

“Horticulture, Forestry and Herbal Technology”

B. Sc. III Sem VI Sec II

“Gardening and Ornamental Plants”

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Pruning

Career Oriented Course “Landscape Gardening”

Pruning

❖ The removal or reduction of parts of a plant, tree or climbers that are not require to growth of production or are injurious to the health of development of the plant.

❖ Proper pruning it increases the beauty of any landscape tree, shrub while improper pruning can greatly reduce its landscape potential.

❖ **Why and When ?**

More important than knowing when or how to prune is to know why and what you are trying to achieve.....

❖ Pruning is when you selectively remove branches from a tree. The goal or purpose of this to remove unwanted branches, improve the tree's structure and direct new, healthy growth.

When ?

- ❖ The right time to prune will depend on the type of plant.
- ❖ For most trees, the best time for major pruning is late winter to early spring because in this season wounds close faster.

Objectives....

- ❖ To regulate the flowering and fruiting of the plants.
- ❖ To maintain optimum balance between vegetative and reproductive growth of the trees.

- ❖ To encourage initiation of flowers and bearing of fruits.
- ❖ To ensure penetration of sunlight and air inside the canopy of the plants.
- ❖ To remove overcrowded, damaged, diseases and pests infested parts of the plants, that is it maintain the plant health.
- ❖ Always cut out dead, dying, diseased or damaged woods.
- ❖ Maintain good air circulation within the plants framework.
- ❖ Maintain desired shape.
- ❖ To improve the quality of flowers, fruit, foliage or stems.
- ❖ To train the plant

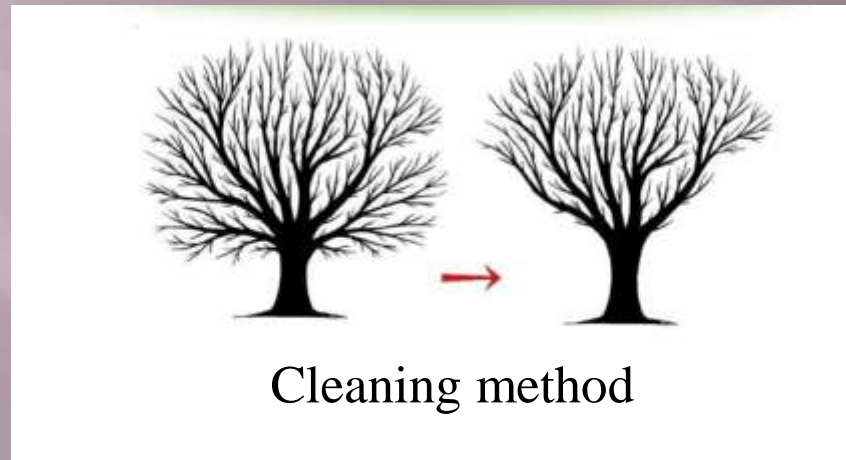
Pruning techniques

- ❖ Crown cleaning
- ❖ Crown thinning
- ❖ Crown reducing
- ❖ Crown raising

These are four important techniques or methods of pruning.

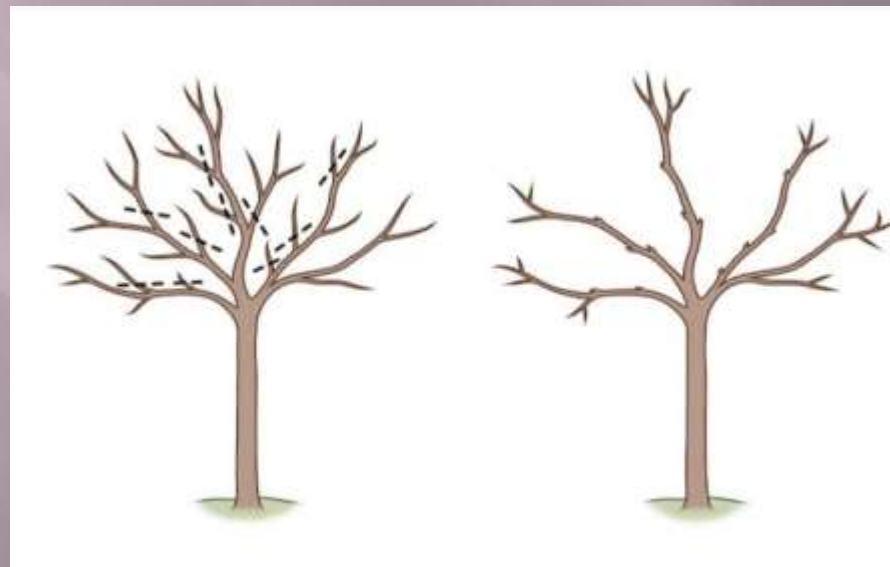
1. Cleaning method

- ❖ It involves removing the dead, diseased and broken branches or stems, weakly attached and low-vigor branches from the crown of a tree.
- ❖ By doing this risk of movement is reduced.
- ❖ It is best and ideal for mature plants because there is no need to unnecessarily remove the live stem



2. Thinning method

- ❖ Purpose of this method to decrease the density of live branches
- ❖ It is done for allowing air and sunlight to penetrate the inner parts of the plant.
- ❖ It is done mostly in case of plants with thick foliage or ones that have a large volume of stems and leaves.
- ❖ It reduces weight on heavy limbs, and helps retain the tree's in neutral shape.



3. Reducing method



- ❖ Purpose of this method to decrease the height or spread of the plant
- ❖ This is done to make plants look more tidy and attractive.
- ❖ To minimize the risk of failure and to clear overgrowth in unneeded areas like structures and buildings.
- ❖ It is not ideal for all plants and shrubs, so it is important to consider the species and health of the plants.
- ❖ It maintain the form and structural integrity of the tree

4. Raising method

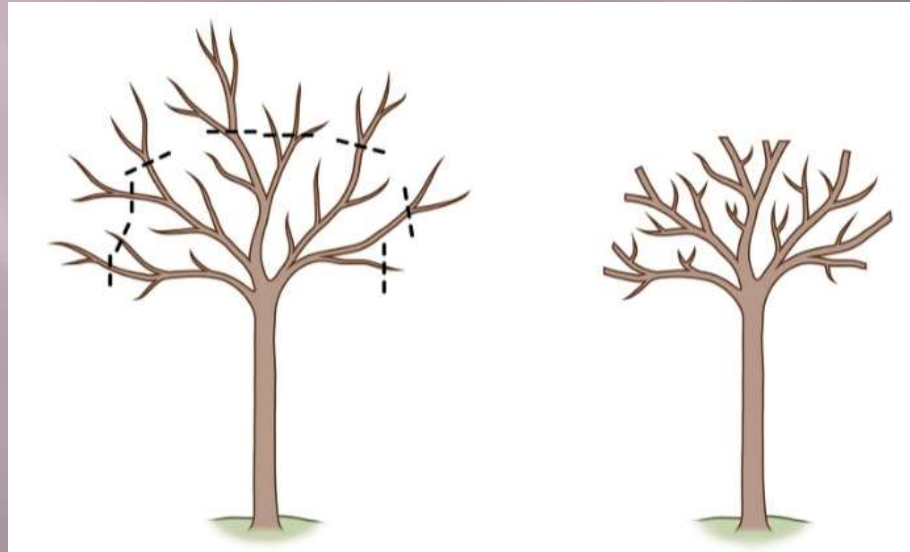
- ❖ This is done by removing or reducing the lower branches of a tree or plant.
- ❖ Half the foliage should originate from branches on the lower two thirds of the tree. Some major branches should be left on the lower half of the trunk.
- ❖ This method is used to provide vertical clearance for buildings, vehicles and pedestrians.
- ❖ The raising method is commonly used in trees near commercial buildings and residential houses.

Crown Raise



5. Heading back

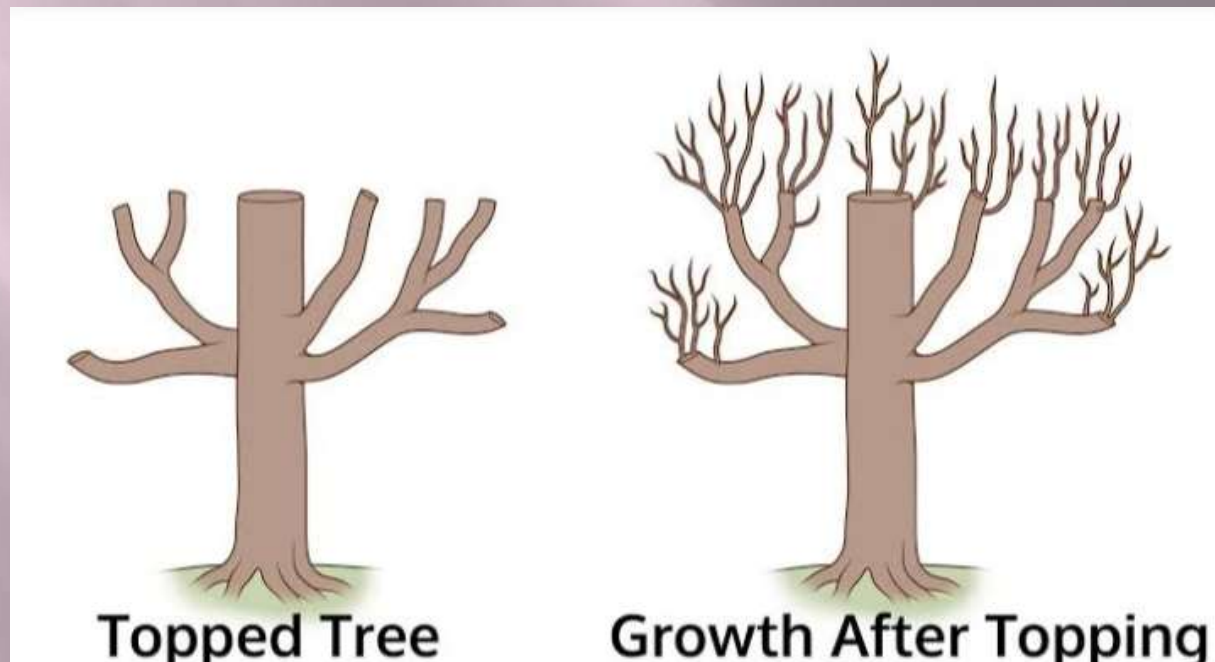
- ❖ Heading back refers to pruning off the terminal or head growth of a tree or shrub just above the lateral bud.
- ❖ The removal of a terminal portion of a branch to a lateral bud by cutting.
- ❖ A branch or shoot is shortened in heading back that encourages lateral branching.
- ❖ Heading cut preserves the lateral bud and encourages the growth sideways, filling in the interior of the plant.



6. Topping method

❖ It is method to remove whole tops of trees or large branches or trunks from the tops of trees, leaving lateral branches that are too small to assume the role of a terminal leader.

❖ This method also known as hat-racking, heading, rounding over and tipping



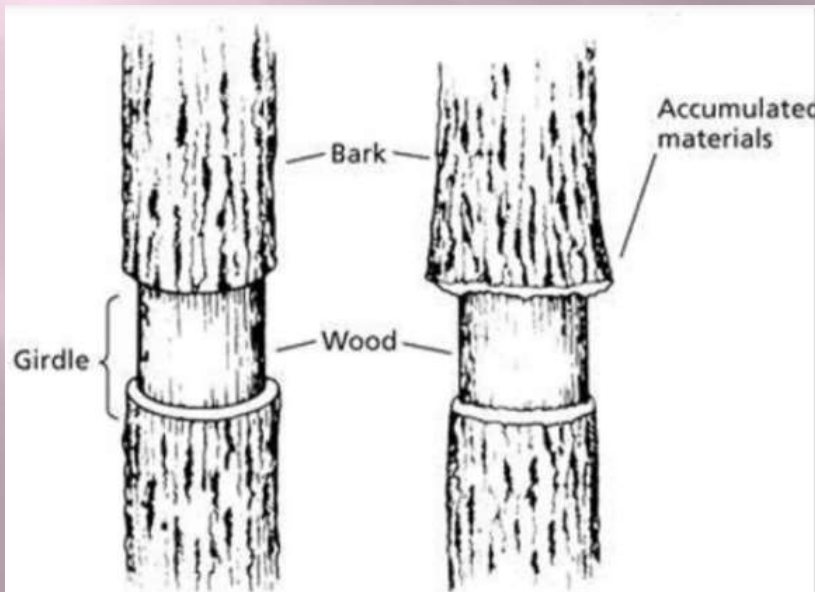
7. Pollarding method

- ❖ It is a pruning system involving removal of the upper branches of a tree.
- ❖ It promotes the growth of a dense head of foliage and branches.
- ❖ It tends to grow slowly with denser growth rings, live longer by maintaining them to reducing the weight.
- ❖ In urban areas it is for to maintain trees at a determined height or to place new shoots away from the grazing animals.
- ❖ Nowadays, this practice or method is used for ornamental trees or for landscape plants.



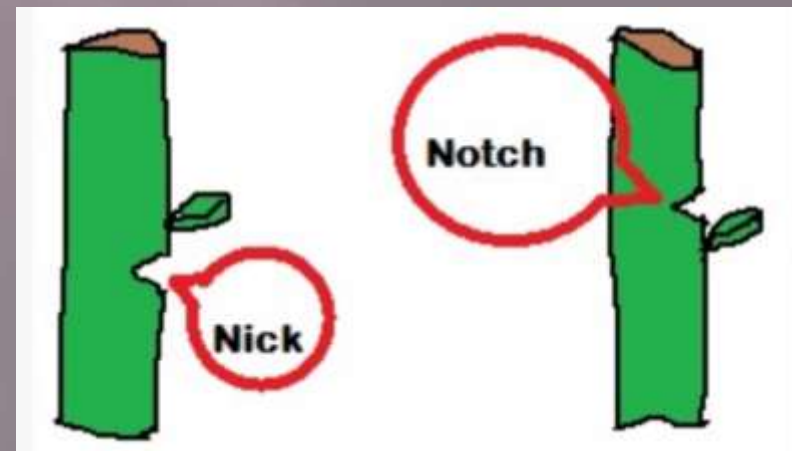
Girdling or Ringing

- ❖ The removal of a bark tissue in circular ring shape, it is about 2.5 cm in length.
- ❖ It is mostly done in case of grape to improve berry or fruit quality. It temporarily stops the plant growth.
- ❖ For to clean the wound and keep the wood from drying.



9. Notch and Nicking

- ❖ The removal of a wedge-shaped bark piece from **above the bud** then it called as **notch**, for encourage to grow.
- ❖ It blocks the flow of growth suppressing hormones which flow down the stem of tree to help the top of the tree keep dominant growth.
- ❖ The removal of a wedge-shaped bark piece from **below the bud** then it called as **nicking**, for encourage to grow.
- ❖ It helps to keep lower limbs and branches from continuing to grow too large.



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