

Best practice guidelines for harvesting and transporting stone fruit from the orchard to the packhouse

During harvest

- It is a good practice if fruit pickers and sorters can wear **clean** cotton gloves to prevent injuries to the fruit.
- Harvest during the cooler parts of the day but avoid very early mornings when fruit is turgid and easily damaged.
- Do not harvest during the heat of the day, as warm fruit ($> 28^{\circ}\text{C}$) are more prone to injury and rub marks.
- Do not pick fruit wet from dew or rain, as it bruises easily, and free moisture increases fungal infection.
- Use smooth, padded picking bags or buckets to minimize abrasion.
- Clean the picking bag or bucket regularly to get rid of debris and dust.
- Do not use the picking bags to pick up fallen fruit.
- Avoid overfilling harvest containers, which increases pressure and rubbing.
- Pickers must never run with picking bags containing fruit, as this will cause mechanical damage.
- Transfer fruit gently from buckets to bins in a slow, smooth motion.
- Use plastic harvest bins rather than wooden ones, and be especially careful with unperforated plastic bin liners, as they prevent air movement through the bin and can cause the fruit to heat up unnecessarily.
- Smooth, cushioned, perforated bin liners can reduce rub marks and fruit-to-fruit impacts and vibrations on the inside of the bin. Perforated bin liners are recommended to minimise bruising and to protect the fruit against dust. Research on apples, nectarines, and cherries has shown that FRUITGUARD™ works very well as a bin liner.
- Maxi bins are preferred to totes due to their higher volume-to-surface ratio. If totes must be used, stack them tightly in the bins and stabilise them with foam pads.
- Keep fruit surfaces dry, as moisture increases susceptibility to skin damage.
- Limit unnecessary handling and sorting steps.

During transport from the orchard to the packhouse

- When transporting bins to the pack shed, it is worthwhile putting a wet blanket or 150 mm polyethylene sponge mattress on top of the bin and tie it down tightly to prevent fruit from movement and rub marks.
- Fit bin trailers with suspension (e.g., torsion bars) to reduce vibration during transport to the farm load bay.
- Tire pressure of 2-3 bar should be maintained for a softer drive.
- Use additional trailers or add weighted bins to improve suspension and stability during transport to the load bay.
- Uneven roads greatly increase the probability of bruising. Before harvest, all roads used by bin trailers and trucks must be repaired and levelled. In winter-rainfall regions, ridges to divert stormwater can be levelled until after harvest.
- Gravel roads from the orchard to the loading bay should be wetted where possible, to combat dust.
- Transport full loads whenever possible to the packhouse. For half loads, add weighted bins or use smaller trucks to reduce vibration damage.
- Trucks should be fitted with pneumatic suspension.