

Gardennote

Table grapes for the home garden

By Ian Cameron, Development Officer, Viticulture, Forrestfield and Christine Castalanelli, Pest and Disease Information Service, South Perth

Most varieties of table grapes grown for the home garden are the European species *Vitis Vinifera*. This species originated between the Caspian and Black seas in Asia Minor. There are records of grape production as far back as 2440 BC. Table grapes differ from wine grapes mainly by the size of the berries. Varieties come in different colours and may contain seeds or be seedless.

Grapevines in the home garden can be grown over a pergola to provide shade or on a post-and-wire trellis. A full sun position is required—shaded vines are more susceptible to disease and tend to produce fewer bunches each season.

Vines can live for over 100 years in good growing conditions but the average productive life is 25–50 years.



Grapes under shaded pergola



Grapes grown on post and trellis

Planting

Young vines are best planted out in August/September just before budburst. If the existing soil is very sandy it can be mixed with composted organic matter and animal manure. This mixture will help retain moisture as well as provide nutrients for the vine. A light dressing of blood and bone could be applied when the vine starts to grow in early spring. Granular NPK fertilisers should not be used on newly planted vines until 6–8 weeks after the first emergence of green shoots.

Cuttings

Table grapes can be propagated from hardwood cuttings taken in late winter from shoots that emerged in the previous spring. Select a section of cane about 30 cm long that carries five to seven buds. Cuttings should be 6–12 mm in diameter with close internodes. A cut



Plant cuttings with the second bud from the top at ground level—that is, about three-quarters in the ground and one-quarter above ground.

should be made immediately below the bottom bud and 2–5 cm above the top bud. Plant the cuttings in moist, well-drained soil. The cuttings should be planted with the top bud clear of the soil and the second bud down from the top at ground level. There is no need to use rooting powders on grapevine cuttings because table grapes strike easily. It is not normally necessary to graft onto a nematode resistant rootstock. However, some varieties such as Red Globe and Crimson Seedless will perform better if they have been grafted.

Important Disclaimer

The Chief Executive Officer of the Department of Agriculture and Food and the State of Western Australia accept no liability whatsoever by reason of negligence or otherwise arising from the use or release of this information or any part of it.

For more information visit our web site www.agric.wa.gov.au

Trellising and vine training

Vines can be trained over a three-tiered post-and-wire trellis or over a pergola. It is important during the first year to let the vine grow vigorously to achieve its eventual height. Only one single shoot should be trained throughout the first growing season by removing lateral shoots that emerge at the base of each leaf. If the vines fail to reach the correct height in the first year, the shoot should be cut back hard in the winter of the following year and training repeated in the second year. No vine should carry any bunches until year 3.

Watering and fertilising

Regular watering of vines in the home garden is necessary from early November to late March in most seasons. Applying a mulch will help retain moisture in the soil during summer months. Disease risk is minimised if the water can be kept off the foliage of the vine.

A mature vine will require about 500 g of NPK fertiliser with trace elements each season. This should be applied as a 350 g dressing in late August (at or near the start of budburst) and a 150 g dressing in mid October.

Pruning

There are two basic methods of pruning table grapes: cane pruning and spur pruning. Pruning is best carried out in late August about two weeks before natural budburst.

Spur pruning is used on any variety that is highly fruitful such as the muscat flavoured varieties. These varieties produce one or two bunches on every shoot every year.

Cane pruning is used on 'low fruitful' varieties such as sultana. In the spring these varieties only carry bunches on less than half the shoots that emerge after pruning. If the name of the variety of grape is unknown, the best pruning method is to have a combination of spurs and canes until the fruitfulness of the vine can be determined.

Cane pruning

Varieties that need to be cane pruned carry bunches on the previous season's growth towards the end of the cane. There are very few bunches to be found in the first four buds along each cane. These varieties require 6 to 12 canes at the end of pruning. Each cane will have 8 to 16 buds, but be no longer than 75 cm. These canes are tied onto the wires of the trellis for support.



Cane-pruned vine

Spur pruning

A vine that is mature and fruitful enough to be spur pruned should have 20 to 40 spurs when pruning is completed. These spurs are shortened lengths of the previous season's shoot growth and should be spaced 10–20 cm apart on the permanent arms of the vine. Each spur should be two or three buds long which will produce a maximum of two new shoots in the spring. The most common fault with pruning vines in the home garden is overcrowding of spurs.



Spur pruning (Photo by Jamie Goode)

Shoot and bunch removal in spring

It is good practice to thin excess foliage and fruit between October and December to maintain a healthy vine and prevent overcrowding.

Early October

- Remove surplus shoots that do not carry any bunches. The aim is to have a single shoot every 10–20 cm along the trellis for cane-pruned vines and two shoots every 10–20 cm for spur-pruned vines. Avoid dense clusters of shoots.

Early November

- Remove the leaves between the base of the shoot and the first bunch. This will dramatically improve disease control.

Late December

- Thin the crop to one bunch per shoot. Select bunches that hang below the foliage and that have a loose set with a reasonable distance between berries. Reduce the crop load to between 20 and 40 bunches per vine depending on the size and age of the vine.

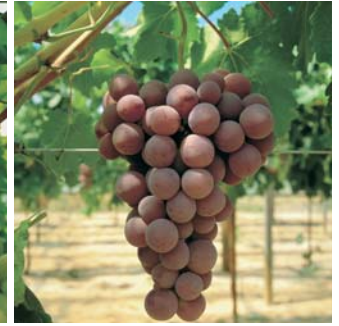
Varieties

The following list of varieties should satisfy the demands of the home gardener.

Late maturing varieties are more likely to be affected by Mediterranean fruit fly, bird damage and powdery mildew.



Sultana



Red Globe

Harvest period	Variety	Berry description	Pruning
Mid Jan	Flame seedless	small red seedless	spur pruned
Late Jan	Cardinal	medium red seeded	spur pruned
Early Feb	Red Globe	large red seeded	cane pruned
Mid Feb	Italia	medium white seeded	spur pruned
Late Feb	Sultana	small white seedless	cane pruned
Early March	Muscat Gordo	medium white seeded	spur pruned
Early March	Crimson seedless	medium red seedless	cane pruned
Mid March	Waltham Cross	medium white seedless	spur/cane pruned

Diseases

Powdery mildew is probably the most common disease of grapevines in the home garden. The disease becomes conspicuous as a grey/white powdery growth on all green parts, including leaves, shoots and berries. The berries may split and the pulp will often dry out. A fortnightly application of wettable sulfur or sulfur dust should be applied from mid September to late December. It is best to apply wettable sulfur early in the growing season and sulfur dust once the fruit has set. Do not apply sulfur on days when the maximum temperature is predicted to be 30 °C or higher.



Powdery mildew on leaf

Downy mildew was first detected in WA vineyards in 1998 but may not be a problem for the home gardener. The disease first appears on the upper surface of leaves as small yellow oilspots. The spots may enlarge to cover the leaf. A downy growth appears on the undersides of the oil spots.

As a preventive measure applications of copper oxychloride or mancozeb can be applied.



Downey mildew

Pests

Bunch mites are not visible to the naked eye. Adults are less than 0.2 mm long and are found on the leaf underside close to the bunches. The mites damage the berry stalks by interrupting the water supply which causes the berries to shrivel and fall off. Do not confuse this with wind-suck which may happen in hot dry windy weather as the roots withdraw water back from the berries as a method of survival.

Grape leaf blister mite causes blistering of the leaf on the upper-surface. On the under-surface felt-like patches develop. Although the leaves become unsightly, fruit production is not affected. A spray of lime sulfur applied at bud-swell should give adequate control.



Leaf blistering on upper leaf surface *Felt-like patches on lower leaf surface*

Caterpillars can cause considerable damage to young vines very quickly. Webbing and excreta may be seen on bunches together with chewed leaf margins. Prune off damaged leaves and spray with a registered chemical suitable for chewing pests.

Weevils are nocturnal pests that chew leaves and flower buds. Banding the trunk of the vine with petroleum gel or grease will prevent weevils crawling up to the leaves.



Weevil damage on vine

Nematodes. The sandy soils on the coastal plain near Perth are known to contain root-knot nematodes (*Meloidogyne sp.*) which can destroy the root system of the vine as the vines get older. Table grapes grown on a nematode-resistant rootstock will perform much better than vines growing on their own roots but are harder to obtain through garden centres.

Other potential damage

Berry splitting. Some varieties will split if rain occurs between colour change and harvest.

Sunburn. Bunches should be protected from direct sunlight particularly during December and January. Red Globe and Muscat Gordo are particularly sensitive.



Sun-damaged grapes

Birds. Grapes contain sugars which make them attractive to birds such as silvereyes and rainbow lorikeets. There are no poisons registered for bird control and poisoning native birds is illegal. A wide range of netting is available.



Bird damage on grapes

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.

Department of Agriculture and Food
Pest and Disease Information Service
3 Baron-Hay Court,
South Perth WA 6151

For details, Freecall 1800 084 881

Email: info@agric.wa.gov.au