

Harvesting during wet weather – consider all the risks

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High quality fruit is paramount for the success of our industry. Fruit must always leave the pack shed in optimum condition to maintain high quality throughout the supply chain. Harvesting avocados during wet weather is risky and detrimental to fruit quality. Avoid harvesting in wet weather. Prolonged periods of intermittent wet weather can be disruptive to business; however, farm managers need to consider all the risks before deciding to continue with harvest.

Risk #1: poor fruit quality

Picking in the rain will decrease fruit quality, both internally and externally. Wet fruit are more susceptible to mechanical abrasion and lenticel damage, which promotes the development of postharvest rots (for example, stem end rot and anthracnose).

- The skin cells of wet fruit are fully turgid (swollen from water uptake). They will easily break when rubbed against another piece of fruit or edge of a bin. This can cause lenticel/nodule damage and increase susceptibility of other mechanical damage, resulting in downgrading skin defects.
- If you are packing turgid fruit, pay extra attention to your pack line. Always check for any stiff cleaning brushes and hold-ups that may prevent a smooth flow of fruit.
- Fungal disease spores move in free water, through individual contact and in wind. Wet fruit rubbing against each other in a bin or on the tree, or splashing water from bare soil under trees to low hanging fruit, are ideal conditions for the spread of disease.
- Any external damage to fruit is a potential 'open wound' susceptible to infection by fungal disease spores. These spores thrive in wet weather and will spread rapidly within

a tree or picking bin.

- Bacterial infections are hard to identify in their early stages. Fruit often appears in good condition when packed; however, the infection will develop and spread rapidly in transit. Rejections at market due to *Erwinia* soft rot are regularly traced back to harvesting after a rain event.

Risk # 2: workplace health and safety

Working in wet weather is dangerous.

- Wet surfaces are slippery. Workers are at greater risk of slips and falls when working in wet conditions.
- Vehicles account for 75% of workplace deaths in the agriculture sector (Safe Work Australia, 2020). Heavy rain and cloud cover can reduce visibility in the orchard, making it difficult for vehicle operators to see pickers and ground crew.
- Under workplace health and safety (WHS) regulations, owners and managers need to ensure farm workers are NOT EXPOSED to health and safety risks (Safe Work Australia, 2020).

Risk # 3: damage to the orchard and your business

Harvesting in wet weather can have long lasting impacts on your business too.

- Machinery working in saturated soil can cause irreversible damage to the orchard.
- When bog holes and ruts caused by orchard traffic dry up, they leave uneven and compacted areas of ground which are subject to water logging.

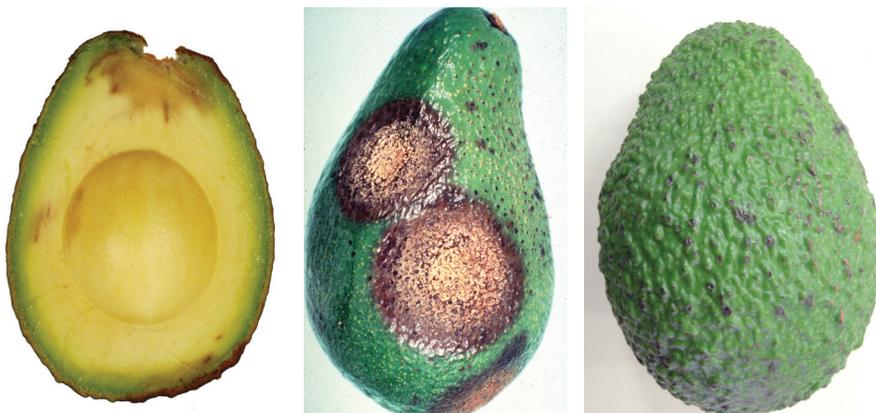


Figure 1. Internal and external rots and lenticel damage are more likely to occur when fruit is harvested wet.

How long do I have to wait after rain before I can pick?

After heavy rain (>20mm in 12 hours),
delay harvest for 48 hours

After any rain (<20mm in 12 hours),
delay harvest for 24 hours

- Reputations with agents are damaged when quality is not guaranteed, having lasting implications on your business success.

Make the right choice

Everyone along the supply chain is responsible for maintaining high quality standards. Fruit that leaves the pack shed in below average condition, will only deteriorate down the supply chain. Therefore, it is critical that high quality standards are achieved at the farm level first. Always consider the risks associated with picking in the rain and where possible, always avoid harvesting in wet conditions.

More information

Avocados Australia Best Practice Resource:
www.avocado.org.au/bpr/

Safe Work Australia: safeworkaustralia.gov.au/agriculture

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Best Practice Tips

- ✔ Do not harvest wet fruit
- ✔ Always handle fruit carefully
 - ✔ Hass can be plucked, other varieties must be clipped
- ✔ Prune trees to have an open canopy & always apply mulch
- ✔ Apply a post-harvest fungicide as soon as possible (within 24 hours) after harvest
 - ✔ Maintain WHS standards
- ✔ Maintain good drainage in the orchard