

Passionfruit (*Passiflora edulis*)

Common Names: Passionfruit

Order: Malpighiales

Family: Passifloraceae

Genus: *Passiflora*

Species: *edulis*

Growth Habit: evergreen vine

Height: up to 10m

Width: >2.5m

Description: a strong, vigorous, partially deciduous climber with dark green, tri-lobed leaves.

Flowers: distinctive, starry flower, 5-8cm across with 3 large, green, leaflike bracts surrounding 5 greenish-white sepals, 5 white petals and a fringed corona of straight, white-tipped rays with purple at the base. The 5 stamens with large anthers and the triple-branched style and ovary form a distinctive central feature. Flowers are borne at each node of new growth.

Fruit: distinctive round fruit with tough rind can range from dark purple with faint, fine white specks, to light yellow or even orange. Inside is a hollow cavity half to two-thirds filled with aromatic pulp that consists of a mass of double walled, membranous sacs containing orange-coloured, pulpy juice and as many as 250 small, hard, dark brown or black, pitted seeds. The unique flavour is sweet/tart to tart. The yellow form has generally larger fruit than the purple, but the pulp of the purple is less acid, richer in aroma and flavour, and has a higher proportion of juice (35-38%). Vines begin producing flowers and fruit from 6-12 months old in subtropical areas. Some passionfruit varieties require another vine to provide cross-pollination. Fruit takes 70 to 80 days to ripen. Fruit needs to ripen fully on the vine to develop its sweet flavour. Fruit will drop from the vine when ready. Fruit can also be picked off the vine when its fully-coloured and comes away easily. Vines generally perform well for 3-5 years after which they need to be replaced.



Location Preferences: subtropical and temperate climatic zones with fertile, free-draining soil with a pH of 5.5-6.5. Prefers a sheltered, frost-free area. Their extensive root system needs room to move, free of competing roots, including grass and weeds, with lots of nutrients and water to produce heavy crops. Provide a full sun position and strong support structure.

Irrigation: water-hungry. Additional irrigation during dry periods is required to avoid the soil drying out and causing developing fruit to shrivel and fall prematurely. Passionfruit roots are wide spreading. When watering established vines, soak a wide area, 3-5m around from the base of the trunk.

Maintenance: do not require special pruning to produce fruit, only to control size and spread, and to allow sunlight in to help ripen fruit. Having said this, flowers are produced on new growth. As pruning will encourage lots of new growth pruned vines also produce more fruit. Vines often appear as green growth on the outside and woody material in the centre. Prune to remove woody material in late winter and early spring. Follow a stem along carefully before you cut it to ensure you're not removing a major branch. Later in the year, summer growth can be tied back onto the trellis or support, or simply cut off.

Prepare soil by incorporating plenty of compost and well-rotted manure to a planting zone 1-2m wide. Pelletised chook manure, 'fruit and flower' or 'citrus food' should be applied twice a year (usually spring and summer). After feeding in spring, spread organic mulch such as straw, compost or aged cow manure 2 to 3 centimetres deep to protect the roots and keep the soil cool. Don't let it build up against the stem and don't dig it in as this may encourage suckering of the rootstock. Fertiliser high in nitrogen will encourage leaf growth at the expense of fruit and flowers so well-rotted cow manure and compost are better choices.

Ripe fruit left on the ground may get sun burnt so collect fruit regularly.

Pests and Diseases: passionfruit vine hopper can attack vines and may lead to fruit or flower drop. Squashed them or hose them off. Juveniles can be treated with a pyrethrum-based insecticide (apply according to label instructions). Vines may also be attacked by scale. Use a horticultural spray oil.

Other notes: The best passionfruit varieties to grow in a tropical climate are the Sweet calabash, Jamaican honeysuckle, and Sweet or Giant granadilla. The Panama red is also ideal for a hot climate. Two worth considering for large-scale commercial growing are the hardy Nelly Kelly and the Super Sweet AV1 for its regular fruit and good disease resistance.

References:

McFarlane, A. (2011) *Organic Fruit Growing*, Sydney: Harper Collins Publishers

Buckingham, A. (2011) *Grow Fruit*, London: Dorling Kindersley Ltd (DK)

<https://www.crfg.org/pubs/ff/passionfruit.html>

<http://www.homelife.com.au/gardening/how-to-grow/how-to-grow-passionfruit>

<http://www.abc.net.au/gardening/stories/s2007495.htm>

http://www.sbs.com.au/food/article/2012/09/06/how-grow-passionfruit?cx_navSource=related-side-cx#cxrecs_s

<http://www.flowerpower.com.au/gardening/top-tips-for-growing-passionfruit/>

<http://www.handyman.net.au/how-grow-passionfruit>

<http://www.australianropicalfoods.com/index.php/exotic-fruits/passionfruit/>

https://en.wikipedia.org/wiki/Passiflora_edulis

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