



# **Importance of Pruning in the Mulberry Cultivation**

Chaitanya S<sup>1</sup> Ashoka K. S<sup>2</sup> and Bharathi M. C<sup>3</sup> <sup>1</sup>MSc (Seri), Department of Sericulture, University of Mysore, Manasagangotri, Karnataka, India <sup>2</sup>Ph.D., Scholor, Department of Agricultural Entomology, College of Agriculture, VNMKV, Parbhani, Maharastra, India <sup>3</sup>MSc (Seri), Department of Sericulture, University of Mysore, Manasagangotri, Karnataka, India <u>https://doi.org/10.5281/zenodo.7393191</u>

### Introduction

Pruning is one of the important activities in the mulberry cultivation. it is a process of removing certain branches systematically to give the mulberry plants a convenient shape and size and also to stimulate the buds to sprout and produce new branches. Pruning is as important as fertilizing or tilling for ensuring a good yield and quality of mulberry leaves. Removal of the branches will not devitalize the plant but, on the other hand, invigorate and rejuvenate it as the available energy is directed to fewer branches and fresh, young shoots sprout from the axillary buds. Pruning is not deviating process rather it invigorates the plants into production phases leading to luxuriant growth and better leaf yield.

## **Main Objectives of Pruning**

- To maintain proper shape and size of plant.
- To make cultural operation easier.
- To provide proper aeration and sunlight.
- To maintain convenient height for harvest.
- To induce higher foliage.
- To expose plant to better sunlight.
- To synchronize the leaf production and silkworm rearing.



# **Types of pruning**

There are mainly two types of pruning. They are

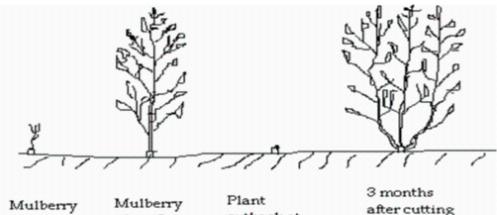
#### ➢ Fist form

Branches are cut at the base at the same height. since no new branches are allowed to develop into new stump it enlarges in width giving a shape of a fist to the plant.

### > Non-fist form

The branches are cut leaving 2-3 buds at the bottom of the shoot.it helps to produce a greater number of shoots. moreover, depending upon the planting systems under varied agro-climatic conditions, different systems of pruning are followed.

- a) **Bottom pruning**: plants are cut at ground level leaving 10cm-15cm stump above the ground. It is done once in a year.
- b) **Middle pruning**: Branches are cut at 40cm 60cm above the ground level. This is done after bottom pruning.
- c) **Kolar or strip system**: branches are cut to the ground level combining shoot harvest. This is done in closely planted areas. It requires heavy fertilization and irrigation.



Mulbe<del>ny</del> seedling at planting plant 3 C months 8 after a planting(9 m 0-120cm)

Plant cutback at ground level after 3 months 3 months after cutting back(90-120c m high)-select best 3 shoots

### Advantages of pruning

- a) Elimination of dead and damaged portions of the plant
- b) The vigor of the plant is restored
- c) Life span of the plant is increased



d) Improvement in the yield and quality of leaves.

#### **Effects of pruning**

- a) pruning involves cutting and removal of branches involving injury to the plant.
- b) Cut ends become susceptible to infection leading to rotting, drying and death of branches.
- c) Repeated pruning over the years results in accumulation of dead fist in the crown.
- d) Oozing of sap from cut ends stresses the plant.

#### Conclusion

Pruning is very essential cultural operations for maintaining a high yielding and quality leaf producing mulberry plantation. Pruning invigorates the plants into production phases leading to luxuriant growth and better leaf yield. Pruning also helps in diverting the energies of plant for optimum production of foliage. Therefore, pruning is important for increasing productivity and quality leaves of mulberry plantation.

#### References

- Magadum, S., Aziz, F., Lal, J., Bala, M., Sharma, P., Sharma, A., Kouser, R., Deskit, L. and Singh, S. 2019. Evaluation of effect of different mulberry plantation systems on rearing performance of silkworm (Bombyx mori L.).
- International Journal of Agriculture Sciences. 11(24): 9354-9357. https://devikacloud.in/. Online learning portal. Govt. degree college, Udaipur.



8