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International Webinar on Speed Breeding for Accelerated Crop Improvement

Institute of Horticulture Technology's School of Speed Breeding (SoSB), Greater Noida successfully organized an International Webinar on "Speed Breeding for Accelerated Crop Improvement" for the benefit of Seed Industry" on 7th May 2026 as part of its Speed Breeding Webinar Series. The online programme witnessed participation from researchers, academicians, seed industry professionals, students and entrepreneurs from different regions. Experts discussed advancements in speed breeding technology for reducing generation turn over time for various crops by modulating and optimizing controlled environment protocols. The outcomes of speed breeding application accelerated varietal development via enhanced genetic gain both in sync with molecular and conventional breeding. The webinar highlighted the importance of speed breeding in addressing challenges related to food security, climate resilience and sustainable agriculture. Speed Breeding opened new possibilities for seed industry in keeping the m ahead in launching new varieties as per the demand of the framers. Participants appreciated the insightful discussions and practical knowledge shared by the experts, making the session highly informative and relevant for the future of crop improvement and seed industry quick response to market demands in the era of climate change.

Genotypes	Subspecies	Duration	DFF in Field	Generation Time in field*	DFF in SBF	Early Flowering*	Maturation Time in SBF	Generation reduction*	Generation per year ⁴		
CO-51	Indica	Early	87.0	122.0	55.2	31.8	15.0	50.2	42.5	5.2	
IR 64			84.0	119.0	55.9	28.1	15.0	50.9	40.4	5.1	
DKR Dhan 44		Medium	93.0	128.0	51.0	40.0	15.0	68.0	46.0	5.3	
Satyaj 52			95.0	128.0	54.8	38.4	15.0	69.6	45.7	5.2	
Suarna		Late	114.0	149.0	56.5	57.5	15.0	71.5	52.0	5.1	
Saribu Mahani			114.0	149.0	59.9	54.3	15.0	74.9	49.8	4.9	
Black rice		Laurrace	108.0	143.0	51.6	56.4	15.0	66.6	53.4	5.5	
Kalamanki			(Late)	130.0	163.0	52.6	72.4	15.0	67.6	59.0	5.4
Geekonipotau		Javanica	Early	84.0	119.0	57.3	26.7	15.0	72.3	39.2	5.8
Betangrehia			Medium	91.0	126.0	52.4	38.6	15.0	67.4	46.3	5.4

DFF: days to fifty percent flowering; DTF: days to flowering; SBF: SB facility.
¹One generation time; ²Early flowering in speed breeding as compared to field; ³Percentage reduction in one generation time under SB as compared to field; ⁴generation per year in speed breeding

School Students Explore Modern Agriculture at IHT

One of the highlights of May 2026 was the educational visit of students from Ryan International School, Greater Noida to the Institute of Horticulture Technology (IHT), Greater Noida and its Technology Park. The visit was organized to provide students with practical exposure to modern agricultural and horticultural technologies and to inspire young minds to explore opportunities in the agriculture sector. During the visit, students were introduced to various innovative farming systems including hydroponics, protected cultivation, micro-irrigation and modern nursery management practices. They had the opportunity to observe live demonstrations and interact with experts who explained how advanced technologies are transforming agriculture into a sustainable, profitable and technology-driven profession. The students showed great enthusiasm while exploring hydroponic units, polyhouses and demonstration plots at the Technology Park. They learned how crops can be grown with minimal water, how climate-controlled structures improve productivity and how modern farming techniques contribute to food security and environmental sustainability.

The visit served as an important platform to connect the younger generation with agriculture and horticulture. It helped students understand the principles behind food production and encouraged them to consider agriculture as an exciting field for future education, innovation and entrepreneurship. Teachers accompanying the students appreciated the practical learning experience and highlighted that such visits help bridge the gap between classroom education and real-world applications. The students described the visit as informative, engaging and inspiring, gaining a new perspective on the role of technology in modern agriculture. Through such educational outreach activities, IHT continues to promote awareness about advanced farming technologies and nurture interest in agriculture among the youth, helping build the next generation of agricultural innovators and leaders.



Glimpses of Ryan International School Childrens visit in IHT

Empowering Growers through Technology, Innovation and Skill Development

May 2026 was highly productive month for the Institute of Horticulture Technology (IHT), Greater Noida. During the month, IHT successfully organized a series of specialized training programmes covering hydroponics, protected cultivation, mushroom production, microgreens, hydroponic saffron cultivation, Horticultural landscape planting designs for home and public places along with introduction to landscape planting materials. These programmes attracted enthusiastic participation from farmers, entrepreneurs, students, working professionals and horticulture enthusiasts from different states of India. Through a combination of interactive lectures, hands-on practical sessions, demonstrations, field visits and expert interactions, participants gained valuable knowledge and skills in modern horticultural technologies. The trainings focused on promoting sustainable agriculture, resource-efficient production systems, entrepreneurship development and income generation opportunities for participants.

Commercial Hydroponics Training

IHT organized two-week Commercial Hydroponics Training Programme from 11th to 23rd May 2026. The programme was divided into two phases. During the first week, participants attended online interactive sessions covering the fundamentals of hydroponics, nutrient management, irrigation and fertigation, greenhouse technology, climate control, nursery management, crop planning and integrated pest management. The second week consisted of intensive hands-on practical training at the IHT campus and technology park. Participants learned about NFT systems, hydroponic crop production, nutrient solution preparation, pH and EC management, greenhouse operation, environmental monitoring and commercial hydroponic business planning. The programme received an excellent response from aspiring entrepreneurs and progressive growers seeking to establish commercial hydroponic ventures. Participants appreciated the practical exposure and business-oriented approach of the training.



Hands on training on Herbs production in NFT system

Mushroom Cultivation Training Programmes

IHT successfully conducted two batches of its four-day Mushroom Production Technology programme during May 2026. The trainings were organized from 12th –15th May and 27th 30th May. The programmes covered compost preparation, spawn production, button mushroom cultivation, oyster mushroom production, climate control, irrigation practices, disease management, harvesting, grading, packaging and marketing. A major highlight of the training was the educational exposure visit to the Mushroom Research Facility at Maharana Pratap Horticultural University (MHU), Sonipat, Haryana. Participants gained first-hand exposure to modern mushroom production technologies, research activities and commercial cultivation systems. The practical sessions enabled trainees to understand every stage of mushroom production and encouraged many participants to explore mushroom cultivation as a profitable agribusiness opportunity.

In addition to the offline programmes, IHT also organized an online Mushroom Cultivation Training Programme, making technical knowledge accessible to participants from distant locations. The online programme covered the complete production cycle and provided valuable guidance for beginners interested in mushroom entrepreneurship.



Exposure visit at the trainees to MHU Sonipat Haryana

Herbs Cultivation in Hydroponics

A three-day training programme on Hydroponic Herbs Production. The programme focused on the commercial production of high-value herbs under hydroponic systems. Participants learned about the cultivation of basil, mint, parsley, oregano, thyme, rosemary, coriander and other culinary herbs. The training covered nursery raising, hydroponic production systems, nutrient management, harvesting practices, post-harvest handling, packaging and marketing opportunities. Special emphasis was placed on the growing demand for fresh herbs in hotels, restaurants, supermarkets and export markets. The participants gained practical experience in managing hydroponic herb production units and understanding their commercial viability.

Microgreens Production Training

Recognizing the growing demand for nutrient-rich functional foods, IHT organized both online and offline Microgreens Production Training Programmes during May 2026. The online programme was conducted from 25th to 27th May, while the offline programme provided practical exposure to commercial microgreens production systems. Participants learned about seed selection, growing media preparation, tray management, irrigation practices, lighting requirements, harvesting techniques, packaging, storage and marketing strategies. Different microgreen crops such as radish, mustard, sunflower, pea shoots, broccoli and amaranthus were demonstrated. The training highlighted the immense business potential of microgreens, especially for urban agriculture, restaurants, health-conscious consumers and specialty food markets.

Protected Vegetable Crops Production Programme

The five-day Protected Cultivation of Vegetable crops programme was organized twice during May 2026 due to high demand from farmers and entrepreneurs. Participants from various states across India attended the programme and gained practical knowledge on greenhouse technology, polyhouse management, quality nursery production, micro-irrigation systems, fertigation scheduling, soil health management, integrated pest management and protected cultivation of tomato, cucumber and capsicum. Hands-on sessions included drip irrigation installation, mulching, bed preparation, pruning techniques, climate management and crop monitoring. The programme helped participants understand how protected cultivation can improve productivity, reduce production risks and enhance profitability through year-round cultivation.



Hands on training on wine crop production

Modern Urban Peri Urban Home Gardening Programme

To encourage urban horticulture and household food production, IHT organized the Modern Home Gardening Programme twice during the month. The training introduced participants to home gardening techniques suitable for balconies, terraces, rooftops and small spaces. Topics included container gardening, potting mixtures, vegetable cultivation, kitchen gardening, ornamental plants, watering practices, organic nutrition and pest management. Participants appreciated the simple and practical techniques that could be easily adopted at home to produce fresh vegetables and improve household greenery.

Hydroponic Saffron Cultivation Training

IHT organized both online and offline training programmes on Saffron Cultivation during May 2026. Participants were introduced to modern saffron production technologies, including hydroponic and controlled-environment cultivation systems. The training covered corm selection, planting techniques, nutrient management, irrigation, climate control, harvesting, drying, grading, storage and marketing. The programme also highlighted entrepreneurship opportunities and government support schemes available for saffron cultivation. Participants showed keen interest in indoor saffron production systems due to their high-value market potential.



Hands on training on media preparation for saffron production



Home Landscape and Gardening Training

A five-day training programme on Landscape and Garden Maintenance was organized from 18th to 22nd May 2026. The programme focused on landscape planning, lawn management, ornamental plant care, pruning techniques, irrigation management, nutrient management, pest and disease control and seasonal maintenance practices. Participants gained practical experience in maintaining residential, institutional and commercial landscapes. The training proved particularly beneficial for gardeners, landscape supervisors, entrepreneurs and professionals involved in urban green space management.



Hands on training on ornamentals Nursery Production

Participation and Impact

The training programmes conducted during May 2026 witnessed participation from different parts of the country, demonstrating the growing interest in modern horticultural technologies and sustainable farming practices. Participants included farmers, bioentrepreneurs, students, government officials, nursery owners, urban gardeners and professionals seeking technical knowledge and establish profitable horticultural enterprises. The feedback received from participants was overwhelmingly positive. Trainees appreciated the practical orientation of the programmes, expert faculty guidance, modern training facilities and hands-on learning opportunities provided by IHT.

Jharkhand Farmers Exploring Hi-Tech Horticulture Technologies

Upcoming Trainings

1. Commercial Hydroponics
2. Orchid Production in Protected Setup
3. Protected Cultivation of Vegetable Crops
4. Landscaping and Garden Maintenance
5. Saffron Cultivation- online and offline
6. Mushroom Production- Online
7. Commercial Nursery Production – Vegetables
8. Italian Gourmet Herbs

IHT is excited to offer these valuable training programs in the upcoming month to help you enhance your skills and grow your agricultural ventures. For details visit www.iht.edu.in



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