



इंस्टीट्यूट ऑफ़ हॉर्टीकल्चर टेक्नालॉजी Institute of Horticulture Technology

ISO 9001: 2008 certified

Vol.2, No. 4 (M)

April 2015

Monthly

Institute of Horticulture Technology is going to complete its six years of growth in September, 2015. In such a short duration the Institute has developed its popularity among farmers, progressive growers, field functionaries and corporate personnel throughout the country and abroad. Its popularity and methodology of skill development has crossed the border and corporate personnel from Afghanistan, Iran, Bahrain and Bangladesh have attended various courses on Protected Cultivation from this Institute. We have recognition from Assam Agricultural University, Guwahati and have well equipped state of art facilities and highly skilled and competent in-house and visiting faculty from India and abroad like Israel, Netherland and China.



Dr. U. V. Kulshrestha delivering talk on Orchid cultivation & export.



Dr. Shankar Verma addressing trainees from Madhya Pradesh



Participants taking notes during hands on training session

Applied Research Activities in IHT

Institute faculty is conducting adoptive / applied research work and developing agronomical modules for various high value crops under protected environment. From this year institute has initiated applied research to develop various nutritional modules for different crops grown under hydroponic crop production system.

With the efforts of IHT's scientists in the last 5 years, agronomical modules for regular and cherry tomato and gynoecious cucumber under protected environment have been standardized. Some of them are listed as under.

- One crop of tomato (Regular and Cherry) can be taken for 10 months in NVPH with a production of 20-25 kg/sqm
- Best variety identified for regular tomato is GS-600 followed by Himsona and Himshikhar.
- In cucumber three crops in one year were taken with a production of 6-7 kg fruits per square meter in case of Sunstar variety which was found most suited for polyhouse cultivation in all three seasons.
- Other modules like date of planting, fertigation scheduling, training and pruning technique, pollination and plant protection technologies were standardized.

Skill Development Programmes at IHT

During this month various in-house and out station training were conducted by IHT.

Madhya Pradesh : A group of twenty horticulture officers from Satna, Sahdol and Singrauli districts of Madhya Pradesh participated in a seven day training-programme entitled “Good Horticulture Practices”. The use of hybrid varieties and various Hi-end technologies give optimized results if integrated with good horticultural practices. The trainees took keen interest in the course and the officers were exposed to various technologies like mulching, vertical cropping system, intercultural operations in greenhouse crops like training, pruning, trellising farm waste management etc.

Telangana : Floriculture is a very emerging area of horticulture and Telangana has a great scope to augment the floriculture trade in the southern India. Twenty gardeners from different part of Telangana were deputed by the state government for a skill development programme in Garden planning- principles and practices in IHT. Participants showed their eagerness to learn hands on trainings in hi-tech nursery production and cultivation of orchids under controlled environment. They were also made aware about the export and export oriented issues, quarantine method of flowers. The trainees visited various gardens in and around Delhi during the study tour. Participants shared their work experience with us, particularly the constraints they faced and the

expectations they have from this training. Peer group of scientists of IHT addressed their problems.

Delhi : Two different groups of hundred gardeners from New Delhi Municipal Council were also visited the state of art facilities at IHT and Technology Park. They were shown different green houses suitable for growing flowering plants. Gardeners were also trained in different methods of vegetative propagation and multiplication of flowers and foliage plants.

On site trainings-Chhattisgarh : A team of six horticulturists of IHT also has arranged few training programmes at four different districts namely, Balodabazar, Mungeli, Balrampur and Raigarh of Chhattisgarh state. These farmers were trained about cultivation and storage techniques of onion, cultivation practices of kharif onion, different plant protection measures of vegetables and rice. Farmers were also brought to Raipur for exposure visit to show hi-tech nursery raising techniques and innovative vegetable cultivation practices. Farmers gained knowledge regarding development of disease free, and healthy planting materials without using soil. They were also exposed to contract farming where; small farmers can take a piece of land on lease and can get better income. IHT faculty explained the method of mixed farming so that growers can minimize the outsourcing of manure, bullocks etc and minimize their investments.



Participants during hands on trainings in Cucumber Polyhouse

Media coverage of on site training Programme in Chhattisgarh

IHT provided on site training to the farmers of nine Gram Panchayat on various hi-tech interventions essential for growth of horticulture. Such trainings have direct implications on economic conditions of the farmers.
(Haribhumi, 5th April, 2015)

DETAILS OF SKILL DEVELOPMENT PROGRAMME

S. No.	Details of Participants	Duration	State	Training Title	Strength of participants
1.	Horticulture officers	7 days	Madhya Pradesh	Good Horticultural Practices	20
2.	Progressive growers	3 days	Mungeli, Chhattisgarh	Innovative vegetable production techniques	260
3.	Progressive growers	3 days	Balrampur, Chhattisgarh		310
4.	Progressive growers	3 days	Balodabazar, Chhattisgarh		260
5.	Progressive growers	3 days	Raigarh, Chhattisgarh		270
6.	Gardeners	3 days	Telangana	Garden planning-principles and practices	20
7.	Gardeners	2 days	NDMC	Exposure visit	200



Trainee sharing his experience during session ▲



Hands on training on use of protrays in nursery raising of ornamental plants ▲

Success Tips for Growers

Topic of this month- "Fruit cracking - a curse for Litchi"

Fruit cracking of litchi is directly associated with variety and irrigation interval due to hot wind, endogenous levels of growth regulators and higher levels of gibberellins and abscisic acid in the skin, aril and seed.

Causes:

1. High temperature (above 38°C) and low humidity (below 60 %) and low soil moisture conditions during fruit development stage.
2. Sharp fluctuations in the day and night temperature coupled with heavy irrigation after dry spell.
3. Deficiency of micronutrients such as Boron and Calcium.
2. Use of organic and plastic mulch to maintain soil moisture near the root zone.
3. Planting of wind breaks around the orchard (North-West Direction).
4. Three spray of 1% borex at 15 days interval at pea stage of fruits and 0.4% at the pit hardening stage of fruits reduce the incidence.
5. Early picking of fruits.
6. Grow fruit cracking resistant varieties: e.g. Seedless No-2 (0.3%), Calcuttia Late (3.4%)

Control measures:

1. Timely irrigation at regular intervals to maintain the soil moisture in the field at maturity

New Joining - Faculty



Dr. Shankar Verma has joined the Institute this month as a Pomologist. He passed ASRB-NET and qualified Ph.D from Junagadh Agricultural University, Junagadh, Gujarat. He has published so far 6 research papers, 3 popular articles in peer reviewed journals .



Mr. Tejendra Singh has joined IHT this month. He has done his M. Sc. in Horticulture with specialization in Fruit Science from Junagadh Agricultural University, Junagadh, Gujarat. Mr. Singh has specialization in canopy management in guava.



Mr. Ashok Rana has joined in Floriculture and Landscaping department. Mr. Rana has served a long time in Haryali Group, Canada High Commission, and Pathway World School..

Feedback from Trainees:

"The effort of teachers in this Institute is very much appreciable. I have learnt grafting, layering and budding in flower crops through hands on training and it will help me a lot."

G. Srinivas, Gardener, Dist.-Ranga Reddy, Telengana

"Training at IHT was very informative. All the teachers have good experience in their respective fields. I wish to visit this place again in other training programmes."

- S. Jamra, Rural Horticulture Extension Officer, Singrauli, Madhya Pradesh



Training Calendar

May 2015

Course Code	Date - Month	Duration	Course Title
PRT - 314: Level 1 PRT - 713: Level 2 PRT - 721: Level 3	Every Monday Date: 4th, 11th, 18th, 25th	Level 1: 3 days Level 2: 7 days Level 3: 15 days	Innovative Nursery Raising Techniques of Horticultural Crops Options 5: (Vegetable / Flower / Fruit / Forest / Medicinal Plant)
TEC-512	Every Friday Date: 8th, 15th, 22nd, 29th	5 days	Innovative Irrigation and Fertigation Techniques in Greenhouse
TEC-513		5 days	Vermicompost – Production and Use
TEC-515		5 days	Rejuvenation of Senile/ Unproductive Orchards
MGT-717		7 days	Greenhouse Construction, Management and Production
TEC-712 TEC-313 MGT-313 MGT-314 MGT-315 MGT-316	6-12 May	3 - 7 days	Skill Certification Courses (i) Greenhouse Technicians (ii) Micro Irrigation Technicians (iii) Gardener - Indoor Plantation (iv) Gardener - Lawn Maintenance (v) Gardener - Pot Maintenance (vi) Precision Horticulture with special emphasis on vegetable production
TEC - 311 PRT - 315	Every Wednesday Date: 6th, 13th, 20nd, 27th	3 days	Exclusively for women: (i) Pesticides - Importance and Usage precautions (ii) Innovative Home Fruit and Vegetable Growing
TEC - 514	27 - 31 May	5 days	Mulching for Moisture Conservation and Weed Control

June 2015

Course Code	Date - Month	Duration	Course Title
PRT - 314: Level 1 PRT - 713: Level 2 PRT - 721: Level 3	Every Monday Date: 1st, 8th, 15th, 22nd, 29th	Level 1: 3 days Level 2: 7 days Level 3: 15 days	Innovative Nursery Raising Techniques of Horticultural Crops Options 5: (Vegetable / Flower / Fruit / Forest / Medicinal Plant)
MGT-511	2 - 6 June	5 days	Good Horticultural Practices
TEC-512	9 - 13 June	5 days	Innovative irrigation and fertigation techniques in Greenhouse
TEC-516	16 - 20 June	5 days	Organic Farming
TEC-514	23 - 27 June	5 days	Mulching for Moisture Conservation and Weed Control
TEC-512	Every Friday Date: 5th, 12th, 19th, 26th	5 days	Innovative Irrigation and Fertigation Techniques in Greenhouse
TEC-513		5 days	Greenhouse Construction, Management and Production
TEC-515		5 days	Vermicompost – Production and Use
MGT-717		5 days	Rejuvenation of Senile/ Unproductive Orchards
TEC-715	25 - 31 July	7 days	Design and Development of Greenhouse
TEC - 712 TEC - 313 MGT - 313 MGT - 314 MGT - 315 MGT 316	3 - 9 June	3-7 days	Skill Certification Courses: (i) Greenhouse Technicians (ii) Micro Irrigation Technicians (iii) Gardener - Indoor Plantation (iv) Gardener - Pot Maintenance (v) Precision Horticulture with special emphasis on vegetable production

* For detailed course calendar 2015-2016 visit our website or contact us