



A61 Pruning and training fruit



Pruning is an exciting job that varies with each fruit crop. This section uses the principles of pruning or training explained in G4.10 to outline the most useful methods for major fruits. Customise these instructions for your site and follow specific advice from fruit nurseries, parent experts and enthusiasts in special interest groups.

Resources

- Plants to prune/train
- Secateurs for small branches, pruning saw/loppers for larger ones
- Organic disinfectant

Activity

- Use instructions on the next page to begin pruning and training your fruit plants.
 - Make well placed cuts (see next page). Use sharp tools cleaned with hot soapy water or organic disinfectant such as 'Citrox' from www.organiccatalogue.com.
 - Most fruit is pruned when dormant, usually late winter or spring. The exceptions are established stone fruit such as plums and cherries that are pruned in summer to avoid risk of 'silver leaf' disease.
 - Trained fruit forms such as cordons and espaliers need extra pruning and tying in summer to help control vigour and shape. See next page.



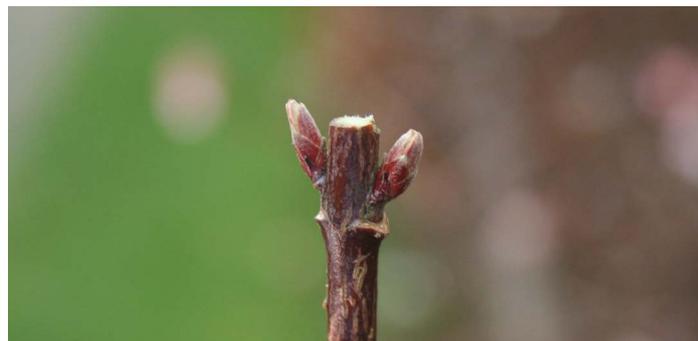
See Food Growing Instruction Cards for details of individual fruit.

Health & Safety	<p>Be careful when using sharp tools such as secateurs, pruning saws and loppers, ensuring constant adult supervision. Store tools safely. Be careful when training woody and sharp stems. Mind your head on lower tree branches and be careful of eye injury, wearing goggles if needed. Consult professional help if branches to be removed are large/unsafe to handle.</p> <p style="text-align: right;"><i>See also Health and Safety Guidelines (Section SG1.2)</i></p>
Further information	<p>A39 Mulching plants</p> <p>S3.4 Planting fruit</p> <p>G4.10 Pruning and training fruit</p> <p>'Pruning and Training' by Christopher Brickell and David Joyce, Royal Horticultural Society. ISBN 1405315261</p> <p>The Food for Life Partnership fruit resource available free from www.gardenorganic.org.uk/schools</p>

Pruning and training by growing habit

Techniques

Cut stems above a bud. Leave 3mm above to avoid killing the bud, but no more to avoid die-back. You'll find a bud where a leaf joins a shoot.



Make angled cuts when buds are positioned alternately. Make straight cuts when buds are positioned opposite.



Cut stems above a branch collar, ie swollen base (pictured). This will heal quickly, unlike 'flush cuts'. Cut off larger stems in stages for safety, undercutting first to avoid bark tearing.



Example leading shoot and side shoot being cut back (gooseberry pictured). See instructions on next page.



To keep up a plant's strength after pruning, mulch in late spring to feed. This will also conserve moisture and suppress weeds. See details in A39.



Tie stems to canes/wire using soft twine in a figure of eight. This method stops the cane/wire damaging plant stems.

Bush fruit

Blackcurrant

Training: none (natural bush).

Fruiting growth: one and two year old.

Young plants (winter): cut all stems to 3cm at planting.

Established plants (winter): cut quarter of oldest stems to 3cm every year to stimulate new growth. Also remove weak and crowded stems.



Blueberry

Training: none (natural bush).

Fruiting growth: two and three year old.

Young plants (winter): cut all stems to 3cm at planting. Then remove weak and crowded stems.

Established plants (winter): after three years, cut down one or two older, less productive stems to 3cm. Also remove weak and crowded stems.



Gooseberry, redcurrant, whitecurrant

(Option 1)

Training: none (natural bush).

Fruiting growth: spurs growing from side shoots on permanent branch structure.

Young plants (winter): select four or five evenly spaced stems to create an open centre. Remove weak and crowded stems. Reduce the length of stems by half to promote bushiness, cutting to an outward facing bud.

Established plants (winter): cut side shoots back to one bud and shorten leading shoot by half previous season's growth.

(Option 2)

Training: single cordon (upright stem).

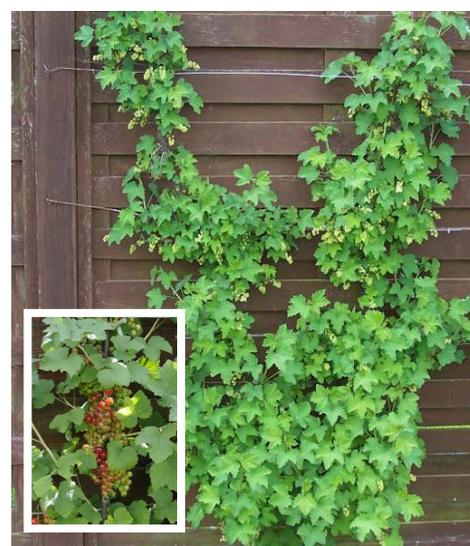
Fruiting wood: spurs growing from side shoots.

Young plants (winter): tie the main shoot to a bamboo cane and shorten all side shoots to one bud. Remove any other main shoots.

Young plants (summer): continue to tie main shoot to bamboo cane. Shorten all side shoots to five leaves.

Established plants (winter): cut side shoots back to one bud and shorten leading shoot by half previous season's growth.

Double cordons (pictured): train two shoots at 30° angle along bamboo canes, then tilt vertical to create upright stems at end of first season. Continue as above.



Cane fruit

Blackberry, hybrid berries (eg loganberry)

Training: separate new and fruiting growth to make pruning, picking and handling thorny stems easier. Set up horizontal wires positioned 30cm apart, up to 180cm high.

Fruiting growth: one year old canes (last year's).

Tying (throughout season): tie one year old fruiting canes in one direction and new non-fruiting growth in opposite direction along wires.

Pruning (after fruiting in summer): cut fruited canes to soil level. Keep new, non-fruiting canes to fruit the following year. Then repeat cycle the following year.



Raspberry (summer)

Training: separate new and fruiting growth to make pruning, picking and handling thorny stems easier. Set up horizontal wires positioned 30cm apart, up to 180cm high.

Fruiting growth: one year old stems (last year's).

Tying and pruning (after fruiting in summer): cut fruited canes to soil level. Tie in the new non-fruiting canes 8cm apart to horizontal wires. Retain the strongest/thickest and cut out the weakest at soil level. These new canes will fruit the following year. Repeat each year.



Raspberry (autumn)

Training: none (natural).

Fruiting growth: current season.

Pruning (winter): cut out all canes to soil level. New canes will grow in spring to fruit in autumn the same year.



Vine fruit

Grape

Training: single cordon (upright stem).

Fruiting wood: new growth from woody spurs.

Young plants (winter): tie the main shoot to a bamboo cane and shorten all side shoots to one bud. Remove any other main shoots.

Young plants (summer): tie main shoot to bamboo cane as it grows. Shorten side shoots to five leaves. No fruit will be produced yet.

Established plants (winter): cut side shoots back to one bud (ie now a woody spur) and shorten leading shoot.

Established plants (summer): let two shoots grow from each spur. Cut one fruiting shoot to two leaves after a bunch of grapes; the other after just two leaves (this is a backup shoot in case the fruiting shoot snaps).

Multiple cordons: train two shoots at 30° along bamboo canes; pinch out tips and lay shoots horizontal at end of season. Treat each upright side shoot that grows from the horizontal shoots as a single cordon.



Tree fruit

Plum

(Option 1)

Training: natural bush. See apple and pear instructions on the next page. Prune young trees in spring. Established trees need minimal pruning; prune these in summer (June-August) to reduce chance of 'silver leaf' disease infection.

(Option 2)

Training: fan shaped.

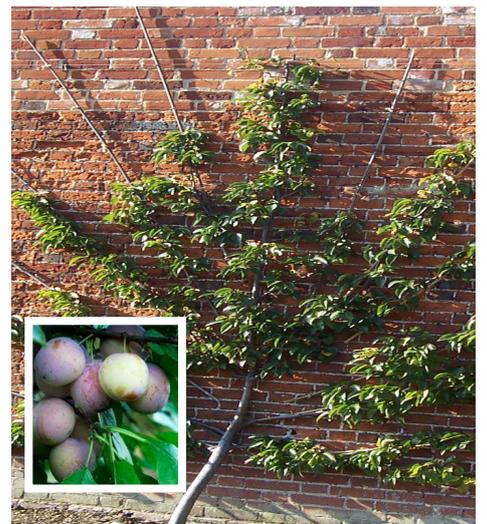
Fruiting growth: woody spurs.

Young plants (winter): select two side shoots near the base and tie to near horizontal wires. Reduce the length of stems by half to promote bushiness. Remove other growth.

Young plants (summer): tie in main stems and side shoots to create fan shape.

Established plants (spring): thin side shoots to 10cm apart and remove awkward shoots.

Established plants (summer): shorten side shoots to five leaves. Tie in shoots to extend fan.



Tree fruit (continued)

Apples and pears

(Option 1)

Training: none (natural bush).

Fruiting growth: mostly spurs; some shoot tips.

Young plants (winter): select four or five evenly spaced stems to create open centre. Reduce the length of stems by half to promote bushiness, cutting to outward facing bud. Fruiting spurs will develop from resulting side shoots. Remove weak and crowded stems.

Established plants (winter): cut side shoots back and shorten leading shoots. Cut weaker shoots back more to stimulate more growth.

(Option 2)

Training: espaliers (horizontal branches). Set up horizontal wires positioned 30cm apart, up to 180cm high, against a wall/fence or free standing.

Fruiting growth: spurs growing from side shoots.

Young plants (planted with single stem, winter): tie the main stem to an upright bamboo cane and cut off the growing tip just above the lowest wire.

Young plants (summer): three side shoots should be produced. Tie one to the upright cane to become the new leading shoot. Set up two more canes attached to the wires at 30° in opposite directions. Tie a shoot to each. These will form the first horizontals.

Young plants (2nd winter): lower the angle of the two canes to horizontal and tie to wire. Cut off the growing tip. Tie main shoot to upright cane and cut to just above the second wire.

Young plants (2nd summer): repeat instructions from year one to create a second tier. Shorten side shoot on first tier to encourage spurs, cutting back to three to six leaves.

Established plants (winter): repeat instructions from year one and two to create new tiers.

Established plants (summer): continue to shorten side shoots to contain vigour and produce spurs.

(Option 3)

Training: single or double cordons, but with the whole tree planted at 45° angle. Shorten side shoots in summer to contain vigour and produce spurs.

