



KALPA

CPCRI Newsletter

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From the Director's Desk



The traditional coconut farming in our country is an integral part of our life, culture, identity and liberty. In contrast to this, the current decade is witnessing mass withdrawal of people from this sector despite the breakthrough research outputs generated by the research institutions. Hence, redemption of the traditional coconut farming approaches is becoming a necessity and such an act is nothing but the redemption of our own cultural democracy. Anyone committed to the coconut farming is doing nothing but highlighting his ethnic identity. It is important to remember that until and unless a society marks its ethnic identity it can never raise to the national identity. We are bound to set our feet firmly on the ethnic thoughts of our cultural heritage to make our present prosperous and also to construct our future.

Coconut is omnipresent in the culture of our country and had significantly influenced the lives of the people and therefore shifting away from coconut and its products to other substitutes is solely moving far away from your own cultural blessings. Beyond that, by subduing coconut palms and

coconut farming, the society is passively getting separated from its own identity. The evolution of identity crisis can adversely affect a society and even may construct marginalized identities. Such a situation may exist paradoxical to the fact that we were known to the western world from time immemorial for our agrarian achievements and the cosmopolitan culture shaped up through that.

In the above described context it is important for the agricultural research institutions to uphold the character of creation and recreation. Creation is nothing but sustaining through the deep rooted inheritance of research values. The agricultural research institutes should have an open mind to the global research activities and should discard the imitations and instead follow the path of assimilation of the vast knowledge sphere. Research institutes can develop independent ideologies only through the path of knowledge assimilation. The ideology should emphasize the livelihood of the farmer and also should be capable of reforming the livelihood scenario. Such an evolution through research ideology is becoming inevitable for the social existence of the research institutions. Therefore, the change of states of farmer minds and material life should be reflected through the analytical outputs of agricultural research institutions. Above all the research institutions have a greater role in creating an impetus for the social, economical and cultural advancement of a society.

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

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Krishi Mela at Regional Station Vittal

A Krishi Mela was organised at ICAR-CPCRI Regional Station, Vittal on 10th January 2015 with participation of about 2500 farmers and other stakeholders. Shri D.V. Sadananda Gowda, Hon'ble Minister for Law and Justice, Govt. of India has inaugurated the Krishi Mela. Scientist-extension personnel-farmer interface programme on coconut, arecanut and cocoa farming, exhibitions on technologies, visit to arecanut and cocoa plots and quiz programme were organised for the participants as part of the Krishi Mela.



Shri D.V. Sadananda Gowda, Hon'ble Minister for Law and Justice, Government of India inaugurating the Krishi Mela

Dream Big – Kalpa 2015

An institute - industry interface meet “**DREAM BIG – KALPA 2015**” was organised at ICAR-CPCRI Kasaragod on 31st January 2015 to mark “ICAR Technology Day” with participation of over 200 entrepreneurs. Shri M.J. Shetty, President, Kanara Small Industries Association (KSIA), Mangalore inaugurated the programme and explained how R&D will help entrepreneurs in national development. Shri Shetty portrayed himself as a witness to showcase the success of a farmer as an entrepreneur. Dr. P. Chowdappa, Director, ICAR-CPCRI in his presidential address, expressed the importance of industries to take the improved technologies to the benefit of common man. Shri Rammohan Pai Maroor, Vice President, Kanara Chamber of Commerce & Industries, Shri Martin Chacko, Asst. Director, MSME, Sri Samuel, Manager, District



An entrepreneur receiving “Coco Sap Chiller” from Dr. P. Chowdappa, Director and Shri M.J. Shetty, President, KSIA

Industries Centre, Shri Jyotish Jagannath AGM, NABARD have offered felicitations.

During the meeting, technology transfer were made to the tune of Rs. two lakhs through MoUs in respect of virgin coconut oil production machineries, coconut chips technology and collection

of fresh and unfermented neera. A booklet on “Entrepreneur and Farmer Friendly Technologies” was released during the occasion. An exhibition on technologies with charts and specimen were arranged and the technologies were explained to the entrepreneurs by the inventors and technology managers.

National Workshop on planting material production in coconut-Issues and Strategies

ICAR-CPCRI organized a National Workshop on 'Planting Material Production in Coconut -Issues and Strategies' on 10th February, 2015 at Kasaragod. Dr. P. Rethinam, former Director, APCC chaired the workshop. Delegates from Kerala, Tamil Nadu, Karnataka, Andhra Pradesh, Maharashtra, Gujarat, Odisha, Assam and West Bengal representing various stakeholders including research workers, Development agencies, Farmer organizations, NGOs and progressive farmers attended the workshop. Dr. Chowdappa, Director, ICAR-CPCRI, presided over the plenary session. Dr. Anitha Karun and Dr. Samsudeen K., presented



Dr. S. Edison, Chairman, RAC addressing the participants of the Workshop on "Planting material production in coconut" at Kasaragod

on 'Biotechnological tools for quality planting material' and 'coconut planting material production - national scenario' respectively. The workshop deliberated on issues like improving the availability of quality planting material, decen-

tralized participatory production of planting material, accreditation and certification process for maintaining seedling / seed nut quality and formulated strategies for improving the availability of quality planting material in the country.

Awareness – cum - training programme on 'Protection of Plant Varieties and Farmers Right Act' at Kinanur

Awareness – cum - training programme on 'Protection of Plant Varieties and Farmers Right Act (PPV&FRA)' was organised on 27th March 2015 at Choyangod in Kinanur - Karindalam grama panchayat by ICAR-CPCRI Kasaragod. Shri P. Karunakaran, Hon'ble Member of Lok Sabha, Kasaragod inaugurated the programme. About 250 farmers attended the awareness-cum training programme.



Shri P. Karunakaran Hon'ble MP, addressing awareness-cum-training programme on PPV&FRA

Training cum awareness programme on PPV & FRA at Ambalappuzha

KVK, Alleppey in association with ATMA Alappuzha conducted a training-cum-awareness programme on PPV&FRA at Ambalappuzha on 07-02-2015. Dr. S. Rajeena, Head, Farming System Research Station, Kottarakkara, KAU, delivered a lecture on 'PPVFR Act and farmers'

rights' and Dr. Reji Jacob Thomas, Senior Scientist, ICAR-CPCRI delivered a lecture on 'Guidelines for registration of farmer varieties and community genome savier awards'. Sri. Thomas, Secretary, Kadamakudi – Varappuzha Pokkali organic farmers ICS was facilitated in the

meeting and he narrated the experience of his community receiving award from PPV & FRA. About 100 farmers from different parts of the district attended the programme. An exhibition of farmers' varieties was also arranged of different crops.



CPCRI launched packaged 'Kalparasa'

The Institute (ICAR-CPCRI, Kasaragod) in collaboration with North Malabar Chamber of Commerce (NMCC) Kasaragod organized a workshop on the production and marketing of 'neera' on March 10, 2015 to highlight its importance and develop entrepreneurship. The production technology of the neera brand 'Kalparasa,' developed by the ICAR-CPCRI, is a natural non-alcoholic beverage and high in nutritional value. This is pasteurized product, without any added chemicals and lasts for 45 days at 4 to 6°C. It has all the qualities of natural fresh neera but for the fresh aroma.

In his inaugural address, Dr. P. Chowdappa, Director, ICAR-CPCRI, Kasaragod emphasized the need for value addition in coconut and popularizing relevant technologies for enhancing farmers' income and create employment opportunities to rural and urban youth. He also stressed that in addition to improving the livelihood of farmer, neera

technology is going to create green colour jobs. He further informed that the first fresh neera sale was launched with a brand name 'Pamdew' by Palakkad Coconut Producers Company Limited (PCPCL) by adopting the coco-sap chiller technology developed by the ICAR-CPCRI in Kerala.

Sri Susheel Aaron Chairman NMCC presided over the inaugural function. Bottled Kalparasa, developed by ICAR-CPCRI was launched during the workshop and handed over to Sri P J Antony Executive Editor, Jeevan T.V. Memorandum of understanding (MOU) on Kalparasa Technology was also signed with the

entrepreneurs, M/s Planet Private Limited, Hyderabad and M/s Senthil Seeds Private Ltd, Tirupur, Tamil Nadu. Dr. K.B. Hebbar, Head, Plant Physiology, Biochemistry and Post Harvest Technology made a presentation on production and processing of Kalparasa. Dr. C. Thamban, Principal Scientist explained marketing strategies for Kalparasa through farmers producers companies. Field demonstration on production and processing of Kalparasa was conducted as part of the programme and coconut to sugar was also the highlight of the day. Exposure visit to agro processing laboratory and the experimental plots was also organized.



Shri P.J. Antony, Executive Editor, Jeevan TV receiving Kalparasa bottle from Dr. P. Chowdappa, Director

Coconut varieties registration

The released and notified coconut varieties from the Institute were registered with PPVFR Authority and registration certificates for plant

variety protection under extant variety category were received for six coconut varieties viz. Kalpa Pratibha (830 of 2014), Kalpa

Dhenu (828 of 2014), Kalpa Mitra (832 of 2014), Kalparaksha (761 of 2014), Kalpasree (818 of 2014) and Kalpa Sankara (814 of 2014).

Research Advisory Committee meeting

The 17th meeting of Research Advisory Committee was held at ICAR-CPCRI, Kasaragod on 11th February 2015 under the chairmanship of Dr. S. Edison, Former Director, CTCRI and the members present were Dr. Brahma Singh, Dr. V.S. Korikantimath,

Dr. S. Arulraj, Dr. Subhash Narayanan, Dr. P. Chowdappa with Dr. Anitha Karun, Head, Crop Improvement being the Member Secretary.

An interactive meeting with Head of the Divisions and Head of regional stations and members of the RAC

was held to address the target oriented issues and to sensitize the concerned scientists involved in implementation.

RAC suggested to update the ATR periodically and communicate to the Chairman and the Members. It was suggested to include all the

stakeholders to finalize any policy document pertaining to mandate crops so that the strategies are acceptable to all States. The Chairman, RAC complimented the Director and the Scientists of the Institute for the significant contributions made under the ongoing research programmes and appreciated the quality of publications in high impact factor journals.



Dr. S. Edison, Chairman RAC, releasing extension folder on *Brontispa* during RAC meeting

Institute Research Committee meeting

The 43rd Annual Institute Research Committee Meeting of the ICAR-Central Plantation Crops Research Institute was held at ICAR-CPCRI Kasaragod from 23rd to 26th February, 2015 under the chairmanship of Dr. P. Chowdappa, Director ICAR-CPCRI to review the progress of research programmes and achievements under the ongoing projects at the Institute. During the meeting, all the ongoing research



Dr. P. Chowdappa, Director addressing the members during Plenary Session of IRC meeting projects (including externally funded projects) grouped under eight research programmes were discussed in detail and the technical programme for the year 2015-16 was finalized.

RESEARCH HIGHLIGHTS

Kodinar, a new arecanut variety

The variety is a high yielding selection from germplasm lines IC557397 collected from Gujarat. The palms of the variety are regular bearing with good kernel quality suitable for tendernut processing. The variety has exhibited better

performance for yield over the released varieties viz., Mangala, Sumangala, Sreemangala, Madhuramangala and SK Local, with high recovery of first quality processed tendernut (68.4%). The palms possess medium thick stem, shorter internodes,

particularly drooping crown and semi tall. The fruits are round shaped with high recovery of chali (26.8%). The average dry kernel yield and tendernut yield was 3.82 kg palm⁻¹ year⁻¹ and 3.10 kg palm⁻¹ year⁻¹ respectively. The 43rd Institute Research Committee has recommended this variety for release and cultivation in Karnataka and Gujarat, considering the suitability for dry kernel production and tendernut processing.



Kodinar: A promising arecanut selection

Kalpa Sankara hybrid yield harvested

Harvesting of mature nuts from 31-month old Kalpa Sankara commenced on 20-03-2015, this was experimented in the novel concept on crop-habitat diversification for pest regression. This is the first time mature coconuts are harvested from the hybrid Kalpa Sankara, the seedling of which were planted during August 2012. Kalpa sankara is the first hybrid (CGD x WCT) tolerant to root (wilt) disease of coconut released by ICAR-CPCRI.



Dr. P. Chowdappa, Director inaugurating first harvest of nuts in 31 months old palm of Kalpa Sankara coconut hybrid at Kayamkulam

Safe level of imidacloprid residue in coconut meat and water

Imidacloprid residue was not detectable in both nut water and meat from all samples taken from a period of 2-30 days

after crown pouring of imidacloprid @0.02% (1 ml per litre of water) on red palm weevil infested coconut palm. This in-

dicates the food safety limit of imidacloprid @ 0.02% for use in the management of red palm weevil.

HUMAN RESOURCES DEVELOPMENT

Training within India

Name and Designation	Title of training course	Place and Duration
Dr. P. Chowdappa, Director	EDP on Leadership Development	ICAR-NAARM, Hyderabad 19-01-2015 to 23-01-2015
Dr. V. Niral, Principal Scientist	Training workshop of all the ICAR institutes HRD nodal officers	ICAR-NAARM, Hyderabad 26-02-2015
Dr. Murali Gopal Principal Scientist	Agricultural Genomics Symposium	TNAU, Coimbatore 16-02-2015
Dr. S. Elain Apshara, Senior Scientist (Hort.)	Genomics and Proteomics in plant and microbes towards translational research	ICAR-IISR, Calicut 21-01-2015 to 01-02-2015
Dr. Nagaraja, N. R. Scientist (Plant Breeding)	National Seminar on Cocoa	Jawaharlal Nehru National Institute of Engineering and Technology, Shivamogga, 30-01-2015 to 31-01-2015
Shri M.S. Rajeev and Dr. S. Ravi, Assistant Chief Technical Officers	Capacity building programme on Technology demonstrations for climate resilience and value -added agro - met advisories	CRIDA, Hyderabad 27-01-2015 to 28-01-2015

AWARD/ HONOURS

An oral presentation entitled "Surveillance note on invasive pests of coconut and strategies on incursion management" by Josephraj Kumar, A., Chandrika Mohan,

Jerard, B.A. and Krishnakumar, V. was adjudged as the best oral presentation in the International Conference on Innovative Insect Management Approaches

for Sustainable Agro Eco System (IIMASAE) held at Agriculture College and Research Institute, Madurai during 27-30 January, 2015.

PUBLICATIONS

Research Articles

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Merin Babu, Josephraj Kumar, A., Rajumon, M., Devika, S., Rajeev, G., Gangaraj, K.P. and Hegde, V. 2015. Molecular characterization of phytoplasma associated with phyllody of *Petalium murex*—a common weed in coconut plantations. *Phytoparasitica* DOI 10.1007/s12600-014-0450-1.

Nagaraja, N. R., Anupam Singh, Pallavi, J. K., Sharma, J. B., Karnam Venkatesh, Singh, G. P., Neelu Jain and Prabhu, K. V. 2014. Genetics of resistance to stem rust against Indian races in wheat varieties, Kundan and UP 2338. *Electronic J. Plant Breeding*. **5**(4): 636-640.

Neema, M. and Reghunath, B.R. 2015. Variability among Indian Indigo accessions in Kerala. *Open Access J. Medicinal and Aromatic Plants*. **6**(1): 15-20.

Shareefa, M., Thomas, R.J., Nampoothiri, C. K. and Anitha Karun 2014. Studies on vivipary in dwarf coconut cultivars. *Indian J. Horticulture* **71** (4): 464- 468.

Papers presented in Conference

Chandrika Mohan and Josephraj Kumar, A. (2015) Scope of entomopathogens for pest management in coconut. Lead lecture presented at International conference - Innovative Insect Management Approaches for Sustainable Agro Eco System (IIMASAE) held at Agriculture College and Research Institute, Madurai 27-30 January 2015 Srinivasan *et al.* (Eds) Book of Abstracts p337-339.

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Augustine Jerard, B., Niral, V., Samsudeen, K., Nair, R.V. and George V. Thomas. Development of "Kalpa Samrudhi"—a Dwarf x Tall coconut hybrid at ICAR-CPCRI. In: Dinesh R, Santhosh J Eapen, Senthil Kumar CM, Ramakrishnan Nair R, Devasahayam S, John Zachariah T, Anandaraj M (eds.) Abstracts, PLACROSYM XXI, International Symposium on Plantation Crops, ICAR-Indian Institute of Spices Research, Kozhikode, Kerala, India, pp. 23.

Augustine Jerard, B. and Niral, V. Intra-population variability for morphological and fruit component traits in Gangabondam Green Dwarf coconut accession. Poster-18, In: Dinesh R, Santhosh J Eapen, Senthil Kumar CM, Ramakrishnan Nair R, Devasahayam S, John Zachariah T, Anandaraj M (eds.) Abstracts, PLACROSYM XXI, International Symposium on Plantation Crops, ICAR-Indian Institute of Spices Research, Kozhikode, Kerala, India, pp. 35.



Niral, V., Jerard, B.A., Samsudeen, K., Jose, C.T. Evaluation of variability in coconut germplasm with special reference to ecologically important traits. P13. In: Dinesh R, Santhosh J Eapen, Senthil Kumar CM, Ramakrishnan Nair R, Devasahayam S, John Zachariah T, Anandaraj M (eds.) Abstracts, PLACROSYM XXI, International Symposium on Plantation Crops, ICAR-Indian Institute of Spices Research, Kozhikode, Kerala, India, pp 32.

Popular articles

Elain Apshara, S. 2015. Trinitario type of cocoa and their performance in India. *The Cashew and Cocoa J.* **4**(1): 32-35.

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Rajeev, M.S., Lekha, G. and Muralidharan, P. 2015. Arka Abha - a gifted variety. Kerala Karshakan- e Journal. Vol. **2**(8): 36-39.

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Adikeyalli Kaalabadda Krishi Chatuvatikogalu (Kannada). Technical bulletin (No. 90). ICAR-ICAR-CPCRI, Kasaragod – 671 124, Kerala 43 p.

Ananda, K. S., Nagaraja, N. R., Elain Apshara, S., and Jaganathan, D. 2015. E-technical bulletin on arecanut calendar (Kannada) ICAR-CPCRI, Kasaragod – 671 124, Kerala.

Extension Folders

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Chandrika Mohan and Josephraj Kumar, A. 2015. Beware of the invasive pest, coconut leaf folder, *Brontispa longissima*, Extension folder No. 226, ICAR-CPCRI, Kasaragod.

Training Manual Chapters

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Niral, V., Jerard, B.A. and K.S. Ananda. 2015. Species utilization for plantation crops improvement. In: Souvenir of lead papers and abstracts- National meet on distant hybridization in horticultural crop improvement, ICAR-IIHR, Hessraghatta Lake, Bangalore, 182-190.

TRANSFER OF TECHNOLOGY

Stakeholders' interface programmes on coconut and cocoa farming

Stakeholders' interface programmes on coconut and cocoa farming were organized by ICAR-CPCRI in Andhra Pradesh as part of the technology transfer activities. The first stakeholder meeting was conducted at Mukkamala near HRS, Ambajipeta on 3rd March, 2015. About 200 stakeholders including farmers, entrepreneurs, extension personnel from the State Department of Horticulture, scientists from ICAR-CPCRI and HRS Ambajipeta attended. Dr. P. Chowdappa, Director, ICAR-CPCRI inaugurated the meeting and Dr. B.M.C. Reddy, Vice Chancellor, Dr. YSR Horticultural University presided over the inaugural function. On 4th March 2015, another stakeholder interface meeting was conducted at IIOPR, Pedavegi. Dr. S. Arulraj, Director, IIOPR inaugurated the meeting. Dr. P. Chowdappa guided the discussions. Dr. Venkatesh Hubballi, Director, DCCD, Kochi delivered a lecture on cocoa developmental activities. About 200 farmers and other stakeholders attended the programme.

Training Programme

Advanced cocoa production technologies

The training programme, sponsored by the Directorate of Cashew and Cocoa Development (DCCD), Kochi, was organized during 19th to 21st March 2015 at ICAR-CPCRI Regional Station, Vittal. Fifty two trainees from Dakshina Kannada and Shivamogga districts of Karnataka participated in the training.



Dr. P. Chowdappa, Director, ICAR-CPCRI inaugurating the interface programme on cocoa at Mukkamala, Andhra Pradesh

Mr. Ravindra Rao, officer from M/s Mondelez International and Mr. Sunil Kumar, Manager, CAMPCO, Vittal offered felicitations. Scientists from ICAR-CPCRI, RS, Vittal and Kasaragod took classes on crop improvement, nursery techniques, crop production, management of nutrient deficiencies, crop protection, safe use of pesticides, marketing and extension strategies. Exposure visits were also arranged to various farmers' gardens at Puttur and Mangalore.

Other trainings

Training program for a batch of 20 trainees (including Agricultural Assistants and Pollinators from Kollam district) at RS, Kayamkulam on "Hybridization techniques and plant health management in coconut" was conducted under *Kera Samrudhi* programme of Department of Agriculture, Government of Kerala during 29th December 2014 - 3rd January 2015.

A one day training programme was conducted at ICAR-CPCRI, research Centre, Mohitnagar on "Crop Di-

versification in Plantation garden with spices (Black pepper). A total of 40 farmers participated in the training programme. Friends of coconut tree programme sponsored by CDB was organised at RC, Mohitnagar from 8th February to 14th February, 2015. 21 trainees were trained on coconut palm climbing and scientific coconut cultivation technologies.

Two Farm Schools at Mararikulam and Thanneermukkam Coconut Producers Federations in convergence with ATMA, State Department of Agriculture and Block Panchayath on IPM of rhinoceros beetle and red palm weevil on 12th March, 2015.

Orientation training was extended to 25 climber trainees from Anugraha Social Service Society, Pathanamthitta on 09-01-2015, 22 climber trainees from Pazhakulam Service Society on 21-01-2015 and 20 climber trainees from Anugraha Social Service Society, Pathanamthitta on 06-02-2015.

Frontline Demonstrations

Frontline Demonstration (FLD) on

integrated management of *Ganoderma* wilt of coconut was conducted at Periya village in Kasaragod district. The disease affected palms were applied with *Trichoderma* enriched neem cake @ 5kg/ palm in bimonthly intervals. The disease index of affected palms was reduced to 15.2 compared to the pre-treatment disease index of 46. A field day was conducted on 12th January 2015 at Pukkalam in which 30 farmers and extension personnel participated.

Farmer participatory FLDs are being conducted in four panchayaths on coastal sandy loam management and integrated root (wilt) disease management packages by Regional Station, Kayamkulam. Three demonstrations on fortification of compost / dried farm yard manure with *Trichoderma harzianum* and 21 demonstrations on plant protection were conducted at Kanjikuzhy. FLDs on integrated management of root grubs in arecanut was conducted at ICAR-CPCRI, RS Vittal. Demonstration on arecanut based cropping system was conducted by the ICAR-CPCRI RC, Mohitnagar, West Bengal.

Radio / TV programme

Dr. S. Kalavathi, Principal Scientist participated in an interview about "Be vigilant on pest and disease incidence in coconut" which was broadcasted by AIR, Thiruvananthapuram on 25-02-2015.

Dr. V. Krishnakumar, Head, Dr. Chandrika Mohan, Principal Scientist and Dr. A. Josephraj Kumar, Sr. Scientist participated in the "Noorumeni" programme telecast in DD Thiruvananthapuram on 15-03-2015 about the glimpse of the Regional Station and pest manage-

ment in coconut.

Dr. A.K. Sit Sr. Scientist participated one live Phone-in Programme on "Scientific Cultivation of different

Exhibitions



Shri D.V. Sadananda Gowda Hon'ble Minister for Law and Justice, GOI visiting Krishi Mela exhibition at ICAR-CPCRI, RS Vittal



Shri B.S. Yeddyurappa, M.P. and Ms. Shobha Karandlaje, M.P. visited ICAR-CPCRI Stall at Yantra Mela held at Puttur during 24th and 25th January 2015

Exhibitions were arranged by RC, Mohitnagar in three Krishi Melas, one at UBKV, Poondibari on 19-21st January, 2015, another at ADA office, Kalchini on 20-22nd January, and the third at KVK, Ramsai, Jalpaiguri on 30th March 2015.

horticultural crops in North Bengal region at Uttarbanga Channel, Siliguri on 04-03-2015 and another live programme at Doordarsan Kendra, Jalpaiguri on 27-03-2015.

CPCRI RC, Kahikuchi took part in Agri Fair at ICAR Research Complex for NEH Region, Umiyam, Meghalaya during 9th to 10th January, 2015 and in 2nd International Agri-Horti Fair at Khanapara, Guwahati during 10th -14th February, 2015.



Exhibition by RC Kahikuchi at ICAR Research Complex for NEH Region, Umiam, Meghalaya

KVK, KASARAGOD

SAC Meeting

The 19th Scientific Advisory Committee meeting of Krishi Vigyan Kendra of ICAR – ICAR-CPCRI, Kasaragod was conducted at ICAR-CPCRI on 11-03-2015, under the chairmanship of Dr. P. Chowdappa, Director, ICAR-CPCRI. Dr. C.V. Sairam, Principal Scientist, Zonal Project Directorate, Bengaluru, briefed about the convergence on linking the activities of KVK with agriculture and allied departments of the district. Further, bottled honey, a product of KVK, branded and labelled as Keramadhu was also launched for sales through KVK outlet.

Frontline demonstrations

Prophylactic method for control of bud rot disease in coconut

FLD programme on prophylactic method for the control of bud rot disease in coconut was conducted in coconut gardens of 7 farmers at Manjeswara and West Eleri panchayaths of Kasaragod district using *Trichoderma* coir pith cakes for third phase of treatment. Out of 200 palms treated only 4 palms succumbed to the disease.

Management of basal stem rot (*Ganoderma* wilt) disease in coconut

The demonstration is going on in Kodakkad, Pilicode and Kanhangad. All the palms treated with *Trichoderma* enriched neem cake - 5 kg as basal application are found to be in healthy condition.

Other programmes

Wild boar repellent powder has proved to give very good results with almost 100% control of wild life intrusion in the applied areas. Nucleated fresh water mussels maintained in the pearl culture unit of KVK, Kasaragod at Kabanigiri, Wynad district yielded good results. Provided linkage for promotion and sales of dehydrated raw banana vermicilli as a energy rich convenience food to trained entrepreneur. Brined jackfruit were dehydrated at KVK and packed for promotion of the same as dehydrated brined jackfruit through entrepreneur.

On farm trials

The on farm trials of KVK going on are Soil acidity management

for better productivity in vegetable crops, Management of Blue beetle in paddy, *Phytophthora* foot rot disease management of black pepper, Performance of cassava varieties under CBFS and Performance of fodder grass varieties like Suguna, Supriya and Thamburmuzhy-1 as intercrop in coconut gardens.

Training programmes

Organized training programmes and trained participants in various topics like division of bee colonies, plant protection under organic cultivation, preparation of organic growth stimulants, production of organic input through various composting methods, production and promotion of minimally milled red rice, EDP on "Food Processing", value added products from Nutrimix, mushroom production technology, management of divided bee colonies, plant protection in coconut, organic cultivation of vegetables, honey extraction and processing, ipm in banana, jasmine cultivation, soil micronutrient management, stingless bee keeping, organic cultivation of vegetables, preparation of organic pesticides and growth stimulants, production of oyster and milky mushroom by utilization of different biowastes, osmodehydration of fruits and production and post harvest technologies for cocoa. Through these about 603 men and 589 women were trained.

Distributed 3000 nos papaya seedlings (*var.* Red lady 786) and 1000 nos. drum stick (*var.* PKM-1) seedlings under revolving fund scheme of KVK. Raised arecanut nursery with 24000 nos of arecanut (*var.*, Mohithnagar) under revolving fund of KVK.



Success story

Shri Rajan from Wynad had attended a Workshop on “Fresh water pearl culture technology for entrepreneurship development” organized by KVK, Kasaragod in February, 2014. He has immediately set up a small unit at Wynad in about 30 fresh water mussels and inoculated the mussels using designer/ image nuclei. Now, the nucleated fresh water mussels maintained in the pearl culture unit at Kabanigiri, Wynad district has yielded good results. In a period of 10 months good quality image pearls have formed within the mussels. With encouraging results, more farmers forward for fresh water pearl culture at Wynad.

KVK, ALLEPPEY

Integrated family farming

In continuation to the “International year of Family Farming” activities, a seminar cum interface on integrated family farming for nutritional and food security was conducted at Ambalappuzha on 06-02-2015 with support from ATMA, Alappuzha.

Paddy harvest festival

Harvest festival of the technology demonstration on ‘Resource conserving and eco friendly technologies in paddy’ under the ‘National Innovation on Climate Resilient Agriculture’ project being implemented by KVK – Alappuzha at Muttar village of Kuttanad taluk was conducted on 19-03-2015. Dr. P. Chowdappa, Director, ICAR-CPCRI, Kasaragod inaugurated the harvest festival at Paruthikkattuserry padasekharam followed by a public meeting at Muttar. Resource conserving and eco friendly

technologies for paddy cultivation such as, soil test based dolomite and fertilizer application, sowing of seeds using drum seeder, and eco-friendly pest and disease management practices using bio agents (*Pseudomonas*, *trichocards*) were demonstrated as a package in this demonstration programme.

TV programmes

Use of drum seeder as a resource conserving technology in paddy cultivation in Kuttanad demonstrated and popularized by KVK-Alappuzha under NICRA project was telecasted in the “Noorumeni” programme of FIB, Govt. of Kerala on Dooradarshan.

Success story of the value addition unit on Turmeric at Bharanickav guided and supported by KVK-Alappuzha was telecasted in “Noorumeni” programme of FIB, Govt. of Kerala on Dooradarshan.

Training programmes

During the period organized 20 training programmes benefitting a total number of 609 farmers/rural youth. KVK participated in the ATMA technology meet, conducted from 2- 4th March 2015 at Kala-

rcode, Alappuzha. Programme coordinator and Subject Matter Specialists participated in the interface programme on Integrated farming system and Integrated crop management and an exhibition stall was also arranged.

Women cell activities

An innovative programme of improving the involvement of women farmers in coconut cultivation was implemented in Bharanikkavu Grama Panchayath during 2014-15. The programme envisages improving skill and knowledge in pest and disease surveillance, plant protection aspects and serving as technology providers for the coconut community.

Commercialization of Technology

During the period, technology transfer of process for three value added products and a device were transferred. Five entrepreneurs have signed MoU to this effect and an amount of Rs. 77,000/- have been collected at technology transfer fees as per the following details:



Dr. P. Chowdappa, Director, ICAR-CPCRI exchanging MoA for technology transfer with Mr. M.S. Ganesh, A.P.

Sl. No.	Technology	Entrepreneur	Date	Amount ₹
1	Collection of fresh and hygienic neera and production of natural coconut sugar	Kera Jyothi coconut Fedaration, Kasaragod	31-01-2015	10000
		Kathipara Coconut Industry, Kasaragod	31-01-2015	10000
		Senthil Seeds Private Ltd, Tirupur, T.N.	10-03-2015	10000
		Palm Planet Private Limited, Khajaguda, Hyderabad	10-03-2015	10000
2	Fabrication of Tender coconut Punch and Cutter	Mr. M.S.Ganesh Kumar, Kurnool, Andhra Pradesh	12-03-2015	2000
3	Technical know-how of production of virgin coconut oil (VCO) by hot process'	Palm Planet Private Limited, Khajaguda, Hyderabad	10-03-2015	25000
4	Coconut chips		10-03-2015	10000
Total				77,000

SEMINAR/ SYMPOSIA/ CONFERENCES/ WORKSHOPS ATTENDED

Name and designation	Title of the programme	Place and date
Dr. V. Niral, Principal Scientist	National meet on distant hybridization in horticultural crop improvement	ICAR-IIHR, Bangalore 22-01-2015 to 23-01-2015
Dr. Chandrika Mohan, Principal Scientist Dr. A. Josephraj Kumar, Sr. Scientist	International conference - Innovative Insect Management Approaches for Sustainable Agro Eco System (IIMASAE)	Agricultural College & Research Institute, (TNAU), Madurai 27-01-2014 to 30-01-2015
Dr. H.P. Maheswarappa, PC (Palms), Dr. Anitha Karun Dr. Ravi Bhat, Dr. K.B. Hebbar, Dr. Vinayaka Hegde, Dr. K. Muralidharan, Dr. K.S. Ananda, Dr. V. Krishnakumar, Heads, Dr. C. Thamban, Dr. V. Niral, Dr. B.A. Jerard, Dr. Murali Gopal, Dr. P. Subramanian, Principal Scientists, Dr. T.S. Manojkumar, Programme Coordinator, KVK, Dr. M.K. Rajesh, Dr. K. Samsudeen, Dr. Elain Apshara, Dr. Regi Jacob Thomas Senior Scientist, Dr. Sujithra, Dr. Prathibha V.H., Prathibha P.S., Dr. Neema, Dr. Ganesh N. Khadke, Scientists	National Workshop on "Planting material production in coconut- Issues and Strategies"	ICAR-CPCRI, Kasaragod 10-02-2015

Dr. Murali Gopal Principal Scientist	Agricultural Genomics Symposium	TNAU, Coimbatore 16-02-2015
Dr. P. Anithakumari, Principal Scientist	National Workshop on Wireless sensors and robotics for Agriculture and Rural Development	State Planning Board, Trivandrum 17-03-2015 to 18-03-2015
Dr. Chandrika Mohan, Principal Scientist	National Conference on "Advances in Entomological Research ADVENTOR 2015" and delivered an invited paper on "Invasive pests and biosecurity threats in Indian Agriculture".	University of Calicut 20-03-2015

New Projects

Consortium Research Platform on borers (Coconut-red palm weevil)

was initiated at the Regional Station, Kayamkulam during January 2015 with an outlay of Rs. 25 lakhs in ICAR-Network

mode. Dr. A. Josephraj Kumar, Sr. Scientist (Ag. Entomology) is the Principal Investigator of the sub-project.

VISIT OF DIGNITARIES

Shri D.V. Sadananda Gowda, Hon'ble Union Minister for Law and Justice, Govt. of India, inaugurated the Krishi Mela at ICAR-CPCRI Regional Station, Vittal on 10th January 2015.

Dr. S. Ayyappan, Hon'ble Director General, ICAR, visited Research Centre, Kahikuchi on the 8th of March, 2015



Dr. S. Ayyappan, D.G. ICAR along with personnel from ICAR-CPCRI, RC, Kahikuchi

Visit of APCC members

Members of Technical Working Committee of Asia Pacific Coconut Community (APCC) Jakarta, Indonesia under the leadership of Mr. Uron N. Salum (Papua New Guinea), Executive Director visited ICAR-CPCRI, Kasaragod on 06-02-2015. The team visited various experimental plots and held discussion with scientists on the ongoing research programmes of ICAR-CPCRI. The team also visited International Coconut Gene Bank for South Asia (ICG-SA) maintained at Research Centre, Kidu and held discussion with scope for collaboration for research on coconut germplasm conservation.



Dr. P. Chowdappa, Director, ICAR-CPCRI along with experts from ICAR-CPCRI interacting with APCC team at the ICGSA, ICAR-CPCRI, RC, Kidu

The visiting team consisted of (Switzerland), Mr. Raymond Fitzgerald Trotz (Guyana), Mr. Anthony George Ho Sang (Jamaica), Mr. Tevita Kete (Fiji), Dr. Ponciano A. Batugal (Philippines), Mr. Alan Aku (Papua New Guinea)

CELEBRATION

Republic Day

Republic Day was celebrated on 26-01-2015 at ICAR-CPCRI and its regional stations and research centers with tradition and gaiety. Dr. P. Chowdappa, Director, ICAR-CPCRI hoisted the flag and delivered Republic Day speech at Kasaragod.



Dr. P. Chowdappa, Director, ICAR-CPCRI delivering Republic Day speech at Kasaragod

Annual club day celebrated

The annual club day celebration was held at the Regional Station, Kayamkulam on 20-03-2015. Dr. P. Chowdappa, Director, ICAR-CPCRI inaugurated the function and complimented the "we feeling instinct" of the club members in his inaugural address. Smt Celin Jose, a noted playback singer engrossed the audience with her melodious voice.

of Kerala in particular. Swachh Bharat Mission in the ICAR-CPCRI premises has created tremendous impact on all travellers, visitors, farmers and passerby the experimental plots are kept free of debris and showcased the beauty of plantations. Bio-management of solid wastes through pipe-composting technology was also initiated as part of the campaign at the Institute.

regaining the title after a gap of thirteen years. The team dominated in athletics bagging individual championships as well. Mr. Aneesh won individual championship for men by winning gold in 100 m, 200 m race and long jump whereas Mrs. Preethi also retained the individual championship for women winning gold in 200m and long jump, silver in 100 m race and bronze in high jump.

OTHER INFORMATION

IJSC meeting was held at ICAR-CPCRI, RC, Mohitnagar on 17-02-2015. Members from official and staff sides have deliberated upon the issues concerned with the progress and development of the Institute and staff amenities.

ICAR- CPCRI won the Overall Championship in ICAR Inter Zonal sports meet

The Director and staff of ICAR-Central Plantation Crops Research Institute felicitated the sports team, the winners of overall championship in the ICAR Inter Zonal sports meet held at NDRI, Karnal during 11 to 14 March, 2015. ICAR-CPCRI won the championship with 33 points

Hindi workshop conducted

A Hindi workshop was conducted on 24-03-2015 at this Regional Station. Dr. A. Panicker, Hindi Professor, Bharat Mata College, Trikkakara was the Chief Guest, who inaugurated and conducted the workshop. He trained the participants to prepare and write simple Hindi sentences in the present continuous tense.

Swachh Bharat campaign

As part of national initiative on Swachh Bharat campaign, weekly and monthly cleaning drive was undertaken by all staff of the ICAR-CPCRI Kasaragod, its Regional Stations and Research Centres. In addition a human chain holding placards with the message on cleanliness along the NH-47 in front of the Institute was organized on Jan 1, 2015. The message of cleanliness is thus taken along the length and breadth of the country in general and the State



Dr. A. Panicker, Hindi Professor (Retd.), Bharat Mata College, Trikkakara addressing the staff

PERSONALIA

Promotion

Name of the staff	From (Designation)	To (Designation)	w.e.f.
Shri H. Muralikrishna	ACTO (Tech. Info.), ICAR-CPCRI, Kasaragod	CTO (Tech. Info.) , ICAR-CPCRI, Kasaragod	01-09-2010
Shri P. Ravindran	Sr. Technical Officer, ICAR-CPCRI, Kasaragod	ACTO, ICAR-CPCRI, Kasaragod	01-01-2013
Shri. Aswin Reghunath	LDC, ICAR-CPCRI, Kasaragod	UDC, ICAR-CPCRI, RS, Vittal	02-03-2015

Transfer

Name of the staff	From (Place)	To (Place)	w.e.f.
Smt. Jayashree K., UDC	ICAR-CPCRI, Kasaragod	ICAR-CPCRI, RS, Vittal	06-01-2015
Shri Mohammed Haneefa P.K., UDC	ICAR-CPCRI, Kasaragod	ICAR-CPCRI, RS, Vittal	08-01-2015
Dr. (Mrs.) Neenu, Scientist (Soil Science)	IISS Bhopal	ICAR-CPCRI, Kasaragod	12-01-2015
Dr. Abdul Haris A., Principal Scientist (Agronomy)	KVK, ICAR-CMFRI, Njarakal (Kochi)	ICAR-CPCRI (RS), Kayamkulam	16-01-2015
Dr. A.K. Gogoi, Principal Scientist	ZPD-III, Barapani	RC, Kahikuchi	05-03-2015

Retirement

Name	Designation	Place	Date
Shri Sankar Ram	SSS	ICAR-CPCRI, RC, Kahikuchi	31-01-2015
Smt. M. Padmini	AAO	ICAR-CPCRI, Kasaragod	31-03-2015



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ICAR- 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, cpcrinews@gmail.com; website: www.cpcri.gov.in

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