

Managing Passionfruit

Once the passionfruit crop is established it is important to manage it well to get best yields and quality fruit. Important aspects of management include managing the nutritional needs of your crop, monitoring and preventing pests and diseases in the crop and pruning carefully.

Passionfruit nutrition

The light, well drained soils that passionfruit grow best on often have problems with nutrient leaching and may not be very naturally fertile. It is recommended that you test the soil at your chosen site for nutrients and that any lacking nutrients are applied before you plant your crop.

Passionfruit grows best at pH 6 and doesn't grow outside the range of pH 5.5-6.5. Passionfruit is known to require a high level of nitrogen, and it may be necessary to apply nitrogen several times over the growing season for optimum yield to be achieved. Sources of organic nitrogen include some organic fertilisers, composts or by using a legume crop such as clover or vetch in the space between rows.

Nutrient levels should be tested fairly regularly to know when and how much nutrient you need to add to your soil.

Pests and diseases

A common pest of passionfruit is the passionvine hopper, which sucks the sap and secretes honeydew. If large numbers build up in the crop they can have a significant impact on yield and fruit quality.

Mealybug and Green Vegetable Bug are less common pests that also impact fruit quality. In addition aphids are a minor problem for passionfruit but sometimes spread viruses and other diseases, so they should also be controlled.

There are a number of bacterial and fungal infections which can lower fruit quality or in bad cases can kill the whole plant. Significant bacterial diseases include grease spot and bacterial blast. Fungal diseases include brown spot, septoria blotch and root rot.



Passionvine hopper
(www.ento.csiro.au/aicn/images)



Passionfruit affected by grease spot

<http://www.hortnet.co.nz/publications/hortfacts>

Good orchard hygiene, pruning and burning infected plants and a good pest management

program will help to reduce pests and diseases in your crop.

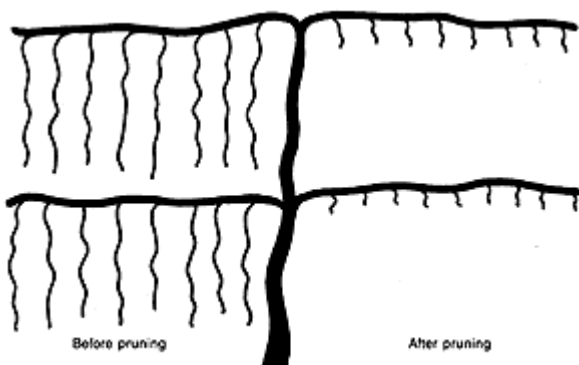
A copper based spray program should give reasonable control over many diseases which affect passionfruit. Vines should be well maintained so that sprays can reach through the growth. If growth is particularly dense you should check the spray coverage.

Pruning

Pruning helps to stop vines becoming overgrown and tangled which helps prevent disease, and ensures that the fruit is carried on strong vines. It is usually done in late September or early October every year. Pruning can be done by hand with hedging shears or mechanically. If it is done mechanically it is good to check afterwards and remove any dead or diseased growth that was missed.

Fruit is produced on the current season's growth so it is important that this is retained.

When pruning, remove any dead or diseased branches and trim all lateral shoots back to about 15cm long. It is best to remove all diseased branches from the crop and burn them to help prevent diseases spreading.



*A diagram showing a vine before and after pruning
(<http://www.hortnet.co.nz/publications/hortfacts>)*

Irrigating

Irrigating may be necessary in summer as

passionfruit are not drought resistant. Lack of water may cause leaves to fall off and lower yield, but too much can cause root rot.

Water should get to the depth of the root zone - get advice about the right amount for you to use. It will depend on the time of year and the water-holding capacity of your soil.

For smaller blocks drip line may be suitable but it requires very good water quality and careful filtration. Poor water will rapidly block the outlets!



Drip line irrigation

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

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dan@pagebloomer.co.nz

www.pagebloomer.co.nz