



Contents

- India's Horticulture Growth through Technology and Training
- Hi-Tech Horticulture Trainings Conducted at IHT in June 2025

India's Horticulture Growth through Technology and Training

India's horticulture sector has witnessed a significant milestone, with total production rising by 3.66% to reach 367.72 million tonnes in the fiscal year 2024–25, as per data released by the Ministry of Agriculture. This growth includes notable increases in fruit and vegetable production, attributed to improved farming practices, government support schemes like MIDH (Mission for Integrated Development of Horticulture), and technological interventions.

In this national context, the Institute of Horticulture Technology (IHT) has emerged as a premier Institution for innovation and capacity-building among horticulture stakeholders. With its tailored training modules, field-based demonstrations, and hands-on exposure programs, IHT is equipping farmers, agri-entrepreneurs, and government officials with practical skills in protected cultivation, orchard management, micro-irrigation, hydroponics- Soilless farming, nursery production, and integrated pest and nutrient management.

IHT's approach is closely aligned with the national goal of increasing productivity and profitability in horticulture. With specially designed training programs across India, the institute ensures region-specific knowledge dissemination, covering high-value crops and climate-resilient practices. The institute also plays a key role in post-harvest management and market linkages, which are crucial for reducing crop losses and increasing farmer income. As India pushes toward a more technologically empowered and diversified horticulture sector, IHT's role will only grow stronger. Future-oriented initiatives like the integration of IoT-based greenhouse systems, AI-driven crop monitoring, precision farming tools, and hydroponic infrastructure are already being embedded in IHT's curriculum



Hi-Tech Horticulture Trainings Conducted at IHT in June 2025

The Institute of Horticulture Technology (IHT), Greater Noida, successfully organized a series of specialized short-term training programs in June 2025, aimed at promoting advanced, sustainable, and commercially viable horticultural practices among farmers, agripreneurs, and students. These programs combined theoretical knowledge with hands-on exposure, covering trending topics like protected cultivation, mushroom farming, hydroponics, saffron production, and exotic herb cultivation.

1. Protected Cultivation of Vegetable Crops

One-week training on Protected Cultivation of Vegetable Crops was conducted at the IHT campus with the objective of equipping participants with the latest knowledge and techniques in high-value vegetable production under controlled environments. The course emphasized the design and management of polyhouses and nethouses, with practical insights into the cultivation of crops like capsicum, cucumber, cherry tomato, and leafy greens. Trainees gained hands-on experience in nursery raising, fertigation, and integrated pest management (IPM) protocols. The program also covered harvesting, post-harvest handling, and economic aspects of protected cultivation. Field demonstrations and real-time exposure to commercial models added immense value to the learning experience.



Hands-on training on nursery production & tomato pruning and trellising

2. Mushroom Cultivation

The three-day training on Mushroom Cultivation provided in-depth knowledge of both button and oyster mushroom production. Participants were trained in essential topics such as compost preparation, casing soil formulation, spawn production techniques, and effective disease and pest management. A key highlight of the program was the field visit to a commercial mushroom farm, where participants observed live demonstrations of large-scale production, harvesting, processing, and packaging. The course offered a strong foundation for aspiring mushroom entrepreneurs looking to establish profitable units with minimal land requirements.



Hands-on training on spawn production & pest management in button mushroom

3. Commercial Hydroponics

The two-week Commercial Hydroponics Training was structured in a hybrid format — one week of interactive online sessions followed by one week of intensive offline practical training at IHT. The program introduced participants to various hydroponic systems, including Nutrient Film Technique (NFT), Deep Water Culture (DWC), and vertical farming. Trainees learned nutrient solution preparation, pH and EC monitoring, irrigation automation, climate control, and crop scheduling for leafy greens and herbs. Live demonstrations of crops like lettuce, basil, kale, and cherry tomato were conducted in IHT's state-of-the-art hydroponic lab. The training also covered system design, maintenance, and financial planning, preparing participants for setting up viable hydroponic businesses.



Glimpses of commercial hydroponics

4. Saffron Cultivation Training

A specialized three-day training program on Saffron Cultivation under Controlled Conditions was held to promote the adoption of saffron farming in non-traditional areas. The course provided comprehensive insights into saffron corm selection, planting media preparation, environmental requirements, irrigation schedules, and flower development stages. Participants were also guided through harvesting methods, stigma separation, drying techniques, and quality enhancement practices. Both open-field and polyhouse-based cultivation models were discussed, with a focus on productivity, profitability, and niche market demand for high-quality saffron.



Glimpses of saffron cultivation

5. Italian Herbs Production Technology

To address the growing market for exotic culinary herbs, a three-day hands-on training on Italian Herbs Production Technology was conducted with a dedicated focus on hydroponic systems. Participants were introduced to the commercial cultivation of basil, oregano, rosemary, thyme, and parsley using nutrient-rich hydroponic methods. The training covered propagation techniques, crop spacing, light and temperature requirements, pest and disease control, and harvesting cycles. Practical sessions were held in IHT's hydroponic herb production unit, where participants engaged in real-time planting, maintenance, and packaging practices. The training also explored export potential and value-added product development, encouraging participants to tap into high-end retail and hospitality markets.



Trainees participation in hydroponic production & leafy green production

Upcoming Trainings

IHT is excited to offer these valuable training programs in the upcoming month to help you enhance your skills and grow your agricultural ventures.

1. Basic Hydroponics (Online)
2. Commercial Hydroponics (Online & Offline)
3. Protected Cultivation of Vegetable Crops (Offline)
4. Hydroponic Saffron Cultivation (Offline Program)
5. Mushroom Production Technology (Online)
5. Mushroom Production Technology (Offline)
6. Italian Herbs Production (Offline)



ISO 9001 : 2008

इंस्टीट्यूट ऑफ़ हॉर्टीकल्चर टेक्नोलॉजी
Institute of Horticulture Technology

Main Campus: 42A, Knowledge Park III, Greater Noida - 201310, Uttar Pradesh
North East Campus: Mandira, Kamrup - 781127, Assam
Mobile: 8860621160, website: www.iht.edu.in, Email: enquiry@iht.edu.in, training@iht.edu.in