasaragod includes Management of red palm weevil in coconut, Management of foot rot disease in pepper, Management of bud rot in coconut, Performance of coconut climbing devices, Cultivation of grafted pepper and High density planting of banana.

The ongoing frontline demonstrations by KVK, Kasaragod includes 'coconut based farming system, arecanut based farming system, micronutrient management in vegetables, cue lure traps against fruit flies of cucurbits, management of coconut rhinoceros beetle using *Metarhizium anisoplae* and bush pepper cultivation'.

Besides, extension activities comprising of field days, film shows/video CD, advisory services, agricultural seminars, farmers visit to KVK, diagnostic visits, method demonstration, radio talks etc. were carried out in which farmers were appraised of modern production technologies of various crops and enterprises.



FLD on management of fruit flies in cucurbits



Visit of SGSY trainees to goat rearing farm

KRISHI VIGYAN KENDRA, ALLEPPEY

Field Day

Field Day of the Front Line Demonstration on "Hipsizygus mushroom cultivation using paddy straw" was conducted at "Greeshma Mushrooms" in Venmony on 26-02-2011. About 25 mushroom growers from different panchayaths of the district participated in the programme. Participating farmers of the FLD programme shared their experience and described the merits of *Hipsizygus* mushroom over the commonly grown oyster mushroom varieties. Panchayath Member Shri. Anil George inaugurated the programme. Dr. P Muralidharan, Programme Coordinator, emphasized the importance of including mushroom in our daily diet to protect the body from life style diseases.

Training programmes

KVK Alleppey has conducted a total of 27 trainings during this quarter; (On campus- 5, Off campus- 7, Sponsored - 9, for extension officials 5 and Vocational-1) A total of 687 participants including 187 men and 500 women attended the programmes.

Sponsored training programme for SC / ST farmers on "Entrepreneurship development in Agriculture" was conducted in two batches of one week each (, 17 - 22 Jan, 2011 and 14 - 19 March, 2011) with sponsorship from Kerala State Development Corporation for SC/ST Limited, Thrissur. Forty two farmers from Alappuzha and Kollam participated in the training programme.

Vocational training for two batches of women on Dairy farming and Screw pine products sponsored by Ochira Block Panchayath was conducted during this quarter. 41 rural women participated in the 15 days training programme on screw pine products and 34 farmers were participated in the dairy farming training programme.

Vocational training for two batches of farmers on Dairy farming and banana and vegetable cultivation sponsored by Haripad Block Panchayath was also conducted during this quarter. Fifty nine farmers participated in the training programmes.

On farm testing/ Frontline demonstrations

On farm testing of ten technologies and front line demonstrations of eighteen technologies are being conducted in the field during this quarter. OFT on the assessment of improved screw press for drudgery reduction in small scale coconut processing unit is concluded and FLD's on use of rain shelter, use of pole harvester for coconut harvesting , eco friendly pest management in rice , rhizome rot management in ginger using bio control agents and white elm mushroom cultivation were also completed during this quarter.

Exhibitions

KVK-Alleppey participated in the exhibitions organized by SBT,Charummoodu at Majestic centre, Charummoodu on 5-6th Feb. 2011 and at RARS, Moncombu jointly organized by Kerala Agricultural University and Dept. of Agriculture on 15th February, 2011.

*Field day on
Hipsizygus mushroom
cultivation*



Farmers - Scientist interface / Seminars

Subject Matter Specialist of this KVK participated in the Mushroom farmers scientist interface organized by KAU at Moncombu on 31st January, 2011.

They also attended three seminars as resource persons in which a total of 343 farmers participated.

DISTINGUISHED VISITORS

Name & Designation	Date of visit/ place	Purpose
Dr. S.Rajan, ADG(Hort.I) ICAR New Delhi Dr.D.Alexander (Rtd.)Director of Research, KAU, Thrissur	15-2-2011 Regional Station, Vittal	Discussions with scientists about the research work on arecanut and cocoa
Dr. V.A. Parthasarathy, Director, IISR, Calicut	21-2-11 CPCRI, RC, Kahikuchi	Visit to the North-East related to ongoing programmes



Dr. S. Rajan, ADG (H-I) and Dr. Alexander, Members, RAC observing the cocoa nursery at Vittal

ANY OTHER INFORMATION

Right to Information Act

Dr. H.P. Maheswarappa, Principal Scientist, CPCRI, Kasaragod has been nominated as Public Information Officer and Shri M.P. Rameshkumar, Technical Officer (T 7-8), as Transparency Officer.

Science Day at Kayamkulam

National Science Day was

celebrated at the Regional Station Kayamkulam on 28-02-2011 at 11.00 AM by organizing a special lecture. In his presidential address, Dr PM Jacob, Head highlighted the contributions of Sir C.V. Raman and the importance of science communication in the present era. He felt the younger generation need to be inculcated with scientific temperament and therefore biographies and contributions of

eminent scientists through lecture series have to be introduced. Dr Mani Chellappan, Associate Professor, Kerala Agricultural University, Thrissur was the chief guest and he delivered an inspirational lecture on the role of bats and birds of Kerala in restoring ecology. He emphasized the unique role of bats and birds as ecological indicators, soil nourishers, pollinators and biotic balancers.

SUCCESS STORY

Seasonal Vegetables Grow Rich in Arecanut Interspaces

Mr. Ramesh Das is a farmer from the Palli village, Rani Block in Kamrup District of Assam. He has a farm land of 22 *bighas* (2.93 ha) and 2 pairs of bullocks as assets. He cultivates mainly field crops especially *Ahu* rice (Feb-Mar to Aug-Sept) and *Sali* rice (June-July to Oct-Nov). He has a homestead garden with 5 *bighas* of land where arecanut, citrus, banana, mango and betelvine are mainly grown. He was mainly involved in rice cultivation and was less interested in the crops grown in the homestead garden. At this juncture, a group of scientist from CPCRI, RC, Kahikuchi visited his village. During the interaction with farmers, technology for increasing return from arecanut garden through intercropping and mixed cropping system in the same piece of land was discussed. After the meeting, it was decided to conduct an on farm trial on performance of rabi and summer season vegetables as intercrop in arecanut garden for the benefit of farmers. Mr. Das was convinced by the information provided by scientists of CPCRI, Kahikuchi and was willing to adopt modern technologies on arecanut based cropping system.

Mr. Das was provided with planting materials and technical guidance for rabi

and summer vegetable to be grown as intercrop under arecanut. Simultaneously, Mr. Das has also attended a training on “Scientific management of arecanut based cropping system” organized at CPCRI, Kahikuchi campus. He was provided with cabbage seedlings (*var.* Drum Head) and french bean (*var.* Sneha) and carrot (*var.* Kuroda Improved) seeds in the rabi season. He cultivated these in between rows of arecanut. He planted the intercrops in an area of 10m² during the month of October and all the recommended package of practices were followed as per the guidance of scientist of CPCRI, Kahikuchi. Mr. Das could realise lush greenery of vegetables in the unutilized interspaces. In that season he was able to harvest a good crop of 152.69q cabbage, 92.26q french bean and 80q carrot from one hectare of arecanut garden. Accordingly in the summer season, okra, amaranthus and cowpea seeds were provided to Mr. Das. All the seeds were sown in 10m² size of raised beds in areca interspaces in the month of May. In that summer season also he was able to harvest a yield of 104.53 q of okra, 48.60 q of amaranthus and 231.20 q of cowpea from one hectare of arecanut garden. After two consecutive years of

cultivation, Mr. Das could get an additional return of Rs. 49,600/- to Rs. 97,500/- per hectare of arecanut garden compared to traditional monocropping system (Rs. 20,000 to Rs. 25,000 per hectare). That was the first time in the region, a farmer could successfully grow vegetables profusely under an existing arecanut garden. So, cultivation of vegetables in areca interspaces increased the productivity of unit area of garden by proper utilization of the limited natural resources such as water, soil nutrients and sunlight. Besides, during the trial it was noticed that, in the second year Mr. Das could harvest better yield from similar vegetable cultivation compared to previous year. Hence, intercropping not only increased productivity from unit area but also helped to achieve sustainability and economic returns. Mr. Das is happy about the technologies from CPCRI by which he could achieve this and is now encouraging other farmers to grow vegetables and other intercrops in arecanut garden.

After seeing the demonstration of CPCRI, Kahikuchi the farmers of Palli and nearby areas have opted for cultivation of vegetables as they are fully confident of assured yield and additional economic returns from the production of vegetable in arecanut garden.



Intercropping of cabbage and carrot under arecanut garden in NEH region

PERSONALIA

APPOINTMENT

Name of the official	Designation	Location	w.e.f.
Dr. V.H. Pratibha	Scientist (Plant Pathology)	CPCRI, Kasaragod	10-01-2011
Shri N.R. Nagaraja	Scientist (Plant Breeding)	CPCRI, RS, Vittal	10-01-2011
Shri Sushanta Burman	Trainee	CPCRI, RC, Mohitnagar	11-01-2011
Dr. K.P. Chandran	Senior Scientist	CPCRI, Kasaragod	30-03-2011

TRANSFER

Name of the staff / Designation	From (Place)	To (Place)	w.e.f.
Dr. C. Jayabose, Sr. Scientist	CPCRI, Kasaragod	SBI, Coimbatore	18-01-2011

PROMOTION

Name of the staff	From (Designation)	To (Designation)	w.e.f.
Shri K. Devadas	T-5 Technical Officer	T-6 Technical Officer	01-01-2009
Shri G.S. Hareesh	T-4 Instrumentation Mechanic	T-5 Technical Officer (Instrumentation)	29-07-2009
Shri V.K. Gopalakrishnan	T-3 Engineering Asst.	T-4 Engineering Asst.	13-09-2009
Shri M.V. Krishnan	T-4 Technical Asst.	T-5 Technical Officer	03-02-2010

RETIREMENT

Name	Designation	Place	Superannuation on
Dr. Mathew George	Principal Scientist (Microbiology)	CPCRI RS, Kayamkulam	31-01-2011
Shri Nevekanta Roy	SSS	CPCRI RC Mohitnagar	31-01-2011
Shri Tarakanta Barman	SSS	CPCRI RC Mohitnagar	31-01-2011
Mrs. Thulasi Bai	Assistant	CPCRI RS, Kayamkulam	28-02-2011
Ms. E.M. Shijini	Programme Assistant (Extension)	KVK, Alappuzha	17-03-2011 on resignation
Shri Vincent Furtado	SSS	CPCRI RS Vittal	31-03-2011
Shri N. Sasidharan	Technical Officer (T-5)	CPCRI RS, Kayamkulam	31-03-2011
Shri N. Sadashivan Pillai	SSS	CPCRI, RS, Kayamkulam	31-03-2011



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किसानों का हमसफर
भारतीय कृषि अनुसंधान परिषद

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