



## Mouth Watering Mangoes- The Quintessential Queensland Fruit!

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*It's official. With its broad, shady canopy and bountiful harvest, the backyard mango (*Mangifera indica*) is a Queensland icon. The inaugural list of heritage icons announced by the National Trust named the backyard mango tree as one of twelve indispensable elements of Queensland culture along with Southern Cross Windmills, Bundaberg Rum and the Flying Doctor Service.*



*But as house lots get smaller, fewer people are prepared to dedicate their entire backyard to one enormous tree. Thankfully, by selecting smaller grafted varieties and adopting pruning techniques used by commercial growers, succulent summer mangoes will continue to be the mainstay of backyard orchards in tropical and subtropical regions.*

### Frequently Asked Questions

**Where will they grow?**

Subtropical and tropical regions are preferred, especially those with a long dry season from autumn to Mid Summer, but some trees fruit successfully in frost-free temperate areas.

**What position is best?**

A warm northerly aspect with good air circulation, but sheltered from strong winds.

**When do they fruit?**

November - March depending on the variety and climate.

**What soil type is best?**

Light, well-drained soil is preferred, but high fertility is not essential.

**What care do they need?**

Increased watering once fruit has set, plus annual pruning to keep trees small.

**How long must I wait?**

Well grown, grafted varieties typically bear within three years, while seed grown varieties take 2-3 years longer.

**Down Sizing**

Choosing an appropriate grafted variety and regular pruning are key factors in keeping your mangoes within reach.

When selecting varieties remember that dwarf is a relative term. When you consider that some mango trees get to 30m high, a 10 metre tree could be considered dwarf. Grafted trees are typically smaller and more uniform in their growth habit than seed grown plants, so should be considered a worthwhile investment.

**To Prune or Not To Prune**

The fruit laden canopy and shady, mature mango is a sight to behold on a hot summer's day. So why do some people insist on butchering their trees?

**On the Positive Side**

Pruning trees to open up the canopy and increase air circulation is one way of reducing the incidence of some diseases in trees. Reducing the height of the tree also makes the fruit more accessible. Commercial growers typically aim to keep their trees pruned to 4.5metres or less.



### **On the Negative Side**

Heavy pruning can cause excess vegetative growth. Trees can be more subject decay within the trunk and branches. The beautiful, natural shape of the tree can be destroyed.

### **Getting the Timing Right**

New trees should be encouraged to branch just over a metre from the ground. This can be achieved by pruning out the growing tip. Light, regular pruning to maintain the general size and health of plants should be done at the end of summer or immediately after fruit harvest.



To rejuvenate a large, existing tree, pruning of large limbs should be carried out during the cooler months of the year when sap flow is reduced. You should expect that this initial heavy pruning will typically have a negative effect on fruit production the following summer.

### **Varietal Selection**

**Irwin** - A dwarf tree with sweet mild flavour. Attractive colour. Low resistance to anthracnose and bacterial black spot.

**Glenn** - Sweet, strong, juicy flavour. Moderate resistance to anthracnose and very good resistance to bacterial black spot. Excellent early variety.

**Florigon** – Soft, sweet flesh, small seed and virtually no fibre. Yellow skinned. Sets well in subtropics. Moderately resistant to anthracnose, susceptible to black spot.

**Kasturi** - A small crisp and spicy flavoured mango that is ideal for eating fresh and cooking. Vigorous grower.

**Van Dyke** - Sweet, slightly turpentine flavour. Variable quality. High resistance to anthracnose and black spot.

**Kensington Pride** (Bowen) - Excellent flavour, very juicy and aromatic. Crops irregularly in wet cold areas. Moderate susceptibility to anthracnose and black spot.

**Tommy Atkins** - Attractive colour and medium to good quality. Regular, moderate cropper. Good resistance to anthracnose, susceptible to blackspot.

**Nam Doc Mai** - (Thai-type mango) Green-yellow skin, sweet, tender and juicy with excellent flavour. Regular cropper in cooler climates. Elongated fruit. Little acid and fibreless. Susceptible to anthracnose, resistant to black spot.

**Kwan** - similar to Nam doc mai, but twice the size. Elongated fruit a consistent light yellow. Excellent disease resistance and is a heavy cropper. Performs very well in south eastern Qld and the northern coast of NSW.

**R2-E2** – Large, attractive, sweet flavoured fruit. High flesh to seed ratio with very slight fibre. Susceptible to black spot and anthracnose. Consistent over a range of climates. Vigorous growth habit.

**Valencia Pride** - Excellent taste, highly coloured fruit, large and beautiful. Fruit longer than the Kensington Pride and has a thinner skin. Vigorous and upright tree.

**Sensation** - Medium, oval fruit, bright yellow skin with dark red blush. Flesh is pale yellow, firm, slightly sweet with a distinctive mild flavour. Scanty fibres. Vigorous upright tree. Susceptible to anthracnose, tolerant to black spot.

**Palmer** - Late variety with large elongated fruit and brightly coloured skin. Smooth, very sweet, almost fibreless, apricot flesh. Susceptible to anthracnose and black spot.

*Variety descriptions courtesy of Daley's Nursery. For more information go to [www.daleysfruit.com.au](http://www.daleysfruit.com.au)*



### **Can I grow mangoes from seed?**

Most varieties of mangoes are monoembryonic and produce seeds containing a single, cross-pollinated embryo. Plants of these varieties must be grafted to reproduce the growth habit and fruiting characteristics of the parent plant.

Polyembryonic varieties such as the Kensington Pride and Nam Doc Mai produce seeds containing multiple embryos that are clones of the parent tree. Seed grown plants of these varieties can be expected to reproduce the growth habit and fruiting characteristics of the parent plant, although commercially most trees are still grafted.

### **Dreaded Fruit Drop**

Three major factors influence fruit set on mango trees, temperature, anthracnose and black spot. Climatic suitability and disease resistance are key factors in successful fruit production and should be primary considerations in selection of suitable varieties.



### **Oh So Cold**

Cool evening temperatures combined with early flowering can result in the formation of infertile fruit. Small fruit may form, but drop prematurely. Some commercial growers prune off these early flower stalks to encourage a fresh flush of flowers when temperatures increase.

### **Anthracnose and Black Spot**

Failure to set fruit, premature fruit fall, black spots on flowers, fruit and leaves are symptomatic of the fungal disease known as anthracnose and bacterial black spot. Rain and high humidity exacerbate this disease. When seasonal conditions are dry and humidity is low these diseases are virtually absent. Some varieties also possess inherent disease resistance.

Anthracnose is the primary reason why trees fail to fruit or develop blackened fruit that drops prematurely. Application of copper based sprays immediate prior to flowering and during early fruit set and/or use of biodynamic preparations such as casuarina tea can help reduce the effects of anthracnose and black spot.

### **Casuarina Tea**

Simmer 60gm dried Casuarina needles in a litre of water for 20 minutes using a stainless steel container. Strain and dilute 1 part concentrate to 40 parts water. Spray in the air around trees early in the morning.

For further information go to [www.biodynamics.net.au](http://www.biodynamics.net.au)

### **Bagging Your Bounty**

In regions where fruit fly attack mango trees bagging individual fruit or creating temporary frames and covering entire trees with fabric such as Microklima\* or shade cloth can be used to protect trees. Available from Green Harvest [www.greenharvest.com.au](http://www.greenharvest.com.au)

### **Going Organic**

Next time you question the price of an organically grown mango, consider this. Conventionally produced mangoes are often artificially ripened with ethylene gas. Unfortunately for the consumer, artificial ripening significantly shortens the shelf life of the fruit.

As mangoes are commonly grown in areas subject to fruit fly, commercial crops are regular sprayed with insecticide and must by law be dipped or sprayed with insecticide after harvest. Fruit is also routinely dipped in fungicide to improve its appearance and reduce the incidence of post harvest fungal diseases.