

ICAR Human Resource Management Training

Soil, Plant and Water Analysis for Nutrient Recommendation in Horticultural Crops

January 06-10, 2025



Course Director

Dr. T.R. Rupa

Course Coordinators

Dr. S. Ramachandran

Dr. Yukti Verma

Organized by

Division of Natural Resources
ICAR-Indian Institute of Horticultural Research
Hesaraghatta Lake Post, Bengaluru – 560089



Background

Horticultural crops being of high value, requires high doses of fertilizers coupled with frequent irrigation to ensure proper crop growth, development, high productivity and quality produce. Nutrient requirements of both fruit and vegetable crops are unique comparative to field crops. Fruit crops are perennial in nature and explore a much larger soil volume. Added to this, the nutrient use efficiency in fruit crops varies with the genotype, age of trees and soil type. Vegetable crops are annual like field crops but complete their life cycle a little later than grand growth stage, much ahead of senescence. Therefore, a more holistic approach is essential in nutrient management of both fruit and vegetable crops. Apart from soil and plant analysis, the quality of the irrigation water has been of major concern in recent times since it influences the growth, yield and quality of agricultural crops. The testing of irrigation water also aids in the choice of fertilizers that are to be used, besides minimizing the risk of discharging pollutants to surface or ground water. The major focus of this training is to acquaint the participants on soil, plant and water analysis and exposing the participants to the various laboratory instruments including their handling and working principles.

Objectives

1. To give an overview of soil testing and plant analysis as a diagnostic tool for assessing nutritional requirements of crops.
2. To train participants in irrigation water quality analysis.
3. To provide hands-on in handling of laboratory instruments used in soil, plant and water analysis.

Duration: 05 days from January 06-10, 2025.

Key Contents

1. Soil sampling, soil fertility evaluation for physical, chemical and microbial parameters and nutrient recommendations.
2. Leaf tissue sampling guidelines, testing, nutrient norms, nutrient diagnosis and nutrient recommendations.
3. Irrigation water quality testing and management.
4. Microbial interventions in horticultural crops.
5. Handling and usage of instruments in the soil testing, plant analysis and water quality in laboratory.

Eligibility & Selection Criteria

Scientists/ Technical staff / Faculty from ICAR institutes / Agricultural Universities / Officials from KVKs/ subject matter specialists / NGOs are eligible to apply in the prescribed

format. Total 25 applicants will be selected for this programme based on first-cum first serve and areas of research work.

Training Fee

ICAR Participants: No Fee

Non-ICAR Participants: Rs. 5900/- including GST

Fee may be paid after the nomination confirmation



Mode of Payment

Payment can be made through NEFT (IIHR SBI Bank, A/c No: 37578009241, IFSC Code: SBIN0041187) or QR code.

Travelling / Daily Allowances, Boarding and Lodging

The TA/DA has to be borne by the sponsoring institute of the participants. Organizing institute will provide only session tea, working lunch, study material (preferably in soft copy) and registration kit to the participants from the institute fund. Boarding and lodging facilities for participants will be arranged on a payment basis at ICAR-IIHR Guest House.

How to Apply

Duly filled applicant's scanned copy should be sent to the Course Director via E-mail given below. The last date for receipt of the application is 25th November, 2024. Selected candidates will be informed by 29th November, 2024 through E-mail. A maximum of 25 participants will be selected for the training.

E-mail: Rupa.TR@icar.gov.in

Last date for receipt of applications at ICAR-IIHR: 25th November, 2024.

For Further Information

Programme Director

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