From the Director’s Desk

Cleanliness is the first step towards godliness. As we all know, India is on Swacch Bharat Mission for a healthy society. Plantation crops are considered as environmentally clean niches for maintaining sustainable living on the planet. This not only gives rejuvenating feeling for its dweller, but also maintains the natural resources balance both in the land as well as in the atmosphere. To this direction, CPCRI has made an initiation for year-long cleanliness drive, starting from 25-09-2014 in its campus and spreading message of Swaccha Bharat Mission outside the campus. CPCRI Recreation Club donated its contribution for construction of public toilet in Kumbla in collaboration with Kumbla Grama Panchayat.

Good agricultural practices (GAPs) are the basic necessity for any farming to be sustainable and remunerative in the long run. Maintaining GAPs helps not only to keep the environment clean but also keeps the pests and diseases away resulting in better productivity without polluting the land and water. Essence of it is through weeding, soil and water conservation, integrated nutrient management, integrated pest and disease management, clean development mechanism without emissions, using biodegradable items and recycling of biological wastes through composting and maintaining energy efficiency.

I wish to convey the stakeholders of the mandate crops and also the common public in the region that GAPs are investment for better living and sustainability of the farming, which need not be considered as costly as against cheaper and harmful alternatives. I also call upon the farmers and developmental agencies to maintain their holdings clean and healthy and join hands to achieve the national mission for cleanliness.

Dr. P. Chowdappa

ICAR - Central Plantation Crops Research Institute
Kudlu P. O., Kasaragod, Kerala - 671 124
An ISO 9001:2008 Certified Institution
Botanical cake to control rhinoceros beetle

Botanical cake in tablet form has been developed for effective field delivery and sustained release of active ingredients upon placement on palm leaf axils for subduing rhinoceros beetle incursions. In comparison to other molecules, botanical tablet (of about 1.9 g with diameter of 2.5 cm and thickness of 4.0 mm) passed inside the leaf axils when the spindle emerge out and was identified as the best mode of delivery of the botanical preparation. Field evaluation of the botanical cake is in progress indicating preliminary encouraging results.

HUMAN RESOURCES DEVELOPMENT

Training within India

<table>
<thead>
<tr>
<th>Name and Designation</th>
<th>Title of training course</th>
<th>Place and Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. D. Jaganathan, Scientist (Ag. Extn.)</td>
<td>CAFT training on ‘Futuristic Agricultural extension approaches and tools’</td>
<td>IARI, New Delhi 03-09-2014 to 23-09-2014</td>
</tr>
<tr>
<td>Dr. S. Elain Apshara, Senior Scientist (Hort.)</td>
<td>Workshop on ‘Developing Winning Research Proposals’</td>
<td>NAARM, Hyderabad 09-09-2014 to 11-09-2014</td>
</tr>
<tr>
<td>Smt. Lekha G., SMS (Plant Pathology)</td>
<td>IPM in important crops of Puducherry, Puducherry, Tamil Nadu and Kerala</td>
<td>PKKVK, 10-09-2014 to 12-09-2014</td>
</tr>
<tr>
<td>Dr. G. Rajeev, Asst. Chief Technical Officer and Shri. K.M. Ansary, Technical Assistant -T4</td>
<td>‘Gahan Hindi Karyasala’</td>
<td>Central Hindi Training Institute, New Delhi 25-08-2014 to 29-08-2014</td>
</tr>
</tbody>
</table>

Awards / Honours

Best Poster Award for the paper entitled “Subduing red palm weevil attack on coconut through fine-tuned management approaches” by Josephrajkumar, A., Chandrika Mohan, Sunny Thomas, Namboothiri, C.G.N. and Shanavas, M. was conferred during the National Conference on Sustainability of coconut, arecanut and cacao farming- Technological Advances and Way forward, held at CPCRI, Kasaragod during 22-23 August, 2014.

Jawaharlal Nehru Award

On the occasion of 86th ICAR foundation day held at New Delhi on 29th July, 2014 ICAR award for the year 2013 in the field of Social Sciences was conferred to Dr. Saritha Hegde for the doctoral research work entitled “Evaluation of genetically diversified red rice as functional food with special reference to lactational performance.”
PUBLICATIONS

Research paper

Presentations in Conferences/ Symposia/ Seminars


Basavaraju, T.B., Prashanth, M. and Maheswarappa, H.P. Yield and economics of coconut under fertigation. pp 68.

Chalapathi Rao, N.B.V., Rammanandam, G. and Maheswarappa, H.P. Studies on compatibility of Goniozus nephantidis with the most commonly used chemical pesticides in Coconut based cropping systems. pp 89.


Chandrika Mohan, Anithakumari, P, Josephrajkumar, A., Devika, S., Rasiyakumar, K.H. and Sangeetha, S. Area wide management of rhinoceros beetle infestation on coconut by farm level capacity building. pp 91.

Dhanapal, R. Recent advances in crop production technologies of coconut. pp 58.


Jayasekhar, S., Chandran, K.P., Thamban, C. and Muralidharan, K. Imperativeness of sta-
bilized prices in the system of innovation: The case of coconut sector. pp 116.


Josephrajkumar, A., Chandrika Mohan, Sunny Thomas, Namboothiri, C.G.N. and Shanavas, M. Subduing red palm weevil attack on coconut through fine-tuned management approaches. pp 86.


Krishnakumar, V. Technologies for management of root (wilts) disease of coconut. pp 82.


Madhavan, K. Post harvest processing and value addition for enhanced profitability in coconut. pp 97.

Maheswarappa, H.P. and Rajkumar. Cropping system models of coconut for different agro-climatic regions. pp 60.


Manjula, C., Samsudeen, K and Sugatha, P. Fatty acid composition of oil from coconut (Cocos nucifera L.) ecotypes growing in two Agro-climatic regions of Kerala. pp 45.


Muralidharan, K., Jayasekhar, S., Chandran, K. P. and Thamban, C. Impact analysis of improved coconut varieties developed by CPCRI. pp 110.


Rachana, K. E., Rajesh, M. K., Regi Jacob Thomas, Shareefa, M., Merin Babu and Anitha Karun. Comparative analysis of expression levels of NBS-LRR type resistant gene analogues (RGAs) in coconut. pp 43.


Rajeev, M.S. and Muralidharan, P. Varada – an ideal ginger variety for intercropping in coconut gardens. pp 67.

Rajeshkumar, P. P., George V. Thomas, Alka Gupta and Murali Gopal. Species diversity, richness and the degree of colonization of arbuscular mycorrhizal fungi in coconut palm in a crop mixed agro-ecosystem. pp 72.


Ravi Bhat and Sujatha, S. Production systems management for sustainability and profitability in arecanut. pp 54.


Selvamani, V., Subramanian, P., Surekha, Ravi Bhat and Jeena Mathew. Developing site specific nutrient management practices for increasing the coconut productivity at farm level using GIS. pp 70.


Thamban, C., Mathew, A. C. and Jayasekhar, S. Micro irrigation technology in coconut farming - analysing the field level utilisation pattern. pp 111.


Popular article


Extension folders


TRANSFER OF TECHNOLOGY

Director, CPCRI visits experimental plots at Alappuzha

Dr. P. Chowdappa, Director, CPCRI visited the project area at Bharanikavu panchayat, he interacted with the members of the farmlevelGreenMuscadineFungus (*Metarhizium anisopliae*) preparation unit ‘Jaivikam’. He also visited various experimental fields and laboratories of CPCRI, RS, Kayamkulam and suggested imparting need-based capacity building of farmers as well as conducting diagnostic field visits to address farm problem of pests of coconut. He stressed the need to focus on the management of root (wilt) diseases and commercializing of products emanated from different laboratories.

E-Publication


Technical bulletin

Jissy George and Muralidharan,
Training programme for coconut climbers on Neera Production Techniques

A training programme on neera production techniques for coconut climbers was conducted at Koorachundu in Kozhikode district during 20-30 September 2014 in which 20 coconut climbers from Palakkad, Malappuram, Kozhikode and Kannur districts participated. The training programme conducted in collaboration with Kerala State Coconut Development Corporation was inaugurated by Sri K.P. Mohanan, Hon’ble Minister of Agriculture, Kerala.

Scientist – Farmer Interface Programme

Dr. V. Niral, Principal Scientist, participated in the farmers meeting organized by the Coconut Producers Society, Vorkady Panchayath, Kasaragod district on the occasion of Balaram Jayanthi on 14-09-2014 and delivered a talk on “Coconut cultivation aspects with special reference to improved coconut varieties”.

Training Programmes

Seven training cum exposure visits on ‘Areca nut and cocoa production technology’ were organized at CPCRI, RS, Vittal for the benefit of 250 farmers programmes including lecture cum discussion on crop improvement, production, protection and processing technologies of arecanut and cocoa.

Training programme for master trainers

A capacity building for master trainers on “Techniques and technologies for area-wide community approaches in red palm weevil management” was conducted in the RS, Kayamkulam on 27-09-2014. Twenty master trainers from two panchayats viz., Bhara-
nikavu and Kandalloor were trained on various strategies on pest and disease management in coconut. Training included identification, biology, symptomology and management of rhinoceros beetle, red palm weevil, root (wil) disease and leaf rot management. A hands on training was also imparted on pesticide application technology and identification of pest inflicted symptoms in the field.

**Special training programme**

A batch of 71 gifted students and 64 parents from Alappuzha district along with the Coordinator Shri Chunakkara Janardhanan Nair attended a special training programme on Agriculture on 20 – 09 - 2014 for attracting young generation to farming and to disseminate the message on family farming. Shri.Muralidharan Thazhakkara, Programme Executive, Farm and Home Programme, All India Radio delivered message on family farming to the participants.

**Exhibitions**


**Radio programmes**

Dr. C. Thamban, Principal Scientist (Agrl. Extension) delivered a radio talk on ‘Coconut production scenario in Kerala - Challenges and opportunities’ which was broadcast by All India Radio, Kannur on 02-09-2014. He also presented a radio talk on ‘Coconut for prosperity’ which was broadcast by All India Radio, Kozhikode on 03-09-2014.

**Krishi Vigyan Kendra, Kasaragod**

**Training Programmes**

Total 15 training programmes were conducted during September 2014 which comprises of 5 on campus, 8 off campus programmes in which 100 farmers and 240 farm women participated. Two vocational training programmes of 13 days duration on nursery management and ornamental gardening and plant protection were also conducted in which 51 rural youth including 26 women doing vocational course in agriculture participated.

**On farm trials and frontline demonstrations**

The KVK had initiated four on farm trials on Phytophthora foot rot disease management of black pepper at Ullody, Rajapuram, Kookkam, Kudlu and Padiyadpu, soil acidity management for better productivity in vegetable crops in Bheemanadi, performance of cassava varieties under CBFS in Mogral Puthur panchayat and performance of fodder grass varieties as intercrop in coconut gardens at Padanna Panchayat. Under frontline demonstrations KVK had carried out trials on sixteen demonstrations which include green gram variety CoGG-8 at Mangalpady panchayat, demonstration of mechanized cultivation in paddy at Vorkady, micronutrient management of banana in laterite soils at Madikkai, coastal sandy soil management for higher coconut productivity at Padanna, demonstration of organic farming technology in coconut at Padanna, Prophylactic method for the control of bud rot in coconut at Manjeswar and West Eleri, HYV of ginger Varada and technologies
to prevent crop damage due to wildlife intrusion. On value addition of seasonal fruits and vegetables, formulation of biscuits, burfi, and extruded products, banana vermicilli production as energy rich breakfast food, osmotic dehydration of seasonal fruits and preservation of jackfruit bulbs by brining were demonstrated.

**Krishi Vigyan Kendra, Alleppey**

**Value added products from oriental pickling melon**

An Entrepreneurship Development Programme on Maximizing income through value addition of Oriental Pickling Melon was organised at Cheriyandan Panchayath in collaboration with the Krishi Bhavan on the production, packing, labeling and marketing of value added products of Oriental pickling melon like bath soap, pickle (oil and salted), RTS (ready to serve drink), squash, fry and face pack. Launching of the products was done by Shri. P.C. Vishnunath, MLA. Shri. P.C. Vishnunath, MLA addressing the participants

Panchayath members, progressive farmers from nearby Panchayaths, Kudumbasree, school students, and media person attended the function.

**Training programmes**

KVK, Alleppey has organized 24 training programmes benefitting a total number of 595 farmers/ rural youths/ extension officials during the period. Details of the training programmes were as follows:

<table>
<thead>
<tr>
<th>Training</th>
<th>No of batches</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>On campus</td>
<td>12</td>
<td>105 154 259</td>
</tr>
<tr>
<td>Off campus</td>
<td>9</td>
<td>121 173 294</td>
</tr>
<tr>
<td>Vocational trainings</td>
<td>2</td>
<td>4 21 25</td>
</tr>
<tr>
<td>Extension officials</td>
<td>1</td>
<td>4 13 17</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>234 361 595</td>
</tr>
</tbody>
</table>

**DISTINGUISHED VISITORS**

Dr. S.K. Chakrabarti, Director, CTCRI, Thiruvananthapuram visited CPCRI Kasaragod on 11th September 2014.
TECHNOLOGY COMMERCIALIZATION

During the period, three technologies were commercialised. Collection of fresh and hygienic neera and production of natural coconut sugar was transferred non-exclusively to Shri Ashok Kumar, Chamarajnagar, Karnataka and to Kerala State Development Corporation, Kozhikode. Design drawing of shell fired copra dryer to Shri V. Appu, Palakkad district, Kerala.

SYMPOSIA/ SEMINAR/CONFERENCE/ WORKSHOP ATTENDED

<table>
<thead>
<tr>
<th>Name &amp; Designation</th>
<th>Title of the programme</th>
<th>Place &amp; Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. S. Kalavathi, Principal Scientist</td>
<td>State level seminar on “Watershed management for sustainability” organized by Kerala State Land Use Board</td>
<td>Alappuzha 19-09-2014</td>
</tr>
</tbody>
</table>

CELEBRATIONS

World Coconut Day

Different programmes were organized in connection with World Coconut Day at the Regional Station. Several coconut-based games such as running with coconut, dehusking, nut-splitting, grating, eating, spoon and button race, one-leg running with nut, nut-hitting, plaiting of leaves, climbing coconut tree, preparation of coconut edibles etc. were conducted for the staff. A farmer’s seminar on “Palm health management and value addition in coconut” was also organized. Scientists handled training sessions on good agricultural practices, pest and disease management as well as value addition in coconut. A farmer’s quiz programme on coconut was organized and the winners were felicitated.

Hindi Chetana Maas

Inauguration of the Hindi Chetana Maas was done by Dr. P. Chowdappa, Director, CPCRI on 15-09-2014. He appealed all the staff members to do maximum use of Hindi in official correspondences. Dr. P.V. Samith, Assistant Professor, Pazhassiraja NSS College, Mattannur was the chief guest. During the programme message from the Dr. S. Ayyappan, Hon’ble Director General, ICAR was read.

Dr. P. Chowdappa, Director inaugurating Hindi Chetana maas at CPCRI, Kasaragod
Hindi Fortnight

Hindi Fortnight was celebrated jointly with TOLIC from 15-09-2014 to 29-09-2014 at RS, Vittal. It was inaugurated at DCR Puttur on 15-09-2014 by Shri K.T. Ramesh, Lecturer, Junior College Puttur. The Valedictory function was held at CPCRI, Vittal in which Shri Krishnanda Bhat, Branch Manager, SBM, Vittal was the chief guest and the programme was presided over by Dr. P.L. Saroj, Director of DCR, Puttur. Various competitions were held for employees and school children.

Hindi week was celebrated from 16th to 22nd September 2014 at RS, Kayamkulam. Various competitions in Hindi were conducted in which several staff members participated. The valedictory function was held on 22nd September 2014. The chief guest, Dr. R. D. Iyer, former Head of Division, Crop Improvement, CPCRI, Kasaragod, in his speech stressed the importance of learning languages, as it brings people closer. He also gave away the prizes to the winners of various competitions.

Onam celebrations

Onam was celebrated at CPCRI Kazaragod by Staff Recreation Club CPCRI on 3rd September, 2014. Dr. George V. Thomas (Director, ICAR- CPCRI, retired) was the chief guest for the function. The club members enthusiastically participated in competitions like pookkalam, Tug of war and Uriyadi. A sumptuous ona sadhya, cultural programme and various completions heightened the festive mood of all staff members of CPCRI.

Onam celebrations were held with all traditional pomp and fervour at the Regional Station on 4th September 2014 by conducting various programmes which included Pookalam, Thiruvathira kali, pulikali, vadamvali, Oriyadi and drawing tail for elephant.

Swach Bharat Mission

As part of clean India programme (Swach Bharat Mission) CPCRI recreation club conducted cleaning programme in the premises of CPCRI nursery school on 28.09.2014. The programme was inaugurated by Dr. P. Chowdappa, Director, CPCRI who emphasized the importance of collective effort in fulfilling the goal of Swach Bharat Mission at CPCRI. CPCRI Recreation Club donated an amount required for construction of toilet at Koipady village as a part of Swaccha Bharat mission in collaboration with Kumbla Grama Panchayat.

As part of national initiative on Swachh Bharat campaign during September 25 to October 2, 2014, the farm and office premises of the RS, Kayamkulam were made weed-free by a special cleaning drive started on 25th September 2014.
### PERSONALIA

#### Appointment

<table>
<thead>
<tr>
<th>Name of the official</th>
<th>Designation</th>
<th>Location</th>
<th>w.e.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. P. Chowdappa</td>
<td>Director</td>
<td>CPCRI, Kasaragod</td>
<td>06-09-2014</td>
</tr>
<tr>
<td>Mrs. PP. Sheeja</td>
<td>Junior Accounts Officer</td>
<td>CPCRI, Kasaragod</td>
<td>18-09-2014</td>
</tr>
</tbody>
</table>

#### Promotion

<table>
<thead>
<tr>
<th>Name of the staff</th>
<th>From (Designation)</th>
<th>To (Designation)</th>
<th>w.e.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mrs. Girija Chandran</td>
<td>PA, CPCRI, Kasaragod</td>
<td>PS, CPCRI, RS, Vittal</td>
<td>12-08-2014</td>
</tr>
<tr>
<td>Mrs. Sulochana Nair</td>
<td>PA, CPCRI, Kasaragod</td>
<td>PS, CPCRI, Kasaragod</td>
<td>13-08-2014</td>
</tr>
<tr>
<td>Shri P. Krishna Naik</td>
<td>Assistant, CPCRI, RS, Vittal</td>
<td>Assistant Administrative Officer, CPCRI, RS, Vittal</td>
<td>17-09-2014</td>
</tr>
</tbody>
</table>

#### Transfer

<table>
<thead>
<tr>
<th>Name of the staff / Designation</th>
<th>From (Place)</th>
<th>To (Place)</th>
<th>w.e.f.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Shri V.S. Binoy, SSS</td>
<td>CPCRI, Kasaragod</td>
<td>IISR, Kozhikode</td>
<td>30-09-2014</td>
</tr>
</tbody>
</table>

#### Resignation

<table>
<thead>
<tr>
<th>Name</th>
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<th>Place</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. M. Alagar</td>
<td>Scientist (Ag. Entomology)</td>
<td>CPCRI, RS, Vittal</td>
<td>20-08-2014</td>
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