

Ratooning papaya

Trees that are growing strongly and are too tall for economical harvesting can be cut back in early summer and allowed to reshoot. This is called ratooning. Protection from strong winds is essential, as ratooned trees are extremely susceptible to limb breakage and subsequent fruit loss.

In wet coastal north Queensland, ratooning is not generally recommended because of tree losses to root rot, susceptibility to wind damage and rapid growth of new plantings.

Ratooning can be a strategy in north Queensland if severe damage from cyclones is anticipated. This generally requires a last minute decision and can be dangerous. Subsequent tree growth depends on weather patterns over the following months.

Ratooning is normally done in October to early December. The success rate for ratooning drops during wet weather. You may only achieve a 30% or fewer successful ratoons. Where a farm has had serious wind damage this may still be worth attempting as it may help to reduce the time without income. The success or failure of the practice depends on the rainfall received after ratooning. Maintaining a liberal coating of copper hydroxide and mancozeb on the cut and remaining stump is extremely important for an acceptable result.

This technique usually works well with yellows, in particular 1B 13, and 14, and Red dioecious RD1 to 4. Previous experience has achieved mixed results on Solo and Red bisexual varieties. Best results are achieved on trees under 2 years old that have a strong well developed root system. Cut the stem at a 45 degree angle between 60cm and 1 metre above ground level where the growth rings are close together (see figure 1). The stem is more solid at this spot and trunk rots less likely to develop. The cut should face the west.

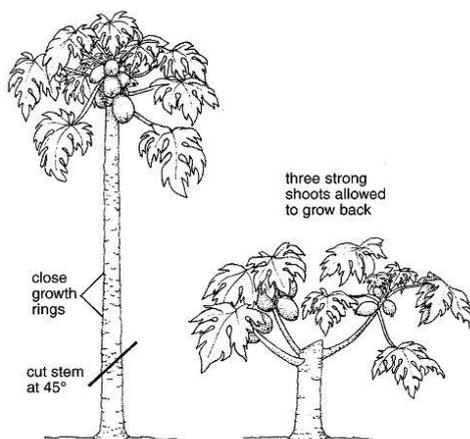


Figure 1. Ratooning papaya

As soon as possible after the tree is cut down, liberally apply the following mixture per litre of water to the cut and trunk with a handgun:

- 20 g copper hydroxide (Kocide®)
- 20 g mancozeb (Dithane®)
- 20 ml phosphorous acid (Agrifos Supa 600®)
- Wetting agent at the normal spraying rate.

The above rates are equivalent to 2kg or 2L respectively of each fungicidal product in a 100 litre tank.

The application rate is approximately 200- 300 ml of mix per stump. Bond or a sticker may be helpful in wet weather.

If you are using a herbicide sprayer don't forget to decontaminate the sprayer. You will need to reapply this mixture at least fortnightly as well as after rainfall. This procedure should be repeated until the wound has healed and the new growth is well developed (e.g. about 200 mm long).

Apply urea at the rate of 40 kg to the acre or 100 kg per hectare to induce some vegetative growth. This may need to be repeated every 2 weeks for the first 2 months.

New growth will develop after about 3 weeks. Most growers make the mistake of thinning too early. Allow the new growth to develop until you see 2 or 3 dominant shoots developing to about 800 mm in length and starting to flower. Leave the 3 strongest shoots which are toward the top of the stump. Remove the lower weaker growth. You may like to remove one of the three shoots and leave only 2 laterals or branches. Try to balance the plant so the new growth is evenly spaced.

Follow your normal nutrition and fungicide spray program. Keep applying phosphorous acid at fortnightly intervals.

More information

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For essential information on important diseases affecting fruit and vegetable crops grown across Australia, pick up a copy of Diseases of fruit crops in Australia or Diseases of vegetable crops in Australia, both available for purchase from CSIRO at www.publish.csiro.au

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