

# Proper Pruning of Mulberry

Training of young mulberry plants is essential during the establishment period itself. Medium bush type plantation seems to be the most suitable system in the Eastern & NE India for higher quality leaf production.

- ⇒ Maintain single stem in the 1<sup>st</sup> year
- ⇒ Maintain main stem without any side branches
- ⇒ Prune the main stem at 45 cm above the ground
- ⇒ Allow only 3-4 primary branches on the main stem
- ⇒ Prune the primary branches at 10-15 cm from the trunk
- ⇒ Prune the primary branches at the same level after each leaf harvest
- ⇒ Continue the process for 3-4 years; main stem top looks like a fist
- ⇒ Thereafter, prune the plant to the fist level itself after each leaf harvest



# Advantages

- ❖ Easy garden maintenance
- ❖ Adequate light & space for optimal growth
- ❖ Boosts vigorous plant growth
- ❖ Facilitates easier leaf harvest
- ❖ Improves leaf productivity & quality
- ❖ Better adaptability
- ❖ Lower pest & disease incidence
- ❖ Minimizes nutrient losses



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# Quality Mulberry Leaf Production

by  
**Wider Spacing & Proper Pruning**



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# Quality Mulberry Leaf Production

## by Wider Spacing & Proper Pruning

Mulberry is sole food plant of mulberry silkworms. It is a perennial, adaptable to varied agro-climatic conditions and could be grown with limited water resources. Mulberry can be grown round the year enabling five leaf harvests. Plantation type and cultivation practices influence the growth and leaf productivity in mulberry. Proper agronomic package of practices would result in harvesting more leaf and sustain plantation productivity. Silkworm productivity is directly associated with feeding of high quality mulberry leaves.

### Need for Wider Spacing

Traditionally farmers adopt narrow row spacing (2 × 2 feet ) for mulberry plantation in E & NE India. Narrow spacing reduces and competition for sunlight, moisture and nutrients among the plants and generally retards plant growth. Ultimately leading to poor crop productivity and leaf quality. Besides, the narrow spacing would also result in the following constraints:

- Early leaf senescence
- Difficult inter-cultural operations
- More prone to pests & diseases
- Not-so-easy garden maintenance

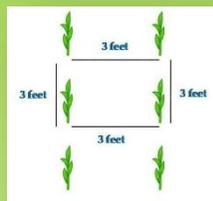
Hence, mulberry cultivation in wider spacing should be adopted for improving mulberry productivity.

### Wider Spacing

Quality mulberry productivity could be achieved by planting mulberry in wider spacing. Such plantations avoid competition among the plants by facilitating more sunlight, air circulation and nutrients availability. Most suitable spacing for mulberry is 3 × 3 feet for rearing bivoltine and crossbreed hybrids for obtaining sustainable productivity.

### 3 × 3 feet Bush Plantation

Square method of plantation should be adopted with 3 × 3 feet spacing. Here, mulberry plants are planted in rows by maintaining 3 ft distance for inter- (spacing between two rows) and intra-rows (spacing between two plants with in the row).



#### No. of Plants

1 Hectare : 12345 plants

1 Acre : 4998 plants

1 Bigha : 1666 plants



Further, 6 × 6 feet spacing facilitates easy mechanization of mulberry cultivation (1249 plants/acre). This could be maintained either as bush or medium tree type plantations.

### Pruning

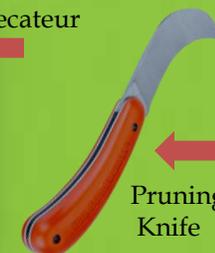
It is the practice of removing already utilized branches of mulberry plant

#### Purpose of pruning

- ❖ Maintain proper canopy shape & size
- ❖ To obtain right type of foliage for silkworm rearing
- ❖ Helps to take five leaf harvests in an year
- ❖ Stimulates more shoot development & vegetative growth
- ❖ Promotes better penetration of sunlight
- ❖ Easier inter-cultivation practices
- ❖ Helps to remove dead & defunct wood
- ❖ Reduces pest & disease affected branches



Secateur



Pruning Knife