Practical - 12

NOTCHING AND PRUNING IN FIG

Exercise

Notching and pruning in fig.

Objectives

- To know about pruning and notching effects & on flowering and fruiting in fig.

Delivery schedule: 01 period

Student expectations/learning objectives

- To know how to prune fig
- To know notching technique for activation of dormant buds in fig.

Handouts/material/equipment's & tools required: Practical note book, pen, and pencil to note down the important points. Secateurs, pruning knife etc. for performing notching and pruning in fig.

Pre-learning required: Pre-requisite knowledge about different crops of fig and dormancy and growth of fig plants.

Introduction

Fig is a deciduous plant but does not require chilling to break dormancy. In North India, it remains dormant during winter and puts up new growth with the advent of spring season. However, in Western India, during monsoon (August-September) it becomes dormant and puts up new growth in October. The main objective of pruning in fig is to induce growth of flower-bearing wood and thereby improve the yield of fruits. In addition, pruning increases the fruits weight in early varieties. Besides pruning, certain other methods such as notching are also adopted to stimulate production of laterals on vigorous upright branches. Notching in the form of a slanting cut is given a little above the buds, removing a slice of bark. A combination of notching and pruning has been found to accelerate more laterals and induce more fruits on the new growth than by pruning or notching alone.

For teachers...

- Show fig plants to students and make them understand the difference in previous season growth and current season growth
- Ask students to practice pruning and notching on fig

Pruning in fig

- Fig trees are pruned annually and trained to a desired height to keep the plants more productive and to facilitate harvesting and other orchard operations.
- In northern India, trees are headed back to a height of 30 cm or 45 cm. whereas in Pune heading back to about 1-1.5 m, is usually done.

- As the fig tree normally bears 2 crops in a year, the first (known as *breba*) on the wood of previous season and the second crop on new wood of current season, the time and amount of pruning is adjusted according to the growth habit and bearing capacity of the tree.

Fruiting on current seasons growth

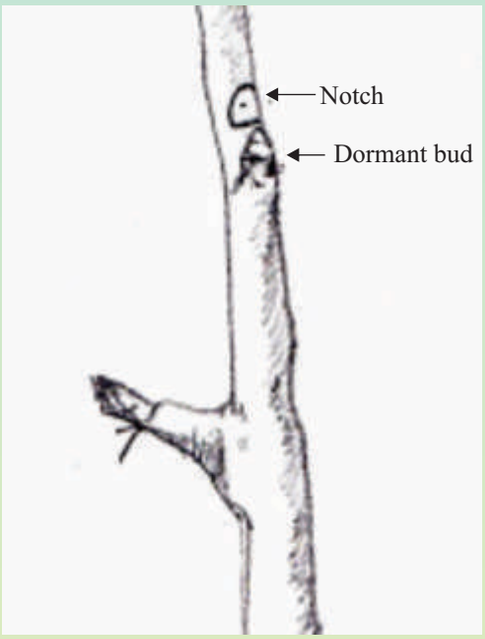
- In Pune, light pruning is given just after the crop has been harvested. In Uttar Pradesh severe pruning is given in December, leaving only 3 to 4 buds in shoots of previous years growth. In Karnataka, the fig plants are headed back every year in January- February to about 2 buds on each shoot of previous season'sgrowth to obtain fruits in July-October.

- Some growers prefer to prune the tree in October to get fruits in the following summer. In contrast, little or no pruning is done in Tamil Nadu.

Notching in fig

- Notching in the form of a slanting cut is given a little above the buds, removing a slice of bark.

- Notching is also adopted to stimulate production of laterals on vigorous upright branches.



- A combination of notching and pruning has been found to accelerate more laterals and induce more fruits on the new growth than by pruning or notching alone.

- The depth and width of the notch varies according to the size of the branch.

- Notching is done in July on at least 8 months old shoots. It has been found that the lower most 3-4 buds at the basal end of the branch are too dormant to be activated, but the buds on the middle portion of the mature shoot can be successfully activated. It is recommended the only 1 or 2 buds on such shoot be activated by notching.

Students Activities

1. Perform pruning and notching operations on fig plants during dormancy.
2. Observe effect of pruning and notching on emergence of new growth and activation of dormant buds.

Study Material

- Bose, T. K., Mitra, S. K. and Sanyal, D. (2001). Fruits: Tropical and Subtropical (Vol. 1). Noya Udyog, Kolkatta-6.
- Bal, J. S. (2007). Fruit growing Kalyani Publishers, Ludhiana, India.
- Chattopadhyay, T. K. (2008). A textbook on Pomology, Vol. 1-4 (Fruits), Kalyani publishers, Ludhiana, India.
- Sharma, R. R. (2006). Fruit Production: Problems and Solutions. International Book Distributing Company, ISBN 81-8189-102-3