



TRAINING CALENDAR 2025-2026



भा कृअनु प
ICAR

भाकृअनुप-केन्द्रीय कन्द फसल अनुसंधान संस्थान

(भारतीय कृषि अनुसंधान परिषद्)

श्रीकार्यम, तिरुवनन्तपुरम 695 017, केरल, भारत

ICAR-Central Tuber Crops Research Institute

(Indian Council of Agricultural Research)

Sreekariyam, Thiruvananthapuram 695 017, Kerala, India



केकफअसं
CTCRI



ICAR-Central Tuber Crops Research Institute
(Indian Council of Agricultural Research)
Sreekariyam 695 017, Thiruvananthapuram, Kerala, India

TRAINING CALENDAR
2025-2026

From the Director



With profound happiness, I am presenting the training calendar for the year 2025-26 for the benefit of the stakeholders in our country. The training programmes are meticulously designed to empower the participants with the advanced knowledge, skills and confidence to excel in respective areas. Whether you are a beginner eager to learn the basics or an experienced professional looking to refine your expertise, this training programme offers a comprehensive and engaging learning experience tailored to meet your needs. This calendar is designed to serve as your comprehensive guide to the training opportunities available to support your professional growth and skill development. In today's dynamic world, staying updated and continuously enhancing capabilities is vital for both individual career and organizational success. The sessions outlined in this calendar have been carefully curated to address a broad spectrum of needs, from foundational skills to advanced techniques tailored to specific roles. Whether you are looking to sharpen your technical expertise, enhance soft skills, or explore new areas of interest, this calendar provides a diverse range of options to suit your goals.

Our goal is to create a supportive and interactive environment where you can explore new concepts and techniques, apply practical skills through hands-on activities, gain insights from real-world examples and case studies and collaborate with peers to broaden your perspective. During the course of the training, you will have access to expert guidance and valuable resources to ensure that you achieve your learning objectives. By the end of this programme, you will not only have enhanced your capabilities but also developed a strong foundation for future growth and success in your area of expert.

Thank you for taking this important step in your professional journey. Let's embark on this learning adventure! Together, let's move, in the journey of continuous learning and growth.

05 March 2025

G. Byju
Director



About ICAR-CTCRI

The ICAR-Central Tuber Crops Research Institute (ICAR CTCRI) was established during the Third Five Year Plan for intensification of research on tuber crops (other than potato). The Institute started functioning on 01 July 1963 with its headquarters (HQ) at Sreekariyam, Thiruvananthapuram, Kerala. It has one Regional Station (RS) at Bhubaneswar, Odisha. The ICAR-CTCRI is conducting basic, strategic and applied research on various edible tropical tuber crops. The All India Co-ordinated Research Project on Tuber Crops (AICRP TC) was started in 1968 for testing and popularizing the location specific tuber crops technologies in various parts of India. It has presently 21 centres including ICAR-CTCRI HQ and Regional Station. The Institute is also one of the centres of the All India Co-ordinated Research Project on Pre and Post-Harvest Technology as well as AINPOF.

Vision

Root and tubers for ensuring better health, wealth generation and inclusive growth.

Mission

To integrate root and tuber crops as sustainable farming system components to ensure food and nutritional security of the nation and livelihood improvement of rural population.

Mandate

- ❖ Basic, strategic and applied research on genetic resource management, crop improvement, sustainable production and utilization of tropical tuber crops.
- ❖ Co-ordinate research and validation of technologies through AICRP on Tuber Crops.

Core Values of ICAR-CTCRI

- ❖ Innovations
- ❖ Diversity
- ❖ Commitment
- ❖ Excellence
- ❖ Farmers welfare

Divisions/Sections/Regional Station of ICAR-CTCRI

The Institute has three divisions, two sections and one regional station for doing research and development on tropical tuber crops.

1. Division of Crop Improvement
2. Division of Crop Production
3. Division of Crop Protection

4. Section of Crop Utilization
5. Section of Extension and Social Sciences
6. Regional Station, Bhubaneswar, Odisha

Mandate Crops

1. Cassava: *Manihot esculenta* Crantz, Euphorbiaceae
2. Sweet potato: *Ipomoea batatas* (L.) Lam., Convolvulaceae
3. Greater yam: *Dioscorea alata* L., Dioscoreaceae
4. White yam: *Dioscorea rotundata* Poir., Dioscoreaceae
5. Lesser yam: *Dioscorea esculenta* (Lour.) Burk., Dioscoreaceae
6. Elephant foot yam: *Amorphophallus paeoniifolius* (Dennst.) Nicolson, Araceae
7. Taro: *Colocasia esculenta* (L.) Schott., Araceae
8. Tannia: *Xanthosoma sagittifolium* (L.) Schott., Araceae
9. Giant taro: *Alocasia macrorrhiza* (L.) Schott., Araceae
10. Swamp taro: *Cyrtosperma chamissonis* (Schott.) Merr., Araceae
11. Chinese potato: *Plectranthus rotundifolius* (Poir.) Spreng., Lamiaceae
12. Yam bean: *Pachyrrhizus erosus* (L.) Urban, Fabaceae
13. West Indian arrowroot: *Maranta arundinacea* L., Marantaceae
14. Queensland arrowroot: *Canna edulis* (Ker-Gawler), Cannaceae
15. East Indian arrowroot: *Curcuma angustifolia* Roxb. Zingiberaceae



Core Training Areas

Crop Improvement	Crop Production	Crop Protection	Crop Utilization	Extension and Social Sciences
<ul style="list-style-type: none"> • Molecular breeding • Gene editing • Plant tissue culture and related techniques • Molecular tools and techniques 	<ul style="list-style-type: none"> • Nutrient management • Organic farming • Natural farming • Hi tech cultivation • Urban farming • Quality planting material production • Integrated farming systems • Soil, plant and water analysis 	<ul style="list-style-type: none"> • Integrated pests and diseases management • Organic management of pests and diseases • Mass production of bio agents 	<ul style="list-style-type: none"> • Processing techniques • Value addition • Development of machineries • Mechanization 	<ul style="list-style-type: none"> • R package • Entrepreneurship development • Smart farming • Intellectual property management • Business incubator management



Training Programmes (April 2025 - March 2026)

- 1. Title** : **Processing, Value Addition and Entrepreneurial Opportunities in Tuber Crops**
- Date** : 09-13 June 2025
- Duration** : 5 days
- Venue** : ICAR-CTCRI, Thiruvananthapuram
- Training areas** : Value addition in tuber crops, primary and secondary processing equipment for tuber crops, processing techniques for preparation of cassava flour and starch, potential uses of cassava starch, starch modification process, extrusion processing of tuber crop starches/flour, ready to eat bakery products, intermediate moisture foods, functional foods, tuber crop based snacks and industrial products, tuber crops based animal feed, by-products utilization, cassava leaf based bio formulations for plant protection, cassava based bioethanol and biodegradable packaging films, postharvest deterioration in cassava, sensory evaluation of snack products, quality parameters of tuber crop, nutrition and bio-chemical analysis, best agronomic practices for producing quality products, tuber crop varieties suitable for industrial processing, quality improvements in starch and sago industries and standardization of cassava products, on-farm processing centres, techno-economic feasibility of value added products, business models, role of common facility centres for entrepreneurship development, hands-on training on development of value added products and field visits to the processing units.
- Eligibility** : Employees from ICAR Institutes/State AUs/CAU/Deemed to be Universities/Colleges affiliated to general Universities who are interested/associated with value addition and allied aspects of agro processing.
- Training fee (Rs.)** : 10000 + GST (18%)
- Course Director** : Dr. M.S. Sajeev
- Course Coordinator** : Dr. A.N. Jyothi, Dr. T. Krishnakumar and Dr. C. Pradeepika
- Contact details** : Dr. M. S. Sajeev, Principal Scientist
E-mail:sajeev.ms@icar.gov.in
Mobile:+91 9446102911

2. Title : Advances in Integrated Pest and Disease Management

- Date : 18-22 August 2025
- Duration : 5 days
- Venue : ICAR-CTCRI, Thiruvananthapuram
- Training areas : Crop health management – holistic approach, biotic and abiotic factors lead to crop loss, soil health and its role in managing biotic and abiotic factors, production of pest and disease free planting materials, field and lab level identification of pest and diseases, novel techniques for pest and disease diagnosis, management of biotic and abiotic factors, biopesticides developed from cassava leaves, demonstration on effectiveness of various biopesticides.
- Eligibility : Students/Staff from ICAR Institutes/SAUs/CAU/ Deemed to be Universities/Colleges/KVKs, State Departments of Agriculture/Horticulture, Entrepreneurs etc.
- Training fee (Rs.) : 5000 + GST (18%)
- Course Director : Dr. M.L. Jeeva
- Course Coordinator : Dr. S.S. Veena, Dr. E.R. Harish and Dr. T. Makesh kumar
- Contact details : Dr. M.L. Jeeva, Principal Scientist
E-mail: jeeva.ml@icar.gov.in
Mob: 9446102163

3. Title : Molecular Markers Techniques for Crop Improvement

- Date : 08-12 September 2025
- Duration : 7 days
- Venue : ICAR-CTCRI, Thiruvananthapuram
- Training areas : Basic molecular techniques including good laboratory practices, preparation of stock solutions, DNA isolation and quantification, Gel electrophoresis, PCR amplification and diversity analysis, gene mapping using SSR markers.
- Eligibility : Researchers, academicians and students in basic plant biotechnology and molecular laboratory techniques
- Training fee (Rs.) : 7000 + GST (18%)



Course Director : Dr. C. Mohan
Course Coordinator : Dr. K.M. Senthilkumar
Contact details : Dr. C. Mohan, Principal Scientist
E-mail: mohan.c@icar.gov.in
Mobile: +91 9495201553

4. Title : Tuberous Vegetables Based Nutrigardens by Organic and Urban Farming

Date : 01-05 December 2025
Duration : 5 days
Venue : ICAR-CTCRI, Thiruvananthapuram
Training areas : Organic farming

Protocols for organic production of tuberous vegetables, integrated organic farming system involving tuber crops, eco-friendly pest and bio-intensive disease management, hands-on-experience on the preparation of different organic manures namely panchagavya, beejamrit, ghana and drava jeevamrit, vermicompost, vermiwash, etc., visit to organic farmers fields and promotion of organic farming and nutrigardens.

Urban and semi urban farming

Soil and soilless cultivation by different media mixes, nutrient management, and low cost hydroponics and high-tech cultivation aspects for yield and planting material production.

Eligibility : Students/Staff from ICAR Institutes/SAUs/CAU/ Deemed to be Universities/Colleges/KVKs, State Departments of Agriculture/Horticulture, Entrepreneurs etc.

Training fee (Rs.) : 5000+ GST(18%)
Course Director : Dr. J. Suresh Kumar
Course Coordinators : Dr. G. Suja and Dr. S. Sunitha
Contact details : Dr. J. Suresh Kumar, Scientist
E- mail: suresh.j@icar.gov.in
Mobile: +91 8075397038

- 5. Title : Quality planting material production and value addition in tropical tuber crops**
- Date : 15-19 December 2025
- Duration : 5 days
- Venue : Regional Station, ICAR-CTCRI, Bhubaneswar
- Training areas : Importance of tropical tuber crops, area & distribution, climate & soil suitability, characteristics of different varieties in tuber crops and its nutritional value, crop production technologies, nutritional deficiency toxicity disorders and its control measures, nutrient management and INM strategies, pests and diseases in tuber crops and its management, IPM/IDM strategies in tuber crops, preparation of value added products in tuber crops. Practicals on collection of soil and plant samples and analysis, estimation of soil chemical properties using standard extraction and estimation procedures, biological parameters, plant sample analysis, nutrient recommendations based on soil test, generation of soil health cards, calculation of soil quality indices and soil health. Preparation of value added products in tuber crops.
- Eligibility : Assistant Horticultural Officers (AHOs), Horticultural Officers (HOs), Assistant Directors of Horticulture (ADHs), Students/Staff from ICAR Institutes/ SAUs/ CAU/ Deemed to be Universities/ Colleges/ KVKs, State Departments of Agriculture/ Horticulture, Entrepreneurs etc.
- Training fee (Rs.) : 8000 + GST (18%)
- Course Director : Dr. K. Laxminarayana
- Course Coordinator : Dr. R. Arutselvan
- Contact details : Dr. K. Laxminarayana, Principal Scientist & SIC
Regional Station of ICAR-CTCRI
Dumuduma Housing Board Post
Bhubaneswar-751019, Odisha
E- mail: laxmi.narayana@icar.gov.in;
klnarayana69@rediffmail.com
Mobile: +91 9437018169; 9348568328



6. Title : Soil, Plant and Water Analysis for Efficient Nutrient Management

Date : 05-09 January 2026

Duration : 5 days

Venue : ICAR-CTCRI, Thiruvananthapuram

Training areas : Collection of soil, plant and water samples and analysis, soil physical parameters and chemical parameters using standard extraction and estimation procedures and with Soil Test based Fertilizer Recommendation (STFR) kit, biological parameters, irrigation water quality assessment, plant sample analysis, nutrient recommendations based on soil test, generation of soil health cards, customized fertilizer formulations, calculation of soil quality indices and soil health.

Eligibility : Students/Staff from ICAR Institutes/SAUs/CAU/ Deemed to be Universities/Colleges/KVKs, State Departments of Agriculture/ Horticulture, Entrepreneurs etc.

Training fee (Rs.) : 5000 + GST (18%)

Course Director : Dr. V. Ramesh

Course Coordinators : Dr. K. Susan John and Dr. Jeena Mathew

Contact details : Dr. V. Ramesh, Principal Scientist
E- mail: ramesh.v1@icar.gov.in
Mobile: +91 9486960928

7. Title : Hands-on Training on R for Biological Data Analysis

Date : 19-23 January 2026

Duration : 5 days

Venue : ICAR-CTCRI, Thiruvananthapuram

Training areas : Installing R and R Studio, R syntax fundamentals, working with data structures, basic functions and data manipulation, summary statistics and data visualization with ggplot2, identifying outliers and anomalies, statistical analysis of experimental data in R,

hypothesis testing (t-tests, ANOVA, chi -squared tests), non-parametric tests, regression analysis, correlation and regression analysis in R, statistical modeling in agriculture with R, multivariate analysis in R, exploratory data analysis and visualization in R, response surface methodology (RSM) and PCA analysis in R, introduction to big data analytics in R, machine learning applications: application of machine learning techniques to biological data, using deep learning for image analysis or sequence classification, role of feature engineering in preparing data for machine learning, time series analysis for big data in R, big data tools and ecosystems in R, introduction to R for breeding.

- Eligibility : Participants are expected to possess a fundamental grasp of biology and some familiarity with programming concepts. Prior experience with R is desirable but not mandatory.
- Training fee (Rs.) : 8000+ GST (18%)
- Course Director : Dr. J. Sreekumar
- Course Coordinators : Dr. C. Visalakshi Chandra and Dr. P. Prakash
- Contact details : Dr. J. Sreekumar, Principal Scientist & Scientist In Charge
E-mail: sreekumar.j@icar.gov.in
Mobile:+91 8281839985

8. Title : Smart Farming driven by Artificial Intelligence

- Date : 02- 06 February 2026
- Duration : 5 days
- Venue : ICAR-CTCRI, Thiruvananthapuram
- Training areas : Introduction to AI in agriculture, understanding smart farming concepts, AI technologies in agriculture, data collection and sensing techniques, data analysis and predictive modeling, resource management and optimization, pest and disease detection, automation and robotics, integration with farm management systems, case studies and best practices, hands-on training and practical application, ethical and regulatory considerations, evaluation and certification.



Eligibility	: Scientists, teachers and students of NARS, other R&D institutions and Universities of Governmental and Non-Governmental systems.
Training fee (Rs.)	: 5000 + GST (18%)
Course Director	: Dr. V. S. Santhosh Mithra
Course Coordinators	: Dr. K. M. Senthilkumar
Contact details	: Dr. V. S. Santhosh Mithra, Principal Scientist E-mail: vss.mithra@icar.gov.in Mobile:+91 9495155965

Training Methodology

- Front end teaching
- Interactive training
- Hands on training
- Experiential learning

Training Partners

- ICAR Institutes, SAUs, Universities, NAARM, MANAGE, IMG, IITs etc.

Facilities at ICAR-CTCRI

- Air conditioned smart lecture halls of varying seating capacity equipped with advanced audio visual aids
- Computer labs with GIS, multimedia, E-learning facilities
- Conference rooms for video conferencing
- State of the art training halls with all modern facilities
- Well equipped laboratories
- Fully furnished guest rooms to accommodate 50 participants
- Library with latest editions of books and journals
- Campus wide Wi-Fi connectivity
- Agri Business Incubation centre with all facilities for the incubates and upcoming start ups
- Agricultural Knowledge Management Unit (AKMU)
- Dairy Unit
- Techno Incubation Centre (TIC)
- Departmental Canteen



Integrated organic farming system



AAS laboratory



Library



Agricultural Knowledge Management Unit



Agri Business Incubation centre



Techno-Incubation centre



Museum



Dairy Unit



Guest House

How to Apply

The interested candidates may send their filled-in applications (as per the format attached) for various training programmes to the concerned course director through e-mail. Participants for the training will be selected after an initial screening and selected candidates will be informed individually.

Fee Payment Details

Account Name : ICAR UNIT CTCRI
Account No : 57019705533
Bank : State Bank of India
Branch : Kallampally
IFSC Code : SBIN0070288

Faculty of ICAR-CTCRI

Crop Improvement

1. Dr. Manas Ranjan Sahoo, Principal Scientist (Horticulture) & Head
2. Dr. P. Murugesan, Principal Scientist (Vegetable Science)
3. Dr. K.I. Asha, Principal Scientist (Economic Botany and PGR)
4. Dr. C. Mohan, Principal Scientist (Genetics and Plant Breeding)
5. Dr. A. Asha Devi, Principal Scientist (Genetics and Plant Breeding)
6. Dr. Shirly Raichal Anil, Principal Scientist (Genetics and Plant Breeding)
7. Dr. L.K. Bharathi, Principal Scientist (Vegetable Science)
8. Dr. N. Krishna Radhika, Senior Scientist (Agricultural Biotechnology)
9. Dr. Kalidas Pati, Senior Scientist (Vegetable Science)
10. Dr. C. Visalakshi Chandra, Senior Scientist (Genetics and Plant Breeding)
11. Dr. K.M. Senthilkumar, Senior Scientist (Agricultural Biotechnology)
12. Dr. T.P. Sujatha, Scientist (Agricultural Biotechnology)
13. Dr. S. N. Rahana, Scientist (Genetics and Plant Breeding)
14. Mr. K. Hanume Gowda, Scientist (Vegetable Science)

Crop Production

1. Dr. G. Byju, Director (Soil Science)
2. Dr. G. Suja, Principal Scientist (Agronomy) & Head
3. Dr. M. Nedunchezhiyan, Principal Scientist (Agronomy)
4. Dr. K. Susan John, Principal Scientist (Soil Science)
5. Dr. S. Sunitha, Principal Scientist (Agronomy)
6. Dr. K. Laxminarayana, Principal Scientist (Soil Science) & SIC, Regional Station
7. Dr. K. Sunilkumar, Principal Scientist (Vegetable Science)
8. Dr. V. Ramesh, Principal Scientist (Soil Science)
9. Dr. R. Muthuraj, Principal Scientist (Seed Science and Technology)
10. Dr. R. Saravanan, Principal Scientist (Plant Physiology)
11. Dr. Jeena Mathew, Senior Scientist (Soil Science)
12. Dr. J. Suresh Kumar, Scientist (Vegetable Science)

Crop Protection

1. Dr. T. Makesh Kumar, Principal Scientist (Plant Pathology) & Head
2. Dr. M.L. Jeeva, Principal Scientist (Plant Pathology)
3. Dr. S.S. Veena, Principal Scientist (Plant Pathology)
4. Dr. E.R. Harish, Senior Scientist (Agricultural Entomology)
5. Dr. H. Kesava Kumar, Senior Scientist (Nematology)
6. Dr. B.G. Sangeetha, Senior Scientist (Agricultural Biotechnology)
7. Dr. R. Arutselvan, Scientist (Plant Pathology)

Crop Utilization

1. Dr. A.N. Jyothi, Principal Scientist (Agricultural Chemicals) & Scientist in Charge
2. Dr. M.S. Sajeev, Principal Scientist (Agricultural Structures & Process Engineering)
3. Dr. C. Pradeepika, Scientist (Vegetable Science)
4. Dr. T. Krishnakumar, Scientist (Agricultural Structures & Process Engineering)

Extension and Social Sciences

1. Dr. J. Sreekumar, Principal Scientist (Agricultural Statistics) & Scientist in Charge
2. Dr. Sheela Immanuel, Principal Scientist (Agricultural Extension)
3. Dr. V.S. Santhosh Mithra, Principal Scientist (Computer Applications & IT)
4. Dr. P. Sethuraman Sivakumar, Principal Scientist (Agricultural Extension)
5. Dr. D. Jaganathan, Senior Scientist (Agricultural Extension)
6. Dr. P. Prakash, Scientist (Agricultural Economics)

HRD Team

Nodal Officer	: Dr. Sheela Immanuel, Principal Scientist E-mail: sheela.immanuel@icar.gov.in
Co-Nodal Officer	: Dr. P. Prakash, Scientist E-mail: prakash.p1@icar.gov.in
Members	: Dr. Shirly Raichal Anil, Dr. R. Muthuraj, Dr. S. Karthikeyan, Sri. T. Manikantan Nair, Smt. S.S. Sneha, Smt. Rini Alocious, Sri. Sreenath Vijay and Sri. P. Aswin Raj

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APPLICATION FORM

Name	
Gender	
Designation & office address (if employed)	
Postal Address (In capital letters)	
Date of birth and age	
Nationality	
Educational qualifications	
Experience	
Mobile number	
Email ID	
Training course applied for	
Whether accommodation is required at ICAR-CTCRI (Yes/No)	

Date:

Place:

Signature of the applicant

For office use only

SAO/FAO/Cashier Pls.

A total amount DD / online payment of Rs.....+18% GST may
be accepted from the candidate towards the training fee for.

.....
.....DD NO / Online transaction No
.....dated.....of.....

AAO, ESTABLISHMENT

Signature of the Course Director

March 2025

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Compiled and edited by

Dr. Sheela Immanuel, Dr. P. Prakash and Dr. D. Jaganathan

Published by

Dr. G. Byju
Director



भाकृअनुप - केन्द्रीय कन्द फसल अनुसंधान संस्थान
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Tuber Crops for
Food, Health, Wealth and Prosperity



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Website: <https://www.ctcri.org>

Social Media

Facebook Twitter Whatsapp Instagram You Tube

