



UNIVERSITÀ
CATTOLICA
del Sacro Cuore



PRODUZIONE DI CIBO APPROPRIATO: sufficiente, sicuro, sostenibile

GUIDELINES FOR PRUNING

WHAT IS “PRUNING”?

Pruning is an operation which consists mainly in cutting portions of branches, according to special rules in function of the type of plant. More specific, pruning is a set of practices whose purpose is to regulate, through appropriate branch cuttings, how to vegetate, to flower and bear a fruiting tree.

WHY TO PRUNE?

Generally, fruit plants are pruned to foster a more uniform and rational shape, to ensure a more constant production and of better quality by a better light interception.

Specifically the main objectives of pruning are:

- to develop the shape and form young trees,
- to encourage the growth of new fruiting wood (in adult trees),
- to allow light and air to enter the center of the tree,
- to reduce the spread of disease to other parts of the tree,
- to remove damaged parts of the tree,
- to thin out the fruit.

HOW TO PRUNE?

Firstly, it is necessary to choose the right equipment to do the cuts and be sure that pruning shears and hacksaw are sharp and clean. Make cuts just above each bud, and try to make the cuts slope away from the bud, for water run-off, and to encourage the wood to heal quickly. A stub or an uneven cut will delay wound healing and increase the probability of infection.

When removing dead or diseased wood, always cut through healthy tissue below the diseased section and, if possible, paint large wounds with a fungicide (such as copper) to protect against disease, otherwise let the wound heal naturally.

WHAT TYPE OF EQUIPMENT IS NECESSARY?

There are a number of tools that can be used for pruning. Choosing the right tool for the job mean less work for the operator and ensures that the plant are not damaged and will heal more quickly.

There are a lot of tools that can be used for pruning. The following is a list of different main types of tools and their uses:

- shears or hand pruners: useful for smaller jobs (fig. 1);
- loppers: useful for larger jobs to cut hard woody branches (fig. 2);
- pruning saws: useful to remove stems you cannot cut with hand pruners or lopping shears (fig. 3).



Figure 1. Hand pruners.



Figure 2. Loppers.



Figure 3. Pruning saws.

WHAT TO PAY ATTENTION?

Trees can be pruned in many ways and the best method is chosen according to: the tree species, the spacing, the harvest method, age, healthy conditions, etc.

In general it is important to remember that:

- intensive pruning will delay bearing, and result in fewer and larger fruits in the first years of production;
- branches spread to a 45-55 degree angle with the horizon are stronger, and produce more fruit than branches with narrower branch-trunk angles;

In addition, when pruning it is good use tools made for the purpose and keep them sharp and clean: to disinfect pruning tools, if it is possible, use household bleach at one part bleach and nine parts water. This is a good practice to avoid pests and diseases dissemination among plants.

In this sense if the pruning residues are derived from infected plants it is a good practice to take out them of the orchard to avoid the diffusion of pathogens, in some cases they are burned. And if they are diseases-free it is possible to mix them in the compost heap or used as green mulching with some benefits from the soil and the species that are cultivated.