



ICAR-CTCRI Newsletter



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CONTENTS

- Research Highlights
- Extension
- Training Programmes
- Seminars/Workshops/Interface Meetings
- Field Diagnostic Visits
- Exhibition
- MGMG Programme
- Swachh Bharat Abhiyan
- Activities of ABI
- Technology Commercialization /Linkages/ Collaborations
- Capacity Building
- Publication
- Major Institute Events
- Honours/Awards/Recognition
- Media Coverage
- Personalia

FORTHCOMING EVENTS

- Fifth meeting of Quinquennial Review Team (QRT-VIII) during 08-10 January 2025
- Research Advisory Committee Meeting during 10-11 March 2025



Dr. G. Byju
Director

निदेशक की कलम से

मुझे पिछले तीन महीनों के दौरान आईसीएआर-सीटीसीआरआई की प्रमुख उपलब्धियों को प्रस्तुत करते हुए प्रसन्नता हो रही है। इस अवधि के दौरान एक महत्वपूर्ण उपलब्धि यह थी कि कंद फसलों की चार नई किस्मों की सिफारिश की गई थी, जिनमें अरारोट की पहली उच्च उपज देने वाली किस्म श्री आधा, सफेद रतालू की उच्च उपज देने वाली किस्म श्री धोणा और दो पोषक तत्व कुशल कसावा किस्मों श्री अन्नम और श्री मन्ना शामिल हैं, जिन्हें केरल राज्य बीज उप-समिति द्वारा किस्मों के विमोचन के लिए अनुशंसित किया गया था। इस अवधि के दौरान आईसीएआर-सीटीसीआरआई और एआईसीआरपी की कंद फसलों पर पंचवर्षीय समीक्षा बैठकें मुख्यालय, क्षेत्रीय स्टेशन के साथ-साथ उदयपुर और जोरहाट स्थित एआईसीआरपी केंद्रों पर आयोजित की गईं। आईसीएआर-सीटीसीआरआई ने अपने एग्रीबिजनेस इनक्यूबेटर के तत्वावधान में क्षेत्रीय स्टेशन, भुवनेश्वर में 'भारत में बायोफोर्टिफाइड शकरकंद की उभरती प्रौद्योगिकियां और व्यावसायिक संभावनाएं' पर एक उद्योग बैठक सह कार्यशाला का आयोजन किया, जिसमें स्टार्टअप्स, एमएसएमई, एफपीओ, सरकारी अधिकारियों और नीति निर्माताओं से 100 से अधिक शकरकंद मूल्य श्रृंखला के कर्ताधर्ताओं ने भाग लिया। संस्थान ने विश्व मृदा दिवस, कंद फसल दिवस, सतर्कता जागरूकता सप्ताह और हिंदी पखवाड़ा को उत्साहपूर्वक मनाया। उष्णकटिबंधीय कंद फसलों में बीज प्रणाली के औपचारिकीकरण पर एक विचार-मंथन कार्यशाला आयोजित की गई, ताकि वनस्पति रूप से प्रचारित फसलों के उपयुक्त मॉडल को अपनाकर औपचारिक बीज प्रणाली विकसित की जा सके। आईसीएआर-सीटीसीआरआई ने भारत के विभिन्न राज्यों में एनईएच, टीएसपी और एससीएसपी कार्यक्रमों के तहत सक्रिय रूप से प्रशिक्षण कार्यक्रम और बातचीत बैठकें आयोजित कीं। अरुणाचल प्रदेश सरकार के कृषि एवं संबद्ध क्षेत्र मंत्री श्री गेब्रियल डी. वांग्सू ने अरुणाचल प्रदेश में कंद फसलों की खेती को बढ़ावा देने के लिए संभावित सहयोग का पता लगाने के लिए आईसीएआर-सीटीसीआरआई, तिरुवनंतपुरम का दौरा किया। अनुसंधान और हितधारक अनुकूल कार्यक्रमों दोनों पर ध्यान केंद्रित करके, संस्थान उष्णकटिबंधीय कंद फसलों के कृषि परिदृश्य में एक प्रमुख खिलाड़ी बना हुआ है।

From the Director

I am pleased to present the salient achievements of ICAR-CTCRI during the last three months. One significant achievement during this period was the recommendation of four new varieties of tuber crops namely the first high yielding variety of arrowroot, Sree Aadya; a high yielding variety of white yam, Sree Dhrona and two nutrient efficient cassava varieties, Sree Annam and Sree Manna, by Kerala State Seed Sub-Committee for Varietal Release. The Quinquennial Review Meetings of ICAR-CTCRI and AICRP on Tuber Crops were held during this period at HQ, Regional Station as well as at AICRP centres at Udaipur and Jorhat. ICAR-CTCRI under the aegis of its Agribusiness Incubator, organised an Industry Meet cum-Workshop on 'Emerging Technologies and Business Prospects of Biofortified Sweet Potato in India' at the Regional Station, Bhubaneswar with the participation of over 100 sweet potato value chain actors from startups, MSMEs, FPOs, government officials and policy makers. The Institute celebrated the World Soil Day, Tuber Crops Day, Vigilance Awareness Week and Hindi Fortnight in a befitting manner. A brainstorming workshop on formalization of seed system in tropical tuber crops was organized to develop a formal seed system by adopting suitable models vegetatively propagated crops. ICAR-CTCRI actively conducted training programmes and interaction meetings under NEH, TSP and SCSP programmes at different states of India. Shri. Gabriel D. Wangsu, Minister of Agriculture & Allied Sectors Government of Arunachal Pradesh visited ICAR-CTCRI, Thiruvananthapuram to explore potential collaborations to boost tuber crops cultivation in Arunachal Pradesh. By focusing on both research and stakeholder friendly programmes, the Institute continues to be a key player in the agricultural landscape of tropical tuber crops.

G. Byju

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Research Highlights

New varieties recommended for release for the state of Kerala

Arrowroot variety Sree Aadya (IC650781), the first high yielding variety of arrowroot was recommended for release to the State of Kerala by the 29th State Seed Sub-Committee for Varietal Release meeting held on 12 November 2024. It recorded an average rhizome yield of 30.04 t ha⁻¹, potential yield of 49.0 t ha⁻¹ and starch yield of 5.95 t ha⁻¹.



Sree Aadya plant

Tubers

Sree Dhrona (SD-15) is a high yielding variety of white yam recommended for release to the State of Kerala by the 29th State Seed Sub-Committee for Varietal Release held on 12 November 2024. It is a semi-dwarf variety with medium cylindrical smooth tubers with good cooking quality and compact tuber shape. It recorded an average tuber yield of 35.0 t ha⁻¹, potential yield of 52.0 t ha⁻¹ and starch percentage of 23.3-28.5.



Sree Dhrona plant

Tubers

Sree Annam and Sree Manna, two nutrient efficient cassava varieties were released for the state of Kerala. The NPK efficient cassava genotype, CI 905 was released in the name 'Sree Annam' which requires only 25% of the recommended Package of Practices (PoP) of nutrients for giving an yield of 30-35 t ha⁻¹. The tuber flesh is dark yellow with good carotene content (0.270 mg 100g⁻¹) and has very good cooking quality with sweet taste. The cyanogenic glucoside content is low (35-45 ppm) and the plant stature is very compact with two branches. The variety has good leaf retention and hence drought tolerant and mosaic tolerant. The tuber rind is yellow and skin is brown in colour.



Plant

Tuber

Cooked Tuber

Plant and tuber of variety Sree Annam

The NPK use efficient cassava genotype, 7 III E3-5 was released in the name 'Sree Manna'. The variety requires 25% of recommended PoP giving an yield of up to 40 t ha⁻¹. The tubers are cylindrical with white flesh and pink rind, and suitable for markets for consumption purpose. It has good cooking quality and sweet taste with low cyanogen content (40-50 ppm). The plants are mosaic tolerant and two branched with top branching at three fourth of th heights.



Plant

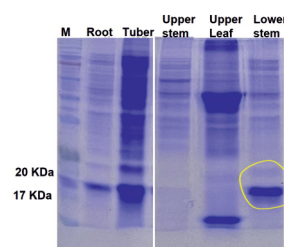
Tuber

Plant and tuber of variety Sree Manna

A small heat shock protein is differentially expressed in roots, tubers and lower stem

Sujatha T.P., Sheela, M.N. and Nasreena, C.

Total soluble proteins were extracted from all tissues of Sree Suvarna variety of cassava using phenylmethylsulfonyl fluoride (PMSF)-based extraction buffer and resolved in 12% Sodium Dodecyl Sulphate-Poly acrylamide Gel Electrophoresis (SDS-PAGE) gel. A protein of 17-20 KDa was expressed in roots, tubers at various developmental stages and lower stem, but absent in aerial plant parts such as leaves and the upper portion of the stem. The protein band extracted from SDS-PAGE gel was analysed by LC-MS to identify the protein with maximum similarity to small heat shock proteins which are known to be involved in protein folding and heat response and are possibly involved in protein metabolism in cassava.



SDS-PAGE of total soluble proteins isolated from various tissues of cassava (M is high molecular weight protein ladder)

Early Maturing progeny of Chinese potato through mutation breeding

Dr. P. Murugesan

The field evaluation of the Chinese potato variety Sree Dhara, treated with different doses of gamma irradiation led to the identification of an early-maturing progeny in 55Gy treatment which was characterized by early flowering and tuber formation, while other treatments showed no flowering or tuber development even three and a half months after planting the irradiated tuber sprouts. Further observations of individual flowers in the inflorescence of the early-maturing plants revealed plump stigmas, indicating high fertility and the potential for seed set.



Early maturing plant



Inflorescence



Early tuber initiation and flower

Portable self-propelled cassava sett cutter

Dr. T. Krishnakumar

Traditionally cassava is cultivated by planting stem cutting of 10-15 cm length and 8-10 viable nodes and about 12,500 cassava setts are required for planting one hectare of land. The manual method of producing cassava setts requires 3 labourers for 15 h to prepare cassava setts for one hectare of land. Therefore, ICAR-CTCRI has developed a portable self-propelled cassava sett cutter. The stopper can be adjusted to produce cassava setts of varying lengths based on the need and it can produce cassava minisetts also. The cutting efficiency, percentage of damaged setts and capacity of the sett cutter 98%, 0.45% and 5000 setts per hour, respectively. The per centage of labour saving is 85% and the cost saving is 90%. The cost of production for one hectare of setts is ₹400/-, while the manual method costs ₹4000/-. The fuel consumption is 0.6 litre per hr. The

working model of the portable self-propelled cassava sett cutter was released during the Tuber Crops Day celebration on 13 November 2024.



Portable cassava stem cutter

Extension

FLDs/OFTs

- Under the 'Industry Connect - Quality Planting material production scheme of ICAR-CTCRI-TANUVAS-KVK- Satellite Incubation Centre', KVK, TANUVAS, Kallakurichi, Tamil Nadu, three cassava varieties planted in FLD (0.4 ha) in the Thagamtheerthapuram village, Chinnasalem block, Kallakurichi, were harvested. While Sree Athulya recorded highest tuber yield (43.75 t ha⁻¹), followed by Sree Reksha (42 t ha⁻¹) and Sree Kaveri (38 t ha⁻¹).
- Distributed Micronol and fertilizers to taro farmers at Pallakal, Podhukudi village, and at Keela Ambur village, Kadayam taluk, Tenkasi district, Tamil Nadu. The seed village demonstration plots for quality planting material production of Chinese potato variety Sree Dhara were monitored at Pallakal, Podhukudi village on 15 October 2024.



Distribution of fertilizers to farmers

Training programmes

On campus programmes

- RHWE programme on improved technologies of tuber crops was organized for B.Sc. (Hons.) Agricultural students of ITM University, Gwalior, Madhya Pradesh during 01 October to 03 November 2024 at ICAR-CTCRI, Thiruvananthapuram, Kerala.

- RHWE programme on improved technologies of tuber crops was organized for B.Sc. (Hons.) Agricultural students of Karunya Institute of Technology and Sciences, Tamil Nadu during 18 September to 15 October 2024 at ICAR-CTCRI, Thiruvananthapuram, Kerala.
- One week training programme on 'Tuberous Vegetables Based Nutri Gardens by Organic and Urban Farming' was organized during 18-22 November 2024 at ICAR-CTCRI. Fourteen trainees attended the programme.
- A training on 'Innovation in detection and management of pests' was organized for 20 farmers at ICAR-CTCRI on 22 November 2024.
- Under the SCSP project, three candidates completed one year Skill Development Programmes on hands on training on quality planting material production of tuber crops, mass production/multiplication of bio control agents (*Trichoderma*), and *in vitro* conservation of tuber crops, on 31 December 2024.

Off campus programmes

- Under the Scheduled Castes sub-programme, ICAR-CTCRI, in collaboration with Ollur Block Panchayat, Department of Agriculture, Ollur KrishiSamridhi FPC and Ollur Scheduled Castes Cooperative Society, organized Tuber Crops Development Program on 05 October 2024 at Ollukkara, Thrissur, Kerala with the participation of about 100 farmers. The programme was inaugurated by Adv. K. Rajan, Minister of Revenue and Housing Department, Government of Kerala. Various agricultural inputs like chemical fertilizers, biopesticides, biofertilizers and planting materials were distributed to the selected beneficiaries. ICAR-CTCRI scientists participated in the scientist-farmers' interaction.



Inauguration of tuber crops development programme



Distribution of planting materials

- ICAR-CTCRI organized a training programme on 'Improved production technologies on tuber crops for enhancing farm income' at Mundanthurai village, Ambasamudram taluk, Tamil Nadu on 16 October 2024.

- A training was organized on 'Crop diversification with cassava and sweet potato' under Tribal Sub Plan at Cholagara village, Purulia, West Bengal on 16 October 2024 with the participation of 50 beneficiaries.
- Under SCSP program, two farmers' training programmes on crop production and value addition aspects on tuber crops, were organised at Moolapudur, Gangavalli block, Salem district on 06 November 2024 and at Chembanarcoil block, Mayiladuthurai district on 07 November 2024 with the participation of more than 100 farmers. especially on cassava. Farm tools were distributed to 44 beneficiary farmers.
- A training programme on 'Improved Production Technologies in Tuber Crops' was organized at Ankalgiri village, Southwest Garo Hills District, Tura, Meghalaya on 22 November 2024 under NEH programme.



Training under SCSP programme at Salem



Training under NEH programme at Tura, Meghalaya

- A training programme on 'Improved varieties, Technologies and Value addition in Tuber Crops' was organized on 25 November 2024 at Lower Damalgre village, Southwest Garo Hills in collaboration with Incubation Centre, Northeastern Hill University (NEHU), Tura campus, Meghalaya .
- ICAR-CTCRI organized a training programme on 'Improved varieties, technologies and value addition in tuber crops' on 28 November 2024 at Lumdiengngan village, Ri Bhoi in collaboration with ICAR RC for NEH Region, Umiam, Meghalaya and Department of Horticulture, Ri Bhoi.



Training at NEHU, Tura, Meghalaya



Training at ICAR RC for NEH Region, Umiam, Meghalaya

- A training was organized to tribal beneficiaries at Agali village, Attappadi, Palakkad on 29 November 2024 in collaboration with Kudumbashree under TSP. Planting materials of biofortified varieties of sweet potato, agri-inputs like bioformulations, biopesticides and training

materials were distributed to tribal farmers. Scientists of ICAR-CTCRI handled classes on sweet potato cultivation and value addition. Officials from Agali, Solapur, and Podur panchayats as well as from Kudumbashree offered felicitations. About 100 participants comprising of tribal farmers, entrepreneurs attended the meeting.

- A training on 'Personality Development' was organised for the scientists (19 scientists) of ICAR-CTCRI during 18-20 December 2024 at the Institute of Management in Government (IMG), Thiruvananthapuram. Sessions were arranged on professional excellence through personal excellence, government procurement procedures, AI tools for academic and research excellence and interpersonal communication. The valedictory programme was organised at ICAR-CTCRI on 20 December 2024.

Seminars/Workshops/Interface Meetings/Field Diagnostic Visits Organized

- Four interaction meetings on production and value addition technologies in tuber crops were organized with the participation of farmers from Kuliana and Bangriposi blocks of Mayurbhanj district during 21-22 October 2024 and Rayagada, Bissamcuttack, Kolnara and Muniguda blocks of Rayagada district during 27-29 October 2024.
- A One day National Brainstorming Workshop on 'Formalization of Seed System in Tropical Tuber Crops' was organized in hybrid mode at ICAR-CTCRI, Thiruvananthapuram on 03 December 2024 with an objective to develop a formal seed system for tropical tuber crops by adopting suitable models from potato and other vegetatively propagated crops. The workshop was inaugurated by Dr. S.K. Singh, Hon'ble Deputy Director General (Horticultural Science). Dr. Sudhakar Pandey, ADG (FVSMAP) was the guest of honour. Dr. S.K. Chakrabarti, former Vice Chancellor, UBKV, West Bengal and Director of ICAR-CPCRI as well as CTCRI, in his opening remarks emphasised the urgency of developing breeder seed standards for major tuber crops to strengthen the present seed system in the country. Dr. G. Byju, Director, ICAR-CTCRI, in his address presented the need for accelerating of seed/planting material production for enhancing area from the present 4.2 lakh ha to 6.0 lakh ha by 20230. In the technical session, there were 11 presentations by experts, viz., Dr. S.K. Chakrabarti; Dr. Vinod Kumar,

HoD, Crop Improvement and Seed division, ICAR-CPRI; Dr. James George, former Project coordinator, AICRP TC; Dr. M. Nedunchezhiyan, Principal Scientist, ICAR-CTCRI RS; Dr. Janata Tarafdar, Professor, BCKV; Dr. K. Sunilkumar and Dr. R. Muthuraj, ICAR-CTCRI; Dr. M. Sankaran, HoD, Division of Fruits, ICAR-IIHR Bengaluru; Dr. P. Naveen Kumar, HoD, Division of Floriculture, ICAR-IIHR, Bengaluru and Dr. Lijo Thomas, ICAR-IISR, Kozhikode. Subsequent to technical presentations, there was an open forum for interaction and the meeting was attended by 197 participants.



Participants of the Brainstorming Workshop

- The Indian Society of Mycology and Plant Pathology Zonal Meet (Southern Zone), along with ICAR-CTCRI and Kerala Agricultural University, organized a 'National Seminar on Advances in Plant Pathology: Challenges and Prospects' on 14 December 2024. The inaugural program was presided over by Dr. Byju, Director, ICAR-CTCRI and the seminar was inaugurated by Dr. S.S. Chahal, Emeritus President and former Vice-Chancellor of MPAUT, Udaipur. A special address was delivered by Dr. Jacob John, Director of Extension, at Kerala Agricultural University. The seminar featured five invited lectures and showcased 48 posters presented across five sessions, focusing on various aspects of plant pathology. There were 80 participants from four Southern states, Kerala, Tamil Nadu, Karnataka, and Andhra Pradesh.



Inaugural session of the National Seminar



Participants of the National Seminar

- An awareness class on 'Good agricultural practices for cassava' was organized on Kisan Diwas (Farmer's Day) to the farmers at Vamanapuram Krishi Bhawan, Thiruvananthapuram, Kerala on 23 December 2024 and distributed the planting materials of cassava varieties, Sree Raksha and Sree Pavithra.
- A field diagnostic visit was organised by Adi Dravidar and Tribal Welfare Department, Govt. of Tamil Nadu at the Kalavarayan Hills in Kallakurichi district of Tamil Nadu on 27 December 2024. Scientists from different ICAR Institutes and Annamalai University participated in the field visit. The cassava production systems in five villages were assessed and problems were identified. The assessments report along with intervention points were presented to Smt. G. Laxmi Priya IAS., Secretary to Government, Tribal Welfare Department, Govt. of Tamil Nadu at a Stakeholders meeting held on 28 December 2024.

Exhibitions

During this period, ICAR-CTCRI participated in the following exhibitions.

- Exhibition in connection with inauguration of Tuber Crops Development programme 2024-2025 and distribution of inputs under SCSP programme on 05 October 2024 at Ollukkara, Thrissur, Kerala.
- ICAR-CTCRI Regional Station, Bhubaneswar participated in the exhibition during ICNSFS 2024 at ICAR-CIWA, Bhubaneswar, Odisha during 06-08 November 2024.
- Chertala Fest – Karappuram Kazhchakal exhibition during 20-29 December 2024 at Chertala, Alappuzha district.



Adv. K. Rajan, Minister of Revenue and Housing Department, Government of Kerala visiting CTCRI exhibition stall at Ollukkara



Cherthala Fest – Karappuram Kazhchakal exhibition



Exhibition stall at ICAR-CIWA, Bhubaneswar

Mera Gaon Mera Gaurav Programme

An awareness programme on 'Disease management in tuber crops' was conducted in the MGMG adopted village, Karakulam, Thiruvananthapuram on 25 November 2024 with the participation of 50 farmers. The gathering was welcomed by Dr. Sheela Immanuel, Principal Scientist, ICAR- CTCRI, who briefed on the MGMG initiative and its implementation in the adopted villages in Kerala and Bhubaneswar. The chief guest of the programme, Shri. S. Suresh Kumar, Ward Member, Ayanikadu, inaugurated the programme. Dr. S.S. Veena, Principal Scientist, ICAR-CTCRI took class on the diseases of tuber crops and emphasized the importance of integrated disease management to achieve better yields from tuber crops. Planting materials of improved varieties of cassava and sweet potato were distributed.



MGMG programme at Karakulam

Swachh Bharat Abhiyan

Swachhata Pakhwada

Under Swachhta Hi Seva-2024, a series of activities were organized during 15 September - 02 October 2024 on the theme 'Swabhav Swachhata- Sanskaar Swachhata' at HQ and RS of ICAR-CTCRI. On 16 December 2024, the Swachhata Pakhwada program was inaugurated and the staff members took the Swachhata pledge. The Swachh Bharat Abhiyan committee organized the Farmers Day (Kisan Diwas) on 23 December 2024, besides activities such as quiz program to school students, establishment of kitchen gardens in residential colony, cleaning drive at Akkulam Tourist Village, Thiruvananthapuram during this fortnight period.



Programmes under Swachhta Hi Seva-2024



Exposure visits to ICAR-CTCRI

- One day exposure visit cum training on 'Improved technologies of tuber crops' was organized for the benefit of 80 farmers, 442 students and 30 officials during this period at ICAR-CTCRI, Sreekariyam, Thiruvananthapuram.

Activities of Agribusiness Incubator

● Agri Udaan 7.0-Road show & startup hunt

ICAR-NAARM, Hyderabad and Agri-business Incubator of ICAR-CTCRI jointly organised a Road show/Start up Hunt for a food and agribusiness accelerator programme on 01 October 2024 with an objective to brief about the benefits of Food and Agribusiness accelerator program at a-IDEA Dr. Ch. Srinivasa Rao, Director, NAARM was the Chief Guest; Dr. Roy Stephen, Dean, College of Agriculture, Vellayani and Sri. Baiju N. Kurup, CGM of NABARD, Kerala Regional Office graced the programme by their presence as Guests of Honour. Director, ICAR-CTCRI delivered keynote address. Dr. S. Senthil Vinayagam, CEO, a-Idea, NAARM; Chairman, SLBC; representatives of SBI; ICAR-CMFRI; CWRDM and Kerala Startup Mission participated. About 250 stakeholders comprising of scientists, startups, MSME, social enterprises, investors, IP agencies and students also participated in the event. The roadshow also featured technology showcasing pavilion for displaying various commercial products developed by ICAR Institutions in the South India.



Agri Udaan programme



- ICAR-CTCRI ABI organised 'Student Exposure Training on Sustainable Tuber Crops Innovations for Food and Nutritional Security' for the first-year students of College of Agriculture, Vellayani under the Deeksharambh Student Induction Programme on 19 November 2024.
- AgriInnovate has collaborated with Kerala Startup Mission (KSUM) for the Branding Challenge 2.0, in which the Kerala Startup Mission identified 'Functional Pasta from Cassava', a technology of

ICAR-CTCRI, for the branding challenge this year. ICAR-CTCRI ABI along with the representative from AgriInnovate participated in the event at Thiruvananthapuram, Kerala during 28-30 November 2024.

● Rooting for Tubers 2024

ICAR-CTCRI ABI in collaboration with M/s Spudnik Farms, an incubatee of CTCRI, organised 'Rooting for tubers 2024' at Bengaluru on 01 December 2024. This was the second edition of the unique festival designed to promote indigenous tubers among the urban communities in Bengaluru. Dr. Kadirvel Govindasamy, Director, ATARI, Guwahati; Dr. Srinivasulu Rajendran, Co-Lead Work package 3 - CGIAR Seed Equal Initiative, faculty from NEHU, College of Horticulture & Forestry, CAU(I), Pasighat, Arunachal Pradesh; KAU, Wayanad; investors, startups, and farmers participated in the programme. Members of different tribal groups from Arunachal Pradesh, Tripura, Meghalaya, Odisha and Karnataka demonstrated their traditional tuber recipes. Over 500 people participated



Rooting for tubers



● Industry Meet cum workshop on Biofortified Sweet Potato

As a part of ICAR-CTCRI's effort to develop a vibrant business ecosystem for promoting biofortified crops businesses for ensuring availability and easy access to needy families, ICAR-CTCRI ABI organised an Industry Meet cum-Workshop on 'Emerging Technologies and Business Prospects of Biofortified Sweet Potato in India' at Regional Station of ICAR-CTCRI, Bhubaneswar on 17 December 2024. The chairman and members of QRT, Dr. S.D. Shikhamany, Former Vice Chancellor, Dr. YSR Horticultural University, Andhra Pradesh; Dr. S.K. Pandey, Former

Director, ICAR-CPRI, Shimla, H.P., Dr. V.S. Korikanthimath, Former Director, ICAR-CCARI, Goa; Dr. Rakesh Pandey, Prof. Emeritus, AcSIR & CSIR, CIMAP, Lucknow, U.P. and Dr. Jagan Mohan, DSW & Head, Food Science & Nutrition, NIFTEM, Thanjavur, T.N. and Dr. G. Byju, Director, ICAR-CTCRI participated in the programme. The industry meet brought together over 100 sweet potato value chain actors from startups, MSMEs, FPOs, government officials, agripreneurs, NGOs, academics and researchers, extension managers and policy makers under one roof to showcase biofortified sweet potato varieties and their products.



Glimpses of Industry Meet cum Workshop at ICAR-CTCRI RS, Bhubaneswar

Technology Commercialization/Linkages/Collaborations

- ICAR-CTCRI signed a MoU with Kerala Agricultural University, Vellanikkara, Kerala represented by its Registrar, Kerala Agricultural University, KAU, Vellanikkara, Thrissur on 27 November 2024 for the establishment of a Satellite Incubation Centre (SIC) at the RARS, Pattambi.
- ICAR-CTCRI signed a MoU with Centre for Development of Advanced Computing (C-DAC) Thiruvananthapuram on 13 December 2024 in connection with the tuber crops day celebration. The function was attended by Shri. K.R. Rajesh, Senior Director and Head, Strategic Electronic Group and Sri.

Anish Sathyan, Scientist-G, C-DAC. The MoU is aimed to establish a framework for the cooperation of the parties in research and developmental activities related to the fields of Agriculture Automation, Crop management, Agriculture robotics, AI/ML driven Agriculture solutions, IoT sensors, and Geospatial data-driven applications, and Edge Embedded Systems and or any other technology research area of common interest that may arise in future.



MoU with KAU for establishing Satellite Incubation Centre

Exchange of MoU between ICAR-CTCRI and C-DAC, Thiruvananthapuram

- e-Crop device was officially launched by Shri. Brajesh Pathak, honourable deputy CM of Uttar Pradesh on 18 December 2024 during the Uttar Pradesh Agri Exhibition, which was held at Indira Gandhi Prathishtan, Lucknow.



Launching of e-Crop

- MoU was signed with M/s Haritha Lekshmi Food Products, Haritha Lekshmi Krishikoottam, Kollam Krishi Bhavan, Kollam, Kerala on 12 December 2024 to license the technology of 'Dehydrated Flakes of Elephant Foot Yam' developed by ICAR-CTCRI.

Capacity building

Trainings attended by staff

Sl.No.	Name	Particulars of the training	Period
1	Dr. N. Krishna Radhika	Training on 'Next Generation Sequencing (NGS) Data Analysis' at ICAR-NAARM, Hyderabad	21-25 October 2024
2	Dr. Sheela Immanuel Dr. S.S. Veena Dr. Sujatha T.P.	Online webinar on Karmayogi Mission	22 October 2024
3	Dr. H. Kesava Kumar	Training on 'Ways of enhancing presentation skills', organized by Department of Personnel & Training, Govt. of India	22 October 2024
4	Dr. H. Kesava Kumar	Training on 'Introduction to emerging technologies', organized by Department of Personnel & Training, Govt. of India	25 October 2024

5	Dr. N. Krishna Radhika	Hands on Training on 'Genome Editing - Basic Principles and Practices' organized at Division of Plant Physiology, IARI, Pusa for CCPs, PI and Co-PI of participating Institutes of EFC project entitled 'Enhancing Climate Resilience and Ensuring Food Security with Genome Editing in crops (sub scheme-10)' and 'Enabling Climate Resilience and Ensuring Food & Nutritional Security through Genome Editing in Horticultural Crops (sub scheme-5)' at IARI, Pusa, New Delhi	02-06 December 2024
6	All scientists	National Brainstorming Workshop on 'Formalization of Seed System in Tropical Tuber Crops' at ICAR-CTCRI, Thiruvananthapuram	03 December 2024
7	Dr. Sujatha T.P.	Virtual Workshop on 'Molecular Phylogenetics: From Theory to Practice V-11.0', organized by Quaxon Bio & IT solutions, India	06-08 December 2024
8	Dr. Sujatha T.P.	International virtual workshop on 'NGS & transcriptomics data analysis V-8.0' organized by Quaxon Bio & IT solutions, India	18-20 December 2024
9	Dr. P. Murugesan Dr. A. Asha Devi Dr. N. Krishna Radhika Dr. Shirley R. Anil Dr. K.M. Senthilkumar Dr. S.N. Rahana Dr. J. Suresh Kumar Dr. V. Ramesh Dr. R. Muthuraj Dr. K. Susan John Dr. K. Sunilkumar Dr. M.L. Jeeva Dr. S.S. Veena Dr. B.G. Sangeetha Dr. Sheela Immanuel Dr. P. Prakash Dr. D. Jaganathan	Training programme Training on 'Personality Development' organized for scientists of ICAR-CTCRI by the Institute of Management in Government, Government of Kerala	17-21 December 2024
10	Dr. S.S. Veena	Workshop on conduct of inquiry on complaints relating to ICC of sexual harassment of women at workplace	30 December 2024

Staff participation in scientific events/seminars/symposia/conference/workshop/meetings

Sl.No.	Name of the participant	Programme	Particulars of the programme
1	All scientists	Agri Udaan Food and Agribusiness Accelerator programme, a Roadshow/Start up hunt.	Organised by ICAR-NAARM, Hyderabad and ICAR-CTCRI 01 October 2024
2	Dr. M.L. Jeeva	S& T Interventions for the development of Bioresources of the Region (Kerala) with special focus on the involvement of Women scientists and technologists:	Organised by The National Academy of Sciences, India (NASI) and RGCB, Thiruvananthapuram at Kerala 01 October 2024
3	All scientists	Meeting of Quinquennial Review Team (QRT VIII)	ICAR-CTCRI, Thiruvananthapuram 08-09 October 2024
4	Dr. G. Byju Dr. P.S. Sivakumar	'Stakeholder Consultation on Priorities for Potato and Sweet potato Science and Innovation in India'	Organised by CIP, Lima, Peru at ITC Maurya Hotel, New Delhi 16-17 October 2024
5	Dr. P. Murugesan	Inaugural function and technological exhibition of CSIR-NIIST, Thiruvananthapuram Golden Jubilee Celebration	CSIR-NIIST, Thiruvananthapuram 17 October 2024
6	Dr. Sujatha T.P.	Understanding IP: Encouraging creativity and innovation	Organised by ICAR-Central Arid Zone Research Institute, Jodhpur 18 October 2024
7	All scientists	Quarterly Review meeting of scientists	ICAR-CTCRI, Thiruvananthapuram 18 & 22 October 2024

8	Dr. P.S. Sivakumar	Stakeholders meeting for the project 'Rainbow Diet Campaign for Odisha: Development and Scaling of Customised Rainbow Diet Food Matrices for Combating Malnutrition among Children in Keonjhar District'	Office of the CDO, Keonjhar, Odisha 22 October 2024
9	Dr. C. Visalakshi Chandra	10 th international conference 'Recent Advances in Agriculture, Engineering, Applied & Life Sciences for Environmental Sustainability (RAAEALSES-2024)'	Uttaranchal University, Dehradun 23-25 October 2024
10	Dr. S.S. Veena Dr. H. Kesava Kumar Dr. Sujatha T.P.	Webinar on 'Recent threats of Invasive Insect Pests to Indian Agriculture: Challenges & Way Forward'	ICAR-IISR, Kozhikode 25 October 2024
11	All Staff	Vigilance Awareness Week 2024 'Culture of Integrity for Nation's Prosperity'	ICAR-CTCRI, Thiruvananthapuram 28 October- 03 November 2024
12	Dr. J. Sreekumar	Attended an Online Workshop on 'R for Bioinformatics' and delivered a lecture on 'Basic Statistics using R'	ICAR-IISR, Kozhikode 05 November 2024
13	Dr. K. Laxminarayana	32 nd Foundation Day of CHES	ICAR-IIHR, Bhubaneswar 06 November 2024
14	Dr. G. Byju Dr. G. Suja Dr. J. Sreekumar	Second meeting of Quinquennial Review Team (QRT VIII)	MPUAT, Udaipur 07-08 November 2024
15	Dr. D. Jaganathan Dr. K.M. Senthilkumar	31 st Swadeshi Science Congress 'Towards Net Zero Emission: Approaches and Strategies'	ICAR-CIFT, Kochi 07-09 November 2024
16	Dr. G. Suja	19 th AGM of AINPOF	08 November 2024
17	Dr. K. Laxminarayana	International Symposium on SHREE ANNA & FORGOTTEN FOODS 2024	Lok Seva Bhawan, Bhubaneswar, Odisha 10-11 November 2024
18	Dr. T. Makeshkumar	International Conference on Emerging viruses: Pandemi & Biosecurity Perspectives (VIROCON 2024)	DRDE, Gwalior, Madhya Pradesh 11-13 November 2024
19	Dr. Asha K.I.	29 th State Seed Sub-Committee for Varietal Release, Kerala meeting and presented the two variety release proposals.	12 November 2025
20	Dr. T. Makeshkumar	ICAR Regional Committee Meeting No. IV	Organised by ICAR-IIVR & ICAR-IISR at ICAR - IISR, Lucknow 14 November 2024
21	Dr. K. Laxminarayana	Global Soils Conference 2024. Caring Soils Beyond Food Security: Climate Change Mitigation & Ecosystem Services	NASC Complex, Pusa, New Delhi 19-22 November 2024
22	Dr. M.S. Sajeew Dr. T. Krishnakumar	Annual workshop on AICRP on Post-harvest Engineering & Technology (PHET) at AAU, Jorhat	20-22 November 2024
23	Dr. S.S. Veena	International conference on Biotechnology-the way forward (ICBWF-2024)	Department of Biotechnology, Karyavattom, Thiruvananthapuram 20-22 November 2024
24	Dr. Sujatha TP	Webinar on 'Epigenetics: A Paradigm Shift with Long-Read Sequencing From Bi-sulphite to Long-Read Sequencing: Change in the Gold Standard'	Organised by Genotypic Technology, Bengaluru 20 November 2024
25	Dr. Rahana S.N.	Hands on Workshop on 'Artificial Intelligence (AI)'	Digital Media Foundation 24 November 2024
26	Dr. G. Byju Dr. G. Suja Dr. J. Sreekumar	Third Meeting of Quinquennial Review Team (QRT VIII)	AAU, Jorhat 25-26 November 2024
27	Dr. S.S. Veena	MGMG programme on disease management in tuber crops	Karakulam, Thiruvananthapuram 25 November 2024
28	Dr. S.S. Veena	BLAKC Meeting to finalise Farm Plan-2024-25	Office of the Asst. Director of Agriculture, Attingal, Thiruvananthapuram 27 November 2024
29	Dr. J. Suresh Kumar	ISWS Biennial Conference on Climate Smart Weed Management for Global Food Security	BHU Varanasi 28-29 November 2024

30	Dr. V. S. Santhosh Mithra	Attended the Workshop on 'Agricultural digitalization: Digital platforms for agricultural advisories' and delivered a talk on 'Overview of the digital platforms of CTCRI'.	Organized by CAB International, New Delhi and Kerala Agricultural University at KAU, Vellanikkara 29-30 November 2024
31	All scientists	Meeting with Shri. Gabriel D. Wangsu, Minister of Agriculture, Government of Arunachal Pradesh	ICAR-CTCRI, Thiruvananthapuram 02 December 2024
32	Dr. Rahana S.N.	National Brainstorming Workshop on 'Formalization of Seed System of tropical tuber crops'	ICAR-CTCRI, Thiruvananthapuram 03 December 2024
33	All staff	World Soil Day celebration	ICAR-CTCRI 05 December 2024
34	Dr. K.M. Senthilkumar	Online International Workshop-cum-Webinar on 'CRISPR Construct Design' for efficient genome editing in plants	Glostem, New Delhi 04-06 December 2024
35	Dr. A. Asha Devi	Annual meeting of the Board of Studies in Botany (UG), University of Kerala	06 December 2024
36	Dr. M.S. Sajeev Dr. A.N. Jyothi Dr. T. Krishnakumar Dr. C. Pradeepika Dr. S.S. Veena	NASF Advisory Committee and second review meeting of the project 'Development of smart foods, bio-composites, green packaging and bio-energy from agro-residues',	ICAR-CTCRI, Thiruvananthapuram 09 December 2024
37	Dr. D. Jaganathan	Annual Review Meeting of the project titled 'Soil Health Management in Coconut Based Cropping Systems Involving Tuber Crops for Enhanced Yield and Income' funded by Coconut Development Board, Kochi	ICAR-CTCRI, Thiruvananthapuram 10 December 2024
38	Dr. A. Asha Devi	Second Half Yearly Meeting of TOLIC for the year 2024-25 and Award Distribution Ceremony	ICAR-CTCRI 12 December 2024
40	Dr. S.S. Veena Dr. M.L. Jeeva	Meeting of selection/screening cum evaluation committee	Kerala Agricultural University, Thrissur, Kerala 13 December 2024
41	Dr. S.S. Veena	ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects,	Organised by ISMPP, ICAR-CTCRI and KAU, Thrissur at ICAR-CTCRI Thiruvananthapuram 14 December 2024
42	Dr. G. Byju Dr. G. Suja Dr. J. Sreekumar Dr. H. Kesava Kumar All scientists of Regional Station	Fourth Meeting of Quinquennial Review Team (QRT VIII)	ICAR-CTCRI, Regional Station, Bhubaneswar 16-18 December 2024
43	Dr. G. Byju Dr. G. Suja Dr. J. Sreekumar Dr. P.S. Sivakumar All scientists of Regional Station	Industry Meet cum Workshop on biofortified sweet potato	ICAR-CTCRI RS, Bhubaneswar, Odisha 17 December 2024
44	Dr. S. Sunitha	Review meeting of ICAR-CIAT collaborative project	NASC New Delhi 17 December 2024
45	Dr. K. Laxminarayana	13 th Scientific Advisory Committee meeting of KVK-Khordha	ICAR-CIFA 20 December 2024
46	Dr. Rahana S.N.	International Winter School on 'Navigating Agricultural Transformations for Upliftment of Rural Excellence (NATURE:2024)' (hybrid mode).	Jointly organized by Agri Meet Foundation Bharat, Southern Federal University Russia, CIMMYT Mexico, ICRISAT Hyderabad, Visva-Bharati University West Bengal, ICAR-NDRI Karnal, MGVVV Durg, ICAR-ATARI Jabalpur and SKLTSU Telangana 02 to 31 December 2024

47	Dr. G. Byju Dr. S. Sunitha Dr. S.S. Veena Dr. M.S. Sajeev	Cherthala Polima, Karappuram Kazchakal, St. Michael's College, Cherthala, Kerala	23 December 2024
48	Dr. P. Murugesan	National Workshop on 'Reviving of agrobiodiversity in rainfed areas through traditional varieties for climate resilience agriculture'	Organized by WASSAN and National Rainfed Area Authority (NRAA), Government of India at NASC, Pusa, New Delhi 24 December 2024
49	Dr. S.S. Veena, Dr. H. Kesava Kumar	Viksit Bharath Young leaders dialogue- State Championship	Thiruvananthapuram 27 December 2024
50	Dr. T. Makeshkumar Dr. M.L. Jeeva Dr. J. Sreekumar Dr. T.P. Sujatha Dr. K.M. Senthil Kumar	Institute Biosafety Committee meeting	ICAR-CTCRI, Thiruvananthapuram 31 December 2024

Publications

Research papers

- Athira, K., Pradeepika, C., Krishnakumar, T., Sajeev, M.S. and Hanume Gowda, K. 2024. Pearl millet Incorporated Sweet Potato Choco-Filled Cookies. *J. Root Crops*, **50**(1): 16-22.
- Chithra Vinod, Veena, S.S., Sreekumar, J., Karthikeyan, S, and Jeeva, M.L.2024. Assessment of variability in temperature tolerance and antagonistic activity among Trichoderma isolates for biological control applications. *J. Root Crops*, **50**(1): 45-52.
- Hasmi, S.K.K., Saravanan, R., Makasana, J., Thulasimani, K. and Safia, S. 2024. Comparative study of extraction methods and screening of cassava genotypes for high stem starch yield: A potential industrial source. *Starch/Stärke*, e202400158 (NAAS score: 8.3).
- Jaganathan, D., Sheela Immanuel, Prakash, P. and Muthuraj, R. 2024. Women in Chinese potato cultivation in Tamil Nadu- A multidimensional analysis *Journal of Root Crops* **50**(1): 32-38.
- Kumar, H.K., Sangeetha, B.G., Tadigiri, S., Jayaprakas, C.A. and Makeshkumar, T. 2024. New Record of *Steinernema siamkayai* (Rhabditida: Steinernematidae) from Kerala, India. *Indian Journal of Nematology*, **54**(2):128-133. <https://doi.org/10.5958/tpb9sv05>. (NASS score: 5.07).
- Murugesan, P., Ashish Narayan, H., Rahana, S.N., Jaisankar, K. Pradeep, Augustin Jerard and Jyothi, A.N. 2024. Characterization of yam bean (*Pachyrizhus erosus*, L. Urban) germplasm (IC No. 635945) from Havelock (A&N) Island and comparison with Rajendra Mirshikand-1 (RM-1) variety. *J. Root Crops*, **50**(1): 56-61.
- Murugesan, P., Dinesh Prasad Semwal, Soyimchiten Longkumer, Jyothi, A.N., Shameer, P.S., Manju Baby and Akhila Anil. 2024. Morphological and biochemical profile of ex situ conserved *Homalomena aromatica* (Schott) - an underutilised indigenous tuber crop, *J. Root Crops*, **50**(1): 39-44.
- Pradeepika, C., Alka Joshi, Bandana Kaundal, Pinky Raigond, Brajesh Singh and Bhawna Kaundal. 2024. A Non-Destructive Technique for Estimation of Amylose, Resistant Starch, and Starch in Potato using NIR Spectroscopy. *J. Root Crops*, **50**(1): 45-52.
- Prakash P., D. Jaganathan and Sheela Immanuel. 2024. Production, trade and future prospects of tropical tuber crops, *Current Science*, **127**(09):1100-1107 (NAAS Rating 7.10).
- Suja, G., Jaganathan, D. and Sooraj, C.S. 2024. Potential manure management options for organic farming in horticultural crops. *Journal of the Indian Society of Soil Science*, (Special issue), **72**:1161-1179 (NAAS score: 5.34).
- Suresh Kumar, J., Sunitha, S. and Namrata A. Giri. 2024. A review of tropical root and tuber crops for livelihood security and nutrition. *Environment and Ecology*, **42**(4B): 1793-1800 (NAAS score: 4.76).
- Velmurugan, M., Anand, M., Kamalkumaran, P.R., Krishnakumar, T., Pugalendhi, L. 2024. Performance of cassava mosaic resistant accessions for tuber yield and starch content. *International Journal of Research in Agronomy*, **7**(8):11-14 (NAAS score: 5.20).
- Velmurugan, M., Manickam, S., Pugalendhi, L., Krishnakumar, T., Byju, G., Anand, M. and Sumera,

S. 2024. Combined application of micronutrients and stake dipping of cassava for alleviating the deficiency and maximization of tuber yield. *Journal of Animal & Plant Sciences*, **34**(6): 1541-1551 (NAAS score: 6.70).

14. Visalakshi Chandra, C., Sheela, M.N., Ravi, V., Bishal Gurung, Senthil alias Sankar and Sreekumar, J. 2024. Genetic parameters and prediction of genotypic values for postharvest physiological deterioration tolerance and root traits in cassava using REML/BLUP. *Biochemical Genetics*. <https://doi.org/10.1007/s10528-024-10972-6>.

Book chapters

1. Dinakaran Elango., Wanyan Wang., Neethu Francis., Debamalya Chatterjee., Ann Murithi., Visalakshi Chandra., Theivasigamani Parthasarathi., Einstein Mariya David., Vanitha Jayaraman., Kamaleeswari Govindarajan., Bonti Gogoi., Somashekhar Punnnuri., Mahendar Thudi., Mahalingam Govindaraj., Ashok Kumar Are., Yinping Jiao and Surinder Chopra. 2024. *New Breeding Trends in Sorghum*. In: Habyarimana et al. (eds.), Omics and Biotechnological Approaches for Product Profile-Driven Sorghum Improvement, Springer, pp. 377-394. https://doi.org/10.1007/978-981-97-4347-6_15.
2. Vanangamudi, K., Prabhu, M., Kokila, M. and Murugesan, P. 2024. *Statement question on Horticulture*, AGROBIOS (INDIA), Agro House, Behind Nasrani Cinema Chopasani Road, Jodhpur 342 003, ISBN No. 13: 978-81-969537- (PB). pp. 200.

Popular articles

1. Ajay, P.K. and Sunitha, S. 2024. How much thirsty we are? Measure in terms of water footprint. *Kerala Karshakan English e magazine*, November 2024, pp. 10-13.
2. Asha, K.I., Aswin S. Kumar, Asha Devi, A. and Shirley Raichal Anil. 2024. Keralathile naadan kizhanginangal – vaividhyavum parambaryavum (Malayalam). *Kerala Karshakan*, 70(1): 42-45.
3. Byju, G. and Veena, S.S. 2024. Thenginidayil chena: Krishiyum Vilaveduppum Vithu Samrakshanavum (Malayalam), *Indian Naleekera Journal*, 16(11): 14-16.
4. Byju, G., Jaganathan, D. and Muthuraj, R. 2024. CTCRI organized stakeholders' interface on tuber

crops at Ambasamudram, Tirunelveli. *eCrop Today*, 1(6): 22-25.

5. Prakash, P., Jaganathan, D., Sheela Immanuel and Byju, G. 2024. Tuber crops in Kerala: Investment opportunities and market demand for sustainability, *Agriculture World*, 10(12): 30-32.
6. Prakash, P., Jaganathan, D., Sheela Immanuel and Muthuraj, R. 2024. Chinese Potato Production in India: Challenges and Strategies, *AgriTech Today eMagazine*, 02(09):150-152.
7. Prakash, P., Jaganathan, D., Sheela, I. and Muthuraj, R. 2024. Chinese potato production in India: Challenges and strategies. *AgriTech Today e-Magazine*, December 2024, pp 25-28.
8. Rahana, S.N. 2024. Ennapanakrishiude sadyathathakal (Malayalam) (Scope of oil palm cultivation). *Yojana* (Malayalam), 52(12): 31-34.
9. Visalakshi Chandra, C., Hanume Gowda, K., Pradeepika, C. and Senthil Sankar. 2024. Microbial plant breeding- prospects and applications in agriculture. *Agritech*, September 2024, 1(4): 11-12.

Conference/Souvenir/Seminar proceedings

1. Aswathi, M.S., Lellapalli Rithesh, Radhakrishnan, N.V., Susha S. Thara, Joy, M., Sreekala, G.S., Swapna Alex and Veena, S.S. 2024. *In vitro evaluation of Bacillus amyloliquefaciens VLY24 and Piriformospora indica against Phytophthora palmivora*. In: Compendium of Invited Lectures and Abstracts of ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, 14 December 2024, ICAR-CTCRI, Thiruvananthapuram, Kerala, pp.30.
2. Divya, S., Jeeva, M.L., Bag, T.K., Makesh Kumar, T., Veena, S.S., Kumar, A., Pavithra, S.A., Krishnaveni, K., Beegamnazrin and Karthikeyan, S. 2024. *Exploring the causes and impacts of cassava stem and root rot disease*. In: Compendium of Invited Lectures and Abstracts of ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, ICAR-CTCRI, Thiruvananthapuram, Kerala, pp.22.
3. Jaganathan, D., Muthuraj, R., Sunilkumar, K., Sheela Immanuel, Prakash, P. and Byju, G. 2024. *Decentralized seed production of tropical tuber crops: Prospects, Challenges and Way forward*. Book of

- Abstracts, 31st Swadeshi Science Congress, 07-09 November 2024, ICAR-Central Institute of Fisheries Technology, Kochi, Kerala, 205p.
4. Jeeva, M.L., Sheela, M.N., Karthikeyan, S., Tom Cyriac, Veena, S.S., Makeshkumar, T., Arutselvan, R., Rahana, S.N., Amrutha, P.R. and Shilpa, S.U. 2024. *Screening greater yam lines for anthracnose resistance*. In: Compendium of Invited Lectures and Abstracts of ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, ICAR-CTCRI, Thiruvananthapuram, Kerala, pp.28.
 5. Nileena, P., Veena, S.S., Karthikeyan, S. and Jeeva, M.L. 2024. *Morphological characterisation of organisms associated with leaf and pseudostem rot disease in elephant foot yam*. In: Proceedings of International conference on Biotechnology- the way forward (ICBWF-2024), 20-22 November 2024, Department of Biotechnology, Karyavattom, Thiruvananthapuram, Kerala, pp. 87-88.
 6. Pavithra, S.A., Veena, S.S., Aundy Kumar, Divya, S., Krishnaveni, K., Beegamnazrin, Harish, E.R., Karthikeyan, S., Shilpa, S.U., Tom Cyriac, Nileena, P., Makeshkumar, T. and Jeeva, M. L. 2024. *Microbial profiling of elephant foot yam's phylloplane: Insights into disease dynamics and plant health*. In: Compendium of Invited Lectures and Abstracts of ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, ICAR-CTCRI, Thiruvananthapuram, Kerala, pp.40.
 7. Senthilkumar, K.M., Mahima, S., Saravanan Raju, Makeshkumar, T., Sreekumar, J. and Sheela, M.N. 2024. *Comprehensive analysis of U-box family genes in Cassava (Manihot esculenta Crantz)*. In: Book of Abstracts, National Conference on 'Towards Net Zero Emission: Approaches and Strategies' (31st Swadeshi Science Congress), organized by Swadeshi Science Movement, Kerala (Vijnana Bharati) and ICAR-CIFT, Kochi, Kerala from 07-09 November 2024. pp. 57.
 8. Shilpa, S. U., Jeeva, M.L., Veena, S.S., Amrutha, P.R. and Tom Cyriac. 2024. *Endophyte diversity and biocontrol: contributions of wild and cultivated taro against Phytophthora colocasiae*. In: Compendium of Invited Lectures and Abstracts of ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, 14 December 2024, ICAR-CTCRI, Thiruvananthapuram, Kerala, pp.34-35.
 9. Tom Cyriac, Jeeva, M. L., Makeshkumar, T., Pravi Vidyadhara, Amrutha, P. R., Shilpa, S. U Pavithra, S. A. and Rahana, S.N. 2024. *Leveraging molecular techniques for early detection and genetic understanding of Yam mild mosaic virus*, In: Seminar Compendium of, ISMPP Zonal meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, ICAR-CTCRI, Thiruvananthapuram, pp.25.
 10. Veena, S.S., Jeeva, M.L., Praveena, R., Arutselvan, R., Sreekumar, J., Byju, G., Suja, G., Linet K Joseph, Chithra Vinod, Karthikeyan, S. and Makeshkumar, T. 2024. *Harnessing Trichoderma: A sustainable approach to manage fungal diseases in tropical tuber crops*. In: Compendium of Invited Lectures and Abstracts of ISMPP Zonal Meet (South Zone) & National Seminar on Advances in Plant Pathology: Challenges and Prospects, 14 December 2024, ICAR-CTCRI, Thiruvananthapuram, Kerala, pp-36.
 11. Veena, S.S., Linet K. Joseph, Chithra Vinod, Karthikeyan, S., Jeeva, M.L. and Makeshkumar, T.2024. *Unravelling variability in Trichoderma isolates to enhance bio-control efficacy against fungal pathogens in tropical tuber crops*. In: Proceedings of International conference on Biotechnology- the way forward (ICBWF-2024), 20-22 November 2024, Department of Biotechnology, Karyavattom, Thiruvananthapuram, Kerala, pp.10.
 12. Visalakshi Chandra, C, Aparna Hari, Shirly Raichal Anil, Susan John, K., Shameer, P.S., Jyothi, A.N., Pradeepika C., Shanavas, S. and Senthil alias Sankar. 2024. *Genetic variability for morphological, agronomic and biochemical traits in sweet potato for determining suitability for processing and value addition*. In: Book of Abstracts. 10th International Conference 'Recent Advances in Agriculture, Engineering, Applied & Life Sciences for Environmental Sustainability (RAAEALSES-2024), 23-25 October 2024, p.114-115.

Technical/Extension folders/Leaflets

1. Nedunchezhiyan, M. and Kalidas Pati. 2024. *Profile of AICRP on Tuber Crops*, Bhubaneswar Centre, AICRPTC-ICAR-Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram, Kerala, India.

2. Nedunchezhiyan, M., Kalidas Pati, Chauhan, V.B.S., Gowda, K.H., Arutselvan, R., Jata, S.K., Dixit, J. and Laxminarayana, K. 2024. *Saru madhyare paniparibara anthahphasala chasa*. TF-11/2024/AICRPTC-ONEH.
3. Harish, E.R., Makesh Kumar, T., Sangeetha, B.G., Kesava Kumar, H. and Rajeswari L.S. 2024. *Integrated management of mites in cassava*. Technical leaflet (Malayalam), ICAR-Central Tuber Crops Research Institute, Thiruvananthapuram, Kerala.
4. Harish, E.R., Makesh Kumar, T., Kesava Kumar, H., Sangeetha, B.G. and Rajeswari L.S. 2024. *Emerging pests of tropical tuber crops and their management strategies*. Technical folder, ICAR-Central Tuber Crops Research Institute, Thiruvananthapuram, Kerala.

e-Publication

1. Arutselvan, R., Kalidas, P., Chauhan, V.B.S., Hanume Gowda, K., Nedunchezhiyan, M. and Laxminarayana, K. 2024. Trichoderma reesei isolate EP-01 small subunit ribosomal RNA gene, partial sequence; internal transcribed spacer 1, 5.8S ribosomal RNA gene, and internal transcribed spacer 2, complete sequence; and large subunit ribosomal RNA gene, partial sequence. PQ803458. <https://www.ncbi.nlm.nih.gov/nuccore/PQ803458>.

Radio talk

1. Dr. K. Susan John delivered a radio talk on 'Discussion on balanced nutrient management for tuber crops' in All India Radio, Thiruvananthapuram on 07 October 2024.

Institute Publications

1. ICAR-CTCRI Newsletter Volume 41(3), July-September 2024.
2. ICAR-CTCRI. 2024. Quarterly review meeting of scientists: Progress Report (July- September 2024), ICAR-Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram, Kerala, 215p.
3. Nedunchezhiyan, M. and Kalidas Pati. 2024. Quinquennial Review Team Meeting, 2024-2019 AICRP on Tuber Crops, Bhubaneswar Centre Background document, AICRPTC ICAR-Central Tuber Crops Research Institute, Sreekariyam, Thiruvananthapuram, Kerala, India, 28p.
4. Sreekumar, J., Sheela Immanuel, Santhosh Mithra,

V.S., Sivakumar, P.S., Jaganathan, D. and Prakash, P. 2024. The 3 A's of Section of Extension and Social Sciences... Achievements, Aspirations and Action Plan, ICAR-Central Tuber Crops Research Institute, Sreekariyam, Kerala, India, 27p.

Major Institute Events

Quinquennial Review Team meeting

The Quinquennial Review Team (QRT) of ICAR-CTCRI reviewed the work of ICAR-CTCRI and AICRP TC for the period from 01 April 2019 to 31 March 2024. The experts of the team are Dr. S.D. Shikhamany, Former Vice Chancellor, Dr. YSR Horticultural University, Andhra Pradesh (Chairman); Dr. S.K. Pandey, Former Director, ICAR-CPRI, Shimla; Dr. V.S. Korikanthimath, Former Director, ICAR-CCARI, Goa; Dr. Rakesh Pandey, Prof. Emeritus, AcSIR & CSIR, CSIR-CIMAP, Lucknow, Uttar Pradesh; Prof. R. Jaganmohan, DSW & Head, Food Science & Nutrition, NIFTEM, Thanjavur, Tamil Nadu; Shri. Selvaraj Manivannan, Venus Starch Industries, Salem, Tamil Nadu, and Dr. G. Suja, Principal Scientist & Head, Division of Crop Production, ICAR-CTCRI (Member Secretary). During this quarter, the QRT conducted four visits: ICAR-CTCRI, Thiruvananthapuram (08-09 October); MPUAT, Udaipur (07 November); AAU, Jorhat (25-26 November) and ICAR-CTCRI Regional Station, Bhubaneswar (16-17 December). The team visited the experimental fields at ICAR-CTCRI, HQ at Thiruvananthapuram, its Regional Station at Bhubaneswar and selected centres of the coordinated research project, laboratories and other infrastructure, reviewed research programmes and their outcome and proposed the future lines of research, held interactive meetings with various stakeholders including farmers, processors and traders, officers of the State Department of Agriculture/Horticulture, the Head and Subject Matter Specialists of the Krishi Vigyan Kendra, faculty of MPUAT, Udaipur & AAU, Jorhat. The major highlight and unique feature of QRT meeting at Bhubaneswar was the 'Industry Meet-cum-Workshop on 'Emerging Technologies and Business Prospects of Biofortified Sweet Potato in India' organized at the RS ICAR-CTCRI on 17 December 2024. A technology pavilion showcasing diverse technologies of biofortified sweet potato with product demonstration was arranged alongside the industry meet, which was inaugurated by Dr. S.D. Shikhamany, Chairman, QRT. This industry meeting was conducted as part of ICAR-CTCRI's efforts to place

tuber crops in urban food plates to enhance their marketability in these value chains. The interactions facilitated a comprehensive assessment of the institute's ongoing research programs and led to the formulation of a strategic roadmap for the next five years. The QRT also reviewed the institute's research outcomes against global research efforts, emphasizing its increasing responsibility to strengthen food and nutrition security and farm resilience, particularly for marginalized and climate-vulnerable communities. The team will submit its final report with concrete recommendations and future areas of research by January end.



Glimpses of First Meeting of QRT VIII & subsequent field visits at ICAR-CTCRI, Thiruvananthapuram



QRT Meeting of AICRP TC at Maharana Pratap University of Agriculture & Technology (MPUAT), Udaipur



QRT meeting of AICRP TC at Assam Agricultural University (AAU), Jorhat



Meeting of QRT at ICAR-CTCRI, Regional Station, Bhubaneswar

Quarterly review meetings

Quarterly review meetings of scientists were conducted during 18 and 22 October 2024 under the Chairmanship of Dr. G. Byju, Director, to review the progress achieved during the quarter (July-September 2024) and to prioritize the targets for scientists of Crop Improvement, Crop Production, Crop Protection, Crop Utilization and Extension & Social Sciences.

Vigilance Awareness Week 2024

ICAR-CTCRI observed the Vigilance Awareness Week 2024 during 28 October to 03 November 2024 with the focal theme 'Culture of Integrity for Nation's Prosperity'. The programme was launched on 28 October 2024 with the Integrity Pledge taking ceremony. Various competitions viz., elocution, essay writing and poster competitions were held on the focal theme for the school students and CTCRI

staff. The valedictory function of Vigilance Awareness Week was held on 04 November 2024 and Shri. Yogesh Gupta, DGP and Director, Vigilance and Anti-Corruption Bureau, Thiruvananthapuram was the chief guest. During his speech, he shared his vast experience in different government sectors where he worked and encouraged everyone to keep up the tradition of remaining corruption free. He mentioned about transparency in an institution and how important the various checks are in controlling corruption and the jurisdiction of various governmental enforcement agencies. Dr. G. Byju, Director, ICAR-CTCRI presided over the function and talked about maintaining an ethical culture in research and how important that is for the advancement of a Nation.



Valedictory function of Vigilance Awareness Week 2024

Visit of Shri Gabriel D. Wangsu, Minister of Agriculture, Arunachal Pradesh

Shri. Gabriel D. Wangsu, Minister of Agriculture, Horticulture, Animal Husbandry & Veterinary, Fisheries, Legal Metrology & Consumer affairs, and Food & Civil Supply, Government of Arunachal Pradesh visited ICAR-CTCRI, Thiruvananthapuram along with other officials on 02 December 2024 to explore advanced agricultural practices and potential collaborations to boost tuber crops production in Arunachal Pradesh. He visited the experimental farms and other facilities at ICAR-CTCRI and had a discussion with scientists and senior officials of CTCRI.



Shri Gabriel D. Wangsu, Minister of Agriculture & Allied Sectors, Arunachal Pradesh visiting ICAR-CTCRI research field

World Soil Day

ICAR-CTCRI celebrated the World Soil Day 2024 at HQ and Regional Station at Bhubaneswar on 05 December 2024. At the HQ, Dr. P. Rajendran, Chairman, Kerala Farmers Welfare Fund Board & Former Vice Chancellor, Kerala Agricultural University delivered the lecture on this

year's theme, 'Caring for soils: Measure, Monitor, Management. He emphasized that soil health will reflect on plant health which in turn on animal and human health. Students and staff from nearby schools also attended the celebration. World Soil Day pledge was administered during the occasion by the Director, Dr. G. Byju. At the Regional Station, Dr. K.K. Rout, Former Dean, College of Agriculture, OUAT and Dean, School of Agriculture, DRIEMS, University, Cuttack, Odisha was the chief guest and he delivered the theme lecture.



Meeting in connection with World Soil Day

Tuber Crops Day

Indian Society for Root Crops (ISRC) in collaboration with ICAR-CTCRI celebrated 'Tuber Crops Day on 13 December 2024. Dr. G. Byju, Director, ICAR-CTCRI presided over the function. Shri. Murukan Kattakada, Malayalam poet and Director, Malayalam Mission, Department of Culture, Govt. of Kerala was the Chief guest, and in his inaugural speech, he emphasized the importance of agriculture and need for uplifting the struggling farmers. Dr. E. Sreekumar, Director, Institute of Advanced Virology, Thiruvananthapuram, the Guest of honour, highlighted the importance of the existence of CTCRI for tuber crop farmers and for the general public. Various institute publications, products and equipment were released during the function and signed MoUs with C-DAC, Thiruvananthapuram and Haritha Lakshmi Krishikoottam, Kollam, Kerala. Around 150 farmers, scientists, staffs and students participated in the programme. A scientists-farmers interface was followed the event.



Tuber Crops Day celebration

Institute Biosafety Committee Meeting

The Institute Biosafety Committee Meeting (IBSC) was held at ICAR-CTCRI, Thiruvananthapuram on 31 December 2024 to review the rDNA based research

projects. Dr. G. Byju, Director, ICAR-CTCRI & Chairman, IBSC; Dr. S. Manjula, Scientist F, RGCB, Thiruvananthapuram, DBT Nominee; Dr. T. Bindu, Medical Officer, Govt. of Kerala, Thiruvananthapuram, Biosafety Officer; Dr. E.V. Soniya, Scientist G, RGCB, Thiruvananthapuram, External expert; and Internal experts, Dr. T. Makesh Kumar, Head, Division of Crop Protection & Scientist-in-Charge, PME Cell; Dr. J. Sreekumar, Principal Scientist and SIC, ESS; Dr. M.L. Jeeva, Principal Scientist and Dr. K.M. Senthilkumar, Senior Scientist attended the meeting and reviewed the progress of rDNA-based research projects of ICAR-CTCRI. The committee members appreciated the scientists for strict adherence to the biosafety guidelines at the research laboratories of the Institute.

Other Important Events

Hindi Corner

Hindi Fortnight celebration

The Valedictory function of the Hindi Fortnight celebrations 2024 was held on 27 November 2024 under the chairmanship of Dr. G. Byju, Director and Chairman (OL). Dr. A. Asha Devi, Principal Scientist & Liaison Officer (OL) delivered the welcome address. In his presidential address, the Director spoke in detail about the provisions of official language in Articles 343 to 351 of the Constitution and Section 3(3) of the Official Languages Act, 1963. The function was inaugurated by Dr. Shamli M.M., Professor and Head of Department (Hindi), Government College for Women, Thiruvananthapuram. In her speech she talked about the diversity of Indian languages, why only Hindi was adopted as the official language, the use of foreign languages in Indian languages etc. After the inauguration, the Chief Guest and Director distributed prizes to the winners of the Hindi Fortnight competitions. The program concluded with a vote of thanks by Mr. Bhadrakumar S., Senior Administrative Officer and Member Secretary, OLIC, ICAR-CTCRI.



Valedictory function of Hindi Fortnight celebration

Hindi Workshop

A one day Hindi workshop cum Hindi class was conducted for the employees of the Institute on 17 December 2024

and a class on 'Spoken Hindi' was conducted by the Hindi Cell. Twenty participants comprising of 7 officers and 13 staff attended the workshop.



Hindi workshop

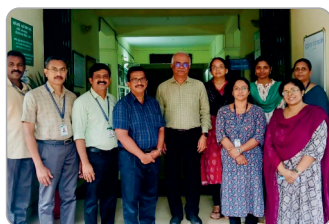
Director's Visits

- Dr. G. Byju, Director, participated in the 'Stakeholder Consultation Meeting on Priorities for Potato and Sweet potato Science and Innovation in India' held during 16-17 October 2024 at ITC Maurya Hotel, New Delhi. Dr. Simon Heck, Director General, CIP, Lima, Peru; Dr. Hugo Campos, DDG, CIP and program leaders of CIP led the program discussion.



Director in the Stakeholder Consultation Meeting

- Dr. G. Byju, Director inaugurated 'Janakeeyam-2024' seminar and unveiled the portrait of Dr. E.K. Janaki Ammal at Sree Narayana College of Technology, Kollam, Kerala on 11 November 2024.
- Dr. G. Byju, Director visited ICAR-KVK, Pullad, Pathanamthitta, Kerala and the on-farm trials in Kottanad panchayat on 20 November 2024.



Visit of Director to KVK Pullad and on-farm trials at Kottanad panchayat

- Dr. G. Byju, Director, ICAR-CTCRI visited ICAR-Sugarcane Breeding Institute (SBI), Coimbatore and delivered the World Soil Day lecture on 'Role of Plant Nutrition in Food Security: Achievements, Aspirations and Action plan' on 05 December 2024.



Director participating in the World Soil Day celebration at ICAR-SBI, Coimbatore

Distinguished Visitors

Headquarters, Thiruvananthapuram, Kerala

- Dr. S.D. Shikhamany, Former Vice Chancellor, Dr. YSR Horticultural University, Andhra Pradesh, as Chairman, Quinquennial Review Team
- Dr. S.K. Pandey, Former Director, ICAR-CPRI, Shimla H.P., as Member, QRT
- Dr. V.S. Korikanthimath, Former Director, ICAR-CCARI, Goa, as Member, QRT
- Dr. Rakesh Pandey, Prof. Emeritus, AcSIR & CSIR, CIMAP, Lucknow, U.P., as Member, QRT
- Dr. Jagan Mohan, DSW & Head, Food Science & Nutrition, NIFTEM, Thanjavur, T.N.as, as Member, QRT
- Shri. Gabriel D. Wangsu, Minister of Agriculture, Horticulture, Animal Husbandry & Veterinary, Fisheries, Legal Metrology & Consumer affairs, and Food & Civil Supply, Government of Arunachal Pradesh
- Dr. Ch. Srinivasa Rao, Director, NAARM, Hyderabad
- Dr. Roy Stephen, Dean, College of Agriculture, Vellayani Thiruvananthapuram, Kerala
- Sri. Baiju N. Kurup, CGM of NABARD, Kerala Regional Office
- Dr. S. Senthil Vinayagam, CEO, a-Idea, NAARM, Hyderabad
- Dr. P. Rajendran, Chairman, Kerala Farmers Welfare Fund Board & Former Vice Chancellor, Kerala Agricultural University
- Shri. Murukan Kattakada, Malayalam poet and Director, Malayalam Mission, Department of Culture, Govt. of Kerala

- Dr. E. Sreekumar, Director, Institute of Advanced Virology, Thiruvananthapuram
- Dr. S.S. Chahal, Emeritus President and former Vice-Chancellor of MPAUT, Udaipur
- Dr. Jacob John, Director of Extension, Kerala Agricultural University

Regional Station, Bhubaneswar, Odisha

- Dr. S.D. Shikhamany, Former Vice Chancellor, Dr. YSR Horticultural University, Andhra Pradesh, as Chairman, Quinquennial Review Team
- Dr. S.K. Pandey, Former Director, ICAR-CPRI, Shimla H.P., as Member, QRT
- Dr. V.S. Korikanthimath, Former Director, ICAR-CCARI, Goa, as Member, QRT
- Dr. Rakesh Pandey, Prof. Emeritus, AcSIR & CSIR, CIMAP, Lucknow, U.P., as Member, QRT
- Dr. Jagan Mohan, DSW & Head, Food Science & Nutrition, NIFTEM, Thanjavur, T.N., as Member, QRT
- Dr. G. Byju, Director, ICAR-CTCRI
- Dr. K.K. Rout, Former Dean, College of Agriculture, OUAT and Dean, School of Agriculture, DRIEMS, University, Cuttack, Odisha

Honours, Awards and Recognitions

1. ICAR-CTCRI bagged the Best Exhibition Stall Award (2nd Prize) in connection with Chertala Fest-Karappuram Kazhchakal exhibition during 20-29 December 2024 at Chertala, Alappuzha district, Kerala.
2. Fertilizer Association of India (FAI) Award for Excellence for the Best Work done in the field of Plant Nutrition-2023 has been jointly awarded to Dr. K. Susan John, ICAR-CTCRI & Dr. Y.S. Shivay, ICAR-IARI.



Dr. K. Susan John receiving the Award of Excellence

3. Dr. G. Suja evaluated a thesis under the Dual Ph.D. program between Western Sydney University (WSU),

Australia & Kerala Agricultural University (KAU).

4. Dr. K. Susan John evaluated a Ph.D. thesis of the Department of Soil Science and Agricultural Chemistry, College of Agriculture, Vellayani.
5. Dr. S. Sunitha evaluated M.Sc. (Ag.) thesis of a student at College of Agriculture, Vellayani, Thiruvananthapuram.
6. Dr. S. Sunitha evaluated M.Sc. (Ag.) thesis of a student at College of Agriculture, Vellanikkara, Trissur.
7. Dr. K. Laxminarayana participated in the mid-term evaluation of the projects funded under collaborative research project grants in Biotechnology for the year 2022-2023 at Odisha Bigyan Academy, Saheed Nagar, Bhubaneswar.
8. Dr. T. Makesh Kumar acted as external member for IBSC meeting at College of Agriculture, KAU, Vellayani on 04 November 2024 and as DBT nominee for IBSC meeting at ICAR-NRCB, Trichy on 06 November 2024.
9. Dr. T. Makesh Kumar chaired a session and delivered a lead talk in International Conference on Emerging viruses: Pandemic & Biosecurity Perspectives (VIROCON 2024) held during 11-13 November 2024 at DRDE, Gwalior, Madhya Pradesh.
10. Dr. S.S. Veena acted as evaluator for M.K. Patel Memorial Young Scientist Award, S.N. Dasgupta Memorial Award, K.C. Mehta and Manoranjan Mitra Award and Fellow of Indian Phytopathological Society (FPSI) of the Indian Phytopathological Society, New Delhi.
11. Dr. S.S. Veena acted as evaluator of Dr. J.S. Pruthi Award for the best research paper published in the journal, Journal of Spices and Aromatic Crops by Indian Society for Spices, ICAR-IISR, Kozhikode.
12. Dr. S.S. Veena acted as member, Assessment committee meeting for CAS considering promotion of ARS scientists, ICAR-IISR, Kozhikode.
13. Dr. M.L. Jeeva acted as external examiner for evaluation of thesis of two M.Sc. Pathology students.
14. Dr. S.S. Veena acted as external examiner for a Ph.D. student of Mahatma Gandhi University, Kottayam, Kerala.
15. Dr. Sheela Immanuel served as question paper setter for KUFOS for the course on Monitoring Evaluation

- and Impact assessment for M.F.Sc. students and conducted the qualifying viva voce examination of one Ph.D. student, Kerala Agricultural University.
16. Dr. Sheela Immanuel acted as evaluator for the KAU workplan on the Strategic necessity of establishing Centre for agricultural innovation and technology transfer (CAITT), Vellayani.
 17. Dr. J. Sreekumar acted as the External Expert, Agricultural Bioinformatics in the Assessment committee for Career Advancement Scheme of ARS Scientist of ICAR-Indian Institute of Spices Research, Kozhikode.
 18. Dr. C. Mohan acted as Chairman of the evaluation committee for the viva-voce of one Ph.D. scholar in Botany at ICAR-IISR, Kozhikode, Kerala.
 19. Dr. V. Ramesh evaluated one M.Sc. (Ag.) thesis each at Department of SS&AC, AC&RI (TNAU), Madurai, Tamil Nadu and Department of SS & AC, College of Agriculture, Vellayani.
 20. Dr. P. Murugesan acted as session pannel member and co-chair in the National Workshop on 'Reviving of agrobiodiversity in rainfed areas through traditional varieties for climate resilience agriculture' 2024 jointly organized by WASSAN and National Rainfed Area Authority (NRAA), Government of India and held at NASC, Pusa, New Delhi on 24 December 2024.
 21. Dr. P.S. Sivakumar acted as an expert and participated in the KSCSTE – Third Expert Committee Meeting- Entrepreneurship Development By SC-ST Women In STEM (ED/SC-ST- WISTEM) held at Dept. of Environmental Science, University of Kerala.
 22. Dr. P.S. Sivakumar acted as a Panellist in the Plenary Session on 'Harnessing informal seed systems for sustainable seed business: Challenges and opportunities in India' at the 'National Seed Congress' organised by IRRRI during 28-30 November 2024 at Varanasi.
 23. Dr. P.S. Sivakumar acted as a Panellist in the 'Future proofing production in the face of Climate Change' at the 'Stakeholder Consultation on Priorities for Potato and Sweet potato Science and Innovation in India', organised by CIP, Lima, Peru during 16-17 October 2024 at New Delhi.
 24. Dr. P.S. Sivakumar acted as a Panellist in the session 'Leveraging Incubators for Startup Excellence' at the National Conference on Building Sustainable Agricultural Start-ups in India, 12-13 November 2024, at ICAR-NAARM, Hyderabad.
 25. Dr. D. Jaganathan was invited to deliver a lead talk on 'Decentralized seed production of tropical tuber crops: Prospects, Challenges and Way forward' in 31st Swadeshi Science Congress held during 07-09 November 2024 at ICAR-Central Institute of Fisheries Technology, Kochi, Kerala.
 26. Dr. D. Jaganathan is nominated as visiting Scientist to KVK, Idukki, Kerala for providing technological and methodological support for strengthening activities of KVK.
 27. Dr. D. Jaganathan is selected as an Editor of the Journal of Traditional and Folk Practices published by Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI), Kerala State Council for Science, Technology, and Environment (KSCSTE), Government of Kerala.
 28. Dr. K.M. Senthilkumar acted as member for the thesis viva-voce of one Ph.D. scholar at Department of Crop Physiology, College of Agriculture, Vellayani, Thiruvananthapuram.
 29. Dr. K. Sunilkumar adjudicated one Ph.D. thesis of Dept. of Fruit Science, College of Agriculture, KAU, Vellayani and evaluated one M.Sc. thesis.
 30. Dr. J. Suresh Kumar evaluated research papers for the 37th Kerala Science Congress for the theme, Agriculture and Food Sciences.
 31. Ms. Nileena, P. bagged the Best Oral Paper Award for the research paper titled 'Morphological characterisation of organisms associated with leaf and pseudostem rot disease in elephant foot yam', (Authors: Nileena, P., Veena, S.S., Karthikeyan, S. and Jeeva, M.L) in the International conference on Biotechnology- the way forward (ICBWF-2024) held during 20-22 November 2024 at University of Kerala, Karyavattom, Thiruvananthapuram, Kerala.

Media Coverage

Sl.No.	Date	Title	Name of Newspaper/Magazine/e-paper
1	06.10.2024	Kizhanguvila Vikasana Padhathi Udkhadanam	Mathrubhumi, Thrissur
2	07.10.2024	Ollukkarayil Kizhanguvila Vikasana Padhathi	Desabhimani e-paper
3	08.10.2024	Kizhanguvila Padhathikku Thudakkam	Malayala Manorama, Thrissur
4	23.10.2024	Training Programme for Kani tribes under TSP at Mundanthurai, Tirunelveli	Dinamalar
5	30.10.2024	Dr. K. Susan Johninu Deseeya Award	Kerala Kaumudi
6	30.10.2024	Dr. K. Susan Johninu Deseeya Puraskaaram	Malayala Manorama
7	30.10.2024	C.T.C.R.I Saasthananjakku Deseeya Award	Mathrubhumi e-paper
8	7.11.2024	Introduction of new variety of Cassava to the Tammam Patti farmers in Selam District	Source not available
9	7.11.2024	Training on value addition in Cassava at Gangavalli in Selam District	Source not available
10	12.11.2024	CTCRIyil Vigilance Bodhavalkkarana Vaaram	Source not available
11	22.11.2024	3 improved varieties of arrowroot released	The Hindu
12	23.11.2024	More farmers take up cultivation of hybrid tapioca variety in India	The Hindu, Idukki
13	25.11.2024	Better days ahead for tuber farmers in Meghalaya	HubNews, Shillong Ed.
14	26.11.2024	Karshaka Pariseelana Paripaadi Sanghadipichu	Press Information Bureau
15	28.11.2024	Central Tuber Crops Research Institute releases two new tapioca varieties	The Hindu Online
16	01.12.2024	Kizhanguvilakalude Vaanigija Saadhyatha: CTCRI-Kaarshika Sarvakalasala Dharana	Mathrubhumi
17	01.12.2024	Puthumaracheenikalumayi CTCRI	Malayala Manorama
18	01.12.2024	Randu Maracheeni Enagalumayi CTCRI	Desabhimani E-Paper
19	02.12.2024	CTCRI Researchers bring out two new tapioca varieties	The Hindu
20	02.12.2024	Ruchiyum Gunavum koodiya Maracheeniyumayi CTCRI	Mathrubhumi
21	02.12.2024	Puthiya randu maracheeni enagalumayi kizhanguvarga vila gaveshana kendram	Jana Yugam
22	02.12.2024	85 farmers trained on tuber crop technologies and value addition in Ri Bhoi	Syllad News
23	02.12.2024	Wangsu visits ICAR-CTCRI in Thiruvananthapuram, invites them for tuber crop development in State	Arunachal Post Daily
24	03.12.2024	Wangsu visits CTCRI to explore collaboration to boost tuber crop production in Arunachal	The Arunachal Times
25	09.12.2024	CTCRI Scientists offered farmers a number of solutions for reducing the cost of elephant foot yam seed	Andra Jyothi
26	11.12.2024	High quality seed is important for higher returns in Cassava	Andra Jyothi
27	13.12.2024	Innu Trikarthika, Kihanguvargavila dinam: Puthiya maracheeni enagalumayi CTCRI	Mathrubhumi e-Paper
28	13.12.2024	Recommended cultivation practices are important for higher tuber returns	Pen power
29	14.12.2024	Kizhanguvila dinam Aacharichu	Malayala Manorama
30	21-12-2024	ICAR-CTCRI- Bhubaneswar hosts industry meet to boost biofortified sweet potato value chains	Prameya News
31	23-12-2024	ICAR-CTCRI organizes Industrial meet to promote biofortified sweet potato	The Bhokila Peta
32	25.12.2024	22 enam kappu muthal dragon fruit puttupodi vare.	Malayala Manorama

Personalia

Promotions

Sl.No.	Name	From	To	Date	O.O.No & Date
1	Dr. Harish E.R.	Sr. Scientist (PML-12)	Sr. Scientist (PML-13-A)	15.12.2022	F.No. 4-2/2011-Estt.III dated 22.10.2024
2	Dr. Kalidas Pati	Sr. Scientist (PML-12)	Sr. Scientist (PML-13-A)	15.09.2023	F.No. 4-2/2011-Estt.III dated 22.10.2024
3	Dr. Krishna Radhika N.	Sr. Scientist (PML-12)	Sr. Scientist (PML-13-A)	11.05.2024	F.No. 4-2/2011-Estt.III dated 22.10.2024
4	Dr. Visalakshi Chandra C.	Scientist (PML-11)	Sr. Scientist (PML-12)	01.01.2024	F.No. 4-2/2011-Estt.III dated 22.10.2024
5	Dr. Senthil Kumar K.M.	Scientist (PML-11)	Sr. Scientist (PML-12)	01.01.2024	F.No. 4-2/2011-Estt.III dated 22.10.2024
6	Dr. Vijay Bahadur Singh Chauhan	Scientist (PML-11)	Sr. Scientist (PML-12)	01.01.2024	F.No. 4-2/2011-Estt.III dated 22.10.2024
7	Dr. Sangeetha B.G.	Scientist (PML-11)	Sr. Scientist (PML-12)	01.07.2024	F.No. 4-2/2011-Estt.III dated 22.10.2024
8	Dr. Sujatha T.P.	Scientist (PML-10)	Scientist (PML-11)	02.05.2017	F.No. 4-2/2011-Estt.III dated 22.10.2024
9	Dr. S.N. Rahana	Scientist (PML-10)	Scientist (PML-11)	15.09.2020	F.No. 4-2/2011-Estt.III dated 22.10.2024

New Appointment

Sl.No.	Name	Position held	Date of Appointment
1	Shri. S. Sreeni Nair	Assistant	04.10.2024

Retirement

Sl.No.	Name	Position held	Date of Retirement
1	Shri. S. Sreekumar	AAO	31.10.2024



Tuber Crops for Food, Health, Wealth and Prosperity

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