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ICAR-CENTRAL PLANTATION CROPS RESEARCH INSTITUTE

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ICAR-CPCRI Celebrates 109th Foundation Day with National Seminar and New Initiatives in Plantation Research

The ICAR-Central Plantation Crops Research Institute (CPCRI), Kasaragod, Kerala, celebrated its 109th Foundation Day by organizing a National Seminar on Plantation Crops from January 3–5, 2025. Themed “Harnessing plantation sector for sustainable development goals,” the seminar brought together researchers, students, development agencies, policy makers, cultivators, processors, and other key stakeholders. The event was inaugurated by Dr. Himanshu Pathak, Director General of ICAR and Secretary DARE, and featured a series of technical sessions alongside the Kalpa Agri-Tech Expo 2025, showcasing innovations and technologies in the plantation sector. The seminar concluded with a valedictory address by Dr. S. K. Singh, Deputy Director General (Horticultural Science), ICAR, New Delhi, who emphasized the need for multi-stakeholder collaboration to enhance productivity, value addition, and farmer welfare.

DIRECTOR'S DESK

As a part of its ongoing efforts to address pest and disease challenges in coconut cultivation, ICAR-CPCRI conducted awareness and brainstorming sessions in Hassan and Coimbatore during March 2025, in collaboration with the Department of Horticulture. These programs aimed to prevent the spread of pests and diseases in coconut-growing regions, and were followed by the scaled-up production and release of biocontrol agents in affected areas.

A major milestone in arecanut research was marked with the start of the first-ever multi-institutional research project on Arecanut and human health. This collaborative initiative includes leading organizations such as CSIR, AIIMS, NIMHANS, SDM, KMC, NITTE, and other reputed public and private institutions.

In addition, a project on ‘Large scale demonstrations on management of leaf spot disease of arecanut’ was initiated under the MIDH scheme, jointly implemented by ICAR-CPCRI and KSNUAHS Shivamogga, covering the districts of Dakshina Kannada, Uttara Kannada, Shivamogga, and Chikkamagaluru.

On the climate resilient research front, ICAR-CPCRI continues to focus on developing and promoting climate-resilient varieties, eco-friendly plant protection measures, and value-added products, several of which were successfully commercialized during the mega events.

K. Balachandra Hebbar
Director

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Tips and eady reckoner for stakeholders

Bio-management of coconut rhinoceros beetles integrating with livestock

- Cow dung pits in livestock-integrated coconut farms attract coconut rhinoceros beetles (CRB) for egg laying.
 - Surrounding palms suffer severe damage from adult beetles, making them prone to red palm weevil and bud rot.
- Management Strategies:**
- Cover dung pits with metal mesh to block beetle entry.
 - Apply *Metarhizium majus* (MM-601) @ 5×10^{11} cfu/m³ in dung pits to kill beetle larvae, pupae, and adults.
 - Add *Clerodendrum infortunatum* leaves to dung pits to cause developmental defects in beetles.



Technology Highlights

Registrartion of cocoa and kola collections

Indigenous collection numbers received for the following cocoa and kola accessions, including 10 cocoa accessions of Kahikuchi, four of Vittal and two Kola collections.



Indigenous cocoa collections at Vittal

Kola collections

Sathakeram Kerasamridham - 100 nuts productivity programme for root (wilt) affected areas

A participatory programme was implemented in eight local bodies of Muthukulam block panchayat, covering 25,000 coconut palms across 142 hectares involving 550 farmers. Key interventions included baseline data collection, yield gap analysis, training, and promotion of Root Wilt Disease Management (RWDM). This target-oriented approach led to improved technology adoption, with a projected increase of 10 nuts per palm resulting in 2.5 lakh additional nuts and 1,760 nuts per hectare.

Fusarium spp: A new entomopathogenic fungi on Tea mosquito bug, *Helopeltis theivora* (Hemiptera: Miridae)

ICAR – CPRI, Regional Station, Vittal, India, collected naturally infected TMB adults, and *Fusarium* spp. was isolated and identified based on morphological features and molecular analysis. In vitro pathogenicity tests showed up to 80% mortality at 2×10^8 conidia/mL within six days. This is the first report of *Fusarium* spp. infecting TMB, suggesting its potential as a biocontrol agent in cocoa pest management.



Utilization of cocoa sweating for multiplication of *Trichoderma harzianum*

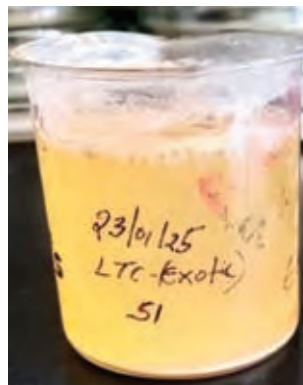
The use of concentrated cocoa sweating (1 L), supplemented with 15 g of dextrose and adjusted to a neutral pH (7.0), effectively supported the growth and sporulation of

Trichoderma spp. AT172. These results indicate that cocoa sweating can serve as a low-cost,

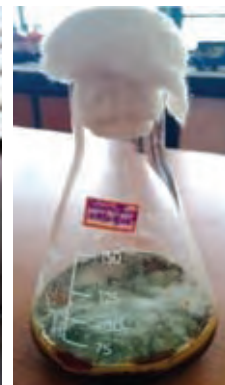
agro-industrial waste-based medium for the mass cultivation of *Trichoderma*.



Fermentation unit *drained* out of sweating



Trichoderma multiplication in cocoa sweating



1st day cocoa sweating

EPN, *Heterorhabditis indica* (CPCRI-HI1) for the sustainable management of root grubs in coconut

Soil drenching of Kalpa EPN (*Heterorhabditis indica*, 20 lakh IJs/palm) in September-October, followed by neem cake application (5 kg/palm) in December-January, reduced root grub populations from 6.62 to 2.10 grubs per palm in Kundapur and Puttur, Karnataka. This treatment also improved palm health and yield.



Healthy and infected root grub larvae *H. indica* & infective juveniles (IJs)

A customized attachment for power tillers has been developed to mechanize and automate the coconut base opening process. This attachment securely fastens the power tiller to the trunk of the coconut tree, enabling it to revolve autonomously around the tree without manual intervention. Once installed, the tiller moves in a circular path to perform the base opening operation automatically. Field trials conducted at the Research Centre, Kidu, demonstrated that the conventional manual method took an average of 55.6 minutes to open the base of a single coconut tree. In contrast, the mechanized system using the attachment completed the task in just 6.5 minutes, reducing the operation time by approximately 88.3%. This innovation greatly enhances operational efficiency, lowers labour demands, and improves safety and ease of use. It is especially valuable for large-scale coconut plantations, providing a practical solution for farm mechanization and promoting sustainable agricultural practices.





New Projects Initiated

- A project titled 'Promotion of value chain in Banana' with a financial outlay of Rs.16.4 lakhs under the Farm Sector Promotion Fund (FSPF) of NABARD for three years from 2025. P. Muralidharan, PI & Head, ICAR-CPCRI, KVK, Alappuzha, is the Principal Investigator of the project.
- ICAR sanctioned two corpus fund projects C12024NAHO1232 'Environmentally responsible bio-suppression of exotic whitefly invasions on coconut' - Under National Priority Project (Rs. 73.40 lakhs) with Dr. A. Joseph Rajkumar Principal Investigator and C12024VIHO1155 'Integrated Approaches for Sustainable Management of Cocoa Vascular Streak Dieback Disease' - Under Viksit Bharat (Rs. 70.90 lakhs) with Dr. Regi Jacob Thomas as Principal Investigator
- NABARD sanctioned a grant assistance to the tune of Rs. 38.66 lakhs for the promotion of a new cocoa based FPO in Kottayam District with ICAR-CPCRI as Producer Organization Promoting Institution (POPI). The Company named "Brown Gold Cocoa Producer Company" was officially launched on 19 March 2025 at Manimala, Kottayam District.
- A project entitled with 'Large scale demonstrations on management leaf spot disease of arecanut' was initiated with the DPR is Rs. 6,31,56,400/- and will be shared between ICAR-CPCRI and KSNUAHS for duration 3 years. Dr. Vinayaka Hegde, Head, Crop Protection is the PI of the project.
- Multi-institutional project on arecanut and health. was initiated with fund of Govt. of India in which total budget of the project 9.9 crores for three years. ICAR-CPCRI is a partner.



Important Events

DG inaugurates National Seminar cum Foundation Day Exhibition

A National Seminar on 'Harnessing plantation sector for sustainable development goals' was inaugurated by Dr. Himanshu Pathak, Secretary, DARE, and Director General, ICAR at ICAR-CPCRI. The programme was presided over by Dr. K.B. Hebbar, Director, CPCRI on 3 January 2025



Dr. Himanshu Pathak, Secretary, DARE, and Director General, ICAR, formally inaugurating the event by lighting the ceremonial lamp

Earlier on the day, Hon'ble DG laid the foundation stone of the new building of KVK Kasaragod at Chowki, Kasaragod. He also inaugurated a multi-utility hub including the SBI branch, ATM, Sales Parlour, and the Bharat Ratna MS Swaminathan Committee Hall and commissioned a 110 kw solar power grid. A Kalpa Agri-Expo 2025 exhibition was also inaugurated by him.

Dr. V.B. Patel, ADG (Fruit and Plantation Crops), ICAR, New Delhi, was the guest of honour. During the programme, MoAs were exchanged.

EPN technology to Shri Rajendra, Shatamangala arecanut variety to Mr. Joice George, Bio agents Trichoderma coir pith cake, *Trichoderma harzianum* to Ms.

Bindu from Karshika Sevana Kendram, Kalpa Shatabdi coconut variety to Mr. Santhosh, Kalpa EPN technology to Mr. Niranjana Prabhu, Carbonated tender coconut water to Mr. Anantha Nayak, Trichoderma coir pith cake to Mr. Prashanth P. Nayak, Cocoa fermentation technology to Mr. Nithin Chordia, Rotary dryer technology to Mrs. Shafeeja, and MTA with Dr. I. Karunasagar, Nitte University on microbial inoculants.

Releases were made during the occasion, which include the Abstract Book, Kalpa Bhooma product for circular bio economy, launch of Kisan Samridhi Portal, and a Virtual website assistant to ICAR-CPCRI official website.



The DG had distributed seedlings and climbing devices to farmers on the occasion.

Dr. V. Venkatasubramanian, Director, ICAR-ATARI, Bangalore, Dr. J. Dinakara Adiga, Director, ICAR-DCR, Puttur, Dr. George Ninan, Director, ICAR-CIFT, Cochin, Dr. Grinson George, Director, ICAR- CMFRI, Cochin also felicitated the seminar.



DG inaugurating Multi-Utility Hub, on the occasion of CPCRI Foundation Day



DG inaugurating MS Swaminathan on the occasion of CPCRI Foundation Day

Foundation Day of CPCRI, Kasaragod

ICAR-CPCRI, Kasaragod celebrated 109th Foundation Day on 5 January 2025. Foundation Day address was delivered by the Chief Guest, Dr. S. K. Singh, DDG (Hort. Science), ICAR, New Delhi. He highlighted the major share of plantation crops in the value chain. He expressed confidence that the myths associated with arecanut would be dispelled through a newly launched project, signalling a positive future for growers and stakeholders alike.

Dr. V. S. Korikanthimath, Former Director, ICAR-CCARI, Goa delivered Dr. K. V. Ahmed Bavappa memorial lecture. He delivered a talk on 'spices and plantation crops for promoting agro-ecotourism sustainability'.

Dr. R. K. Mathur, Director, ICAR-IIOR, Hyderabad and Dr. R. Selvarajan, Director, ICAR-NRC Banana, Tiruchirappalli, offered felicitations.

The technologies viz., Frozen coconut delicacy and Kalpa Bliz-flavoured coconut milk were transferred to Sri Kusumadhar, South Canara Coconut Producers Company through exchange of MoAs.

Five publications viz., technical bulletin on 'Seasonal operations in arecanut plantation (Kannada)' and 'Integrated nutrient management in arecanut (Kannada)', extension folder on '*Simplicillium lanosonivem*: A potential biocontrol agent for managing invasive whiteflies in coconut plantations' and 'Integrated management of white grubs', and a handbook on 'Improved coconut varieties' were released on the occasion.

Institute award for best technical staff were presented to Sri Bhavani Shankar Naik K.M. and Sri Dinesh Kumar N., Mr. Pradeep Kumar Vasu was awarded the best administrative staff award and Mr. Sundaran C., received best skilled support staff award.

Expert Talk on Farm to Pharmacy

A talk by Dr. Sreesha P. Srinivasa, an expert on drug molecular

biology, on 'Farm to pharmacy: The interconnection between agriculture, nutrition, disease and drugs', on 17 January 2025 at ICAR-CPCRI, Kasaragod. The talk was focussed on cancer control aspects in comparison with lifestyle, diet and environment.

Interaction of Director with Honourable Agriculture Minister

On 18 January 2025, during the Mega Farmers Meet held in Sagara, Karnataka, Shri Shivraj Singh Chouhan, Hon'ble Union Minister of Agriculture and Farmers Welfare, Government of India, discussed the arecanut issues with Dr. K. Balachandra Hebbar, Director of ICAR-CPCRI. Taking note of the recommendations put forth by the National Scientific Committee (NSC) on Arecanut, the Hon'ble Minister announced a grant of ₹67 crore for the first year to support disease management initiatives. He also emphasized the urgent need for launching the Arecanut and Health Project, directing that it be initiated without delay.



Director's Interaction with the Honourable Agriculture Minister



Workshop on Media in the Context of Changing Agriculture at Kayamkulam

A workshop on 'Media in the Context of Changing Agriculture' was held on 27 January 2025 at ICAR-CPCRI, Regional Station, Kayamkulam. Dr. T. Pradeep Kumar, Vice-Chancellor of KUFOS,

inaugurated the event and emphasized the role of media in inclusive technology dissemination for farmers. Three extension folders under the Farmer-FIRST project were

released. Two technical sessions focused on the evolving role of print and digital media in agricultural communication. Over 100 media personnel and scholars participated in the event.



Inauguration of the Workshop on Media in the Context of Changing Agriculture at Kayamkulam and group photo of participants

Official Language Workshop

Workshop on 'Strategies for Official Language Implementation in the Institute' was held at ICAR-CPCRI, Kasaragod on 27 February 2025, chaired by Dr. K. Balachandra Hebbar, Director. He emphasized enhancing Hindi usage through technology, sample documents, and available online forms. Shri Ram Avatar Parashar, Chief Finance and Accounts Officer, shared practical tips to promote Hindi, including using translated posts, internal forms, and presentations to support national unity and policy compliance. Sixty employees participated in the workshop.

Principal of E.K. Nayanar Memorial Government College, was the Chief Guest. He spoke about the contributions of Prof. C.V. Raman and the continued relevance of Raman spectroscopy in scientific research. Dr. K. B. Hebbar, Director, highlighted India's scientific advancements over the past decade and expressed hope for further progress. A quiz competition for college students was conducted, and winners were awarded during the event.

ICAR-CPCRI Regional Station, Kayamkulam, held a seminar on 'Mentoring Leaders and Innovators in Science for Vikasit Bharat' as part of National Science Day 2025. Over 100 students and faculty from colleges and research institutes participated. The event was inaugurated by Shri K. Sethuraman, IPS, who highlighted the importance of science and advanced infrastructure in national development. Dr. Santhosh J. Eapen delivered a technical session on 'Science in the Era of Artificial Intelligence', focusing on AI applications and its responsible use. The Proceedings of the Workshop on Media in Changing Agriculture were released, and a video showcasing station technologies was unveiled. A speech contest was also held, with winners awarded during the valedictory session.

National Science Day

ICAR-CPCRI, Kasaragod celebrated National Science Day on 28 February 2025 with the theme "Empowering Indian Youth for Global Leadership in Science and Innovation for Vikasit Bharat." Prof. M. Gopalan, former



Prof. M. Gopalan, Chief Guest, delivering address at the Valedictory Function



Inauguration of National Science Day at Kayamkulam along with group photo of participants



Publications

Research Articles

Amritha, K.T.K., Muralikrishna, K.S., Habeeb, J., Chandran, K.P., Paulraj, S. and Rajesh, M.K. 2025. 5-Azacytidine promotes the induction of embryogenic calli and somatic embryos from transverse thin cell layer (tTCL) cultures in coconut. *Chilean Journal of Agricultural Research*, 85(1) pp.77-87. NASS Rating: 7.50.

Govindharaj, G.P.P., Sujithra, M., Sahu, S.K., Sahoo, S., Banra, S. and Choudhary, J.S. 2025. Predicting the potential distribution of three invasive insect pests (*Tuta absoluta*, *Aleurodicus rugioperculatus* and *Phenacoccus manihoti*) under future climate scenarios in India based on CMIP6 projections. *Theoretical and Applied Climatology*. 156:86. <https://doi.org/10.1007/s00704-024-05315-9>, NAAS Rating: 8.80.

Josephraj Kumar, A., Jilu V.S., Merin Babu, Anes, K.M., Prathibha, P.S., Sujithra, M., and Vinayaka Hegde 2025. Morphological and molecular characterization of the

coconut slug caterpillar, *International Journal of Tropical Insect Science*. <https://doi.org/10.1007/s42690-025-01473>. NASS Rating: 7.10.

Nagaraja, N.R., Ramesh, S.V., Arivalagan, M., Sushmitha, C.H., Yasmeen, A.M., Neema, M., Prathibha, V.H., Hebbar, K.B., Bhavishya, A., Madhu, T.N., Sudha, R., Ananda, K.S. and Chowdappa, P. 2025. Physiological and biochemical characterization of variegation in *Areca catechu* Linnaeus populations from South Karnataka, India. *AMA, Agricultural Mechanization in Asia, Africa and Latin America*, 56(1): 20163-20174. DOI: 01.13413/Ama.30.01.2025.01. NASS Rating: 6.40.

Thomas, R.J., Josephraj Kumar, A., Mohan, B., Shil, S. and Shareefa, M. 2025. Relative abundance and diversity of insect foragers associated with inflorescence in dwarf varieties of coconut (*Cocos nucifera* L.). *Current Science*, 128(4):404-413. NASS Rating: 7.10.

Venugopal, G., Muralikrishna, K.S., Sugatha, P. and Rajesh,

M.K. 2025. Effect of Light-Emitting Diodes on the Proliferation of Immature Endosperm-Derived Calli of Coconut (*Cocos nucifera* L.). *Russian Journal of Plant Physiology*, 71(6), p.211. NASS Rating: 7.10.

Papers presented in seminar/ symposia conferences/ workshops/ webinars/ etc

Daliyamol, Pandiselvam, R., Sujithra, M., Rajkumar, Prathibha, V.H. and Vinayaka Hegde 2025. Evaluating UAV-Based Spraying for Pest and Disease Management in Coconut Plantations: Challenges and Opportunities. In: Ravi Bhat, Ramesh S.V. Niral V. Ranjini T.N. Sudha R. Muralikrishna H. (Eds.) Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3 -5 January 2025, ICAR-CPCRI, Kasaragod. pp 36.

Diwakar, Y., Niral, V., Samsudeen, K., Rajkumar, Muralidharan, K. and Hebbar, K.B. 2025. Success story empowering SC and ST youth





- through Skill development for sustainable livelihoods. *In: Ravi Bhat, Ramesh S.V., Niral V., Ranjini T.N., Sudha R. and Muralikrishna H. (Eds.) Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3-5 January 2025, ICAR-CPCRI, Kasaragod. pp 90.*
- Muralidharan, K., Manikantan, M. R. and Rajkumar 2025. Licensing and utilization of ICAR-CPCRI, Technologies. *In: Ravi Bhat, Ramesh S.V., Niral V., Ranjini T.N., Sudha R. and Muralikrishna H. (Eds.) Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3-5 January 2025, ICAR-CPCRI, Kasaragod. pp 82.*
- Prathibha, V. H., Rajkumar, Thava Prakasa Pandian, R., Daliyamol, Nagaraja, N.R., Thejasri K.P., Rajesh, M.K. and Vinayaka Hegde 2025. Insights into the physiological traits of Colletotrichum isolates associated with leaf spot of arecanut. *In: Ravi Bhat, Ramesh S.V., Niral V., Ranjini T.N., Sudha R. and Muralikrishna H. (Eds.) Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3-5 January 2025, ICAR-CPCRI, Kasaragod. pp 67.*
- Rajkumar, Surekha, Prathibha V.H., Daliyamol and Vinayaka Hegde 2025. Exploring the bio-efficacy of tender coconut husk extract liquid suspension against *Meloidogyne incognita* (Kofoed & White, 1919) juveniles. *In: Ravi Bhat, Ramesh S.V., Niral V., Ranjini T.N., Sudha R. and Muralikrishna H. (Eds.) Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3-5 January 2025, ICAR-CPCRI, Kasaragod. pp 72.*
- Shareefa, M., Jeena Mathew, Jilu V. Sajan, Indhuja, S., Anes, K.M., Merin Babu, Nihad K., Rajkumar, Josephraj Kumar, A., Regi J. Thomas, Abdul Haris A. and Anithakumari, P. 2025. Connecting ICAR-CPCRI, technologies in upskilling and entrepreneurship development of Scheduled caste youths. *In: Ravi Bhat, Ramesh S.V., Niral V., Ranjini T.N., Sudha R. and Muralikrishna H. (Eds.) Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3-5 January 2025, ICAR-CPCRI, Kasaragod. pp 91.*
- Popular Articles**
- Anithakumari, P., Vishnu, K.S. and Sreeja, J. 2025. Coconut provides food, income and ecology services. Messages from FFP. *Indian Naliker Journal. 17(1): 13-17.*
- Anithakumari, P., Shareefa, M. and Indhuja, S. 2025. My Coconut My Legacy - planting the idea of coconut in young minds - ICAR-CPCRI Farmer FIRST Program (FFP). *Indian Coconut Journal. 67(7): 18-25.*
- Anithakumari, P., Balakrishna, B., Letha Devi G., Kolekar, D.V., Venkata Subramanian V. and Hebbar, K.B. 2025. Farmer FIRST Programme - Heros of rural India (Success stories). Published by Director, ICAR-CPCRI, Kasaragod. pp 130.
- Anithakumari, P. and Vishnu, K.S. 2025. Collective adoption of intercrop diversification in coconut gardens. *Indian Coconut Journal. 67(8):6-15.*
- Beena S Nair, Rajesh K Patel, Bhujendra Kumar, Sumitha, S. and Jerard, B.A. 2025. Potential of coconut cultivation in Bastar region of Chhattisgarh. *Indian Coconut Journal. Vol. LXVII. pp 10.*
- Jissy George 2025. Income from fruit crops. *Karshakasree Dairy*, pp. 24-33 (*In Malayalam*).
- Jilu, V. Sajan, Prathibha, P. S., Josephraj Kumar, A., Merin Babu, Anes, K. M. and Regi Jacob Thomas 2025. Thengolappuzhuvine niyantrikkaan mitrakeedangal. (*In Malayalam*). *Indian Naliker Journal, 16(12): 21-22.*



Lekha, G. and Anju Sathyan, S. 2025. Diseases of banana and its control measures. *Krishiyankanam*. March: 29-32.

Maya Lekshmi, Shareefa M. and Abdul Haris A. 2025. Carbon Sequestration and Coconut Farming. *Indian Coconut Journal*. Vol. LXVII. pp 18.

Priya, U.K., Abdul Harris, A., Elain Apshara, S., Nihad, K., Saneera, E.K. and Suchithra, M. 2025. Profitable beverage crop cocoa in coconut gardens. *Indian Naliker Journal (In Malayalam)* 17(2): 14-16.

Extension Folders

Chaithra, M., Alpana Das, Jayasree Dutta, Vinayaka Hegde, Bhavani Devi and L.S.

Singh 2025. A Green Solution for Management of Ganoderma Disease of Arecanut (Assamese). Extension Folder No. 340.

Chaithra, M., Vinayaka Hegde, Alpana Das, Jayasree Dutta and L.S. Singh 2025. A Green Solution for Management of Ganoderma Disease of Arecanut (English). Extension Folder No. 341.

Prathibha, P.S., Jilu V Sajan, Rajkumar, Josephraj Kumar. Vinayaka Hegde and Sujithra, M. 2025. Integrated management of white grubs in coconut and arecanut. Extension folder No. 339.

Books

Ravi Bhat, Ramesh, S.V., Nirral,

V., Ranjini, T.N., Sudha, R. and Muralikrishna, H. 2025. Books of Abstract, National seminar on 'Harnessing Plantation Sector for Sustainable Development Goals', 3-5 January 2025, ICAR-CPCRI, Kasaragod. pp 96.

Book Chapters

Chaithra, M., Nishmitha, K., Patel, P. S., Mitra, D., Gangaraj, R. and Sayyed, R. Z. 2025. Fungal Bio-stimulants: Cutting-Edge Bioinoculants for Sustainable Agriculture. In *Plant Microbiome and Biological Control: Emerging trends and applications* pp. 289-307. Cham: Springer Nature Switzerland.



Technology Commercialization

During the period from January-March 2025, 18 technologies were commercialized and an amount of

Rs 10,05,000/- was collected as technology transfer fees.



Technology transfer to Ecophytocare India Pvt. Ltd., by Dr. Himanshu Pathak, DG, ICAR, New Delhi





Human Resources Development

Training attended

Name & designation	Programme Title	Place & date
Dr. Ravi Bhat, Principal Scientist & SIC, PME Cell	MDP training programme on “Research Prioritization, Monitoring and Evaluation of Research Projects.”	NAARM Hyderabad during 17-22 February 2025.
Dr. Benjamin Mathew Senior Technical Officer (SMS-Horticulture)	5-day training programme on 'Soil, Plant and Water Analysis for Nutrient Recommendation in Horticultural Crops.'	IIHR-Bengaluru 06-10 January 2025.
Chaithra M., Scientist RC, Kahikuchi	3 days online training on “Bio-agents based Sustainable Weed Management for Healthy Ecosystem.”	ICAR-Directorate of Weed Research 10-12 February 2025.
Dr. Rajesh M.K., Pr. Scientist & Head, CPCRI, RS, Vittal	Virtual training programme on Analysis Tools for Association and QTL Mapping in Fruit Crops.	ICAR-National Research Centre for Grapes, Pune during 10-14 February 2025.
Dr. Thava Prakasa Pandian R., Scientist, RS, Vittal	Online workshop under the “National Professorial Programme” on Virome Profiling in Plants: Advanced Methods for Discovery and Analysis.	ICAR-IARI, New Delhi during 10 -11 March 2025.

Karmayogi capacity-building programme

The following category of officials in the institute have attended or the Karmayogi online programmes during the period has given below.

Category	Total no. of Personnel attended	Total no. of courses attended
Scientific	24	126
Technical	31	177
Administrative	8	17
Total	63	320



Awards and Recognition

Best Oral Presentation Award

- The paper titled “Exploring the bio-efficacy of tender coconut husk extract liquid suspension against *Meloidogyne incognita* (Kofoed & White, 1919) juveniles” authored by Rajkumar, Surekha, Prathibha V.H., Daliyamol and Vinayaka Hegde presented in the National Seminar on Harnessing Plantation Sector for Sustainable Development Goals held at ICAR - CPCRI, Kasaragod during 3-5 January 2025.
- The paper titled “New distribution record of Mango mealy bug, *Rastrococcus iceryoides* Green (Hemiptera: Pseudococcidae) on coconut.” authored by Prathibha, P.S., Sujithra, M., Sunil Joshi, Josephraj Kumar, A. and Jilu V. Sajan presented in the National Seminar on Harnessing Plantation Sector for Sustainable Development Goals held at ICAR - CPCRI, Kasaragod during 3-5 January 2025. Bagged best poster presentation award.
- The paper titled “Influence of age of factitious host egg on parasitic potential of *Anastatus* sp., an egg parasitoid of coconut coreid bug, *Paradasynus rostratus* Distant.” authored by Jilu V. Sajan, Merin Babu, Prathibha, P.S., Anes, K.M. and Josephraj Kumar, A. presented in the Second International Conference on contributions to one health, Bangalore, 25- 28 February 2025. Bagged best poster presentation award.



Transfer of Technology

Visit of dignitaries

Shri H. Dineshan, IAS, Executive Director, Kudumbashree Local Self Government Department Government of Kerala, Trivandrum visited CPCRI, Kasaragod on 27 January 2025.

Shri C.P. Yogeswara, former minister and MLA, Chennapattana, Karnataka visited CPCRI, Kasaragod on 14 March 2025 and interacted with the scientists to explore the potentials of coconut based technologies.

On Campus Training

- ICAR-CPCRI, RS, Kayamkulam

organized a meeting on 07 January 2025 for 13 members from Cocoa Farmer Producer Company and officials associated with three leading FPOs (*viz.*, Dr. P. Anithakumari, associated with Odanadu Farmer Producer Company, Dr. P. Muralidharan and Mr. M.S. Rajeev associated with Onattukara Spices Producer Company, Dr. Remany Gopalkrishnan, CEO - Onattukara Coconut Producer Company briefed their experiences).

- ICAR-CPCRI, Regional Station, Kayamkulam conducted a one-day workshop on 'Modes for effective implementation

of official language in the Institute' on 3 March 2025. Dr. Poornima, R., Associate Professor, Department of Hindi, S. D. College. Alappuzha was the resource person.

- At RC, Mohithnagar an orientation programme of 28 numbers of BSc (Hort) students along with 2 faculty members of BCKV was conducted at this centre from 10-11 January 2025. A training programme on "IPM in coconut with special emphasis to white grub management in coconut" was organized on 13 February 2025 at this centre. ATMA training on coconut cultivation practices and





value addition for the progressive farmers (40 nos.) of Tamil Nadu was held at ICAR-CPCRI, Kasaragod on 22-24 January 2025.

- Conducted a training for SC farmers on 17 March 2025, which included Integrated Nutrient Management in coconut and Integrated pest and disease management of coconut. Distributed inputs and coconut seedlings to 98 participant farmers.
- Conducted training on Mechanization for sustainable coconut farming for two days on 19 and 26 March 2025 for 15 participants under Tribal Sub-plan scheme at Regional Station, Kayamkulam. Participants from Pathanamthitta and Idduki Districts of Kerala attended this training. Hands-on sessions on coconut climbing using machine and weed management using brush cutter were provided by the skilled experts. Orientation on different machineries and farm tools used in coconut plantations was given. Coconut climbing machine and participation certificates were given to the participants.



A glimpse of the training on 'Cocoa Processing and Chocolate Making'

- A total of 100 farmers of

different blocks of Jalpaiguri participated the training. A filed demonstration on application on application of neem cake and polypropylene chemicals was also conducted.

- A training on 'Cocoa processing and chocolate making', conducted at Regional Station, Vittal, on 20 March 2025, benefitted 29 participants including 15 women.

Off-campus trainings EDP on coconut processing and value addition

ICAR-CPCRI, Kasaragod, and Pro B Products, Bengaluru, jointly organized an Entrepreneurship Development Programme on coconut processing and value addition at Bengaluru on 9 March 2025. The event featured live demonstrations and hands-on sessions on technologies for producing virgin coconut oil, coconut chips, flakes, milk, sugar, and DC powder. Dr. K.B. Hebbar, Director, ICAR-CPCRI, was the chief guest. He emphasized the need for cost gradation in coconut products and highlighted value addition as key to increasing farmer incomes and industrial growth. He also stressed the importance of collaborating with Farmers Producers Organizations (FPOs) to strengthen the sector.

Other Training Programmes

- Training and demonstration

on integrated nutrient management in coconut at Nahira, Kamrup, Assam on 13 February 2025.

- A demonstration program on 'Integrated nutrient management in arecanut' conducted on February 17, 2025 at Nahira village, Kamrup (d), Assam, India.
- Another demonstration program on 'Integrated nutrient management in cocoa' conducted on February 20, 2025 at Borjhar village, Kamrup (d), Assam, India.
- A training programme conducted for 65 farmers on 'Increasing productivity, use of scientific storage and minimization of post-harvest losses' in collaboration with Central Warehousing Corporation, Kanhipoil, Madikkai, Kasaragod on 18 March 2025 at CPCRI, Kasaragod.
- Scientists from ICAR-CPCRI, Regional Station, Kayamkulam participated in the District Level Coconut seminar conducted at Scott Christian College, Nagercoil, Tamil Nadu on 14 March 2025. The seminar was organized by Department of Horticulture & Plantation Crops, Tamil Nadu. Dr. A. Joseph Rajkumar, Principal Scientist delivered a lecture on 'Integrated Pest and Disease management in coconut'. Dr. Regi J. Thomas delivered a lecture on 'Coconut varieties with



resistance to root (wilt) disease' and Dr. S. Indhuja delivered a lecture on 'Integrated Nutrient management in coconut'. The meeting was attended.



Dr. A. Joseph Rajkumar, Principal Scientist delivering a lecture on IPM in coconut' at Nagarcoil, Tamil Nadu.

Interface meet with Tamil Nadu State Horticulture Department officials

An interface meeting was organised in collaboration with Department of Horticulture, Government of Tamil Nadu on whitefly management in coconut on 13 February 2025 at Coimbatore. Dr. K. Balachandra Hebbar, Director, inaugurated the meeting. Primary objective of the meeting to raise awareness about the correct diagnosis and identification of pests and diseases, their broad management strategies, and the importance of timely reporting for swift action by all stakeholders. Dr. K. B. Hebbar highlighted that productivity is being affected by climate change, particularly rising temperatures and erratic rainfall distribution, along with biotic stresses such as outbreaks of whiteflies, leaf-eating caterpillars, and root wilt

disease in the region. He further emphasized that collaborative efforts would ensure sustainable coconut production in the region. A field visit was also arranged to Thondamuthur block, Coimbatore district. by 150 farmers.



Dr. K. B. Hebbar, Director, ICAR-CPCRI, inaugurating the training programme



Participants during the Field Visit at Thondamuthur, Coimbatore District

RAWE Training

RAWE training for 20 students from KAU Padannakkad Department of Food & Nutrition KAU, College of Agriculture, Padannakkad, Kasaragod from 11-15 February 2025 conducted at CPCRI, Kasaragod.

Farmers visits

- Training cum exposure visit was organized at ICAR-CPCRI, Regional Station, Vittal on 29 January 2025 for 5 Staff's and 42 farmers from Water Resources Dept., Works Division VII, Dhargal Pernem,

Goa.

- 15 trainees (SCSP, TSP, Apprenticeship) of Regional Station, Kayamkulam visited Soil Museum - Thiruvananthapuram and College of Agriculture, Vellayani on 25 February 2025.

SCSP Activities

On campus Farmers -Scientist Workshop

Farmer-Scientist workshop-cum-training on coconut production technologies was organized to the Scheduled Caste farmers under SCSP on 3 January 2025 at ICAR-CPCRI, Kasaragod in coordination with ICAR-KVK experts. More than 120 farmers were benefited from the programme.



View of the training programme and demonstration of coconut value-added product production protocols to participants



Field Day Cum Input distribution programme

Field day cum input distribution programme was organized at ICAR-CPCRI, Research Centre, Kidu, in collaboration with ICAR-IIHR CHES, Chettalli. The event showcased improved varieties of coconut, while also promoting the integration of high-value underutilized fruit crops into coconut plantations for enhanced sustainability.

Skill oriented handicraft training programme

A skill development training programme was successfully conducted to empower SC and ST

youths through the art of coconut shell handicraft. A total of 12 participants received hands-on training in crafting various products using coconut shells, utilizing specialized machinery and tools.

Valedictory of Skill development training programme (SCSP)

The valedictory of skill development training programme for scheduled caste trainees under SCSP was organized at ICAR-CPCRI, Kasaragod on 14 March 2025. The programme was inaugurated by Sri. C. P. Yogeshwara, MLA, Channapatna Taluk of Karnataka and the certificates were distributed to

the 30 participants. The training had started on 01 July 2024 and completed on 31 March 2025.



Certificate distribution to SCSP trainees by Sri C.P. Yogeshwara, MLA, Karnataka



ICAR-Krishi Vigyan Kendras

Krishi Vigyan Kendra, Kasaragod

FLD and OFT Program

ICAR-Krishi Vigyan Kendra, Kasaragod has conducted 2 On-Farm Testing and 2 Front Line Demonstration during the period from January to March 2025



FLD Training programme

Capacity development programmes

Conducted 16 Skill development and other training programmes to

cover several different topics like Value addition of seasonal fruit crops and vegetables, Hi- tech Horticulture, Integrated disease management of Inflorescence die back of arecanut.



Scientific stingless bee keeping

Extension Activities

CPCRI-Krishi Vigyan Kendra,

Kasaragod, exhibited the institute's technologies at the 'Kalpa Agri-Tech Expo 2025', held at the institute from 3 - 5 January 2025. The event was inaugurated by Dr. Himanshu Pathak, Secretary (DARE) and Director General (ICAR), on 3 January 2025.



Dr.Himanshu Pathak, Secretary(DARE)and DG(ICAR),atthe ICAR-KVK Exhibition Stall



ICAR-KVK Kasaragod Celebrates “Kisan Samman Samaroh” and 19 Instalment Release of PM-KISAN Samman Nidhi Scheme

ICAR-KVK Kasaragod marked the release of the 19th instalment of the PM-KISAN Scheme with a *Kisan Samman Samaroh* at ICAR-CPCRI, Kasaragod. The event was inaugurated by Hon'ble MLA Shri N. A. Nellikkunnu and attended by officials including Dr. K.B. Hebbar (Director, ICAR-CPCRI), Shri Raghavendra P. (Principal Agricultural Officer), and Dr. Manojkumar T.S. (Head, KVK Kasaragod). Over 80 participants, including farmers, FPOs, SHGs, SC-SP & TSP representatives, and agriculture students, took part. A

Kisan Chaupal was also conducted and live-streamed to facilitate wider farmer participation and knowledge sharing.



Hon'ble MLA Shri N. A. Nellikkunnu inaugurating Kisan Samman Samaroh along with a group photo of the participants at Kasaragod

Workshop on sustainable lifestyle

ICAR-KVK Kasaragod successfully organized a two-day workshop on “Sustainable Lifestyle” on 21 January 2025 for 200 school students from Kasaragod district. The initiative was funded by the Ministry of Environment, Forest and Climate Change (MoEFCC) and supported by EEP Kerala-National Green Corps (NGC) under KSCSTE.



Moments from the Two-Day Workshop on Sustainable Lifestyle with School Students

Krishi Vigyan Kendra, Alappuzha

Launching of KVK-NABARD project on 'Promotion of value chain in banana'

KVK Alappuzha has launched a new three-year project titled “Promotion of Value Chain in Banana” under NABARD's *Farm Sector Promotion Fund (FSPF)* with a financial outlay of ₹16.4 lakhs. The project will be implemented in six panchayats of Bharanikkavu block, benefiting 180 farmers organized into six clusters. Implementation partners include VFPC, OSFPCL, VAICoS, and APICo. The project was officially inaugurated on 19 March 2025 by Sri. Byju N. Kurup, CGM, NABARD Kerala Region, with 80 stakeholders attending.

Scientific Advisory Committee (SAC) meeting conducted

The 23rd SAC meeting of the Krishi Vigyan Kendra (KVK) was held on 20 March 2025 under the chairmanship of Dr. K. Balachandra Hebbar, Director, ICAR-CPCRI, Kasaragod. The chairman praised the KVK team for their achievements and consistent performance. Key officials, including representatives from ATMA, KAU, ICAR-CPCRI Kayamkulam, NABARD, line departments, farm entrepreneurs, and farmers from different agro-ecological zones attended the meeting. Dr. P. Muralidharan, Head, KVK, presented the action taken report from the previous SAC meeting

and reviewed the KVK's activities over the past year. The KVK newsletter (Oct-Dec 2024) was released during the meeting. Members actively participated and offered suggestions for future activities.

Training programmes

During the period 18 training programmes were organized benefitting a total number of 439 farmers/rural youths. The details of the training programmes were as follows:

Training	No. of Progra-mmes	Participants		
		Men	Women	Total
On campus	15	136	212	348
Off campus	3	25	66	91
Total	18	161	278	439





Celebration

Republic Day

ICAR-CPCRI, Kasaragod, celebrated the 76th Republic Day on 26 January 2025. The programme started with flag hoisting by Dr. K.B. Hebbar, Director followed by salutation of the national flag and thereafter the national anthem. Dr. K.B. Hebbar, delivered the Republic Day message. Republic Day was also celebrated in all the Regional Stations and Research Centres of ICAR-CPCRI with national fervour.



Director delivering Republic Day message and flag hoisting



Success stories

SCSP Trainees Showcase Honey Products at Kalpa Agri-Tech Expo



Exhibition stall visit by Dr. S.K. Singh, DDG, Horticulture, ICAR, featuring honey products by SC Farmers (SCSP)

Scheduled Caste trainees from SCSP Sri Ramachandra, Badiyadka Panchayath, Kasaragod, participated in the Kalpa Agri-Tech Exhibition at ICAR-CPCRI, Kasaragod (3-5 Jan 2025). They exhibited honey from *Apis cerana indica* and *Monzinta* bees, beeswax, and bee hive accessories. Dr. Sanjay Singh, DDG Horticulture, encouraged them to enhance packaging and processing for better market value.

Impact of Training Programme on Livelihood Improvement of SC Farmers

ICAR-Krishi Vigyan Kendra, Dakshina Kannada, in collaboration with ICAR-CPCRI Kasaragod, implemented a skill-

based training and input support programme for Scheduled Caste (SC) farmers under the SCSP scheme. Led by Dr. K. B. Hebbar and coordinated by Dr. T. J. Ramesha, KVK Head Mangalore with ground-level implementation by Dr. Rajkumar, the initiative aimed to enhance the agricultural skills and socio-economic status of SC farmers in Dakshina Kannada. The programme successfully improved farmers' knowledge, productivity, and livelihoods through targeted training and resource support.

Convergence with Institutions/ Departments: The programme was organized in convergence with various institutions/departments such as Taluk Panchayaths, Department of Agriculture, Department of Horticulture, Women and Child Welfare Department, Karnataka State Rural Livelihood Promotional Society (KSRLPS).



Training on coconut cultivation and seedling distribution held at Sullia Taluk, Karnataka



Facilities created

- Hon'ble DG inaugurated a multi-utility hub including the SBI branch, ATM, Sales Parlour, and the Bharat Ratna MS Swaminathan Committee Hall and commissioned a 110 kw solar power grid in Kasaragod.
- A borewell with submersible pump was installed for irrigation purpose at ICAR-CPCRI RS, Kayamkulam. A *Trichoderma* Unit, fertilizer godown constructed, security cabin, and new gate of the centre.
- Atomic absorption spectrophotometer with accessories (UPS and fume hood) worth Rs. 29.32 lakhs purchased.
- Renovated and air-conditioned auditorium at ICAR-CPCRI RS, Kayamkulam was inaugurated by Director, ICAR-CPCRI on 20 March 2025. The cost of renovation and installation of air-conditioning facility of the auditorium was approximately Rs. 9.59 lakhs.
- CCTV installed in the main campus of ICAR-CPCRI, RS, Kayamkulam worth Rs 0.53 lakhs.
- Mahindra Tractor with rotavator worth Rs. 9.96 lakhs purchased at ICAR-CPCRI, RC, Kidu.



Women Activities

International Women's Day

ICAR-CPCRI, Kasaragod, marked International Women's Day 2025 with Ms. Shilpa, D., IPS, District Police Chief, as Chief Guest. She urged women to focus on their societal roles rather than gender to achieve empowerment. Dr. K.B. Hebbar, Director, praised the institute's efforts towards women's empowerment and emphasized performance over individuality. The event included felicitations for a successful woman entrepreneur, Mrs. Annamma T.M., and two outstanding women employees. Certificates and prizes were also awarded to trainees and

competition winners, celebrating women's achievements and empowerment at CPCRI.

The event was inaugurated by cine artist Smt. Kudassanad Kanakam, with poet and teacher Smt. Bindhu R. Thampi as chief guest. Dr. Veena V.S. from the Max Planck Institute, Germany, delivered an online keynote address. A special session on drug abuse prevention was held by Civil Excise Officer Smt. Thasni Kalam. Staff and invited women farmers attended the program.



Ms. Shilpa Devaiah, IPS, inaugurating the Women's Day programme





Personalia

APPOINTMENTS

Name of the staff	Designation	Place	w.e.f.
Shri Raghavendra Kumar	Technician (T-1)	CPCRI, Kasaragod	24.02.2025
Shri Aman Kumar Gautham	Technician (T-1)	CPCRI, Kasaragod	12.03.2025
Shri Shivam Soni	Technician (T-1)	CPCRI, Kasaragod	11.03.2025
Kum. Swathi Agarwal	Technician (T-1)	CPCRI, Kasaragod	12.03.2025

PROMOTIONS

Name of the staff	From (Designation)	To (Designation)	w.e.f.
Shri K. Manikandan	Technical Officer (T-5)	Senior Technica Officer (T-6)	01.01.2002
Dr. K.S. Muralikrishna	Senior Technical Assistant(T-4)	Technical Officer (T-5)	10.03.2024
Shri Santhosh Kumar P.	Senior Technical Assistant (T-4)	(Technical Officer (T-5)	11.03.2024
Shri Arunji G.	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	04.10.2023
Dr. Nirmal Kumar B.J.	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	19.11.2023
Shri Bisun Bhaskar	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	01.10.2023
Smt. Asha K. Chandran	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	04.10.2023
Shri Anoop Kumar, P.P.	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	05.01.2024
Shri Kamal Kumar, V.	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	05.01.2024
Smt. Poonam Khatri	Technical Assistant (T-3)	Senior Technical Assistant (T-4)	20.04.2024
Smt. Ashamol E.P.	Technical Assistant (T-1)	Senior Technician (T-2)	25.04.2024
Shri Lagesh K.P.	Technical Assistant (T-1)	Senior Technician (T-2)	26.04.2024
Shri Suvith P.S.	Technical Assistant (T-1)	Senior Technician (T-2)	01.05.2024
Shri Ajith Kumar R.	Technician (T-1)	Senior Technician (T-2)	01.05.2024
Shri Sajin B.J.	Technician (T-1)	Senior Technician (T-2)	10.05.2024
Shri Premjith Antony	Technician (T-1)	Senior Technician (T-2)	24.08.2024
Shri P. Krishna Kumar	Administrative Officer	Senior Administrative Officer	01.01.2025
Smt. Arathi A.R.	Stenographer III	Personal Assistant	01.01.2025
Shri Sasi K.K.	Asst. Finance & Officer	Finance & Accounts Accounts Officer	20.03.2025

TRANSFER

Name	From (Place)	To (Place)	w.e.f.
Mr. Premjith Antony, Technician (T-2)	ICAR-CPCRI, RS, Kayamkulam	ICAR-CMFRI, Kochi	03-01-2025
Dr. S. Neenu, Senior Scientist	ICAR-CPCRI, Kasaragod	ICAR-CPCRI, RS, Kayamkulam	27-01-2025
Dr. Bikash Chowdhury, CTO	CPCRI, RS, Kayamkulam	CPCRI, RC, Kahikuchi	12.03.2025
Dr. Jeena Mathew, Senior Scientist	CPCRI, RS, Kayamkulam	ICAR-CTCRI, Trivandrum	10.01.2025
Dr. R. Sudha, Senior Scientist	CPCRI, Kasaragod	ICAR- NRCB, Trichy	08.01.2025
Dr. Hima John, Scientist	ICAR-NDRI, Karna	ICPCRI, Kasaragod	13.01.2025

RETIREMENT

Name of the staff	Designation	Place	Date
Dr. C. Thamban	Principal Scientist	CPCRI, Kasaragod	31.01.2025
Shri Sundara B.	Technician (T-1)	CPCRI, Kasaragod	31.01.2025
Dr. K. Muralidharan	Principal Scientist	CPCRI, Kasaragod	VRS on 5.3.2025
Dr. K. Samsudeen	Principal Scientist	CPCRI, Kasaragod	31.03.2025
Shri K. Manikandan	Senior Technical Officer	KVK, Kasaragod	31.03.2025
Shri Velayudhan M.	Skilled Support Staff	CPCRI, Kasaragod	31.03.2025



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