

# Helping to prevent papaya disease problems after a cyclone or bad weather event

## Seedling propagation

Growers planning to raise their own papaya seedlings should ensure the following:

- Sufficient good quality seed of a suitable variety is obtained from a reputable supplier
- A well-drained commercially produced potting mix is used
- Seedlings should be drenched regularly with a fertiliser such as Seasol® or Aquasol®
- Seedlings are raised on benches at least 1 metre above the ground
- The ground under the benches is covered with plastic or coarse gravel
- At the first sign of 'damping off' (seedling collapse caused by *Pythium* sp.) seedlings should be thoroughly drenched with the fungicide Previcur®. Over-watering of plants should be avoided if at all possible.

## Managing Phytophthora root rot

Some 50% of Australia's papaya is grown in the wet tropics region of far north Queensland. Phytophthora root rot is the most important disease affecting papaya in the region with crop losses of 60-80 % being recorded following severe storms and periods of prolonged wet weather.

Managing Phytophthora root rot involves:

- Initial land preparation should ensure that all surface water is readily removed from the field following heavy rain.
- When land is sufficiently dry, it should be deep ripped, before being rotary-hoed or ploughed and 0.75 mounds (inverted V-shaped) formed.
- Transplanting healthy papaya seedlings to the field well before the onset of the wet season (August – October).
- One day prior to transplanting seedlings, Ridomil Gold® at (25 kg/ha for a 4 metre row spacing or 25 g per square metre of a granule formulation) or 2 Litres per hectare (80 mL per 100 metre of row) is applied in a 40 cm wide band along the centre of the plant row. This will give 4-6 weeks disease control. Note: liquid Ridomil Gold® cannot be applied to the foliage as it will cause severe damage to the foliage.
- At 4-6 weeks after transplanting fortnightly foliar sprays of phosphorous acid as Agrifos Supa 600® at 1-2 Litres per 100 Litres of water should commence and be continued for the remaining life of the crop.
- Phosphorous acid can also be applied through the irrigation system at 3-6 Litres/ha but this method has been shown to be less effective than foliar sprays.

## Ratooning established papaya

- The rate of success of ratooning papaya during the wet summer months has been most variable and seems less suited to red papaya than yellow varieties.
- Newly cut surfaces of ratooned trees should be sprayed with copper hydroxide (2 kg/100 L water) to reduce the incidence of surface rots.

## More information

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