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## IHT Conducts International Webinar on Speed Breeding

The Institute of Horticulture Technology (IHT), Greater Noida, successfully organized an international webinar on “Fast-Tracking Crop Improvement through Speed Breeding” on August 22, 2025. The event was hosted under its School of Speed Breeding (SoSB) with support from the Federation of Seed Industry of India (FSII).

Dr. R.S. Kureel, Director of IHT, welcomed the participants, which included experts with practical experience in speed breeding, representatives from the seed industry, and plant breeders from across India. The webinar featured a global panel of experts, including main speakers Dr. Uma Maheshwar Singh from the International Rice Research Institute (IRRI), Varanasi, and Dr. Dharminder Pradan from the School of Biotechnology, Ludhiana. They shared their experiences from speed breeding facilities at their institutions, explaining how the technology accelerates crop development, enhances food security, and addresses climate change challenges. Key topics covered advanced methodologies, controlled environment agriculture, and integration with biotechnology.

Dr. Neha Pandey, Biotechnologist and Incharge of Speed Breeding at SoSB, explained the school's role in providing advanced methods to shorten crop growth cycles and enable multiple generations per year. She detailed how SoSB optimizes photoperiods, light, and temperature in controlled environments to accelerate research and variety development. She also outlined the specialized services offered for individuals, research institutions, universities, and companies, highlighting the DSIR-recognized R&D centre and comprehensive support including training, consultancy, and full facility setup.

Dr. Vijay Koul, Associate Director of IHT, concluded by thanking the speakers and participants for a highly interactive session, particularly during the Q&A. He announced that the next webinar in the series on Speed Breeding will be held in the last week of September 2025.



*Webinar Q & A session in progress after the lead lectures from experts*

## Independence Day Celebration – 15th August 2025

The Institute of Horticulture Technology (IHT), Greater Noida, celebrated the 79th Independence Day of India with great enthusiasm and patriotic spirit. The event was graced by the distinguished presence of Shri Sandeep Sudan, Chairman of IHT, who unfurled the National Flag and addressed the gathering. In his inspiring speech, he highlighted the importance of freedom, unity, and the responsibility of every citizen in nation-building. He also emphasized the role of modern agricultural education and technology in making India self-reliant in food and horticulture production.



The celebration began with the flag hoisting ceremony, followed by the singing of the National Anthem. Faculty members, staff, and trainees actively participated in the event, showcasing their love and respect for the country. The event concluded with a renewed sense of pride and commitment among all present.

## Capacity Building Trainings

The Institute of Horticulture Technology (IHT), Greater Noida, organized multiple training programs on modern horticultural technologies. These programs were designed to equip farmers, agri-entrepreneurs, students, and professionals with practical skills and scientific knowledge for improving productivity and profitability.

### Hydroponics

Among the major courses conducted, the Two-Week Commercial Hydroponics Training was long duration course. This course was delivered in a hybrid format, with one week of online theoretical sessions followed by one week of offline practical training at the IHT campus. Participants interacted about different hydroponic systems, nutrient solution management, crop planning, protected structures, and pest management, along with cost analysis and marketing opportunities. The trainees got to know hands-on experience in preparing nutrient solutions, operating hydroponic units, and studying crops like lettuce, basil, and cherry tomatoes. They shared that the course gave them both confidence and clarity to start their own hydroponic ventures in the future.



*Hands-on training on commercial hydroponic*



## Protected Cultivation

Another important program was the Five-Day Protected Cultivation Training, where participants learned about different greenhouse and polyhouse structures, climate control, fertigation systems, nursery management, and cultivation practices of high-value crops like cucumber and capsicum. Practical demonstrations of drip irrigation and fertigation techniques were especially useful. The course highlighted the scope of protected cultivation in ensuring year-round production and enhanced profitability. Trainees acknowledged that such knowledge would help them adopt protected farming with a better understanding of technical and economic aspects.



*Glimpses of Protected Cultivation*

## Saffron Cultivation

The institute also organized a Three-Day Saffron Cultivation Training, which attracted participants due to the high market value of saffron. The course covered agro-climatic requirements, soil and corm selection, scientific planting techniques, irrigation, nutrient management, post-harvest handling, and marketing strategies. Trainees expressed great interest, noting that saffron cultivation can diversify income sources and open opportunities for exports and niche markets beyond traditional growing regions.



*Q & A session during hands-on-training of Indoor Saffron Cultivation*

## Mushroom Cultivation

Equally popular was the Three-Day Mushroom Cultivation Training, which was conducted both online and offline to enable wider participation. This course focused on types of mushrooms, compost preparation, spawn production, casing soil, crop management, harvesting, grading, packaging, and market opportunities. Online participants appreciated the convenience of virtual learning, while offline trainees gained practical skills by working directly in mushroom units at IHT. Many trainees expressed their intention to adopt mushroom farming because of its low investment and quick returns, making it an attractive option for small-scale entrepreneurs.



*Trainees participation in Mushroom Production*

## Orchid Production

For those interested in floriculture, IHT conducted a Three-Day Online Orchid Production Technology Course, which provided an introduction to orchid biology, propagation methods, greenhouse requirements, nutrition, pest management, and commercial potential. Participants found the sessions engaging and informative, and many shared that they now feel motivated to start orchid cultivation as a business, especially in urban and peri-urban areas where ornamental plants have growing demand.

Trainees across all programs reported that the courses were highly practical, interactive, and beneficial for their professional and entrepreneurial goals. They felt empowered with new ideas, technical confidence, and business orientation, which would help them in the long run. The institute's efforts to combine scientific knowledge with field-level exposure are not only improving individual skill sets but also contributing to the larger goal of transforming Indian horticulture into a sustainable, profitable, and globally competitive sector. Through these programs, IHT continues to inspire and prepare the next generation of horticulture professionals and agri-entrepreneurs who will play a key role in strengthening the vision of Atmanirbhar Bharat.

## 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