

An introduction to passionfruit

Passionfruit is a subtropical vine plant that is native to South America. Two varieties of passionfruit are present in New Zealand: the purple passionfruit and the banana passionfruit. The purple passionfruit (*Passiflora edulis*) is the commercial crop. This Tip introduces you to some of the things you must consider if you are thinking of growing passionfruit - what are the set up costs, do you have the time and appropriate growing conditions for a passionfruit crop, and how will you manage soil nutrition, irrigation, pests and diseases?

Establishing passionfruit

Passionfruit grow best in a warm, moist environment. Choosing the right site for your crop is very important. Below are some things to keep in mind.

Passionfruit can tolerate a slight frost (minus 1-2°C), but severe frost will damage growing shoots and may cause fruit damage. They need to be sheltered from wind damage as well, so you may need to plant a shelter belt around the site for protection.

The soil on your site should be free draining because passionfruit don't like "wet feet", and poorly draining soil can cause root disease that may kill the plants. Free draining soil types sometimes lack nutrients, so a soil test should be done and any problems dealt with before you plant your crop.

How are passionfruit grown?

Passionfruit are grown on supporting structures similar to grape vine supports. They are grown in rows with about 3 metres between the rows and about 5 metres between plants. It is good to plant the rows running north to south so that both sides of the vine get plenty of sun. At this spacing you get about 660 plants per hectare or 70 plants in a $\frac{1}{4}$ acre garden.

As well as buying plants (or seed) you may need to buy posts and wire for supports, and perhaps pay a contractor to build them.

Passionfruit produce fruit quite quickly. A half crop of fruit normally occurs in the second season after

planting, and full crops in following seasons. Fruit drop off the plant when ripe and are picked up off the ground during harvest.



A crop of passionfruit growing on supports.
(www.hortnet.co.nz/publications/hortfacts/hf708005.htm)

Managing the crop

It is suggested that one person can manage up to 400 passionfruit plants by working full time through the growing season.

Passionfruit require pruning at the start of the season, pest and disease management throughout the season, and harvest at the peak of the season is also fairly labour intensive.

During summer passionfruit may need irrigating if there is not enough rain. Depending on your soil you may also need to apply nutrients. For example passionfruit has a high requirement for nitrogen and East Coast soils are known for having low phosphate levels so both may need to be applied for good yields.

'Te Pànui Tips' are simple fact sheets that cover topics designing organic crop production systems on the East Coast.

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