

Reducing the impact of wet weather on papaya fruit quality

After cyclones or extended periods of wet weather, fruit quality is suffering largely as a result of the prolonged wet weather.

Most of these fruit quality issues are fungal-related diseases which thrive under conditions of high temperature and high humidity. Fruit at this time also tends to be 'soft' making it even more prone to rots and other blemishes.

The most common and important post-harvest disease is Anthracnose which occurs as brown sunken spots on the surface of fruit which can enlarge into unsightly water-soaked areas. It can also occur as multiple small spots often referred to as 'chocolate spot'. Anthracnose infections occur when the fruit is young and immature but the rot only becomes evident as the fruit ripens.

Control of this disease is dependent on crop hygiene (removal of over-ripe, damaged and fallen fruit, and dead leaves from the field) as these are sources of the anthracnose fungus.

Fortnightly foliar spray applications with a protectant fungicide such as Bravo WeatherStik® should commence from fruit-set onwards. Harvested fruit also needs to be treated with a registered postharvest fungicide such as Sporetak®.



Black rot (Phoma sp.)



Anthracnose



Stem-end rot

Other post-harvest diseases include Rhizopus rot, Black rot, Stem-end rots and Cladosporium rot. The control of all these diseases is similar to that for anthracnose. As mentioned earlier, fruit harvested after cyclones or extended wet weather tends to be soft so extra care should be taken in the harvesting and handling of fruit to avoid cuts and bruises to the skin which is where these rots will develop.



Phytophthora fruit rot (pictured above) is the other fruit disease of concern during the wet season. Greasy, water-soaked spots appear on the fruit surface and these soon become covered with a white

mould.

Growers should attempt to recognise the early symptoms of this disease and discard these affected fruit in the packing shed.

Management of this disease is again dependent on crop hygiene where affected fruit should be removed from the paddock as it is an abundant source of spores capable of causing new infections. If fruit is simply dropped on the ground, it will quickly become infected and spores will be dispersed onto unaffected fruit by wind-blown rain.

A fortnightly spray program with copper hydroxide can assist in preventing new infections. As Phytophthora is a water mould, the removal of surface water from the paddock is important for control of this disease. Wheel ruts which remain full of water for days or weeks at a time can encourage the development of this disease.

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

The State of Queensland, Department of Agriculture and Fisheries, 2016

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