

 **Jain™**  
**Tissue-Culture**  
Better Yield - Greater Profits.

  
**Hi-Tech**  
**Nursery**  
Elite Planting Material

# Hi-Tech Nursery



Nursery is a place where plants are propagated and grown to usable size. Nursery may supply plants for horticulture, agriculture, forestry, garden and conservation biology.

Nursery basically deals with plant propagation techniques. The planting materials for horticulture crops are raised from seeds or vegetative parts. Most of the perennials are propagated through vegetative means while annuals through seeds. Hence, the role of the mother block has become very important. The success of the nursery depends upon quality and truthfulness of the mother plants.

### Why Hi-Tech Nursery ?

1. Plants can be propagated through seeds but to get the authentic seed and true to the type variety in fruit plants is very difficult.
2. The gestation period of fruit plants propagated through seed is very large.
3. Orchard established from seed propagated plants shows maximum variability.
4. Productivity of the orchard is very low.
5. Plants carry several seed born diseases.
6. Handling of the plants is very difficult.
7. If plants are propagated vegetatively, to maintain the genuineness and authenticity of the planting material is a difficult.

### Hi-Tech Nursery

Jain Hi-Tech Nursery, a division of Jain Irrigation Systems Ltd., started in 1996 to overcome the problems associated with orchard establishment and management. Jain Hi-Tech Nursery is spread over 30 acre area in which 17 acres are mother block only. It is a state of art facility to produce quality planting material of fruits, vegetables, flowers, ornamental, medicinal & Aromatic plants and agroforestry plants. All the plants are grown in partially controlled condition to maintain plant healthy. We prepare plants through recent scientific propagation techniques by our qualified nursery staff. Jain Hi-Tech Nursery is recognised by National Horticulture Board (NHB) with three star rating. It is a source of elite and authentic planting material for the farmers.

### Jain Hi-Tech Nursery

Jain Hi-Tech Nursery is divided into five section namely;

- A) Tissue Culture Plants
- B) Horticulture
- C) Seed
- D) Seedling
- E) Agro forestry



Jain Sweet Orange Production Facility

### A) Jain Tissue Culture

Jain Tissue Culture is one of the biggest laboratory in the World, producing 10 Crore Banana, 80 Lacs Pomegranate and 20 Lacs Tissue Culture Strawberry Plants.

Jain has the only lab having mother nursery under protected condition. We do 100% virus and disease indexing of initial mother tissues. Our primary hardening facility has spread over area with 15 acre fully automated and

climate control Green houses and 80 acres Poly houses. This allows us to deliver highest level of quality with quality planting material. The robotic machines used for planting and media filling gives us accurate quantity planting, comparison depth and distance within two plants that helps for better, healthy and uniform growth of the plant. Jain Tissue Culture Banana, Pomegranate and Strawberry are unique products widely accepted by growers across the country.



Plantation by Robotic Machine



Grading and Planting in Protray

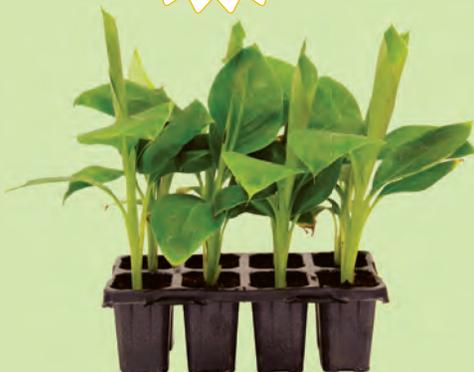
**The Process (Jain Tissue Culture)**



**Better  
Yield  
Greater  
Profits**

**Soon  
Coffee  
and Guava  
will be  
Available**

**Tissue Culture Plants Available**



Tissue Culture Banana



Tissue Culture Strawberry



Tissue Culture Pomegranate

## B) Horticulture

The horticulture section of Jain Hi-Tech Nursery is divided into 4 sub-sections. They are Orchards and Fruit plants, Spices, Medicinal & Aromatic plants and Ornamental plants.

### Features of Horticulture

- Plants propagated through elite planting material
- Seeds sourced from known mother plants to get quality rootstock
- Special attention given to keep mother block free from diseases and pests
- Propagation in hygienic conditions using advanced scientific techniques by skilled nursery staffs
- Disinfected tools are used for plant grafting and cutting
- Plants grown in partially controlled environmental conditions
- Authentic and true to type varieties of plants
- Samples from each batch are tested for quality
- Customised planting material as per the demand

### 1) Orchards & Fruit Plants

Fruits crops has wide variety of climate and soils on which a large number of horticultural crops like fruits crops, which include tropical and subtropical fruits. The changing scenario encourages fruits orchards for highly remunerative for subsistence farming .

Fruit plants is the major activity in Jain Hi-Tech Nursery. It has the capacity to produce 30,00,000 plants in total including all fruit plants. It includes mango, guava, lemon, sweet lime, sapota, custard apple, ber, jamun, aonla, and other fruit crops. We deal with all major varieties in fruit crops. The detail of the variety is given in table.

### Variety of Plants available

Crop	Variety
Sweet Orange (JSO)	Jain Sweet Orange (JSO): JSO-1, JSO-2, JSO-3, JSO-4, JSO-5
Mango	Kesar, Ratna, Aamrapali, Totapuri, Alphonso, Deshahri, Neelam, Mallika
Citrus	Kagadi, Sai Sarbati, Phule Sarbati, Seedless, Pant Lemon,
Guava	L-49, Allahabad Safeda, Latit
Custard apple	Balanagar, NMK-1, NMK-2, Arka Sahan, Anona-2
Sapota	Cricket Ball, Kallipatti
Jamun	Bahdoli
Aonla	Narendra-7, Krishna
Mosambi	Nucellar, Katol gold
Fig	Poona Fig, Dinkar
Ber	Apple Ber, Mehrun
Coconut	Pratap T&D, Gangabondhan

### Note:

- All plants are available year round.
- Plants are supplied against advance booking.
- Specific plants and varieties can be supplied.
- Plants will be supplied as per customer demand



Jain Sweet Orange Rootstock

**Fruit Plants**

TC Banana 	TC Pomegranate 	TC Strawberry 	Sweet Orange 	Mango 	Guava 	Custard Apple 
Sapota 	Jamun 	Aonla 	Apple Ber 	Lemon 	Coconut 	Cashewnut 

**Ornamental Plants**

Abelia 	Allamanda 	Amaltaj 	Areca palm 	Arelia 	Ashoka 	Australian Teak 
Almond 	Bird of Paradise 	Buch 	Bottle palm 	Day-king 	Indian champa 	Foxtail palm 
Nerium BT 	Kentia palm 	Chashewnut 	Fishtail palm 	Dianella grass 	Dracaena colorama 	Golden champa 
Jaswand 	Nerium 	Kewda 	Aglaonema 	Asparagus 	Brahmakamal 	Philodendron 
Dracaena 	Ficus 	Ixora 	kalanchoe 	Pedilanthus 	Croton 	Dracaena sanderiana 

## Medicinal & Aromatic Plants



Neem



Curry Leaf



Noni



Reetha



Behada



Aloe vera



Patharchatta



Tulsi



Adulsa



Cinnamon



Nutmeg



Lemon grass



Vekhand



All Spices

## Agro-forestry Plants



Acacia



Alstonia



Arjun



Bakaon



Aonla



Banyan / Vad



Cassia fistula



Cassia semia



Cassia tora



Eucalyptus



Delonix regia



Jacaranda



Burflower



Karanja



Buch



Kavat



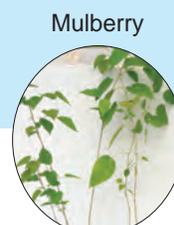
Khaya



Lagerstroemia



Mahogany



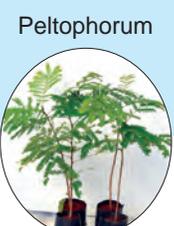
Mulberry



Tamarind



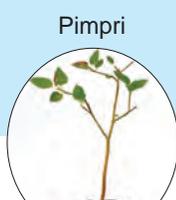
Pando



Peltophorum



Peepal



Pimpri



Putravanti



Rain tree



Raktachandan



Sagargoti



Shirish



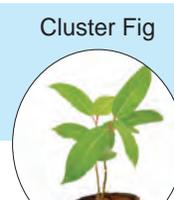
Silver Oak



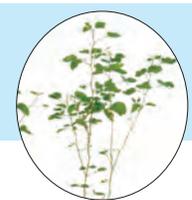
Sheestam



Saptaparni



Cluster Fig



Exotic Tamarind

## B) Horticulture Contd. ...

### 2) Spices

Spices constitute an important group of horticultural crops and India is known as the home of spices. Almost all the states grow one or more spices.

Spices are used for flavouring, seasoning and imparting aroma in foods. Jain Hi –Tech Nursery deals with the spices seedling of Chilli, Turmeric, Ginger, Garlic, Black paper etc. These plants are propagated through seed and vegetative parts like rhizome and bulbs.

### 3) Medicinal & Aromatic Plants

Indian agroclimatic conditions is an ideal for natural growth of medicinal plants. In medicinal plant sector, 80% population of developing countries rely on traditional medicines mostly plants drugs for primary health-care needs.

Jain Hi-Tech Nursery deals with several medicinal plants. It includes Neem, Adulsa, All spice, Ashwagandha, Cardemom, Cinnamon, Clove, Curry leaf, Aloe vera, Nutmeg, Patharchatta, Tulsi, Noni, etc.

These plants are propagated by seeds or by vegetative parts.

### 4) Ornamental Plants:

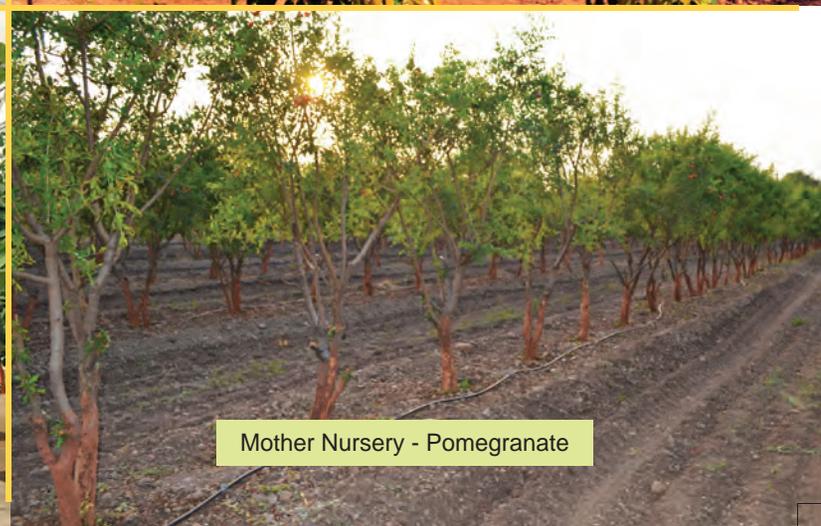
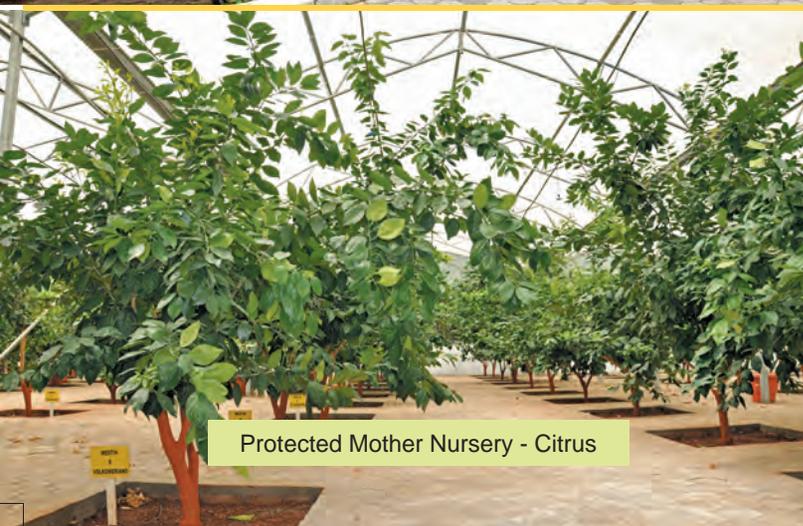
Ornamental plants are grown for display of aesthetic features. Generally ornamental plants are attractive foliage hence grown for decorative purpose in gardens and land scape design. Ornamental plants are, tolerant to all type of weather. Easy to maintain and fast adopting plants.

Jain Hi-Tech Nursery produces a large range of ornamental plants. It includes indoor plants, outdoor plants, flowering shrubs, seasonal flower, ground cover, creeper, succulent, and aquatic plants. These plants are propagated mainly by vegetative parts like leaf, bulb, suckers, and rhizomes.

#### Note:

- All plants are available year round.
- Plants are supplied against advance booking.
- Specific plants and varieties can be supplied.
- Plants will be supplied as per customer demand

## Fruits Mother Nursery Block



### C) Seed

Seed is fertilised ovule containing the plants embryo giving the appropriate growth conditions it will becomes a new plant.

#### 1) Onion -

Jain Irrigation Systems Ltd. began white onion seed production in year 2000 and supply it for contract growers over five district of two states near by white onion processing units.

Two varieties are provided by Jain Hi-Tech Nursery.

- i) JISL- 5
- ii) JV-12

#### 2) Potato

Recently Jain Hi – Tech Nuresry started seed potato. Potato grown from tuber or seed potatos produced and extract genetic clone of the mother plant

Varities available:

- i) Kufri Jyoti
- ii) Kufri Pukharaj
- iii) Kufri Lavkar
- iv) Kufri Chips sona
- v) Kufri Badshah
- vi) Kufri Surya
- vii) Kufri Himalini

#### Key Features (Seed)

- Quality Potato Seed tubers are produced from TC raised plants and mini tuber produced in fully automated Aeroponic Green houses
- Seed are developpe under Company supervision
- Sample of each lot are tested in lab
- High quality and disease free seeds
- Only Processed / sorted seeds are distributed
- Authentic processing varieties of seeds are available as per customer demand



Potato seed developed in Aeroponic System

### Mango Propagation Method - Cleft Grafting



Step-I: Rootstock Selection



Step-II: Rootstock Cut by Sharp Grafting Knife



Step-III: Slant cut to Scion



Step-IV: Rootstock & Scion Attachment



Step-V: Rootstock and Scion together



Step-VI: Rootstock and Scion tie with grafting tape

### D) Seedling

#### Seedling / Vegetable Plants



Papaya



Brinjal



Cauliflower



Tomato



Onion



Chilli



Papaya and Vegetable Seedlings

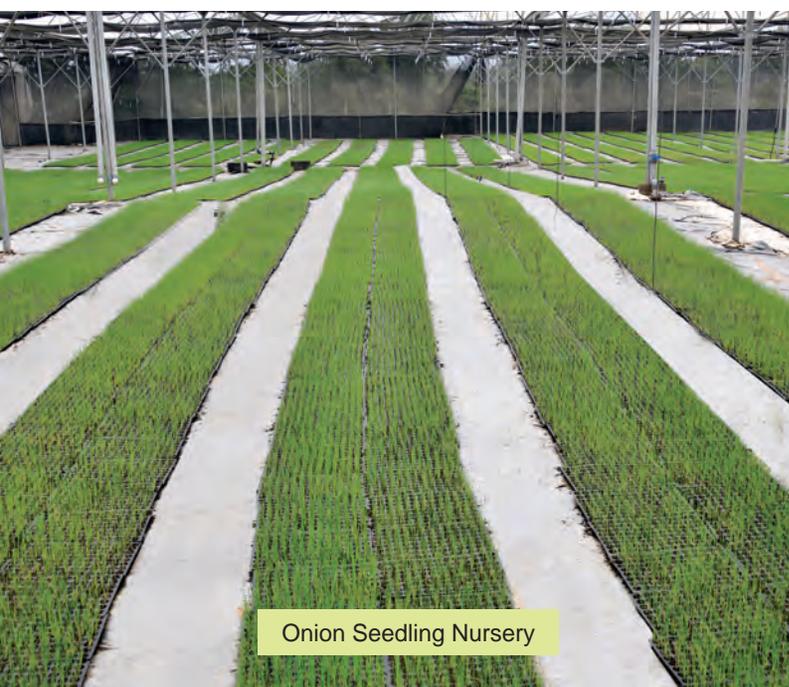
There are two sections in seedling, i.e. papaya seedlings and Vegetable seedlings.

Jain Hi-Tech Nursery has developed an autoplug hi-tech seedling nursery to overcome the problems of Vegetable Nursery in Soil. Seeds are sown by automatic vacuum machines thus the uniformity in the depth of seed placement is achieved. Sterilised organic media are used to produce seedlings. Pro trays are kept in germinator then in growth chamber. It ultimately results in good quality, healthy and uniform seedlings for the farmer. Jain Hi-Tech Nursery is producing the seedlings of various types of vegetables like tomato, brinjal, chilli, capsicum, cauliflower, cabbage, knol khol, Brussels sprout, broccoli, watermelon, muskmelon, cucumber,

pumpkin, bottle gourd, sponge gourd, turmeric, ginger, onion, and Sugarcane. Seedlings of any variety of farmers' choice can be produced in case of advance payment / order at least 60 days before.

### Features of Seedling

- Seeds are sourced from reputed seed companies only
- Use of sterilized soil less media
- Seedlings are raised and harden in partially control environment
- Seedling are develop under qualified staff
- Samples from each batch are tested in lab for quality
- High quality well rooted, disease free seedlings
- Save time, money & efforts of farmer
- Available as per customer demand

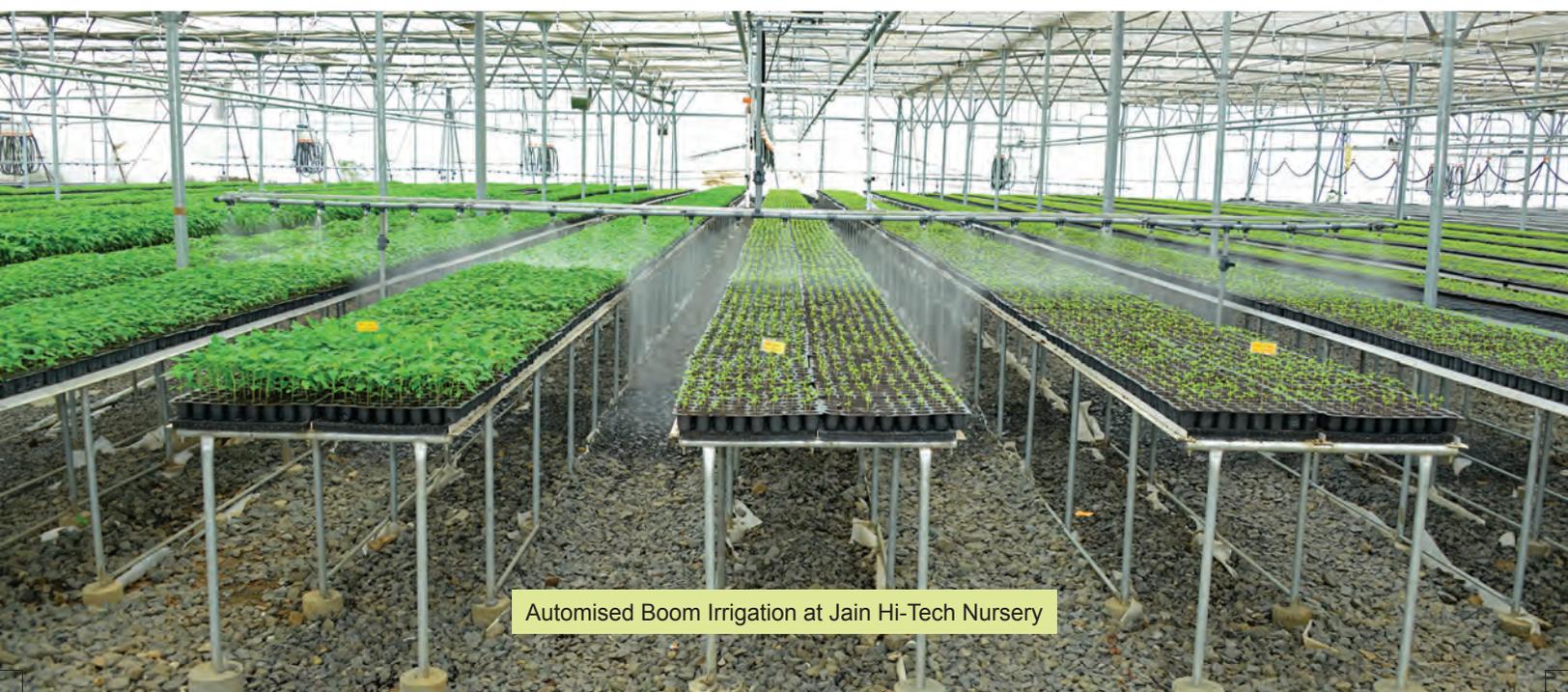


Onion Seedling Nursery

### E) Agro-forestry Plants

Agroforestry crop important for biodiversity for different region. Reduced deforestation increase global warming now days. Depleted soil can be protected from soil erosion by ground cover plants such as naturally growing grasses in agroforestry system. Reduce poverty through increased production of wood and other products.

Agro-forestry is a largest division of Jain Hi-Tech Nursery. It produces 2 lakhs plants per year. It includes Acacia, Cassia, Oak, Peltophorum, Arjun, Rain tree, Bahunia, Banyan, Peepal, Bamboo, Gulmohar, Kadam, Palash, etc. The agroforestry plants are produced by seeds in Jain Hi-Tech Nursery.



Automised Boom Irrigation at Jain Hi-Tech Nursery



Jain Tissue Culture Park: 12 Crore Plants / Annum Production Capacity

## About Jain Irrigation Systems Ltd.

Our Company, Jain Irrigation Systems Limited (JISL) with its motto 'Small Ideas, Big Revolutions®' with more than 11,782 associates worldwide and revenue of USD 1 Billion, is an Indian multinational company with manufacturing plants in 33 locations across the globe. JISL, its subsidiaries and associates are engaged in providing solutions in agriculture, piping, and infrastructure through manufacturing of Micro Irrigation Systems, PVC Pipes, HDPE Pipes, Plastic Sheets, Agro Processed Products, Renewable Energy Solutions, Tissue Culture Plants, Financial Services and other agricultural inputs since more than 34 years. It has pioneered a silent Productivity Revolution with modern

irrigation systems and innovative technologies in order to save precious water and has helped to get significant increase in crop yields, especially for more than 7 million small farmers. It has also ushered in new concept of large scale Integrated Irrigation Projects (IIP). "More Crop Per Drop®" is the company's approach to water security and food security. JISL is early pioneer for IoT in the agri-sector and is leading efforts to create global solutions with precision agriculture. It's food brand 'Jain FarmFresh' is well known all over the world for quality and consistency. All the products and services of JISL help create a sustainable future while fulfilling its vision to 'Leave this world better than you found it'.



 **1800 599 1000, 0257-2258017, 94227 75928**

**Note : Jain Irrigation purchases seeds from reputed seed companies and prepares seedlings So genetic purity of seedling and also the growth & yield can't be guaranteed as these depend on applied input, operational practices, different conditions & various other parameters.**