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Training And Pruning of Capsicum In Protected Cultivation

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Introduction:

Solanaceous vegetable play important role in vegetable production and they are integral part of human diet. Pruning and training is an important factor necessary in growing vegetables which leads to early fruiting, increase in the qualitative and quantitative crop yield and ease of fertilizing operation through solution spray and powder spray. Pruning is necessary when the growth is extremely dense. Manipulation of canopy architecture through pruning and training together with appropriate spatial arrangements has been identified as key management practices for getting maximum marketable yields from polyhouse.

What & Why training, pruning?

Training and pruning are the cultural practices directly influencing fruit quality and plant lifespan. The target of pruning is to allow plants to available benefits of light at a maximum level, to get early, high quality yields, keep the plant young, provide air movement around the plant, to easy the pests and disease control. The greatest function of leaf and fruit pruning in vegetable culture is to vegetative and reproductive balance. It is provide a supporting framework for crop. Removing lower limbs can transform a shrub into a small tree, creating an elegant shape and allow more space for planting below.

Training:

Training refers to judicious removal of part to develop a proper shape of plant capable of bearing heavy crop load.

Objectives of Training

- Training controls the shape of plants
- Proper distribution of fruit bearing parts
- Control of pest and diseases



- To facilitate interception of sunrays to each and every part of plant
- To develop a balance between vegetative and reproductive growth of plant

Principles of Training

- ❖ Training should be started from very beginning age of plant
- ❖ In plant having prominent apical dominance, the terminal bud should be removed to facilitate emergence of side branches
- ❖ Drooping branches needs to be removed

Pruning:

Pruning is defined as the judicious removal of parts like root, leaf, flower, fruit *etc.* to obtain good and qualitative yield.

Objectives of Pruning

- To control flowering and fruiting
- To remove diseased, damaged and insect infested part of plant
- To remove weak shoots
- To thin out flower and fruits
- To augment production in plant which bear on new shoots
- It ensure access to sunlight to bearing shoots



Principle of Pruning

- ❖ Pruning should be completed well in advance of flowering season
- ❖ Diseased, damaged and insect infested shoots should be removed
- ❖ Avoid injury to plant while pruning

Training in capsicum:

The main stem of plant is tied with four plastic twine to train along and tied to galvanized iron wire grid provided on the top of the plants. This is practiced after four week of transplanting. The new branches and plants are trained along the plastic twines.

Pruning in capsicum:

- ✓ Capsicum plants are pruned to retain four stems. The tip of the plant splits into two at 5th or 6th node and are left to grow
- ✓ These two branches again split in to two giving rise to four branches. At every node the tip splits into two giving rise to one strong branch and one weak branch

- ✓ The pruning is done after 30 days of transplanting at an interval of 8 to 10 days
- ✓ Resulting in bigger fruits with better quality and high productivity. The capsicum plants can also be pruned to two stems and same level of yield can be maintained

Type of pruning

Generally, in case of we can use following two type of pruning for better yield.

1. Two stem pruning

The plant tip splits into two at the 5th or the 6th node and are left as such and allowed to grow to get the two stem. In this pruning the two main shoots were maintained as two leaders and the side shoots were pinched after one or two pair of leaves.

2. Four stem pruning

In the four stem pruning, the two branches were allowed to split again into two, and thus giving rise to 4 branches. Thereafter, all the side shoots were pinched off after one or two pair of leaves.

Conclusion:

Training and pruning play important role in capsicum growth and development. Due to training and pruning we can get higher yield in capsicum cultivation. It is important step during protected cultivation. Training control the shape of plant in space should be required and pruning result should be bigger fruits with better quality and high productivity.

Reference:

Athulya, M. P. and Vethamoni, P. I. (2018). Influence of pruning techniques on yield and quality characters of capsicum variety Indra under shade net conditions. *Madras Agri. J.*, **105**: 7-9.