

Gardennote

Growing healthy fruit trees in the home garden

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There is a certain pleasure in sampling the produce of your garden and enjoying the freshness and taste of the sun-ripened fruit. As the producer, you know exactly what has gone into and onto your fruit.

A wide range of fruit can be produced throughout the year in Western Australia. Fruit trees aren't difficult to grow, but you have to follow some rules to achieve success!

This Gardennote outlines the basic requirements to grow healthy fruit trees.



Healthy peach tree.

Ground rules

Any plant which has the right balance of water, nutrients, sunlight and ventilation will grow healthily and build up natural resistance against insect pests and diseases. Hygiene should be practiced when handling the plant (at planting, pruning and harvesting) to avoid the introduction of disease pathogens. By treating insect pests and diseases immediately on discovery you will avoid pest build-up of plaque proportions.

Site selection

Your site should have full sun for at least half of the day and protection from wind. The soil should be well drained and have no major history of soil diseases or nematodes. If your 'ideal' area is confined, there are a number of techniques that can be used to grow a variety of fruit trees in a small space.

Space saving techniques

- Trees shaped to a single trunk can be spaced as close as 1 m apart and grown as a fruiting hedge. For cross-pollination, two or more trees can also be planted into one hole.
- Trees, grafted with two or three different varieties of the same genus, (e.g. orange, tangelos and mandarins) are commercially available. These trees usually combine cross pollinating varieties.
- Miniature peaches or nectarines that are 1.5 to 2 m tall are commercially available. Some trees (e.g. apples) are grafted on dwarfing rootstocks.
- If you have a north or west facing wall, trees can be trained alongside, using an espalier trellis (see Farmnote 55/95 for details). This is suitable for apricots, Japanese plums, nectarines, figs, mulberries, peaches and persimmons. Apples, nashies and pears prefer south or east facing walls in warm winter areas, such as coastal Perth.
- In small patios or balconies, miniature fruit trees (peaches, nectarines, apples) or bushes (blueberries) can be grown in containers.
- In any case, fruit trees can be kept to a manageable size via pruning (see Gardennote 41).

Selecting the right varieties

It is important to select fruit varieties which are suited to your climate and have some resistance to the insect pests and diseases, found in your area. Your local nurseries generally have the best information on fruit varieties, suited to your conditions. Deciduous trees, such as pomefruit (apples, pears, quinces) and stonefruit (peaches, nectarines, cherries) need a certain amount of winter chilling to produce fruit. When choosing these varieties, make sure the winter chilling in your area is sufficient.

Also be aware that certain fruit trees need compatible pollinating 'partners' to produce fruit. These partners are not always the same variety. Consult your local nursery on that issue.

One of the most common complaints by home gardeners is that their trees are not producing fruit. This could be due to chilling, variety or pollination.

Important Disclaimer

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Establishment

The best time to plant deciduous fruit trees (apples, pears, stone fruit) is when they are dormant, in winter. Evergreen fruit trees (citrus, avocados, olives) should be planted in autumn, when the soil is still warm enough for the roots to establish to be ready for spring growth. Before planting, make sure your soil pH is around 6.5 (consult your local nursery for advice about your area).

Young trees should always come from a reputable source. Improve the soil structure, water holding capacity and fertility of the soil through application of animal manure (avoid chicken manure) and compost.

When planting a fruit tree, mix compost (moderate amounts, so it is not too soggy), phosphorus (rock phosphate at 1 kg per tree, or superphosphate at 500 g per tree) and trace elements (100 g per tree) with the soil for the planting hole (approximately 1 m in diameter and half a meter deep). If your soil is clay and drainage is poor, add a few handfuls of gypsum to improve drainage. If the tree is in a container, remove the tree from its container without disturbing the root ball and plant into the hole.

If you purchased a bare-rooted tree (they are available in some nurseries and are generally cheaper), make sure that roots are kept moist during planting. Spread the roots on top of the mound of improved soil mixture, then backfill with more of the mixture. Avoid contact of bare roots with fertiliser grains. The bud union or graft should be at least 5 cm above the eventual soil level.

Water the tree in after planting and mulch with some more compost.

In windy or frost susceptible locations, protect the tree with a tree guard.



When planting a bare rooted fruit tree, trim the roots and train the top to the desired shape.

Growing

Depending on the season trees should be frequently hand-watered. Be careful not to over-water or let the soil dry out. Keep the tree free from weeds, pests or diseases. Unless the tree is dormant, apply one to two handfuls (depending on the size of the tree) of complete fertiliser such as NPK blue with trace elements every 5 weeks.

To train the tree to a desired shape, start shaping it in the first years. Prune the tree when it is dormant. Most home gardeners train their trees into vase shaped trees or central leader trees. Keeping your fruit trees to a moderate size allows easier picking, pruning and cheaper bird netting. Birds are one of the most destructive pests in some areas, and they strike, when your fruit is just about ready. For more information on shaping trees, see Gardennote 41: 'Training and pruning deciduous fruit trees in the home garden'.

Main Pests and Diseases

A few guidelines can be followed to minimise insect pests and diseases on your fruit trees.

- Control pests like snails, slugs and weevils with physical barriers like sawdust or shell grit on the ground (snails) or sticky bands on the tree trunks (weevils). Hand-pick them before they escalate to plague proportions.
- Avoid the use of strong pesticides which will kill the natural enemies of insect pests such as parasitic wasps, ladybirds, lacewings, lizards and frogs. Try to keep your garden ecologically balanced.
- Prune your trees so they are well ventilated and get plenty of sun, as this provides less favourable conditions for diseases.
- Try not to damage your plants, as plant wounds provide an entry for diseases.

Further reading

- Main pests of fruits in the home garden. Gardennote 130. Department of Agriculture and Food.
- Main diseases of fruits in the home garden. Gardennote 129. Department of Agriculture and Food..
- Espalier pruning and trellising of plums. Farmnote 55/95. Department of Agriculture and Food.
- Training and pruning deciduous fruit trees in the home garden. Gardennote 41. Department of Agriculture and Food.
- Basic backyard fruit tree growing. Factsheet 171. Department of Agriculture and Food.

When sending or delivering samples, the following information is required: Collector's name, location (where the specimen was found), full address, description of the damage, and date collected.

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