Pinching Back and Defoliation

Objectives:

Ramification

Leaf reduction

Leaf replacement

Defoliation awakens dormant buds and leads to the development of new shoots (for secondary & tertiary branching)

Balanced growth - defoliate the strongest parts & trim the tips, weaker parts are untouched

Timing:

Healthy, actively growing trees Spring, summer, very early fall

Types of Trees:

Deciduous or Evergreen

Tropicals

Never defoliate conifers and pines

Techniques:

Whether to use complete or partial defoliation depends on the growth stage of the tree.

For a tree whose development is more advanced, the goal is to restrain the branches so that they are not too thick and allow the weak interior shoots is to develop.

In the spring the shoots at the exterior receive more light and grow, whereas, the interior shoots will gradually weaken and/or die. To avoid this situation, 2 or 3 weeks after budding, pinch back for the first time -- cut off the strong exterior shoots and large leaves.

By mid June, the tree will have recovered its density. Weak shoots are now stronger. Pinch back and defoliate again — leave the foliage on the weakest shoots. The result will be that the strength of the tree is balanced and the ramification is improved.

A third defoliation in August may also be done.

Re-evaluate branch structure and placement after defoliation. Make corrections as necessary.

Complete Defoliation:

Ficus nerfifolia – pull leaves off while holding branch horizontally

Other trees - Cut leaves off, leaving petiole in place to protect dormant buds

Pinching back – on mature shoots, new buds form on old wood

- on tender shoots, you are balancing the growth of the tree

Partial defoiliation:

Cut old leaves in half and/or remove leaves from the branch tips only

Remove branch tips (pinching back)

Fertilization:

Defoliation, whether partial or complete, is very stressful for the tree. It is therefore necessary to fertilize adequately before and after defoliation. Inadequate fertilization after defoliation, results in very weak budding.

Watering:

Defoliated trees will use less water than normal. Water only when the surface of the soil is dry. Resume normal watering when the new buds have opened.

Pinching Back:

Used to develop ramification (secondary and tertiary branching)

Pinch branch tips slightly inside the ideal profile of the tree at a fork in the branch.

If pinching is only done on branches that are outside the tree's profile, the branch tips will become thicker and coarser (an undesirable situation).

Remember to pinch interior shoots, so that secondary branching occurs in the interior of the tree.

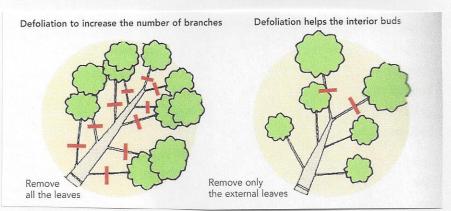


Fig. 1 Defoliation

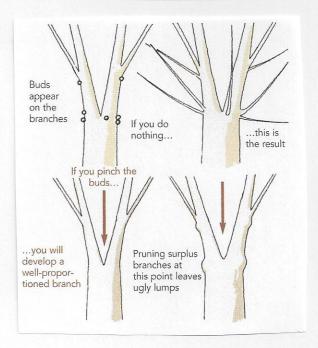


Fig. 2 Bud Pinching

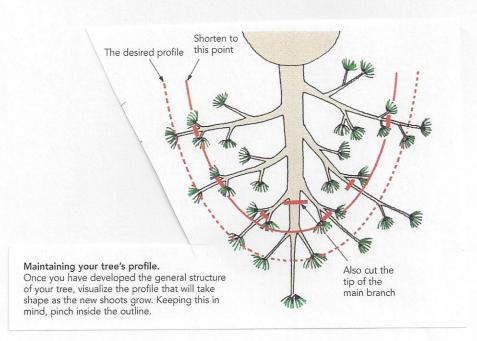


Fig. 3 Maintaining your tree's profile