

# Stem end rot



## General information

In fruit from drier areas, stem end rot may be a more serious post-harvest disease than anthracnose in mangoes. Anthracnose disease (*Colletotrichum gloeosporioides*) may cause similar symptoms.

<b>Cause</b>	The fungi <i>Dothiorella dominicana</i> , <i>Phomopsis</i> spp., <i>Botryodiplodia theobromae</i> and <i>Lasiodiplodia theobromae</i> cause stem end rot in mango and avocado.
<b>Symptoms</b>	A dark rot develops from the stem end as fruit ripen after harvest. A dark brown to black rot begins at the stem end as a dark brown ring and the rot proceeds towards the other end. The rot produces dark streaking of the water-conducting tissues (this symptom distinguishes stem end rot from anthracnose).
<b>How does it spread</b>	These fungi are natural inhabitants on the branches of the mango tree and grow into the stem of the fruit before harvest. Fruit placed on the ground for desapping can also be infected from the bark, twig litter or the soil.
<b>Crops affected</b>	Mango, avocado, citrus.
<b>Control options</b>	<p>As water stress during fruit development may predispose fruit to infection, manage irrigation and root rot control carefully. Pre-harvest sprays of fungicides to control bacterial black spot or anthracnose may reduce the incidence of stem-end rot in fruit. Prune trees to improve ventilation and spray penetration. Remove dead branches from trees.</p> <p>Avoid harvesting immature fruit. Cool fruit immediately after harvest and store in well-ventilated containers.</p> <p><b>Post-harvest control</b> Avoid harvesting immature fruit. Use appropriate registered chemicals for post-harvest treatment to help to control the disease. Fruit from orchards with a history of stem end rot losses should be rejected for long-term storage.</p> <p>The severity of stem end rot can be assessed as follows:</p> <ul style="list-style-type: none"> <li>• Harvest 100 mature fruit at random from throughout the orchard.</li> <li>• Leave them untreated and store at 25°C until they are fully ripe.</li> <li>• Ideally, less than one-tenth and certainly no more than one-third of the fruit should develop symptoms of stem end rot by the time they are fully ripe.</li> </ul> <p><b>Chemical registrations and permits</b> Check the Australian Pesticides and Veterinary Medicines Authority <a href="http://services.apvma.gov.au/PubcrisWebClient/welcome.do">chemical database</a> [http://services.apvma.gov.au/PubcrisWebClient/welcome.do] and <a href="http://www.apvma.gov.au/permits/search.php">http://www.apvma.gov.au/permits/search.php</a>&gt;permit database for chemicals registered or approved under permit to treat this disease on the target crop in your state or location. Always read the label and observe withholding periods.</p>

