



CPCRI

NEWS



CENTRAL PLANTATION CROPS RESEARCH INSTITUTE

KASARAGOD - 671 124, KERALA

Vol. 28, No. 3

July - September, 2009

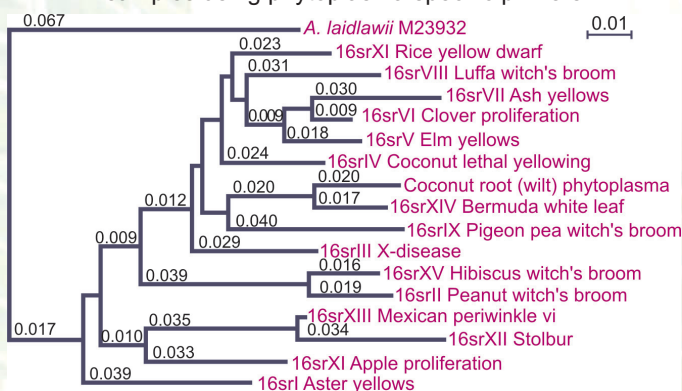
RESEARCH HIGHLIGHTS

Molecular detection of phytoplasma associated with root (wilt) disease of coconut accomplished

Molecular confirmation of phytoplasma association with the root (wilt) disease of coconut through PCR using universal primers has been elusive over the past one decade. In the current effort, molecular detection was accomplished with modified DNA extraction protocol and designing of efficient primers for coconut root (wilt) phytoplasma. DNA was isolated from symptomatic and healthy coconut palms and was amplified with PCR with phytoplasma specific primers (efficient primers designed from coconut root (wilt) phytoplasma). The PCR products



Molecular detection of Phytoplasma from coconut root (wilt) samples using phytoplasma specific primers



Dendrogram showing the phylogenetic relationship between the coconut root (wilt) phytoplasma with 15 related groups of phytoplasma and *A. laidlawii* as out group

were subsequently cloned and sequenced. Homology search with BLAST revealed that coconut root (wilt) phytoplasma is related to sugarcane white leaf phytoplasma, Bermuda grass white leaf phytoplasma, the coconut Weligama wilt of Sri Lanka, with >95% similarity. A collaborative work was undertaken with National Research Centre on Banana, Trichy, Tamil Nadu and Indian Institute of Horticulture Research, Bangalore, Karnataka, by which the association of 16S rDNA XIV group phytoplasma with the root (wilt) disease of coconut in Kerala was confirmed.

A new dwarf mutant coconut identified

A dwarf mutant seedling from the open pollinated progenies of Lakshadweep Ordinary Tall was identified. The seedling produced a total of 29 leaves in 42 months in the nursery bed as compared to 19 leaves by the normal seedling. The dwarf mutant has very short narrow leaves, forming a rosette crown with dense leaf arrangement. The height of fourty two months old seedling was 98 cm whereas the normal seedling reached over 240 cm during the same period in the nursery. Seedlings compared are from the seednuts that

were sown at the same time and were raised side by side in the same nursery bed at CPCRI Research Centre, Kidu during September 2004. The seedlings were uprooted and pot planted for future evaluation. The dwarf mutant is observed to be shorter than the seedlings of CGD variety, which is considered as the shortest coconut variety.



Mutant dwarf along with a normal coconut seedling

Cryopreservation of coconut zygotic embryos

Present strategy of coconut genetic resource conservation in the field gene bank is at the risk of infectious diseases, pests and natural calamities. To develop a complementary conservation strategy which can provide a viable back up for the field gene bank,

work on coconut embryo cryopreservation was started at CPCRI during 2002.

Various cryopreservation methods like desiccation, pre growth desiccation, encapsulation - dehydration and vitrification methods were tested in coconut embryos of tall (WCT) and dwarf (COD) types. Among the various methods tried, desiccation alone resulted in poor survival and re growth (6-7%) whereas, pregrowth desiccation in



Seedling generated from cryopreserved embryo of coconut

3M sucrose resulted 20-21% of the plantlets recovery in pots. Refinement of pre growth desiccation by incorporating raffinose in the pre growth medium improved germination to 66.6% (WCT). This protocol when applied to exotic Tall accessions (Fiji Tall) and dwarf (MYD) resulted in survival of 50.7% and 61.66% respectively.



YLD resistant tissue cultured seedlings of arecanut field planted at disease hotspot region in Sullia taluk, Karnataka

Field planting of tissue culture derived YLD resistant areca palms

A total of 60 numbers of plantlets raised through tissue culture of YLD resistant areca palms were field planted at farmer's plot in disease hotspot region. Twenty plantlets each were planted at 3 villages viz. Gunadka, Balambi and Nadubettu at Sullia Taluk, Karnataka.

Bioinformatics database on palms

Protein kinase genes of coconut, oil palm and rice were analysed using bioinformatics tools. A database has been created using the information and made available at <http://210.212.229.5/CorpKDB/index.htm>

Primers for protein kinase gene specific SSR and SNP markers were designed and synthesised. These are being screened for developing markers to tag root (wilt) resistance in coconut and yellow leaf disease resistance in arecanut.

IMPORTANT MEETINGS / PROGRAMMES HELD

National debate on DUS test procedures

A 'Group meeting on coconut' for developing DUS guidelines for coconut and a 'National debate on DUS test procedures and national test guidelines for tropical and sub-tropical plantation crops' organised by the PPV & FR Authority were held on 9-7-2009 and 10-7-2009 at CPCRI Kasaragod. Dr. S. Nagarajan, Chairman & Dr. P.K. Singh, Registrar, PPV & FR Authority, New Delhi, Dr. George V. Thomas, Director, CPCRI, Dr. K.V.A. Bavappa, FAO Consultant and Former Director, CPCRI, Dr. K.U.K. Nampoothiri, Director, M.S. Swaminathan Research Foundation, Orissa, Dr. R.D. Iyer, Rtd. Head, Crop Improvement, CPCRI, Dr. P.C. Balakrishnan, Dean, KAU and many experts in the field and all scientists from the Division of Crop Improvement have participated in the group meeting on coconut. Scientists from various ICAR Institutes, Central Govt. organisations and private sector

have participated in the national debate on 10-7-2009. The draft DUS guidelines prepared by the CPCRI for coconut and development of test procedures for tropical and sub tropical plantation crops were debated in the meetings.

Town Official Language Implementation Committee meeting

Seventeenth Half Yearly meeting of TOLIC was conducted on 29th July 2009 under the chairmanship of Dr. George V. Thomas, Director, CPCRI and Chairman, TOLIC, Kasaragod. The meeting was convened Dr. V. Balakrishnan, Deputy Director (Implementation), Dept. of Official Language. Smt. K. Sreelatha, Hindi Translator & Secretary TOLIC presented the half yearly report.

Bioinformatics training

A training programme on 'Perl Scripting for genome analysis' was conducted at DIT Agri-bioinformatics



Participants of training programme on Perl scripting

Promotion Center, CPCRI Kasaragod during 10-14 Aug 2009. 26 participants from different parts of the country working in Bioinformatics and biotechnology programs in various fields (Engineering, Agriculture, Horticulture, Fisheries and Animal Husbandry) attended the training.

Mid-term Institute Research Committee meeting

Mid-term Institute Research Committee meeting was held at CPCRI, Kasaragod on 16th September 2009 under the chairmanship of Dr. George V. Thomas, Director. All the mega-project leaders presented the progress of ongoing research projects. Director has reviewed the work done under each of the projects at the headquarters and the regional stations and research centres. He stressed the need to proceed with the programmes with incorporation of the QRT and RAC recommendations. New project proposals were also presented in which, one project each were approved under biotechnology, integrated pest management, post harvest technology and social sciences. During the deliberations, recommendations were given for refining the programmes under the different projects.

Visit of Kerala Legislative Assembly sub committee

Sub committee of subject committee – I of the Kerala Legislative Assembly for studying the problems of coconut sector in Kerala visited CPCRI, Kasaragod on 11-08-09. The committee was under the chairmanship of Shri Rajaji Mathew Thomas, MLA with members Shri C.K.P. Padmanabhan, MLA and Shri Mohammedunni Haji, MLA.

Dr. George V. Thomas, Director made a presentation on technologies evolved by CPCRI for enhancing income from coconut farming. The committee had interaction with scientists on technological options for



Members of Kerala State Legislative Assembly visited CPCRI, Kasaragod

improving coconut sector in Kerala. The team also visited experimental plots and labs.

Institute Management Committee meeting

1st IMC Meeting of the year 2009-10 was held at CPCRI, Kasaragod on 18-09-2009.

Institute Grievance Committee meeting

The Vth meeting of the Institute Grievance Committee 2007-09 was held at Kasaragod on 10-09-2009.

AWARDS

The interest accrued on the term-deposit made from Sardar Patel Outstanding Institution Award is utilised for giving away various awards for the staff of CPCRI to promote excellence in their field. Following awards for the years 2008 and 2009 were presented on 17-09-2009.

Award	Year	Awardee
Best Scientific Team	2009	Dr. C.P.R. Nair, Shri P. Rajan, Dr. Chandrika Mohan, Dr. P. Anitha Kumari and Dr. R. Chandramohan
Best Technical Staff	2008	Dr. Neelofar Illiyas Kutty, SMS, KVK, Kasaragod
Best Technical Staff	2009	Shri Sunny Thomas, JTA (T-2), CPCRI, RS, Kayamkulam
Best Administrative Staff	2009	Shri G.V. Nair, AAO, CPCRI, RS, Kayamkulam
Best Supporting Staff	2008	Shri P.A. Chaniya Naik, SSS, KVK, Kasaragod
Best Supporting Staff	2009	Shri B. Choma, SSS, CPCRI, RS, Vittal.

RECOGNITION

Shri Mohana Gowda S.N., (Technical Officer - T5) has been conferred with a prestigious state award “Annual Academy Award 2008” by Karnataka Nataka Academy for his meritorious services in theatrical activities in the state of Karnataka.

PUBLICATIONS

Research article

Elain Apshra, S., Bhat, V.R., Ananda, K.S., Nair, R.V. and Suma, D. 2009. Evaluation and identification of high yielding trees in Nigerian cocoa germplasm. *J. Plantation Crops*. **37**(2): 111-116.

Riju, A., Rajesh, M.K., Sherin, P.T.P.F., Chandrasekar, A., Apshara, S.E. and Arunachalam, V. 2009. Mining of expressed sequence tag libraries of cacao for microsatellite markers using five computational tools. *J. Genetics*. (Springer) **88**: 217-225.

Venugopal, S. and Chandramohan, R. 2009. Biochemical variability in *Lasiodiplodia theobromae*, the incitant of fruit rot in eriophyid mite infested coconut. *J. Mycol. Pl. Pathol.* **39**(2): 257-259.

Paper presented in seminar/ symposium

Andreas, R., Anna, H., Subaharan, K., Shannon, O. and Bill, H. 2009. Oviposition in *Manduca sexta*: an emerging picture of behavioural responses, chemical stimuli, and their sensory perception. 11th European Symposium for Insect Taste and Olfaction, Sardinia, Italy, 19-24 Sep. 2009.

Litty Thomas, Alka Gupta, Murali Gopal, Chandramohan, R., Priya George and George V. Thomas. 2009. Evaluation of bacilli and fluorescent pseudomonads isolated from the rhizosphere and roots of *Theobroma cacao* L. for biological control of *Phytophthora palmivora*. *In: Proceedings of the First Asian PGPR Congress for Sustainable Agriculture*, ANGRAU, Hyderabad. 21-24 June, 2009, pp 28.

Litty Thomas, Alka Gupta, Murali Gopal, Priya George and George V. Thomas. 2009. Isolation and functional characterization of potential plant growth promoting fluorescent pseudomonads from the cocoa roots and rhizosphere. *In: Proceedings of the First Asian PGPR Congress for Sustainable Agriculture*, ANGRAU, Hyderabad. 21-24 June, 2009, pp 28.

Manimekalai, R. Anoop Raj, Sathish Kumar, R. and Lijin. 2009. Web tool and database on *in silico* approaches in phytoplasma. *In: Information Technology Applications in Horticultural crops*. (Eds.) Govinda Krishnan, P.M., Singh J.P., Lal, S.S., Rawat, S. and Pandey, S.K. Pp. 179-188.

Manimekalai, R., Ambika, S. and George V. Thomas. 2009. Plant resistant gene database. (Eds.) Govinda Krishnan, P.M., Singh J.P., Lal, S.S., Rawat, S. and Pandey, S.K. Pp. 189-195.

Manimekalai, R., Anoop, Rakesh and George V. Thomas. 2009. Putative gene database of cocoa and oilpalm. Presented at the National seminar on Frontiers in computational biology held at C-Dac, Pune, India during 23-24, July 2009.

Priya George, Alka Gupta, Murali Gopal, Chandramohan, R., Litty Thomas and George V. Thomas. 2009. *In vitro* antagonism studies of rhizospheric fluorescent pseudomonads of coconut against *Ganoderma applanatum* and *Thielaviopsis paradoxa*, fungal pathogens of coconut. *In: Proceedings of the First Asian PGPR Congress for Sustainable Agriculture*, ANGRAU, Hyderabad. 21-24 June, 2009, pp 29.

Priya George, Alka Gupta, Murali Gopal, Litty Thomas and George V. Thomas. 2009. Screening of fluorescent pseudomonads from rhizosphere of coconut (*Cocos nucifera* L.) for plant growth promotion traits. In Proceedings of the First Asian PGPR Congress for Sustainable Agriculture, ANGRAU, Hyderabad. 21-24 June, 2009, pp 29.

Popular article

Upadhyay, A.K., Maheswarappa, H.P., Palaniswami, C., Ravi Bhat, Subramanian, P. and George V. Thomas. 2009. Impact of composted coir pith on the nutrition and productivity of coconut. *Bharateeya Tengu Patrike*, **20**(1): 40-44. (In Kannada).

Book Chapter

Nareesh Kumar, S., Kasturi Bai, K.V. and Rajagopal V and Aggarwal, P. K. 2009. Info-Crop coconut model. *In: Information Technology Applications in Horticultural Crops*. (Eds.) Gopalakrishnan, P. M., Singh, J. P., Lal, S. S., Dua, V. K., Shashi Rawat and Pandey, S. K. Malhotra Publishing House, New Delhi. pp. 3-11.

Srinivasan, N. 2009. Production and utilization of biocontrol agents for sustainable management of plant diseases with special reference to coconut root (wilt) – leaf rot. *In: Role of Biocontrol Agents for Disease Management in Sustainable Agriculture* (Ed: Ponmurugan, P. and Deepa, M. A.), Research India Publications, New Delhi, India, pp. 507-520.

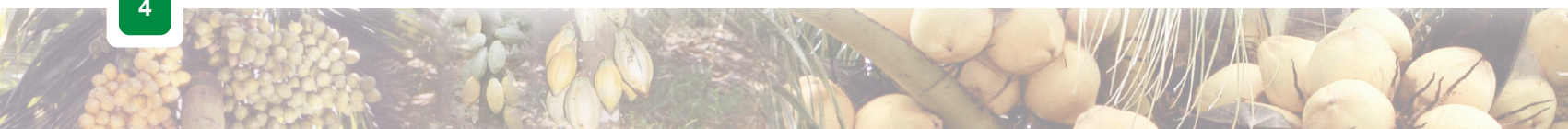
Technical Bulletins

Rajan, P., Chandrika Mohan, Nair, C.P.R. and Joseph Rajkumar, A. 2009. Integrated pest management in coconut. Technical Bulletin No. 55, CPCRI, p 20.

Extension folders

Maheswarappa, H. P., Subramanian, P. and Palaniswami, C. 2009. Coconut based cropping/farming system. Extension pamphlet No. 189. CPCRI, Kasaragod. (In Kannada).

Maheswarappa, H. P. and Palaniswami, C. 2009. Importance of nutrition and integrated nutrient management in coconut. Extension pamphlet No. 190. CPCRI, Kasaragod. (In Kannada).



TRANSFER OF TECHNOLOGY

KASARAGOD

Cyber Extension Programmes

Scientist-farmer interface programmes facilitated through videoconferencing were conducted during the quarter as per the following schedule.

Date	Off campus locations
01-07-2009	CDB HQ, Kochi
17-07-2009	CDB Regional Office, Bangalore, CDB HQ, Kochi
04-08-2009	CDB State Centre, Pitappally, Orissa, CDB HQ, Kochi
20-08-2009	CDB State Centre, Kolkata, CDB HQ, Kochi

Scientists from CPCRI, Kasaragod, farmers from various locations and officials from Coconut Development Board have participated in the interface programmes.

Training programme

A training programme on 'Technology empowerment of rural youth for taking up coconut climbing as a vocation' was conducted at Malappuram, on 27-08-2009 in collaboration with District Kudumbasree Mission and Department of Agriculture. Mr. G. Sudarshanan, Principal Agricultural Officer, Malappuram inaugurated the training programme.

Another training programme for farmers on soil and water conservation and water harvesting was organised at CPCRI, Kasaragod in collaboration with NABARD.

Special training programme

A special training programme on 'Coconut value added products' was organized on 07-08-2009 in which 10 members of women SHG from Onchium Grama Panchayat, Kozhikode District have participated.



Dr. George V Thomas, Director CPCRI inaugurating the training programme on 'soil and water conservation and water harvesting'

A special training programme on 'Use of coconut climbing device' was organized on 07-08-2009 in which five rural youths from Azhiyoor gramapanchayat, Kozhikode District have participated.

A special training programme on 'Preparation of coconut chips' was organized on 24-09-2009 in which 11 entrepreneurs from Kannur and Kanyakumari Districts participated.



Special training program on use of coconut climbing device for rural youth



Special training program on 'Coconut Value Added Products' organised for Women SHG Members

Participation in seminar

Dr. C. Thamban, Sr. Scientist participated in the Research- Extension-Farmer interface programme organised by Department of Agriculture at Kunnummal Block panchayat on 10-07-2009, at Meladi Block Panchayat on 18-07-2009.

He has participated in the District level 'Karshakadinam' celebration organised by Department

of Agriculture at Chengala on 17-08-2009 and dealt with 'Coconut production technologies'. He has also attended another programme jointly organised by SUBICSHA, Perambra and All India Radio Kozhikode at Perambra on 31-08-2009 and dealt with the topic - 'Coconut based farming systems'.

He has also participated in the agricultural seminar organised by Kasaragod District Karshaka Sangham at Erumakkulam on 16-08-2009 and at Kundamkuzhy on 29-08-2009 and dealt with 'Sustainable crop production techniques'.

ATIC activities

A total of 438 visitors including farmers, extension personnel and students made use of ATIC facilities during the quarter, July to September 2009. Technology inputs and products including planting materials, farm products, farm literature and CD ROMs worth Rs 1,63,424/- were sold through ATIC.

Radio talk

Dr. C. Thamban, Sr. Scientist participated in the Phone-in programmes which were broadcast by All India Radio, Kannur/ Kozhikode as per the following details.

Topic	Date
Control of die back disease of arecanut	03-07-2009
Intercropping of pine apple in coconut garden, IPM against red palm weevil in coconut	17-07-2009
Integrated nutrient management practices for coconut	17-08-2009
IDM practices against bud rot disease and IPM against rhinoceros beetle of coconut	19-09-2009
Crop management technologies for coconut cultivation	29-09-2009

KAYAMKULAM

Dr. S. Kalavathi attended the Research Extension on the following aspects:

- 1) Farmer interface programme under ATMA, Karunagappally Block on 30-07-09, Ochira Block on 07-08-09 and Panavally Block on 30-09-09.
- 2) Attended the meeting connected with finalization of Kuttanad Package at Thiruvananthapuram on 18-08-09.

- 3) Attended the Consultative panel meeting of AIR at Thiruvananthapuram on 25-09-09.

She has also attended the Seminar organized by Farmers' club at Thazhava, Kollam 12th August, 2009.

One day training on recent advances in coconut cultivation, with special emphasis to plant protection operations in coconut was imparted to the following groups of farmers under ATMA programme:

- a. Bharanikkavu Block – 20 farmers on 03-07-09
- b. Panavally Block – 41 farmers on 08-07-09
- c. Adoor Block – 50 farmers on 17-08-09
- d. Konny Block – 47 farmers on 26-08-09
- e. Thiruvalla Block - 39 farmers on 24-09-09

Skills were imparted on plant protection techniques and coconut climbing.

Two batches of 50 and 13 farmers each and four officials under the National Horticultural Mission from Dharmapuri and Gudallur Districts of Tamil Nadu were trained on coconut cultivation on 16-07-09 and 01-08-09 respectively.

Dr. V. Krishnakumar, Senior Scientist participated in the seminar and took classes on the following aspects.

- a. Coconut cultivation with suitable intercrops – 19-9-09 at Kodukulanji
- b. Coconut cultivation under "Farmer-Scientist & Extension Interaction" as part of ATMA – 24-9-09 at Ambalapuzha.

Exhibitions

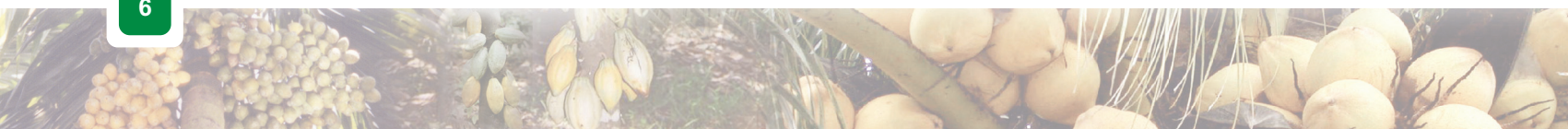
Darshan -2009 (All India Exhibition) at Pushpagiri Medical College Campus, Thiruvalla during 13-23 August, 2009.

VITTAL

Organized a two days training programme on 'cocoa production technology' in collaboration with Dept. of Horticulture, Karnataka from 17th-18th August 2009 for 80 farmers of Dakshina Kannada district.

Dr. Ravi Bhat participated in the following programmes.

- Scientist-Officer-Farmer interface programme conducted by Department of Agriculture, Kerala at CPCRI, Kasaragod on 24-07-2009.
- Seminar on Arecanut and Cashewnut production, processing and marketing at Agricultural College, Shimoga as part on Krishi Mela on 07-09-2009





Training on cocoa production technology at CPCRI, RS, Vittal

- Scientist-Officer-Farmer interface programme conducted by KVK, Brhmavara, on 09-09-2009.

He has also conducted diagnostic field visit to Sirsi and Siddapur, Uttar Kannada District during 4 – 6 August 2009 and to Ujire for participation in Cocoa training programme sponsored by Department of Horticulture, Bantwal on 21-08-2009.

MOHITNAGAR

Dr. Gobinda Ch Acharya- Participated in the Video Conferencing Programme, organized by CDB, Kolkata Centre on 20th August, 2009.

A training programme/ field visit for nine KLO surrendered extremists (SAP) under RSVY was organized by Centre for the Development of Human Initiatives (CDHI) in collaboration with the District Administration, Jalpaiguri on 31st August 2009.

KVK, CPCRI, Kasaragod

Training programmes : A total of 24 training programmes (14 on-campus and 10 off-campus) was organised for the benefit of 439 (223 men and 216 women) participants.

Frontline demonstration : Tissue cultured banana variety Grand Naine was introduced as an intercrop in coconut gardens belonging to 25 farmers of Uduma and Mogral Puttur Panchayats in Kasaragod district. The introduced variety performed better with the yield ranging from 14- 32 kg and an average bunch weight of 23 kg. The benefit cost ratio is 1.3 : 1.0.

Extension services : Conducted/ participated in various extension activities like kisan melas, field days, farmers group meetings, film show/ video CD, participation in exhibitions, advisory services, participation in agricultural seminars, farmers visit to KVK, field visits,



FLD on Grand Naine banana cultivation at Kasaragod

demonstrations etc., for the benefit of the various clientele.

Mass media coverage

- Phone-in programmes from AIR, Kannur with Shri R.Sanal Kumar, SMS, KVK as subject expert on the topics management of yellow leaf disease in arecanut was broadcast on 10 July, 2009; manuring in arecanut garden was broadcast on 17 July, 2009; management of stem bleeding disease in coconut was broadcast on 4 September, 2009.
- Radio talk by Shri R. Sanal Kumar, SMS, KVK on bud rot disease in coconut – Prevention and control (feature) was broadcast on 26 August, 2009.

Krishi Vigyan Kendra, Alleppey

Training programmes

KVK Alleppey has conducted 19 on campus trainings, 13 off campus and 10 sponsored trainings as apart of developing linkages during this quarter. In these trainings a total of 428 men and 578 women have participated.

Training type	No. of trainings	Men	Women	Total
On Campus	19	127	209	336
Off Campus	13	185	173	358
Sponsored	10	116	196	508
Total	42	428	578	1202

External funded programmes

Entrepreneurship Development Programme in Agriculture

One week training programme on 'Entrepreneurship development programme in

agriculture' was conducted for the 46 farmer beneficiaries in two batches sponsored by Kerala State SC/ST Development Corporation. The topics included Crop production, IPDM in major crops, mushroom cultivation, animal husbandry, organic recycling, coconut processing and agricultural equipments.

Frontline Demonstrations (FLD)

A demonstration was conducted at Thekkakra and Cheriyanad panchayaths involving 20 farmers in an area of 2 hectares. The Sree Jaya cassava recorded a highest yield of 22.5 t/ha compared to the local check 14.5 t/ha with a B: C ratio of 2.86 and 1.39 respectively.

Another demonstration was conducted at Chennithala panchayath involving 5 farmers in an area of 5 ha. The technology demonstrated was seed treatment using *P. fluorescence* @ 10 gram/ kg seed and foliar application 35 days and 45 days after transplanting @ 2%. An average yield of 84.25 q/ha was recorded with an increase of 62% over the local check.

Demonstration unit

As per the SAC decision of 8th SAC meeting a demonstration unit on Sericulture was initiated at KVK with the help of Sericulture Department, Alleppey district.

SWPTL

During the period 88 soil samples, two plant samples and two water samples were analyzed for the benefit of 75 farmers.

Other Extension activities of Krishi Vigyan Kendra

Extension activities	Number of activities
Agro clinic	563 Nos.
Helpline Services	584 Nos.
Press Release	15 Nos.



Special programme: Climb coconut tree with confidence

Field Visits	21 Nos.
Students Group Visit to KVK	5 Nos. (360 students)
Soil test campaign	5 Nos. (156 farmers)

Inputs provided through KVK- Good quality planting material, vegetable seeds, broiler chicks, medicinal plants, mushroom spawn, etc. were distributed to farmers.

Special Programme launched on Coconut day

As part of the coconut day celebrations, KVK has initiated a programme "Climb Coconut tree with confidence". The programme will be continuing for one year (from September 2nd 2009 to 2010) on every Wednesday 10 AM to 4 PM. The KVK staff facilitates the interested persons/groups in building skill on climbing coconut trees. Farmers can attend the training and demonstration on pedal type coconut climber and new TNAU model coconut climber on these days. The response is very much enthusiastic enabling follow up off campus trainings and establishment of climbing groups with other stakeholders' collaboration.

ATMA- Alleppey activities

The KVK participated in the ATMA – BTT meetings of Chengannur, Ramankary blocks. Apart from these, KVK personnel attended the Kisan Gosthi programme at Chengannur, Mavelikkara, Ochira, Alappuzha, Ambalapuzha and Karunagappally Blocks.

'Harithapatham'- Leading youth to farming

A programme to motivate and expose the younger generation to farming was initiated among students (Schools and Colleges) with programmes on farm quiz, vermicomposting, organic vegetable cultivation, etc. A quiz programme was conducted at Government Higher Secondary School, Kayamkulam on 30-09-09 in which 30 students participated.



Sponsored training on 'Entrepreneurship development in agriculture' sponsored by SC/ST Corporation

SEMINARS / SYMPOSIA / CONFERENCES / WORKSHOPS ATTENDED

Name and designation	Title	Place & Date
Dr. George V. Thomas Director	Workshop on IT applications in Horticulture	CPRI, Shimla 24-8-2009
Dr. N. Ravikumar Dr. R. Manimekalai Scientists (SS)		25-8-2009
Dr. George V. Thomas Director	National seminar on enhancing agricultural productivity and profitability and presented a lead paper	CMFRI, Kochi 29-8-2009
	Special Interactive workshop on administrative and financial matters	NAARM, Hyderabad 10-9-2009 to 11-9-2009
	Brainstorming session on establishing a Centre of Bioinformatics in Agriculture	NAS Complex, New Delhi 22-9-2009
Dr. R. Manimekalai Scientist (SS)	National seminar on Frontiers in computational biology	C-DAC, Pune 23-24, July 2009
Sri. Rajan, P. Principal Scientist & Dr. Joseph Rajkumar, A. Senior Scientist	National Seminar on enhancing agricultural productivity and profitability	CMFRI, Cochin 30-8-2009

HRD / TRAININGS

Mr. Anilkumar, B., Senior Technical Assistant (T4), CPCRI, RS, Kayamkulam obtained M.Sc. (Ag.) in Agricultural Economics from Allahabad Agricultural Institute – Deemed University, Allahabad, U.P.

Training for two days was conducted to the administrative staff especially to the LDCs and UDCs having up to five years of service in the grade. A total of 17 staff members attended the training.

NEW PROJECTS SANCTIONED

Two new projects were sanctioned by the Coconut Development Board to the Institute for a period of three years.

Project title	Outlay (Rs. in lakhs)	Principal Investigator
Scaling up the production of planting material from released varieties of coconut palms through plumule culture	43.17	Dr. Anitha Karun, Pinc. Sci. (Hort.)
Network project for establishment of nucleus seed gardens for production of quality planting materials of recently released coconut cultivars	49.57	Dr. S. Arulraj, Project Coordinator (Palms)

OTHER INFORMATION

Yoga programme was arranged for the benefit of the staff and family members of the Institute, in which, more than 20 persons have participated. Participants were trained by Smt. K. Sreelatha, Hindi Translator of the Institute during September 2009.



CELEBRATIONS

Independence Day

Independence day was celebrated at CPCRI headquarters, Regional Stations and Research Centres with full enthusiasm.

ICAR Foundation Day

Various programmes were organised in connection with the ICAR Foundation Day celebrations. These include training programme on 'Soil and water



Independence Day celebration at CPCRI, Kasaragod

conservation in coconut garden' for farmers, quiz competition for farmers and training programme for farm women on 'Value added coconut products'. The valedictory function of the ICAR Foundation Day celebrations was held on 20-7-2009. Shri S. Sivaprasad, Principal Agricultural Officer, Kasaragod was the chief guest for the function.



Shri S. Sivaprasad addressing the gathering during the ICAR Foundation Day

Vittal

ICAR Foundation Day was celebrated on 16-7-2009 at CPCRI Regional Station, Vittal. The Chief Guest of the day, Shri Venkatesh A. Shindihatti, Assistant Labour Commissioner, Mangalore spoke on labour laws.

Onam celebration

Kasaragod

The CPCRI Recreation Club had organised Onam celebrations on 27th August at CPCRI Kasaragod which

was inaugurated by noted classical singer Sreevalsan J. Menon, Associate Professor (Extn.), Kerala Agricultural University, Thrissur. He also recited a Keerthanam during the programme. Staff of CPCRI have participated in Uriyadi and flower carpet competitions conducted on the day. Dr. George V. Thomas, Director, CPCRI had presided over the meeting, after which Smt. Jayashree, Subject Matter Specialist, Krishi Vigyana Kendra performed a musical concert.



Dr. Sreevalsan J. Menon, Associate Professor (Extn.) KAU inaugurating Onam celebrations at CPCRI, Kasaragod

Kayamkulam

Onam was celebrated on 28-08-2009 by the CPCRI Recreation Club, Kayamkulam. The staff and family members actively participated in different items like Athapookalam Pulikali, Uriadi, Vadamvali.

Hindi Chethana mas/fortnight/week Celebration

Kasaragod

To commemorate the Golden day of Indian History, the Hindi Chetana mas was inaugurated on 14th Sept 2009 by Dr. V Gangadharan, Principal & Head (Hindi Dept), Nehru Science & Arts college, Kanhangad and delivered a speech on the importance of Hindi as National Language, Official Language and Link Language. Dr. George V Thomas, Director, chaired the inaugural function in which officers and staff took oath to do maximum official work in Hindi.

Kayamkulam

Hindi Week was celebrated at CPCRI, Regional Station Kayamkulam from 14th to 19th September, 2009. In the inaugural session on 14th September, 2009,

Dr. Mathew George, Pr. Scientist and Acting Head of the Station administered the oath. Various competitions were conducted in which a good number of employees participated. The Valedictory function was held on 19-09-09 under the Chairmanship of Acting Head in which Shri Muhammad Salim Khan, Hindi Teacher, S.K.V. U.P School, Karunagappally was the Chief Guest.

Vittal

Hindi Fortnight was celebrated from 14th to 25th September 2009 at CPCRI Regional Station, Vittal in association with TOLIC. The inaugural function was held at the Directorate of Cashew, Puttur on 14-9-2009 with Smt. Savitha, Hindi Teacher as the Chief guest. Valedictory function was held at CPCRI Vittal on 25-9-2009. Shri K Rama Naik, Sr. Branch Manager, Syndicate Bank, Vittal and Smt. Saraswathi, Hindi Teacher were the Chief Guests. Dr MG Bhat, NRCC Puttur presided over the function. During this occasion various competitions were held.

Smt. Veeramma, Shri TH Nagaraj and Smt. K Arunakumari received cash awards for use of Hindi in

their administrative work.

Mohitnagar

Hindi Fortnight was celebrated during 11th to 25th September 2009 at this centre. Various competitions were organized for the staff members and prizes were distributed to the winners.

World Coconut Day

Various programmes were conducted as part of the World Coconut Day celebration at Central Plantation Crops Research Institute, Kasaragod.

Participatory painting campaign

A participatory painting campaign with the theme 'Green lines of coconut community' (*Kera samoothathinte haritha rekhakal*) was organised at CPCRI Kasaragod on 10-9-2009 as a part of World Coconut Day celebrations. Sri. Kanayi Kunhiraman, the renowned sculptor was the chief guest of the programme. A team of nine leading artists lead by Sri. P. S. Punchithaya, the famous artist from Kasaragod district participated in the programme.



Renowned sculptor Sri Kanayi Kunhiraman inaugurating the participatory painting campaign in connection with World Coconut Day celebrations



Shri P Karunakaran, M.P. addressing the gathering during the valedictory function of Coconut Day. Shri Anand Singh, IAS, District Collector is also seen (sitting third from right)

DISTINGUISHED VISITORS

Name of personnel & Designation	Date of visit/ place	Purpose
Dr. S. Prabhukumar, Zonal Project Director, KVK	16-8-2009 KVK, Kayamkulam	VIII th SAC meeting of KVK, Alleppey
Dr. Krishna Kant, Senior Director Department of IT, GOI	9-9-2009 CPCRI, RS, Kayamkulam	Discussions with Scientists on the research work carried out on coconut root (wilt) disease

Paintings of renowned artists
on the theme

*'Green lines of
coconut community'*



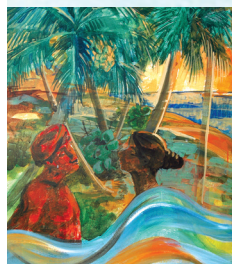
P. S. Punichittaya



K.G. Suresh



Sacheendran



Jyothichandran



Kandan G.



Praveen Kumar Punichittaya



Rajendran Pullur



Vinod



Vishwas M.

PERSONALIA

APPOINTMENT

Name of staff	Post appointed	Place	Date (w.e.f.)
Dr. Merin Babu	Scientist (Plant Pathology)	CPCRI, Kasaragod	28-08-2009

PROMOTION

Name of staff	From (designation)	To (designation)	Date (w.e.f.)
Dr. M. Shanavas	T-5 Technical Officer	T-6 Technical Officer	01-07-2004

TRANSFER

Name of staff	Designation	From (Place)	To (Place)
Dr. C. Palaniswami	Sr. Scientist	CPCRI, Kasaragod	SBI, Coimbatore
Dr. D.V. Srinivasa Reddy	Sr. Scientist	CPCRI, Kasaragod	Zonal Project Directorate, Bangalore
Shri T.S. Ponnaiah	AAO	CPCRI, Kasaragod	Administrative Officer NIANP, Bangalore

RETIREMENT

Name of staff	Designation	From (Place)	On account of
Shri Thomas Mathew	Technical Officer	CPCRI, RS, Kayamkulam	Voluntary on 1-8-2009
Shri C.T. Sankarankutty	JTA (T-2)	CPCRI, RS, Kayamkulam	Voluntary on 1-8-2009
Dr. Sosamma Varghese	Principal Scientist Nematology	CPCRI, RS, Kayamkulam	Superannuation on 31-08-2009
Smt. D. Thankamma	Skilled Supporting Staff	CPCRI, RS, Kayamkulam	Superannuation on 31-08-2009
Smt. Prema Bai	Skilled Supporting Staff	CPCRI, RC, Kidu	Superannuation on 31-08-2009
Shri K. Appu	Skilled Supporting Staff	CPCRI, Kasaragod	Superannuation on 30-09-2009
Shri P.V. Devassy	Skilled Supporting Staff	CPCRI, RS, Kayamkulam	Superannuation on 30-09-2009

Published by: Dr. George V. Thomas, Director

Compiled and edited by: Shri H. Muralikrishna, Shri John George and Dr. B. Augustine Jerard

Photographic credits: Shri K. Shyama Prasad, Shri Mohana Gowda S.N. and Shri E.R. Asokan

Central Plantation Crops Research Institute, Kudlu P.O., Kasaragod, Kerala – 671 124

Phone: 04994 232893, 232894, 232895, 233090, 232333 (Director); Fax: 04994 232322

e-mail: cpcri@nic.in, cpcri@yahoo.com; website: www.cpcri.gov.in

Printed at: Codeword Process & Printers, Yeyyadi, Mangalore - 575 008 Phone: 0824-2214618, 09900100818